

# QUARTERLY JOURNAL

## FIDES ET RATIO

ISSUE 62(2)2025

DIALOGUE, COMMUNICATION.  
INTERDISCIPLINARY APPROACH

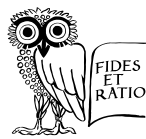


QUARTERLY JOURNAL

FIDES ET RATIO

ISSUE 62(2)2025

DIALOGUE, COMMUNICATION.  
INTERDISCIPLINARY APPROACH



Quarterly Journal Fides et Ratio

fidesetratio.com.pl

ul. Franciszkańska 3/47  
00-233 Warszawa

Principal Contact

Maria Ryś,  
Editor in Chief,  
VIZJA University

kwartalnik@fidesetratio.com.pl

#### EDITOR-IN-CHIEF

Professor **Maria Ryś**, PhD,  
VIZJA University in Warsaw, Poland

#### DEPUTY EDITOR

Associate Professor  
**Urszula Tataj-Puzyna**, PhD,  
Department of Midwifery, Centre of  
Postgraduate Medical Education, Poland

**Irena Grochowska**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

#### EDITORIAL ASSOCIATE

**Paweł Kwas**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

#### THEMATIC EDITORS OF:

##### MEDICAL SCIENCE AND HEALTH SCIENCES

---

Professor **Anna Doboszyńska**, MD, PhD,  
University of Warmia and Mazury in Olsztyn  
(UWM), Poland

Professor **Katarzyna Kucharska**, MD, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

Associate Professor **Urszula Ołdakowska  
Jedynak** MD, PhD, Medical University  
of Warsaw Poland

##### SOCIAL SCIENCES

---

Associate Professor **Zbigniew Gaś**, PhD,  
University of Economics and Innovation  
in Lublin (WSEI), Poland

Professor **Maria Ryś**, PhD,  
University of Economics and Human Sciences  
in Warsaw, Poland

##### ARTS AND HUMANITIES

---

Associate Professor **Andrzej Kobyliński**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

Associate Professor **Małgorzata Wrześniak**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

##### THEOLOGICAL SCIENCES

---

Professor **Roman Bartnicki**, PhD,  
The Catholic Academy in Warsaw, Poland

Professor **Bazyli Degórski**, PhD,  
Pontificio Istituto di Spiritualità Teresianum:  
Roma, Italy

Professor **Adam Skreczko**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

#### LANGUAGE EDITORS

**Zofia Kończewska-Murdek**, MSc

**Krzysztof Kraśniewski**, PhD

**Małgorzata Walaszczyk**, MSc

#### STATISTICAL EDITOR

**Karol Kwas**, MSc

#### EDITORIAL BOARD

**Beata Szlendak**, PhD,  
Centre of Postgraduate Medical Education,  
Poland

#### SCIENTIFIC BOARD

Professor **Tadeusz Biesaga**, PhD,  
Pontifical University of John Paul II in Krakow,  
Poland

Professor **Anna Doboszyńska**, MD, PhD,  
Colegium Medicum, The University of Warmia  
and Mazury in Olsztyn (UWM), Poland

Associate Professor **Zbigniew Gaś**, PhD,  
University of Economics and Innovation  
in Lublin (WSEI), Poland

Professor **Nana Iashvili**,  
Tbilisi State Academy of Arts, Georgia

Professor **Katarzyna Kucharska**, MD, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

Associate Professor **Urszula Ołdakowska-  
Jedynak**, MD, PhD, Poland

Professor **Jakub Pawlikowski**, MD, PhD,  
Medical University of Lublin, Poland

Professor **Paolo Puma**,  
University of Florence, Italy

**Oxana Remeniaka**, PhD,  
National University of "Kyiv-Mohyla Academy"  
(NaUKMA), Ukraine

Professor emer. **Adam Skreczko**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

**Mária Slivková**, PhD,  
OZ Felix Familia, Slovakia

#### REVIEWERS:

**Felicity Agwu Kalu**, PhD,  
Queen's University, Belfast, Northern Ireland

Associate Professor **Barbara Baranowska**,  
MD, PhD, Centre of Postgraduate Medical  
Education, Poland

Professor emer. **Roman Bartnicki**, PhD,  
The Catholic Academy in Warsaw, Poland

**Grażyna Bączek**, PhD, Medical University  
of Warsaw, Poland

Associate Professor **Agnieszka Bender**, PhD,  
The John Paul II Catholic University of Lublin,  
Poland

Associate Professor emer., Rev. **Jan Bielecki**,  
PhD, Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

Rev. **Matteo Campagnaro**, PhD, The Catholic  
Academy in Warsaw, Collegium Joanneum

**Denise Côté-Arsenault**, PhD, RN, CPCLC,  
FNAP, FAAN, Saint Louis University

Professor **Ladislav Csontos**, SJ, PhD, Trnava  
University in Trnava, Slovakia

Professor **Krzysztof Czajkowski**, MD, PhD,  
Medical University of Warsaw, Poland

**Agata Czarnecka**, PhD, The Nicolaus  
Copernicus University in Toruń, Poland

Professor **Bazyli Degórski**, PhD,  
Pontificio Istituto di Spiritualità Teresianum:  
Roma, Italy

Professor **Anna Doboszyńska**, MD, PhD,  
The University of Warmia and Mazury in  
Olsztyn (UWM), Poland

Associate Professor **Urszula Dudziak**, PhD,  
The John Paul II Catholic University of Lublin,  
Poland

Professor **René Ecochard**, MD,  
Université Claude Bernard Lyon, France

Professor **Marian Gabryś**, MD, PhD,  
Wrocław Medical University, Poland

Professor **Janusz Gadzinowski**, MD, PhD,  
Poznan University of Medical Sciences, Poland

Professor **Olgierd Hryniewicz**, PhD,  
Polish Academy of Science, Poland

**Aleksandra Kimball**, MSc,  
Warner Brothers Studios, USA

**Iwona Kiersnowska**, MSc,  
Medical University of Warsaw, Poland

Associate Professor **Andrzej Kobyliński**, PhD,  
Cardinal Wyszyński University in Warsaw  
(UKSW), Poland

Professor **Tomasz Kaźmierski**, PUNO, London, Great Britain

**Marta Komorowska-Pudło**, PhD, hab., University of Szczecin, Poland

Associate Professor **Dorota Kornas-Biela**, PhD, The John Paul II Catholic University of Lublin, Poland

**Monika Kornaszewska-Polak**, PhD, University of Silesia in Katowice, Poland

**Jolanta Kraśniewska**, PhD, The Pontifical University of John Paul II in Krakow, Poland

**Grażyna Koszałka**, PhD, Polish Pastoral Council of Western Europe, Germany

Professor **Teresa Krasowska**, PhD, Academy of Music in Poznan, Poland

Professor emer., Rev. **Jan Krokos**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Professor emer., Rev. **Henryk Krzysteczko**, PhD, University of Silesia in Katowice, Poland

**Paweł Kwas**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Associate Professor **Paweł Mazanka**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Professor emer. **Alina T. Midro**, PhD, Medical University of Białystok, Poland

Professor emer. **Katarzyna Olbrycht**, PhD, University of Silesia in Katowice, Poland

Professor **Elżbieta Osewska**, PhD, University of Applied Sciences in Tarnow, Poland

Associate Professor **Tadeusz Pietras**, MD, PhD, The University of Łódź, Poland

**Wojciech Puzyna**, MD, PhD, St. Sophia's Specialist Hospital in Warsaw, Poland

Associate Professor **Michał Rabijewski**, MD, PhD, Centre of Postgraduate Medical Education, Poland

**Katerina Ratislavova**, PhD, University of West Bohemia in Plzeň, Czech Republic

Professor **Maria Ryś**, PhD, VIZJA University in Warsaw, Poland

Professor emer., Rev. **Adam Skreczko**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Associate Professor Rev. **Borys Soiński**, PhD, Adam Mickiewicz University, Poland

Associate Professor emer. **Witold Starnawski**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Associate Professor **Małgorzata Starzomska**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

**Justyna Stępkowska**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Associate Professor **Dorota Sys**, PhD, Centre of Postgraduate Medical Education, Poland

Associate Professor **Jacek Śliwak**, PhD, The John Paul II Catholic University of Lublin, Poland

**Elżbieta Tracewicz**, PhD, Life Adjustment Center, USA

Associate Professor **Urszula Tataj-Puzyna**, PhD, Centre of Postgraduate Medical Education, Poland

Associate Professor emer. **Elżbieta Trzęsowska-Greszta**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

**Joeri Vermeulen**, MSc, Vrije Universiteit Brussel (VUB), Belgium

**Paulina Wesolowska**, PhD, Medical University of Vienna, Austria

Associate Professor **Krzysztof Wojcieszek**, PhD, University of Criminology and Penitentiary Studies in Warsaw, Poland

Associate Professor **Edyta Wolter**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

**Juliet Wood**, PhD, Bournemouth University, Great Britain

Associate Professor **Małgorzata Wrześniak**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Professor Rev. **Dominik Zamiatąła**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland

Associate Professor **Dominika Żukowska-Gardzińska**, PhD, Cardinal Wyszyński University in Warsaw (UKSW), Poland



## Contents

<i>Marta Komorowska-Pudło,</i> Sexual initiation and premarital sexual partners and the quality of bond, communication, and perceived marital match among young adult spouses .....	9
<i>Agata M. Marciniuk,</i> Communication forms and experienced well-being in close emotional relationships .....	26
<i>Dorota Suwałska-Barancewicz, Natalia Pilarska, Kamilla Komorowska,</i> The importance of interpersonal commitment in intimate relationships for the relationship between personal resilience and life satisfaction .....	36
<i>Piotr Nowicki,</i> Attachment styles, body image and sexual communication as predictors of sexual satisfaction in young men: A serial mediation model .....	49
<i>Malgorzata Weryszko, Kinga Dąbrowska,</i> Communication and closeness versus sexual satisfaction of spouses .....	60
<i>Piotr Nowicki,</i> Maternal attachment styles and maternal-fetal attachment: The serial mediation role of alexithymia and depressive symptoms .....	76
<i>Malgorzata Marmola, Anna Wańczyk-Wélc,</i> Spousal attachment style and the level of marital satisfaction in parents of preschool and early school children in rural and urban settings .....	86
<i>Malwina Dankiewicz, Agnieszka Kotowicz,</i> Parental attitudes and screen time in early primary school children: The role of digital prevention .....	102
<i>Agnieszka Siedler, Anna Wąligórska,</i> Attachment styles as mediators between autistic traits and psychological distress: The role of social and communication difficulties .....	115
<i>Sandra Anna Januszevska, Julia Banach,</i> The importance of family fat talk and body image for indirect self-destructiveness of adult girls and boys in late adolescence .....	128

*Maria Chodkiewicz, Jolanta Krasniewska, Krzysztof Krasniewski,*

The integral development of the student as a support to the family in the process of formation:  
A case study of the Association of Friends of Catholic Schools ..... 135

*Beata Krajewska,*

Specialist support centres for victims of domestic violence in the legal  
and organisational structure of the support system for individuals and families in crisis ..... 151

*Olga Iakovleva,*

Specificity of euphemistic lexis in media discourse  
on the example of Russian press from 2017-2021 ..... 158

*Krzysztof Łuszczek,*

Education and school in the era of AI. Educationist's dilemmas ..... 173



# Sexual initiation and premarital sexual partners and the quality of bond, communication, and perceived marital match among young adult spouses<sup>1</sup>

<https://doi.org/10.34766/344znm49>

Marta Komorowska-Pudło<sup>a</sup> ✉

<sup>a</sup> Marta Komorowska-Pudło, <https://orcid.org/0000-0001-7222-0182>,  
Institute of Theological Studies, Faculty of Theology, University of Szczecin, Poland  
✉ Corresponding author: [marta.komorowska-pudlo@usz.edu.pl](mailto:marta.komorowska-pudlo@usz.edu.pl)

**Abstract:** The quality of marital relationships, including emotional bond, communication, and the perceived compatibility of partners, has long been of interest to researchers. Among the various factors influencing relationship quality, premarital sexual experiences are increasingly recognized. Due to the scarcity of research on this topic within the population of Polish spouses, the present study aimed to examine the relationship between the number of sexual partners and the type of first sexual partner (spouse, former romantic partner, non-romantic partner) and the quality of marital relationships among young adults, specifically regarding bond, communication, and perceived partner match. The study also explored the relationship between the quality of the marital relationship and regret over initiating sexual activity with someone other than the spouse. The study involved 306 married individuals (153 women and 153 men) aged 20 to 35. The research was conducted using a diagnostic survey in the West Pomeranian Voivodeship. Three standardized psychometric tools were used (the Marital Bond Scale by Józef Szopiński, the Marital Communication Questionnaire by Maria Kaźmierczak and Mieczysław Płopa, and the Marital Match Questionnaire by Jan Rostowski and Mieczysław Płopa), along with an author-developed questionnaire. The results showed that women who had sexual experiences exclusively with their spouse scored significantly higher in the areas of bonding and marital compatibility than women whose sexual initiation occurred with a non-romantic partner, as well as those with a higher number of sexual partners. As the number of sexual partners increased, women reported lower levels of emotional connection, intimacy, and self-fulfillment, and higher levels of spouse devaluation and relationship disappointment. Among men, no statistically significant relationships were found. For women, regret about sexual initiation with someone other than the spouse correlated with a lower sense of marital compatibility. The results obtained allow us to conclude that premarital sexual experiences may have a long-term impact on the quality of marital relationships, especially among women.

**Keywords:** marital relationship quality, first sexual partner, premarital sexual experiences, sexual initiation

## 1. The significance of sexual initiation and types of premarital relationships for marital relations – a review of research

During late adolescence and early adulthood, involvement in romantic relationships constitutes one of the key developmental tasks (Erikson, 2004). During this period, alongside the need to relieve sexual tension characteristic of puberty, a need to form bonds emerges, initially in pre-intimate relationships and later in romantic ones (Gurba, 2012; Oleszkowicz & Senejko, 2012). Then, romantic partners play a vital role in the emotional and social life of young people (Joosten, Nelemans, Meeus, & Branje, 2022).

Nowadays, it is common for adolescents and young adults to engage in sexual activity both within romantic and non-romantic relationships (Kotiuga, Yampolsky & Martin, 2022). Research shows that some teenagers engage in sexual activity with a single partner in the context of romantic relationships, while others have a larger number of partners. Early initiation is associated with an increased number of sexual partners (Bancroft, 2019). Researchers indicate that between 10% and 20% of adolescents report having had sexual intercourse with at

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_komo.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_komo.pdf)

least four partners. (Control & Prevention, 2019, from: Khalili, Mirzazadeh, Chegeni, Abedi, Rajaei, Ardalan, Haghdoost, Nasiri, Sharifi, 2020; Steele, Simons, Sutton, Gibbons, 2020; Wakasa, Oljira, Demena, Regassa, Daga, 2021). Boys typically report having more sexual partners than girls (Bancroft, 2019), although recent years have seen an increase in the number of partners among women as well (Smith & Wolfinger, 2024). Despite the rise in the percentage of sexually active individuals at the end of the 20th century, the average number of partners among young adults has remained relatively stable since the 1980s. (Martinez, Copen, Abma, 2011).

As a key moment in psychosexual development (Higgins, Trussell, Moore, & Davidson, 2010; Vasilenko, Lefkowitz, & Maggs, 2021), sexual initiation can influence an individual's well-being and attitudes toward sexuality (Lew-Starowicz, 1990; Vasilenko, Lefkowitz, & Welsh, 2014). Research indicates that both the nature of premarital relationships and the number of sexual partners are significant for the quality of later romantic and marital relationships (Kansky & Allen, 2018). Lew-Starowicz (1990, p. 43) emphasizes that "the sexual and emotional conditions shaped by these early sexual experiences" may affect the quality of future relationships. Sexual initiation, regarded by the author as a pivotal moment, influences not only the development of sexual needs but also the shaping of personality, attitudes toward one's partner, and the overall perception of interpersonal relationships. Its positive effects are most likely to emerge when partners share mutual love, demonstrate psychological maturity, possess a sense of responsibility, have adequate sexual knowledge, and act by their personal value system.

A crucial factor in the psychosexual development of young people is who their partner is during their first sexual experience and what kind of bond connects them. The long-term consequences may vary depending on whether the experience occurred in a casual encounter, a short-term relationship, or a stable romantic partnership. The set of questions concerning sexual initiation, typically asked during sexological diagnostics related to sexual dysfunctions, confirms the significance of this experience.

These questions concern, among other things, the nature of the bond and emotions shared with the initiation partner, the feelings accompanying the event, who initiated the experience, the duration of the relationship, and the reasons for its ending, if applicable (Lew-Starowicz, 2021). The significance of premarital sexual experiences within different types of relationships for the formation of intimate bonds in adulthood stems, among other factors, from the differing behaviors partners display toward each other, the level of emotional connection between them, and the impact of these experiences on self-esteem in both partner and sexual roles. Additionally, this is linked to the various ways individuals cope with these experiences in the face of challenges.

A romantic relationship is a voluntarily and consciously entered partnership based on mutual acceptance, understanding, honesty, loyalty, care, friendship, and love, as well as elements like jealousy and longing. Partners establish mutual expectations and boundaries, spend significant time together, engage in intense communication, express emotions through words and physical closeness, and work to maintain the stability of the relationship. Such relationships support the development of an attachment system rooted in love, closeness, bonding, and a sense of security. They serve as preparation for marital life by teaching individuals to recognize differences between partners, resolve conflicts, and cultivate personality traits essential for long-term relationships. (Putri, Yuniarti, Minza & Riyono, 2021). Barbara Jankowiak (2023) points out that young people strive to form intimate relationships based on commitment, love, and passion, and the absence of these elements may lead to the dissolution of the relationship. The foundation of a healthy romantic relationship lies in communication and negotiation skills, caring behaviors, authenticity, mutual respect, trust, and honesty (Hielscher, Moores, Blenkin, Jadambaa, & Scott, 2021). Tyler Jamison and Caroline Sanner (2021) observe that commitment-based relationships foster the development of skills necessary for building intimacy and interdependence, helping individuals achieve a balance between independence and closeness.

Jamison and Sanner (2021) distinguish six types of romantic relationships in the context of development. The first type is romantic experimentation, which involves short-term, superficial relationships with limited interaction and minimal emotional and physical bonding, typical of childhood and adolescence. The second type is infatuation – a romantic or sexual interest that does not develop further due to a lack of mutuality or situational barriers. The authors consider infatuation a subtype of romantic experimentation. The third type are casual sexual encounters (hookups), limited exclusively to sex, even if one or both parties desire something more. The fourth type is casual dating, in which partners explore a romantic relationship by spending time together and occasionally engaging in sexual activity, without future plans and with the possibility of dating other people at the same time. The fifth type is time-bound dating – a short-term relationship that is emotionally and physically intense but ends due to an anticipated change, such as the end of summer vacation. The sixth type is committed relationships, in which partners experience increasing emotional – and usually physical – intimacy and expect continued commitment and a shared future.

The exploration of romantic and sexual preferences among adolescents often includes experimenting with different types of relationships, partners, and sexual practices (Arnett, 2015, as cited in Olmstead, 2020). Most teenagers engage in monogamous, long-term romantic relationships in which they have their sexual experiences, while others go through them in a series of short-term relationships, casual encounters (hookups), relationships with friends (friends with benefits), or during spontaneous sexual meetings (booty calls). (Baldus, Elgán, Soye, Tønnesen, Arnaud, Csémy & Thomasius, 2023; Olmstead, 2020; Van de Bongardt, De Graaf, 2020; Yu, Luo & Xie, 2022). In the second decade of the 21st century, there has been an increase in the number of individuals engaging, with mutual consent, in non-monogamous sexual relationships (such as polyamory, swinging, and open relationships). This phenomenon involves both individuals with and without romantic partners (Olmstead, 2020). Non-monogamous relation-

ships are based on commitment and emotional investment with one or more partners (Sizemore & Olmstead, 2016), whereas relationships centered around casual sex typically lack an element of commitment (Olmstead, 2020). Research indicates that boys are more likely than girls to engage in casual sexual encounters (Olmstead, 2020; Van de Bongardt & De Graaf, 2020).

Zbigniew Lew-Starowicz (1990) distinguishes four types of sexual initiation: with a partner towards whom one feels no emotional attachment; with a future spouse as a way of testing compatibility; with a more experienced individual; and after marriage, when both partners are inexperienced. According to the author, each of these types can lead to different emotional experiences and consequences for future relationships. Initiation without emotional bonding may result in a separation of sex from love, difficulties in forming deeper emotional connections, and a tendency toward further casual encounters. Sexual compatibility testing can be unreliable, as sexual maturity develops over time and requires patience and a suitable emotional climate. Initiation with a more experienced partner carries the risk of comparisons and jealousy, especially if the experience is not mutual. However, at a high level of maturity, such comparisons may not occur. In contrast, initiation after marriage may lead to disappointment but can also foster the development of shared sexual experience, provided it is accompanied by trust and mutual openness.

Boys and young men are more likely than girls and young women to experience positive emotions related to sexual activity – both during initiation and in subsequent encounters (Higgins et al., 2010; Marván, Espinosa-Hernández, Orihuela-Cortés, 2018; Reissing, Andruff, Wentland, 2012; Schwartz & Coffield, 2020; Vasilenko, Walters, Clark, Lefkowitz, 2022; Walters & Lefkowitz, 2023). These experiences are often accompanied by a sense of fulfillment in their gender role, frequently expressed through dominance (Marván et al., 2018). This applies to their experiences in both long-term relationships and casual encounters. (Conley, Klein, 2022; Reissing et al., 2012; Schwartz, Coffield, 2020). Men's positive emotions related to sexual initiation may stem from

the experience itself, regardless of the nature of the relationship with their partner. However, for boys who undergo sexual initiation with a partner with whom they do not share a close emotional bond, negative consequences may arise, such as concerns that the partner might expect a deeper level of commitment (Vasilenko et al., 2022).

Research shows that most girls and women experience physical discomfort (pain) during sexual initiation, along with lower or no sexual and psychological satisfaction, as well as ambivalent emotions, ranging from anxiety, shame, regret, and guilt to contentment and joy (Boydell, Wright, Smith, 2021; Conley & Klein, 2022; Hawkins, DeLuca, Claxton, Baker, 2023; Richters et al., 2022; Schwartz & Coffield, 2020; Vasilenko et al., 2014; Vasilenko et al., 2022). Positive outcomes of sexual initiation and later sexual experiences, including psychological satisfaction, are more often associated with emotional closeness to the partner. (Higgins et al., 2010; Vasilenko et al., 2022). Sexual experiences can often be traumatic for girls, especially when they are treated in a hurtful way by their partners. In cases of casual relationships or one-time sexual encounters, some girls reported experiencing pressure (Reissing et al., 2012), coercion (McClinton Appollis, Jonas, Beauclair, Lombard, Duby, Cheyip, Maruping, Dietrich & Mathews, 2021), and even violence (Hawkins et al., 2023).

Lew-Starowicz (1997) emphasizes that traumatic experiences related to early sexual encounters and intimate relationships can lead to the development of sexual disorders. This phenomenon is associated with the formation and reinforcement of dysfunctional cognitive schemas that affect the interpretation of subsequent sexual experiences (Smith & Shaffer, 2013). As a result, difficulties such as vaginismus, dyspareunia, or anorgasmia may arise (Lew-Starowicz, 1997, 2004). These mechanisms are explained by sexual script theory (Gagnon & Simon, 1973, as cited in Beisert, 2023) and the concept of encoded sexual responses – deeply ingrained patterns that significantly shape the quality of one's sexual life in adulthood (Imieliński, 1990). Researchers emphasize the role of classical conditioning (Bancroft, 2019; Imieliński, 1990) and the law of first reflexive-conditioned connections (Lew-Starowicz, 2004). As Lew-Starowicz

(2004) notes, an individual's sexual biography – particularly that of a woman – significantly influences later sexual needs and behaviors. According to the principle of generalization, a positively experienced sexual initiation can foster the development of satisfying relationships and emotional bonds. Conversely, a negative experience may lead to inhibitions, difficulties, and failures in the sexual sphere. The sources of disappointment vary by gender. Among young men, these may stem from unrealistic expectations, an excessive focus on intense sensations, emotional immaturity, egocentrism, primitiveness, sexual hyperactivity, and overly rapid sexual responses. Among young women, disappointment is often linked to pain during defloration, the partner's lack of emotional involvement, and his instrumental approach to the sexual act – manifested in a conqueror-like attitude rather than that of someone seeking a relationship based on mutuality and emotional connection. A high level of emotional maturity, personal culture, sexual awareness, and emotional bonding fosters a satisfying initiation experience. In such cases, potential difficulties, such as awkwardness or temporary disruptions, are experienced more mildly (Lew-Starowicz, 1990).

Research indicates that when adolescents engage in sexual activity with someone they have affectionate feelings for – typically within a romantic relationship – the initiation is more often associated with positive outcomes compared to encounters with casual or unfamiliar partners, especially among girls (Higgins et al., 2010). A high level of comfort within the relationship and satisfaction with the first sexual experience help mitigate negative emotions. For young women, positive experiences were strongly linked to the presence of love, emotional closeness, and psychological comfort, which often served as prerequisites for deciding to initiate sexual activity. For men, these factors were not of significant importance (Schwartz & Coffield, 2020). Research by Tracy Walters and Eva Lefkowitz (2023) shows that nearly 90% of eighteen-year-olds experienced physical satisfaction and a greater sense of closeness with their partner during subsequent sexual encounters. Similarly, Sophie Hawkins and co-authors (2023) found that more intimate sexual behaviors within romantic relationships in early adulthood correlated with high-

er sexual satisfaction compared to casual encounters. Individuals in romantic relationships also demonstrated higher levels of sexual communication and greater assertiveness (Van de Bongardt & De Graaf, 2020). Partners in romantic relationships were more likely than those involved in casual encounters to talk about their sex life, needs, boundaries, monogamy, contraception, and the risk of sexually transmitted infections (Lehmiller et al., 2014). As emphasized by Veronica Smith and Matthew Shaffer (2013), sexual initiation experienced in the context of intimacy and mutual respect promotes higher satisfaction (both physical and emotional), better sexual self-esteem, and lower levels of depression. Research by Paige Harden (2012) further indicates that engaging in sexual activity within romantic relationships during adolescence increased the likelihood of marriage, while non-romantic relationships were more often limited to sexual encounters only.

Research indicates that adolescents and young adults who begin their sexual lives with casual partners are more likely to experience negative consequences – such as psychological distress and feelings of regret – compared to those who initiate sexual activity within romantic relationships (Marván et al., 2018; Vasilenko et al., 2022; Wesche, Lefkowitz Maggs, 2021). Among women, sexual initiation outside of a romantic relationship was more frequently associated with lower self-esteem and depressive symptoms than among those who engaged in sex with a romantic partner or remained sexually inexperienced. No such correlation was found among men (Grello, Welsh, Harper, 2006). Casual sexual relationships often carry complex emotional outcomes and are evaluated both positively and negatively. Decreased well-being was particularly reported by young people when sexual encounters occurred under the influence of alcohol, lacked satisfaction, involved low levels of familiarity with the partner, or were accompanied by a lack of self-acceptance regarding their actions (Wesche, Claxton, Waterman, 2020). Casual encounters were often associated with substance use (Wakasa et al., 2021) and a higher risk of sexual violence (Baldus et al., 2023). High-risk sexual behaviors, characterized by limited self-control, were correlated with reduced psychological well-being, stronger feelings

of regret, and poorer mental health (Wesche et al., 2020). Sexual activity in casual relationships was also associated with lower physical and emotional satisfaction (Wesche et al., 2021), more frequent feelings of guilt, and a lack of readiness for sexual intercourse (Vasilenko, 2022). Short-term relationships are characterized by lower levels of intimacy and commitment (Jamison & Sanner, 2021). Research also shows that a higher number of sexual partners is linked to negative health and relational consequences. Among adults with such experiences, there was a higher incidence of sexually transmitted infections, more unplanned pregnancies, and lower quality of romantic relationships (Kahn & Halpern, 2018). Similar patterns were observed among adolescents, where more frequent sexual contacts correlated with poorer physical and emotional health, as well as lower quality of future relationships (Cadely, Finnegan, Spears, Kerpelman, 2020).

There is limited research on the relationship between premarital sexual experiences and the quality of marital relationships; however, the available analyses allow for several important conclusions. Individuals who engaged in sexual activity before marriage more often reported lower marital satisfaction (Sassler, Addo, Lichter, 2012) and were more likely to form lower-quality relationships (Stanley, Rhoades, Markman, 2006; Teachman, 2003), with a higher risk of divorce (Smith, Wolfinger, 2024; Stanley et al., 2006; Teachman, 2003), compared to those who postponed sexual initiation until after marriage. Premarital sexual activity had a stronger negative impact on marital functioning and divorce risk for women than for men (Smith & Wolfinger, 2024). Women who began their sexual lives before marriage more often experienced conflicts and weaker communication with their partners (Sassler et al., 2012). In contrast, premarital sexual restraint was associated with better marital relationships regardless of gender. Couples who postponed sexual activity until marriage reported higher relationship satisfaction, better communication, and a lower risk of divorce (Busby, Carroll, Willoughby, 2010). Similar patterns were observed among individuals who began sexual activity after becoming engaged. Their marital relationships were characterized by

greater commitment, better communication, and higher satisfaction compared to those who became sexually active before engagement (Rhoades, Stanley, Markman, 2009). Jay Teachman (2003) found that premarital sexual activity exclusively with one's future spouse did not increase the risk of marital problems or divorce among women (men were not included in these analyses).

The greater the number of premarital sexual partners reported by spouses, the lower the quality of their marriage (Teachman, 2003). They also reported lower sexual satisfaction (Davis, Shaver, Widaman, Vernon, Follette, Beitz, 2006) and were more likely to engage in infidelity (McNulty, Meltzer, Makhanova, Maner, 2018), which contributed to a higher risk of relationship dissolution (Paik, 2011; Smith, Wolfinger, 2024; Teachman, 2003). Research suggests that individuals who engage in premarital sexual activity with multiple partners may develop more permissive attitudes toward sexuality and a heightened awareness of alternatives, such as infidelity, that weaken marital stability (Paik, 2011; Teachman, 2003). Some may even perceive infidelity as attractive (McNulty et al., 2018).

Negative or ambivalent emotions related to sexual initiation, resulting from factors such as social pressure, manipulation, or dissatisfaction with the experience itself, increase the risk of divorce later in life (Paik, 2011). Similar outcomes are observed in cases where initiation occurred under coercion (Heaton, 2002). In contrast, positive experiences during first sexual intercourse are associated with no increased risk of marital dissolution (Paik, 2011).

Analyses also show that an increasing number of young people engage in sexual activity within the first month of a romantic relationship, which correlates with lower marital quality later in life, especially for women (Sassler et al., 2012). These experiences are also linked to poorer communication between women and their future spouses (Busby et al., 2010). Relationships in which couples quickly initiate sexual intercourse tend to be characterized by impulsivity, lack of planning, and emotional entanglement, which makes it more difficult to end unhealthy partnerships (Sassler et al., 2012). Such couples are less likely to discuss long-term goals, more likely to experience

anxiety within the relationship, and are at greater risk of forming unstable and unsatisfying relationships in the future (Stanley et al., 2006). On the other hand, individuals who delay sexual activity in romantic relationships demonstrate a greater readiness to maintain marital stability and report higher relationship satisfaction (Busby et al., 2010). The longer a couple postpones engaging in sexual intercourse, the better the quality of their future relationship, including improved communication, less conflict, higher levels of commitment, intimacy, emotional support, and sexual satisfaction (Busby et al., 2010; Sassler et al., 2012). People who initiate sexual activity later tend to have fewer romantic partners and report greater relationship satisfaction (Harden, 2012).

## **2. The methodology foundations of the author's research**

The study aimed to analyze the relationship between the type of partner at sexual initiation and premarital sexual experiences, and the quality of marital relationships among young adults. The research question was formulated as follows: to what extent does the nature of sexual experiences – including the type and number of partners – differentiate the quality of marital relationships in young adults? The hypothesis stated that the number and type of sexual partners moderately differentiate the quality of respondents' marital relationships dependent variable was the quality of marital relationships, measured in the areas of bonding, marital communication, and the sense of compatibility with the spouse. The independent variables were the number of sexual partners before marriage and the type of partner at sexual initiation. Three types of partners were distinguished: (1) current spouse, (2) former romantic partner from the time of sexual initiation, and (3) non-romantic partner (e.g., friend, acquaintance, casual partner).

The diagnostic survey method was used, employing three standardized research instruments: the Marital Bonding Scale by Józef Szopiński (1980) (covering empathy, mutual understanding, and cooperation), the Marital Communication Questionnaire by Maria Kaźmierczak and Mieczysław Płopa (2006)

(measuring support, commitment, and depreciation toward the spouse), and the Marital Compatibility Questionnaire by Jan Rostowski and Mieczysław Plopa (2006) (including scales of intimacy, similarity, self-fulfillment, and disappointment in the relationship).

Before conducting the main statistical analyses, the assumptions regarding the data distribution for the key dependent variables were checked using the Shapiro-Wilk test. In most cases, the results of these tests ( $p < 0.05$ ) indicated significant deviations from a normal distribution, which justified the selection and use of non-parametric tests. For comparisons between two independent groups, the Mann-Whitney U test was used, while the Kruskal-Wallis test was applied for comparisons among three groups. Relationships between variables were analyzed using Spearman's rank correlation coefficient. When statistically significant differences were found in the Kruskal-Wallis test, further post hoc analyses were conducted using Dunn's test with Bonferroni correction to precisely locate the sources of these differences between specific groups. For all conducted statistical tests, appropriate effect size measures were calculated and reported: the  $r$  coefficient for the Mann-Whitney U test, the  $\epsilon^2$  (epsilon squared) for the Kruskal-Wallis test, and Spearman's correlation coefficient  $\rho$  (rho) was treated as a measure of the strength of association. These steps were taken to ensure the reliability of the analyses and to provide a more comprehensive interpretation of the results by current scientific reporting standards. Both statistically significant results and trends ( $p < 0.09$ ) were considered due to the unique nature of the study.

Data on the number and type of sexual partners were collected using an original questionnaire. The sample was selected using a non-random, purposive sampling method. The participants were married individuals aged 20-35, born in the late 1980s and early 1990s. The study included 153 women and 153 men. The average age of men was 30.41 years, and the average age of women was 29.05 years. The mean duration of marriage was 5.22 years, and the average length of the relationship before marriage was 3.31 years.

### **3. Selected aspects of premarital sexual experiences and the quality of bond, communication, and perceived compatibility between spouses.**

#### **Results of own research**

The study conducted among young adults revealed that the majority of respondents engaged in premarital sexual activity (74.51% of men and 66.01% of women) (Table 1).

The partner in respondents' sexual initiation was most often someone with whom they shared a close emotional bond. For 43.14% of men and 48.37% of women, this partner was their current spouse, with 25.49% of men and 33.99% of women initiating sexual activity after marriage. A similar proportion of respondents (38.56% of men and 40.52% of women) became sexually active with romantic partners they were dating at the time, but those relationships eventually ended. For the remaining respondents, their first sexual partner was someone with whom they had a non-romantic relationship (18.3% of men and 11.1% of women). The majority of respondents (61.44% of men and 75.16% of women) reported being in love with their first sexual partner. For the remaining respondents, the relationship with their first sexual partner was described as a friendship (7.84% of men and 5.88% of women), affection or liking (18.3% of men and 15.69% of women), or a collegial bond (8.5% of men and 1.31% of women). Only a few participants (3.92% of men and 1.96% of women) reported having no emotional connection with their partner at the time of sexual initiation. Every seventh respondent (16.34% of men and 10.46% of women) stated that they had not been in a romantic relationship with their first sexual partner. The study confirmed that women had fewer sexual partners than men ( $Z = 2.87$ ,  $r = 0.164$ ,  $p = 0.004$ ). The findings also indicated that one in five men (20.45%) and one in four women (25.31%) expressed regret about having initiated sexual activity with someone other than their spouse.

The analysis of marital relationship quality in relation to the number of sexual partners before marriage yielded varied results, with differences particularly noticeable in the group of women (Table 2).

Table 1. Aspects of respondents' premarital sexual experiences

Aspects of premarital sexual experiences		Men		Women		U	Z	r	p
		N	%	N	%				
Engaging in sexual intercourse before marriage	Yes	114	74.51	101	66.01	10832	-1.54	-0.088	0.123
	No	39	25.49	52	33.99				
Initiation partner	Spouse	65	43.14	74	48.37	10577.5	1.48	0.085	0.139
	Former romantic partner	60	38.56	62	40.52				
	Friend	5	3.27	5	3.27				
	Well-known colleague	14	9.15	6	3.92				
	Less-known colleague	4	2.61	2	1.31				
	Stranger	5	3.27	4	2.61				
Feelings during initiation	Love	94	61.44	115	75.16	10191.5	1.65	0.094	0.099
	Friendship	12	7.84	9	5.88				
	Affection	28	18.3	24	15.69				
	Collegial bond	13	8.5	2	1.31				
	No feelings	6	3.92	3	1.96				
Number of sexual partners	1	65	42.48	74	48.37	5453	2.87	0.164	0.004
	2	24	15.69	24	15.69				
	3	24	15.69	26	16.99				
	4	15	9.8	10	6.54				
	5 and more	25	16.34	19	12.42				
Regret that sexual initiation did not take place with one's spouse	Yes	18	20.45	20	25.31	3954	-0.47	-0.027	0.636
	No	70	79.55	59	74.69				

Table 2. Number of sexual partners and the quality of respondents' marital relationships

Quality of the respondents' marital relationships		Number of sexual partners			
		Men		Women	
		<i>Rho</i>	<i>P</i>	<i>Rho</i>	<i>P</i>
Marital bond	Empathy	-0.02	0.867	-0.27	0.003
	Mutual understanding	-0.02	0.858	-0.30	0.001
	Cooperation	-0.05	0.594	-0.29	0.002
	Full bond	-0.03	0.774	-0.30	0.001
Communication with the spouse	Support	-0.03	0.716	-0.12	0.184
	Commitment	0.05	0.578	-0.04	0.660
	Depreciation	-0.05	0.563	0.04	0.630
	Full communication	0.03	0.743	-0.08	0.397
Sense of marital compatibility	Intimacy	-0.08	0.400	-0.25	0.006
	Similarity	-0.13	0.175	-0.17	0.070
	Self-fulfilment	-0.06	0.516	-0.33	0.000
	Dissapointment	-0.07	0.480	0.20	0.028
	Full compatibility	-0.02	0.853	-0.27	0.003



Among the women surveyed, a significant negative correlation was found between the number of sexual partners before marriage and the quality of their marital relationship. Specifically, the more sexual partners a woman had before marriage, the lower her levels of: marital bond, including: empathy ( $\rho = -0.27$ ,  $p < 0.003$ ), mutual understanding ( $\rho = -0.30$ ,  $p < 0.001$ ), cooperation ( $\rho = -0.29$ ,  $p < 0.002$ ). It was also observed that the greater the number of sexual partners women had before marriage, the lower their sense of marital compatibility in the domains of intimacy ( $\rho = -0.25$ ,  $p < 0.006$ ) and self-fulfillment ( $\rho = -0.33$ ,  $p < 0.000$ ), as well as – at a tendency

level – similarity ( $\rho = -0.17$ ,  $p < 0.070$ ). Moreover, a higher number of premarital sexual partners was associated with a greater level of disappointment ( $\rho = 0.20$ ,  $p < 0.028$ ) in their current marital relationship. In contrast, no statistically significant results were found for men that would indicate a relationship between the number of premarital sexual partners and the quality of their current marriage.

A detailed analysis of the relationship between the type of first sexual partner and the quality of marital relationships among the women surveyed revealed numerous statistically significant correlations (see Table 3).

Table 3. Types of sexual initiation partners and the marital relationships of the surveyed women

Quality of marital relationships among female respondents			Types of partners during sexual initiation					
			Spouses	Former romantic partners	Non-romantic partners	H	$\epsilon^2$	p
Marital bond	Empathy	M	91.1	88.55	84.35	7.15	0.047	0.03
		SD	9.04	11.5	11.83			
	Mutual understanding	M	88.93	86.11	81.47	6.47	0.042	0.04
		SD	10.25	11.99	13.3			
	Cooperation	M	90.43	87.52	83.53	5.31	0.034	0.07
		SD	9.22	12.56	14.73			
	Full bond	M	270.45	262.18	249.35	7.19	0.047	0.03
		SD	27.76	35.14	38.83			
Communication with the spouse	Support	M	42.4	42.21	41.53	0.47	0.003	0.79
		SD	5.09	5.85	5.44			
	Commitment	M	33	33.98	32.41	2.02	0.013	0.36
		SD	4.99	4.93	4.58			
	Depreciation	M	24.55	24.34	31.35	10.68	0.700	0.005
		SD	6.44	7.42	8.32			
	Full communication	M	117.01	118.13	109.29	4.28	0.028	0.12
		SD	13.76	15.39	15.41			
Sense of marital compatibility	Intimacy	M	31.71	31.16	28.65	4.03	0.026	0.13
		SD	5.19	5.25	5.86			
	Similarity	M	28.18	27.87	26.47	1.09	0.007	0.58
		SD	4.43	4.16	5.36			
	Self-fulfillment	M	27.62	26.53	23.53	9.12	0.060	0.01
		SD	4.05	4.5	4.84			
	Disappointment	M	19.51	21.81	25.41	4.61	0.030	0.09
		SD	7.26	8.12	11.31			
	Full compatibility	M	128	124.52	113.24	6.85	0.045	0.03
		SD	18.86	19.38	21.02			

The highest levels of marital bond in the areas of emotional empathy ( $H = 7.15$ ,  $\epsilon^2 = 0.047$ ,  $p < 0.030$ ) and mutual understanding ( $H = 6.47$ ,  $\epsilon^2 = 0.042$ ,  $p < 0.040$ ), as well as – at the level of a statistical tendency – in cooperation ( $H = 5.31$ ,  $\epsilon^2 = 0.034$ ,  $p < 0.070$ ), were observed among women whose sexual initiation partner was their current husband. Slightly lower results were found among women who began their sexual life with a partner with whom they were then in a romantic relationship, and the lowest results were noted among those who initiated sexual activity with a non-romantic partner. A similar pattern was observed in relation to the sense of compatibility with their husbands ( $H = 6.85$ ,  $\epsilon^2 = 0.045$ ,  $p < 0.030$ ), particularly in the area of self-fulfillment ( $H = 9.12$ ,  $\epsilon^2 = 0.060$ ,  $p < 0.010$ ). The highest scores on these scales were achieved by women who initiated sexual activity with their current spouses; lower scores were recorded among those whose first sexual partner was a former romantic partner; and the lowest among women whose sexual initiation occurred with a non-romantic partner. The highest level of deprecation directed toward husbands was observed among women whose sexual initiation occurred with a non-romantic partner ( $H = 10.68$ ,  $\epsilon^2 = 0.700$ ,  $p < 0.005$ ). A lower tendency to deprecate their husbands was found among both women whose first sexual partner was their current husband and those who began sexual activity with a then-romantic partner. The greatest disappointment

with the marital relationship was reported by women who experienced sexual initiation with non-romantic partners, while the lowest level of disappointment was declared by those whose initiating partner was their current husband (differences significant at the level of a statistical trend,  $H = 4.61$ ,  $\epsilon^2 = 0.030$ ,  $p < 0.090$ ). Other relationships, despite notable differences in mean scores, did not reach statistical significance. The study found no differences in the quality of marital relationships between respondents who initiated sexual activity with their spouses before marriage and those who did so after marriage.

For the statistically significant results presented above, measured using the Kruskal-Wallis test, Dunn's post hoc test was applied to indicate which groups of women, depending on the type of partner during sexual initiation, differ from one another (Table 4).

The analysis of results for women showed that the type of partner during sexual initiation significantly differentiates the quality of their marital relationships in several key aspects. This was confirmed by the global Kruskal-Wallis tests (Table 3), which justified the use of Dunn's post hoc analysis. Women who initiated sexual activity with their husband (type 1) exhibited a significantly higher level of emotional bonding (mean rank: 85.040) compared to women who initiated with a non-romantic partner (type 3 – mean rank: 53.735;  $z = 2.61$ ,  $p = 0.027$ ). This was reflected in a higher level of emotional empathy (for women who initiated with their husband – type 1 –

Table 4. Mean ranks and Dunn's post hoc test results (adjusted p-values) for pairwise comparisons between groups of women based on the type of partner during sexual initiation

Dependent variables – components of marital relationship quality	Mean ranks of independent variables			Comparisons of female groups based on the type of sexual initiation partner					
	Type 1	Type 2	Type 3	Type 1 vs Type 2		Type 1 vs Type 3		Type 2 vs Type 3	
	(Husband)	(Former romantic partner)	(Non-romantic partner)	z	p	z	p	z	p
Empathy	84.367	76.008	52.647	1.09	0.824	2.64	0.024	1.91	0.167
Mutual understanding	85.133	74.129	56.118	1.44	0.452	2.42	0.046	1.47	0.421
Full bond	85.040	74.895	53.735	1.32	0.555	2.61	0.027	1.73	0.249
Depreciation	75.007	71.476	110.47	0.46	1.000	2.96	0.009	3.19	0.004
Self-fulfilment	85.027	76.169	49.147	1.16	0.742	2.99	0.008	2.21	0.080
Full compatibility	84.527	75.540	53.647	1.17	0.721	2.58	0.029	1.79	0.219

Table 5. Types of sexual initiation partners and the marital relationships of the men surveyed

Quality of marital relationships among male respondents			Sexual initiation partners				H	$\epsilon^2$	p
			Wives (initiation after marriage)	Former romantic partners	Non-romantic partners				
Marital bond	Empathy	M	87.22	88.52	84.89		1.13	0.007	0.770
		SD	13.79	11.59	14.2				
	Mutual understanding	M	84.72	86.21	82.71		0.80	0.005	0.850
		SD	14.16	11.61	14.46				
	Cooperation	M	86.46	88.24	85.04		0.42	0.002	0.935
		SD	14.33	10.36	13.38				
	Full bond	M	258.39	262.97	252.64		0.81	0.005	0.847
		SD	41.52	32.86	41.29				
Communication with the spouse	Support	M	40.44	40.91	39.21		3.04	0.02	0.386
		SD	5.81	5.43	7.83				
	Commitment	M	32.42	33.72	32.5		4.30	0.028	0.231
		SD	5.07	5.05	6.26				
	Depreciation	M	24.74	24.69	25.5		1.52	0.01	0.678
		SD	7.23	7.19	9.27				
	Full communication	M	114.9	116.76	112.63		2.95	0.019	0.399
		SD	15.37	15.08	20.05				
Marital compatibility	Intimacy	M	31.66	31.17	31.04		2.54	0.017	0.468
		SD	4.62	4.37	5.6				
	Similarity	M	27.78	27.74	27.46		0.54	0.003	0.910
		SD	4.37	4.12	4.17				
	Self-fulfillment	M	26.72	28.4	26.29		6.51	0.043	0.089
		SD	4.82	3.39	4.4				
	Dissapointment	M	20.43	20.16	21.64		3.25	0.021	0.354
		SD	6.91	8.05	9.89				
	Overall compatibility	M	125.73	127.29	123.14		2.65	0.017	0.448
		SD	18.93	16.54	19.11				

mean rank: 84.367, vs. women who initiated with a non-romantic partner – type 3 – mean rank: 52.647;  $z = 2.64$ ,  $p = 0.024$ ) and a higher level of mutual understanding (for women who initiated with their husband – type 1 – mean rank: 85.133, vs. women who initiated with a non-romantic partner – type 3 – mean rank: 56.118;  $z = 2.42$ ,  $p = 0.046$ ). Women who initiated sexual intercourse with their husband (type 1) demonstrated a significantly lower level of spousal deprecation (mean rank: 75.007) compared to women who initiated with a non-romantic partner (type 3 – mean rank: 110.47;  $z = 2.96$ ,  $p = 0.009$ ).

Women from the first group also scored higher than those from the third group in the measure of perceived compatibility with their spouse (for women who initiated sexually with their husband – type 1 – mean rank: 84.527, vs. women who initiated with a non-romantic partner – type 3 – mean rank: 53.647;  $z = 2.58$ ,  $p = 0.029$ ), particularly in terms of their sense of self-fulfillment within the relationship (for women who initiated sexually with their husband – type 1 – mean rank: 85.027, vs. women who initiated with a non-romantic partner – type 3 – mean rank: 49.147;  $z = 2.99$ ,  $p = 0.008$ ).

Women who experienced sexual initiation with a former romantic partner (type 2) generally ranked between the group who initiated with their husband (type 1) and the group who initiated with a non-romantic partner (type 3) in terms of mean ranks across most measured aspects of marital relationships. Although women in the second group typically obtained much higher mean rank scores in the assessed areas of marital relationships than women in the third group, statistically significant differences were observed only in the measure of spousal deprecation (for women who initiated with former romantic partners – type 2 – mean rank: 71.476, vs. women who initiated with non-romantic partners – type 3 – mean rank: 110.47;  $z = 3.19$ ,  $p = 0.004$ ). In the area of self-fulfillment, these differences were at the level of a statistical trend (for women who initiated with former romantic partners – type 2 – mean rank: 76.169, vs. women who initiated with non-romantic partners – type 3 – mean rank: 49.147;  $z = 2.21$ ,  $p = 0.080$ ). The remaining differences between these groups of women, despite variations in mean ranks, were not statistically significant. No statistically significant differences were found between the group of women who initiated sexual activity with their

husband (Type 1) and those who initiated with a former romantic partner (Type 2) for any of the variables analyzed.

The analysis of the relationship between the type of partner during sexual initiation and the quality of marital relationships among the men surveyed did not reveal any statistically significant differences that would indicate a relationship in this area (Table 5). However, an analysis of the mean scores obtained by the respondents on the individual scales suggests certain trends.

In the area of marital bonding, which includes empathy, mutual understanding, and cooperation, men who initiated sexual activity with non-romantic partners scored slightly lower compared to those who began their sexual lives within romantic relationships. Similar differences, although also not statistically significant, were observed on the scales measuring communication with their spouse in terms of support, as well as perceived marital compatibility.

Men who initiated sexual activity with non-romantic partners scored lower on the measured scales. Conversely, in the scales assessing deprecation and disappointment in the marital relationship, these men showed slightly higher values compared to those who began their sexual lives

Table 6. Regret over having engaged in sexual activity with someone other than one's spouse and the marital relationships of the respondents

Quality of marital relationships among respondents		Regret that sexual initiation occurred with a partner other than the future spouse							
		Men				Women			
		U	Z	r	p	U	Z	r	p
Marital bond	Empathy	754	-0.14	-0.011	0.89	662	-0.1	-0.008	0.923
	Mutual understanding	701.5	-0.61	-0.049	0.544	643	-0.29	-0.023	0.771
	Cooperation	740	-0.26	-0.021	0.792	666	0.06	0.005	0.955
	Overall bond	734.5	-0.31	-0.025	0.755	654.5	-0.17	-0.014	0.862
Communication with the spouse	Support	1390	-1.5	-0.121	0.134	1678	-2.14	-0.173	0.032
	Commitment	1276	-2.01	-0.162	0.044	1916.5	-1.13	-0.091	0.256
	Depreciation	1706.5	-0.08	-0.006	0.936	1974.5	-0.89	-0.072	0.375
	Overall communication	1551	-0.78	-0.063	0.438	2009.5	-0.74	-0.060	0.460
Marital compatibility	Intimacy	1538	-0.84	-0.068	0.403	1571.5	-2.6	-0.210	0.009
	Similarity	1487.5	-1.07	-0.087	0.287	1311	-3.7	-0.299	0.000
	Self-fulfillment	1374.5	-1.57	-0.127	0.117	1382.5	-3.4	-0.275	0.001
	Disappointment	1618	-0.48	-0.039	0.633	1852	1.41	0.114	0.160
	Overall compatibility	1646.5	-0.35	-0.028	0.727	1528.5	-2.77	-0.224	0.006

within a romantic context. However, these differences are small and, due to the lack of statistical significance, cannot be considered a basis for drawing definitive scientific conclusions.

The study also explored whether the quality of marital relationships differs depending on whether individuals regret having initiated sexual activity with someone other than their current spouse (Table 6).

The results showed that women who expressed regret over having engaged in sexual activity with someone other than their husband, compared to women who did not report such regret, provided significantly less support to their spouses ( $Z = -2.14$ ,  $r = -0.173$ ,  $p < .032$ ). They also reported lower levels of perceived marital compatibility in the areas of intimacy ( $Z = -2.60$ ,  $r = -0.210$ ,  $p < .009$ ), similarity ( $Z = -3.70$ ,  $r = -0.299$ ,  $p < .000$ ), and self-fulfillment ( $Z = -3.40$ ,  $r = -0.275$ ,  $p < .001$ ).

Among men, those who regretted that their sexual initiation had not occurred with their current wife demonstrated significantly lower levels of involvement in building their marital relationship ( $Z = -2.01$ ,  $r = -0.162$ ,  $p < .044$ ) compared to men who did not express such regret.

#### **4. Discussion of the results**

The conducted study confirms that the nature of premarital sexual experiences, including the number of partners and the type of partner during sexual initiation, plays a significant role in the later quality of marital relationships, with these associations being particularly pronounced among women. The results are therefore partially consistent with the research hypothesis, which assumed that the number and type of sexual partners would moderately differentiate the quality of respondents' marital relationships. The findings suggest that the emotional and relational context of sexual initiation – especially when the partner is a future or current husband as opposed to a non-romantic partner – and the extent of experiences with different partners before marriage may have long-term implications for the quality of women's marital life.

Consistent with previous research findings (e.g., Kansky & Allen, 2018; Lew-Starowicz, 1990; Vasilenko et al., 2014), the type of partner with whom women initiated sexual activity emerged as a key factor differentiating the quality of their later marital relationships. Women whose sexual initiation occurred with their current spouse demonstrated significantly higher levels of marital bonding (in terms of empathy, mutual understanding, and overall connection), lower levels of partner depreciation, and a stronger sense of marital compatibility (including self-fulfillment), compared to women whose first partner was a non-romantic one. These findings align with previous reports indicating that initiating sexual activity in the context of love, commitment, and emotional closeness – characteristics often found in relationships with a future spouse – fosters positive long-term outcomes (Higgins et al., 2010; Smith & Shaffer, 2013). Moreover, these results are consistent with the studies of Van de Bongardt and De Graaf (2020) and Hawkins et al. (2023), who emphasized that romantic relationships tend to be marked by greater intimacy and better sexual communication, which contribute to overall relationship quality. It is worth noting that in the present study, no statistically significant differences were found in relationship quality between women who initiated sexual activity with their current husband and those whose first partner was a former romantic partner. This suggests that the mere presence of a committed romantic relationship at the time of sexual initiation, even if the relationship did not lead to marriage, may serve as a protective function compared to experiences with non-romantic partners. Furthermore, women who initiated sexual activity with a former romantic partner demonstrated significantly lower levels of depreciation toward their current husband than those who initiated with a non-romantic partner, further highlighting the importance of the relational context of first sexual experiences.

The findings also confirmed, in line with numerous previous reports (Busby et al., 2010; Kansky & Allen, 2018; Sassler et al., 2012; Teachman,

2003), that a higher number of premarital sexual partners among women is associated with lower quality in their later marriages. In the present study, women with a greater number of premarital partners reported significantly lower levels of empathy, mutual understanding, and cooperation (key components of bonding), as well as lower feelings of intimacy and self-fulfillment within the marital relationship, and higher levels of disappointment with their current marriage. These results support the concept of sexual scripts (Gagnon & Simon, 1973, as cited in Beisert, 2023) and learning theories, including classical conditioning (Bancroft, 2019; Lew-Starowicz, 2004), which suggest that early and varied sexual experiences may shape patterns of intimacy in adulthood.

In the case of men, the results paint a different picture. No statistically significant relationships were found between the number of premarital sexual partners and the quality of their current marriage, nor between the type of partner involved in sexual initiation and marital quality (although some non-significant trends suggested slightly lower scores among men who initiated sexual activity with non-romantic partners). This lack of clear associations in men may stem from gender differences in the emotional significance attributed to sexual experiences, as supported by studies such as Vasilenko et al. (2022) and Schwartz & Coffield (2020). These studies indicate that men are less likely than women to base their satisfaction with sexual experiences, including initiation, on the emotional or relational context in which they occur.

An interesting finding concerns the role of the subjective evaluation of premarital experiences. Respondents (both women and men) who expressed regret over having had sexual intercourse with someone other than their current spouse showed significantly lower quality in certain aspects of their marital relationship (women in terms of support, intimacy, similarity, and self-fulfillment; men in terms of commitment). This underscores the importance not only of the objective facts of one's sexual history but also of their psychological interpretation and emotional processing. These findings are consistent with

research by Paik (2011) and Smith & Shaffer (2013). Negative or ambivalent emotions related to one's sexual past may impact current functioning within a relationship. In the present study, no significant differences were found in marital relationship quality between individuals who initiated sexual activity with their future spouse before marriage and those who waited until after the wedding. This finding aligns with Teachman's (2003) observations for women and suggests that the key factor may not be the timing of sexual initiation relative to the wedding date, but rather the quality of the relationship with the first partner, particularly when that partner becomes the future spouse.

## **5. Study limitations**

Despite the careful execution of the present study, several limitations should be considered when interpreting the results. One such limitation is the relatively small number of respondents in certain subgroups (e.g., women and men who initiated sexual activity with non-romantic partners), which may have affected the statistical power of the analyses and potentially contributed to the lack of significance in some findings, particularly within the male group. Furthermore, the correlational nature of the study does not allow for causal inferences between the analyzed variables; it only indicates their co-occurrence. The analyses also did not account for potential mediating or moderating variables (e.g., personality traits, attachment styles, religiosity, quality of sexual communication), which may influence or modify the observed relationships.

A potential direction for future research could involve conducting analyses on larger, more representative samples, which would allow for more reliable generalizations. It would also be valuable to employ longitudinal studies, enabling the tracking of relationship development trajectories over time and offering a better understanding of how early sexual experiences influence later marital life. Additionally, incorporating the aforementioned mediating varia-

bles and using qualitative research methods would be beneficial, as they could provide a more in-depth understanding of individuals' subjective experiences and the meanings they assign to their sexual histories.

## 6. Practical implications

The study findings highlight the need for comprehensive psychosexual education that addresses not only the biological and technical aspects of sexuality but also the emotional and relational context of engaging in sexual activity. Particular emphasis should be placed on the potential long-term consequences of premarital sexual decisions for future functioning within marital relationships. In light of the results,

educational efforts in the area of sexuality need to promote behaviors among young people that support initiating sexual activity with partners with whom they intend to build lasting marital relationships. The results suggest that sexual partner stability may have a positive impact on the quality of women's marital relationships, particularly in the areas of emotional bonding and perceived marital compatibility. From a psychotherapeutic and counseling perspective, it is important to consider the history of sexual initiation and attitudes toward past experiences as potential sources of relational difficulties. Working on accepting one's sexual biography, forgiving oneself and one's partner, as well as fostering commitment to the relationship, may support the development of a deeper marital bond.

## Bibliography

- Baldus, C., Elgán, T.H., Soye, V., Tønnesen, H., Arnaud, N., Csemy, L., Thomasius, R. (2023). Risky sexual behaviour and sexual victimization among young people with risky substance use in Europe – perspectives from Belgium, Sweden, the Czech Republic, and Germany. *International Journal of Environmental Research and Public Health*, 20(21), 7002. <https://doi.org/10.3390/ijerph20217002>
- Bancroft, J. (2019). *Seksualność człowieka*. Warszawa: Edra.
- Beisert, M. (2023). *Rozwój seksualny w okresie dzieciństwa. Praktyczna analiza teoretyczna*. Warszawa: Wydawnictwo Naukowe PWN.
- Boydell, V., Wright, K.Q., Smith, R.D. (2021). A rapid review of sexual pleasure in first sexual experience(s). *The Journal of Sex Research*, 58(7), 850-862. <https://doi.org/10.1080/00224499.2021.1904810>
- Busby, D.M., Carroll, J.S., Willoughby, B.J. (2010). Compatibility or restraint? The effects of sexual timing on marriage relationships. *Journal of Family Psychology*, 24(6), 766-774. <https://doi.org/10.1037/a0021690>
- Cadely, H.S., Finnegan, V., Spears E.C., Kerpelman J.L. (2020). Adolescents and sexual risk-taking: The interplay of constraining relationship beliefs, healthy sex attitudes, and romantic attachment insecurity. *Journal of Adolescence*, 84(1), 136-148. <https://doi.org/10.1016/j.adolescence.2020.08.010>
- Conley, T.D., Klein, V. (2022). Women get worse sex: A confound in the explanation of gender differences in sexuality. *Perspectives on Psychological Science*, 17(4), 960-978. <https://doi.org/10.1177/17456916211041598>
- Davis, D., Shaver, P., Widaman, K., Vernon, M.L., Follette, W., Beitz K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, 13(4), 465-483. <https://doi.org/10.1111/j.1475-6811.2006.00130.x>
- Erikson, E.H. (2004). *Tożsamość a cykl życia*. Poznań: Zysk i S-ka.
- Grello, C.M., Welsh, D.P., Harper, M.S. (2006). No strings attached: The nature of casual sex in college students. *The Journal of Sex Research*, 43(3), 255-267. <https://doi.org/10.1080/00224490609552324>
- Gurba, E. (2012). Wczesna dorosłość, (In:) J. Trempała (ed.), *Psychologia rozwoju człowieka*, 287-311. Warszawa: Wydawnictwo Naukowe PWN.
- Harden, K.P. (2012). True Love Waits? A sibling-comparison study of age at first sexual intercourse and romantic relationships in young adulthood, *Psychological Science*, 23(11), 1324-1336. <https://doi.org/10.1177/0956797612442550>
- Hawkins, S.E., DeLuca, H.K., Claxton, S.E., Baker E.A. (2023). Sexual behaviors, satisfaction, and intentions to engage in casual sexual relationships and experiences in emerging adulthood. *Archives of Sexual Behavior*, 52, 1575-1591. <https://doi.org/10.1007/s10508-022-02508-z>
- Heaton, T.B. (2002). Factors contributing to increasing marital stability in the United States. *Journal of Family Issues*, 23(3), 392-409. <https://doi.org/10.1177/0192513X02023003004>
- Hielscher, E., Moores, C., Blenkin, M., Jadambaa, A., Scott, J.G. (2021). Intervention programs designed to promote healthy romantic relationships in youth: A systematic review, *Journal of Adolescence*, 92, 194-236. <https://www.sciencedirect.com/science/article/pii/S014019712100110X>
- Higgins, J.A., Trussell, J., Moore, N.B., Davidson, J.K. (2010). Virginity lost, satisfaction gained? Physiological and psychological sexual satisfaction at heterosexual debut. *The Journal of Sex Research*, 47(4), 384-394. <https://doi.org/10.1080/00224491003774792>
- Imieliński, K. (1990). *Seksjatria. Patologia seksualna*, t. 2. Warszawa: Państwowe Wydawnictwo Naukowe.
- Jamison, T.B., Sanner, C.M. (2021). Relationship form and function: Exploring meaning-making in young adults' romantic histories. *Personal Relationships*, 28(4), 840-859. <https://doi.org/10.1111/per.12400>
- Jankowiak, B. (2023). *Związki intymne młodzieży. Studium teoretyczno-empiryczne*. Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza.
- Joosten, D.H.J., Nelemans, S.A., Meeus, W., Branje, S. (2022). Longitudinal associations between depressive symptoms and quality of romantic relationships in late adolescence. *Journal of Youth and Adolescence*, 51, 509-523. <https://doi.org/10.1007/s10964-021-01511-2>



- Kahn, N.F., Halpern, C.T. (2018). Associations between patterns of sexual initiation, sexual partnering, and sexual health outcomes from adolescence to early adulthood. *Archives of Sexual Behavior*, 47, 1791-1810. <https://doi.org/10.1007/s10508-018-1176-9>
- Kansky, J., Allen, J.P. (2018). Long-term risks and possible benefits associated with late adolescent romantic relationship quality. *Journal of Youth and Adolescence*, 47, 1531-1544. <https://doi.org/10.1007/s10964-018-0813-x>
- Khalili, M., Mirzazadeh, A., Chegeni, M., Abedi, L., Rajaei, L., Ardalan, G., Haghdoust, A., Nasiri, N., Sharifi, H. (2020). Prevalence of high-risk sexual behavior among Iranian young people: A systematic review and meta-analysis. *Children and Youth Services Review*, 119, 105526. <https://www.sciencedirect.com/science/article/pii/S0190740920309361>
- Kotiuga, J., Yampolsky, M.A., Martin, G.M. (2022). Adolescents' perception of their sexual self, relational capacities, attitudes towards sexual pleasure and sexual practices: A descriptive analysis. *Journal of Youth and Adolescence*, 51, 486-498. <https://doi.org/10.1007/s10964-021-01543-8>
- Lehmiller, J.J., VanderDrift, L.E., Kelly, J.R. (2014). Sexual communication, satisfaction, and condom use behavior in friends with benefits and romantic partners. *The Journal of Sex Research*, 51(1), 74-85. <https://doi.org/10.1080/00224499.2012.719167>
- Lew-Starowicz, Z. (1990). *Atlas psychofizjologii seksu*. Warszawa: Państwowy Zakład Wydawnictw Lekarskich.
- Lew-Starowicz, Z. (1997). *Leczenie zaburzeń seksualnych*. Warszawa: Wydawnictwo Lekarskie PZWL.
- Lew-Starowicz, Z. (2021). Wywiad seksuologiczny. (In:) M. Lew-Starowicz, Z. Lew-Starowicz, V. Skrzypulec-Plinta (eds.), *Seksuologia*, 209-214. Warszawa: Wydawnictwo Lekarskie PZWL.
- Lew-Starowicz, Z. (2004). *Encyklopedia erotyki*. Warszawa: Muza SA.
- Martinez, G., Copen, C.E., Abma, J.C. (2011). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2006-2010: National Survey of Family Growth. National Center for Health Statistics, *Vital and Health Statistics*, 23(31). (From:) [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_031.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_031.pdf)
- Marván, M.L., Espinosa-Hernández, G., Orihuela-Cortés, F. (2018). Perceived consequences of first intercourse among Mexican adolescents and associated psychosocial variables. *Sexuality & Culture*, 22, 1490-1506. <https://doi.org/10.1007/s12119-018-9539-x>
- McClinton Appollis, T., Jonas, K., Beauclair, R., Lombard, C., Duby, Z., Cheyip, M., Maruping K., Dietrich J., Mathews, C. (2021). Early sexual debut and the effects on well-being among South African adolescent girls and young women aged 15 to 24 years. *International Journal of Sexual Health*, 34(2), 242-253. <https://doi.org/10.1080/19317611.2021.1979162>
- McNulty, J.K., Meltzer, A.L., Makhanova, A., Maner, J.K. (2018). Attentional and evaluative biases help people maintain relationships by avoiding infidelity. *Journal of Personality and Social Psychology*, 115(1), 76-95. <http://dx.doi.org/10.1037/pspi0000127>
- Oleszkowicz, A., Senejko, A. (2012). Dorastanie. (In:) J. Trempała (ed.), *Psychologia rozwoju człowieka*, 259-286. Warszawa: Wydawnictwo Naukowe PWN.
- Olmstead, S.B. (2020). A decade review of sex and partnering in adolescence and young adulthood. *Journal of Marriage and Family*, 82(2), 769-795. <https://doi.org/10.1111/jomf.12670>
- Paik, A. (2011). Adolescent sexuality and the risk of marital dissolution. *Journal of Marriage and Family*, 73(2), 472-485. <https://doi.org/10.1111/j.1741-3737.2010.00819.x>
- Plopa, M. (2006). *Węzi w małżeństwie i rodzinie. Metody badań*. Kraków: Oficyna Wydawnicza Impuls.
- Putri, D.A., Yuniarti, K.W., Minza, W.M., Riyono, B. (2021). How Balinese adolescents perceived romantic relationship. *Journal of Family Sciences*, 5(2), 71-91. <https://doi.org/10.29244/JFS.V5I2.31644>
- Reissing, E.D., Andruff, H.L., Wentland, J.J. (2012). Looking back: The experience of first sexual intercourse and current sexual adjustment in young heterosexual adults. *Journal of Sex Research*, 48(1), 27-35. <https://doi.org/10.1080/00224499.2010.538951>
- Rhoades, G.K., Stanley, S.M., Markman, H.J. (2009). The pre-engagement cohabitation effect: A replication and extension of previous findings. *Journal of Family Psychology*, 23(1), 107-111. <https://doi.org/10.1037/a0014358>
- Richters, J., Yeung, A., Rissel, C., McGeechan, K., Caruana, T., De Visser, R. (2022). Sexual difficulties, problems, and help-seeking in a national representative sample: The second Australian study of health and relationships. *Archives of Sexual Behavior* 51, 1435-1446. <https://doi.org/10.1007/s10508-021-02244-w>
- Sassler, S., Addo, F.R., Lichter, D.T. (2012). The tempo of sexual activity and later relationship quality. *Journal of Marriage and Family*, 74(4), 708-725. <https://doi.org/10.1111/j.1741-3737.2012.00996.x>
- Schwartz, I.M., Coffield, E.A. (2020). Two dimension approach to understanding negative and positive affective reactions to first coitus. *Sexuality & Culture*, 24, 1189-1206. <https://doi.org/10.1007/s12119-019-09693-5>
- Sizemore, K.M., Olmstead, S.B. (2016). Willingness to engage in consensual nonmonogamy among emerging adults: A structural equation analysis of sexual identity, casual sex attitudes, and gender. *The Journal of Sex Research*, 54(9), 1106-1117. <https://doi.org/10.1080/00224499.2016.1243200>
- Smith, C.V., Shaffer, M.J. (2013). Gone but not forgotten: Virginity loss and current sexual satisfaction. *Journal of Sex & Marital Therapy*, 39(2), 96-111. <https://doi.org/10.1080/0092623X.2012.675023>
- Smith, J., Wolfinger, N.H. (2024). Re-examining the link between premarital sex and divorce. *Journal of Family Issues*, 45(3), 674-696. <https://doi.org/10.1177/0192513X231155673>
- Stanley, S.M., Rhoades, G.K., Markman, H.J. (2006). Sliding versus deciding: Inertia and the premarital cohabitation effect. *Family Relations*, 55(4), 499-509. <https://doi.org/10.1111/j.1741-3729.2006.00418.x>
- Steele, M.E., Simons, L.G., Sutton, T.E., Gibbons, F.X. (2020). Family context and adolescent risky sexual behavior: An examination of the influence of family structure, family transitions and parenting. *Journal of Youth and Adolescence*, 49, 1179-1194. <https://doi.org/10.1007/s10964-020-01231-z>
- Szopiński, J. (1980). Skala Węzi Małżeńskiej. (In:) Z. Ratajczak (ed.), *Psychologia w służbie człowieka*, 101-106. Warszawa: Państwowe Wydawnictwo Naukowe.
- Teachman, J. (2003). Premarital sex, premarital cohabitation, and the risk of subsequent marital dissolution among women. *Journal of Marriage and Family*, 65(2), 444-455. <https://doi.org/10.1111/j.1741-3737.2003.00444.x>
- Van de Bongardt, D., De Graaf, H. (2020). Youth's socio-sexual competences with romantic and casual sexual partners. *The Journal of Sex Research*, 57(9), 1166-1179. <https://doi.org/10.1080/00224499.2020.1743226>
- Vasilenko, S.A. (2022). Sexual behavior and health from adolescence to adulthood: Illustrative examples of 25 years of research from add health. *Journal of Adolescent Health*, 71(6), 524-531. <https://doi.org/10.1016/j.jadohealth.2022.08.014>
- Vasilenko, S.A., Lefkowitz, E.S., Maggs, J.L. (2021). Changes in psychological distress after first vaginal intercourse in late adolescence. *Journal of Adolescence*, 89(1), 213-216. <https://doi.org/10.1016/j.adolescence.2021.05.003>



- Vasilenko, S.A., Lefkowitz, E.S., Welsh, D.P. (2014). Is sexual behavior healthy for adolescents? A conceptual framework for research on adolescent sexual behavior and physical, mental, and social health, *New Directions for Child and Adolescent Development*, 144, 3-19. <https://doi.org/10.1002/cad.20057>
- Vasilenko, S.A., Walters, T.L., Clark, A.N., Lefkowitz, E.S. (2022). Positive, negative, or mixed feelings? A person-centered approach to consequences of first penile-vaginal intercourse in college students. *Archives of Sexual Behavior*, 51, 3993-4006. <https://doi.org/10.1007/s10508-022-02379-4>
- Wakasa, B.F., Oljira, L., Demena, M., Regassa, L.D., Daga, W.B. (2021). Risky sexual behavior and associated factors among sexually experienced secondary school students in Guduru, Ethiopia. *Preventive Medicine Reports*, 23, 101398. <https://doi.org/10.1016/j.pmedr.2021.101398>
- Walters, T.L., Lefkowitz, E.S. (2023). Does sex improve with experience?: A latent transition analysis of college students' penile-vaginal sex-related consequences. *Journal of Youth and Adolescence*, 52, 461-474. <https://doi.org/10.1007/s10964-022-01728-9>
- Wesche, R., Claxton, S.E., Waterman, E.A. (2020). Emotional outcomes of casual sexual relationships and experiences: A systematic review. *The Journal of Sex Research*, 58(8), 1069-1084. <https://doi.org/10.1080/00224499.2020.1821163>
- Wesche, R., Lefkowitz, E.S., Maggs, J.L. (2021). Short-term consequences of sex: Contextual predictors and change across college. *Archives of Sexual Behavior*, 50, 1613-1626. <https://doi.org/10.1007/s10508-020-01874-w>
- Yu, J., Luo, W., Xie, Y. (2022). Sexuality in China: A review and new findings. *Chinese Journal of Sociology*, 8(3), 293-329. <https://doi.org/10.1177/2057150X221114599>



# Communication forms and experienced well-being in close emotional relationships<sup>1</sup>

<https://doi.org/10.34766/1j7jnh25>

Agata M. Marciniuk<sup>a</sup> ✉

<sup>a</sup> Agata M. Marciniuk, <https://orcid.org/0009-0002-8259-2304>, John Paul II Catholic University of Lublin, Poland

✉ Corresponding author: [agata.m.marciniuk@gmail.com](mailto:agata.m.marciniuk@gmail.com)

**Abstract:** *Introduction:* Communication is an essential element in building interpersonal relationships. Its quality has a significant impact on relationship satisfaction and overall happiness in a romantic partnership. Partners communicate in various ways. Not every form of the communication is beneficial for the relationship. Effective communication, based on mutual understanding and openness, significantly increases the level of intimacy in a relationship, leading to higher psychological well-being. In contrast, ineffective communication can lead to increased conflicts and reduced relationship satisfaction. The article aims to present the relationship between communication styles used by partners and well-being. Particular attention has been given to two forms of communication: empathetic and depreciative, as well as their influence on an individual's psychological well-being. The study presents gender differences in the communication style used. *Method:* The study included 80 people in romantic relationships with an age range of 19-65 years. A survey was conducted using two tools: the Psychological Well-Being Scale (C. Ryff) and the Communication Forms Questionnaire (M. Rys, P. Kwas). Data analysis included the Shapiro-Wilk test, Spearman's rho correlation, and the Mann-Whitney U test. *Results:* statistically significant differences were identified between men and women regarding the communication used. Women scored higher on empathic communication ( $M = 39.302, SD = 4.335$ ), while men were more likely to use depreciative communication ( $M = 32.471, SD = 6.501$ ). A significant but weak negative correlation was also observed between empathic communication and well-being, suggesting that excessive empathy may lead to lower psychological well-being. Furthermore, it was revealed that the higher the empathic communication level, the higher the positive relationship level, confirming the importance of empathic communication in building satisfying interpersonal connections. *Conclusions:* The study provides new evidence on the importance of communication form in romantic relationships and highlights the need for education on regulating empathy and effective communication. Furthermore, the study indicates the need for further research on the negative consequences of excessive empathy and the influence of personality and socio-cultural factors on communication styles in relationships.

**Keywords:** empathic communication, depreciative communication, well-being, romantic relationships, gender differences

## Introduction

The factors influencing satisfaction and enjoyment of a close emotional relationship have been extensively analysed in the scientific literature. Many authors address the role of empathic communication and the ways in which partners express their emotions. According to Gottman (1994), one of the most prominent marital relationship researchers, interpersonal communication and emotional intelligence are crucial factors affecting romantic relationship quality. The researcher believes that from the communication between individuals in a couple, one can infer its future longevity. Therefore, it is a factor

that plays a huge role in building and maintaining a satisfying relationship.

Research conducted by contemporary psychologists also proves that the ability to express one's emotions and actively listen to one's partner is correlated with relationship satisfaction (Szurlej, 2024). Contemporary psychological theories emphasize the importance of emotional intelligence and its positive impact on relationship dynamics (Smoleń and Iskra, 2023). Meanwhile, recent research suggests that the ability to recognize and regulate emotions can predict long-term relationship satisfaction (Smith et al., 2021).

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_marc.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_marc.pdf)

## 1. Close emotional relationship

Researchers define emotional relationships as the outcome of the attachment process (Janicka and Cieślak, 2020). They emphasize that it is formed both between infants and caregivers, friends, or finally between romantic partners. The article will only discuss the relationship between romantic partners. The attachment characterized by close interpersonal relationships is formed in early childhood, in the mother-child relationship, and perpetuates, projecting into all future relationships, including romantic relationships (Bowlby, 2007). According to psychologists, attachment styles in adult life are a reflection of childhood relationships (Hazan and Shaver, 1987).

According to Baumeister and Leary (1995) creating and entering into close relationships is a fundamental and necessary need in everyone's life. Other researchers also reached similar conclusions, indicating that the basic need of every human being is a sense of belonging – a strong desire to be in a relationship, form bonds, and enter into intimacy (Doroszewicz, 2008).

A close interpersonal relationship positively affects the fulfillment of the need for closeness and belonging, but it also determines well-being and the “happiness” of the people in it (Janicka, 2012).

Meanwhile, Doroszewicz (2008) indicates that when a person remains in a satisfying, close interpersonal relationship, his self-esteem increases. Research clearly indicates that having an emotionally close person reduces premature death risk and provides better physical health compared to people without a partner (Janicka, 2012). The experience of remaining in a close, satisfying emotional relationship translates directly into better mental health. Individuals involved in such a relationship are less likely to report depression symptoms and less likely to experience anxiety (Czyżowska, Gurba, Czyżowska, 2019).

The most popular concept of love worth mentioning when examining close emotional relationships is Sternberg's three-factor concept (1986). He distinguishes three love components: intimacy, passion, and commitment. Intimacy was defined as emotional closeness, respect for the partner, or the

ability to depend on the partner. Passion is the desire, the need to connect with a partner, the enjoyment of their presence. Commitment can be defined as partners accepting certain commitments to each other and solving problems together. It is a conscious mechanism, and each partner voluntarily decides whether he or she wants to engage in a relationship. It seems extremely important to test the connection and relationship between experienced well-being (satisfaction, emotional closeness) and the communication type used in the relationship.

## 2. Well-being in close emotional relationships

According to researchers, well-being is the result of subjective cognitive and affective (emotional) evaluations about an individual's life (Diener, Lucas, Oishi, 2008). Beliefs, judgments, and emotional reactions to events are the components of evaluating one's life. The evaluation is performed only by the individual and not by other, external experts. The individual evaluates their life quality and satisfaction of expectations and needs.

Researcher C. Ryff (1989) defines well-being as an individual's growth and development that depends on the social environment's influence. According to her concept, well-being is understood more broadly than simply “happiness” or “contentment”. For the unit to function well, many more factors are needed. Ryff, based on empirical research, has distinguished six factors. According to her, these factors ensure a good and valuable life. Each represents a challenge that the individual must meet to feel life satisfaction. These are: *self-acceptance*, understood as self-respect; *life purpose* as life's meaning; *environmental mastery* – understood as the ability to cope; *positive relationships with others* – a dimension necessary for a person to function properly; *personal development* – as the ability to realize one's potential; and *autonomy* – independence and the ability to make decisions.

Psychological well-being of individuals in close emotional relationships refers to a subjective feeling of happiness, satisfaction, and fulfillment. It comprises such elements as a feeling of emotional security,

social support, relationship satisfaction, and the ability to deal with conflicts (Reis and Gable, 2018). Individual well-being is not only closely related to the relationship quality and relationship satisfaction level but also to life satisfaction. Research indicates that high-quality communication, empathy, and a feeling of support in a relationship correlate with higher levels of psychological well-being (Holt-Lunstad, 2021), and partners who experience high emotional support levels are more likely to report lower stress levels and better emotional regulation (Pietromonaco and Collins, 2017; Holt-Lunstad, 2021). Moreover, stable and healthy relationships support building a positive self-image and self-esteem (Kuster and Orth, 2018). Partners who support each other and appreciate each other's strengths are more likely to have a higher level of happiness and commitment to the relationship. Relationship satisfaction also depends on the balance between support and autonomy – excessive control or lack of space can lead to a lower sense of well-being. Additionally, research indicates that people in satisfying relationships are less likely to experience depression, anxiety, and somatic problems (Slatcher and Selcuk, 2020), and partner support functions as a “buffer” against harmful stress effects and strengthens mental resilience (Feeney and Collins, 2019).

### **2.1. Communication in close emotional relationships**

Communication is a process aimed at exchanging views, experiences, information, and ideas, causing specific effects (Bijak and Kleka, 2021). However, psychologists understand interpersonal communication as exchanging verbal and nonverbal signals to interact more effectively (Nęcka, Orzechowski, Szymura, 2006). Verbal communication is any information transmitted verbally or in writing between the sender and the recipient. Therefore it has a relational character (Janicka, 2016).

Suwalaska-Barancewicz and Malina (2018) indicate that communication in a romantic relationship can be divided into effective (understood as an empathic communication) and ineffective (which threatens the development of intimacy). Effective

communication in a couple involves partners approaching themselves with openness and respect, resolving conflicts using mutual understanding, and maintaining closeness. Ineffective communication strategies are characterized by criticism, deprecation, hostility, and lack of empathy towards the partner. Neither do they lead to conflict resolution. In conclusion, communication style in a relationship is crucial to a romantic relationship's quality. Openness, active listening, and empathy are predictors of relationship longevity, whereas avoiding conversations and aggressive communication lead to a weakened relationship (Wałęcka-Matyja and Dębska, 2023). Plopa (2007) also reached similar conclusions, distinguishing the following communication types: supportive – is based on showing respect, openness and building community; engaged – is based on creating an atmosphere filled with support and understanding and emphasizes the value of the relationship; depreciative – which is a negative system of communication between partners, full of aggression, arrogance, insults and lack of respect. Increasing this communication type distances partners from each other and causes hostility.

According to researchers (Janicka, Cieślak, 2020), reciprocity in communication is one of the three fundamental dimensions that build good romantic relationships, right next to intimacy and argumentative behavior. Reciprocity in communication is characterized as the mutual exchange of emotions and experiences, as well as sharing them with one's partner. Important in this is also the communication frequency. This requires partners to be honest and able to communicate their emotional states. The researcher defines intimacy as verbal and non-verbal messages of affection directed to a partner. The dimension of “quarrelsome behavior” is defined as the occurrence of negative verbal messages in a conflict situation, which diminishes relationship satisfaction. Communication that complies with these three conditions (without negative non-verbal messages) provides the most effective way to communicate, leads to closer intimacy between partners, and helps resolve conflicts (Markman et al., 2010). The ability to “express and adequately interpret own and partner's feelings” also has a significant impact (Janicka, Niebrzydowski, 1994).

Communication research in relationships indicates that partners who express emotions openly and constructively are more likely to build lasting and stable relationships. Kelly et al. (2021) revealed that couples who regularly use active listening experience greater closeness and fewer conflicts. It is important to emphasize that the role of communication in a relationship is not limited only to conflict resolution. It is also a crucial element in building intimacy and emotional bonding. According to Sprecher and Hatfield (2022), partners who regularly express appreciation, gratitude, and affirmation have higher relationship satisfaction and lower disagreement levels. This means that depending on the communication style used, it can serve either as a factor that strengthens emotional bonds (e.g., empathic and supportive communication) or as a contributor to the deterioration of the relationship (e.g., communication marked by criticism and devaluation). Therefore, communication style has a direct impact on partners' experienced well-being and sense of emotional connectedness.

## **2.2. Empathy in interpersonal communication**

A crucial element in good communication is empathy. Empathy is an emotional intelligence component and is understood as the ability to identify with the other person's experiences and to understand their perspective (Ryś, 2016). According to Baron-Cohen (2015), empathy is the ability to recognize the thoughts and feelings of another person and respond with appropriate emotions. Many researchers debate whether empathy is a personality characteristic or is shaped by the environment (Ciechomski, 2017). Nevertheless, it remains a fact that empathy is a crucial skill in forming close relationships with others and in building satisfying relationships. Emotional closeness and trust in a partner can only be built by people capable of empathy (Ryś, 2009). It allows the partners to build openness towards each other, which significantly strengthens the bond (Block, 2006). According to psychologists, communication between partners' feelings and experiences is a strong predictor of overall relationship satisfaction

(Walęcka-Matyja and Szkudlarek, 2019). Research also indicates that the higher the partners' level of knowledge in the emotional sphere, the greater their relationship satisfaction (Dakowicz, 2020).

Partners with high empathy levels are more likely to use supportive strategies such as paraphrasing statements, validating the other person's emotions, and avoiding criticism (Perez and Riggio, 2019). Research by Lemay and Clark (2020) indicates that people with a high capacity for empathic response are more likely to compromise and positively reinterpret conflict situations. Partners with high emotional intelligence are more likely to use assertive and open communication, leading to better quality relationships (Mikołajczak et al., 2015). The more empathetic and clear the communication between partners, the greater their sense of satisfaction and closeness (Zarzycka, 2016). Researchers also highlight differences between man and woman in empathy and its impact on communication. Women are more likely to demonstrate a higher ability to respond empathetically and use supportive strategies in communication (Christov-Moore et al., 2019). However, men are more likely to prefer a problem-solving communication style, and are not always effective in situations that require emotional empathy and understanding (Barrett and Bliss-Moreau, 2022). Research conducted over the past five years suggests that these differences may result partially from socio-cultural factors, not just biological ones—men are culturally “deprived” of empathy and raised to be strong and causal individuals (Fischer and Eagly, 2021). Current research indicates that interventions based on empathy training and improving communication strategies can help increase relationship satisfaction (Taylor et al., 2022).

## **3. Research methods and tools**

The article aims to examine and evaluate the connections between communication form and experienced overall well-being of individuals in a romantic relationship. Additionally, it aims to highlight the relationship between the communication form (empathetic/denigrating) and certain subscales of

well-being; self-acceptance and positive relationships with others. For this purpose, the following research hypotheses were formulated:

- H1. There is a correlation between empathic communication and high levels of well-being of individuals in romantic relationship;
- H2. The higher the empathic communication, the higher the level of self-acceptance;
- H3. The higher the empathic communication, the more positive the relationship with others;
- H4. There is a difference between men and women in the communication style used.

The research was conducted by a diagnostic survey method using an online questionnaire. It was conducted from January to March 2025. To construct the questionnaire, two tools were used: the Shortened Mental Well-Being Scale (C. Ryff) and the Communication Forms Questionnaire (M. Ryś, P. Kwas). The first tool measures overall well-being and its six dimensions: self-acceptance, environmental mastery, personal development, positive relationships with others, life purpose, and autonomy. The method consists of 42 statements, to which the participant responds on a 7-point scale. The overall scale score is calculated by adding up each statement's score. The higher the score obtained, the higher the well-being level. The second tool, the Communication Forms Questionnaire, measures two communication styles: empathic and deprecating. The method consists of 22 statements to which the respondent responds on a 5-point scale. The higher the score obtained in each of the subscales, the higher the overall score for a given communication style.

#### 4. Study group characteristics

The study included 80 people involved in romantic relationships with varying seniority. Respondents are between the ages of 19 and 65 years old. 79% of them were women and 21% men. Respondents are both married (44%) and in informal relationships (56%). Approximately 35% of the respondents defined the duration of their current relationship as

being between 2 and 5 years, while the second highest result (21%) was the relationship duration defined as between 6 and 10 years. Among respondents, 51% described their relationship as satisfactory and 32% as ideal. Up to 60% rated their communication style as good while indicating that their partner's communication style is at an average level

#### 5. Results

The results were obtained using the SPSS IBM statistical program. The Shapiro-Wilk test was used for descriptive statistics. Spearman's rho test was used to calculate the correlation. The nonparametric Mann-Whitney U test was used to calculate differences between the male and female groups. The significance level was set at  $\alpha = 0.05$ . The result was considered statistically significant if it was in the range  $0.05 < p < 0.1$ .

The data presented in the table indicate that the overall level of well-being in the respondents is average ( $M = 166.913$ ,  $SD = 9.4483$ ). The highest possible score in each subscale is 49, so the highest possible overall score is 343. Based on the values presented in Table 1, it can be concluded that the variables had a right-skewed distribution (positive skewness), meaning that most of the results were below average. Respondents scored highest in the subscale concerning relationships ( $M = 29.93$ ,  $SD = 3.4101$ ). Therefore, it can be concluded that among those surveyed, many have relationships with loved ones that are satisfactory to them and have positive relationships with other people. High scores on this scale also indicate that the examined individuals exhibit empathy and understanding toward others.

In the research sample, the average value for empathic communication was  $M = 38.463$ , indicating the average results obtained. The average empathic communication score among women was  $M = 39.302$ , while among men,  $M = 35.353$ . Additionally, the standard deviation values ( $SD = 4.335$  for women and  $SD = 5.689$  for men) indicate that women were more consistent in their responses. These results suggest that the empathic communication level differs by gender. Among women, it is at a high level, while among men, it is at a medium level.

Table 1. Descriptive statistics of the PWB questionnaire obtained from own research (N=80)

	M	Me	SD	Lower quartile	Upper quartile	Min	Max
WELL-BEING							
Autonomy	27.288	27	4.007	25	30	15	35
Environmental mastery	26.7	27	3.8987	25	29	15	40
Personal development	28.125	28	4.2824	25	30	18	40
Positive relationships	29.938	30	3.4101	28	31.25	22	38
Life Purpose	26.975	26	4.2693	24	30	16	36
Self-acceptance	27.888	28	3.7518	25	31	19	35
Overall	166.913	18	9.4483	158.75	173.25	147	184

M- mean, Me- median, SD- Standard deviation, Min- minimum, Max- maximum

Table 2. Descriptive statistics of the communication forms questionnaire from own research (N=80) by gender of respondents

	M	Me	SD	Lower quartile	Upper quartile	Min	Max
Total	66.586	66	8.028	62	71	47	88
Empathic communication	38.463	38.5	4.894	35.75	42	28	49
Deprecating communication	28.125	27	7.956	23.75	32.25	11	50
Among women							
Total	66.254	66	7.960	62	70	47	88
Empathic communication	39.302	40	4.335	36	42	28	49
Deprecating communication	26.952	26	7.948	22	30	11	50
Among men							
Total	67.824	68	8.406	59	75	57	84
Empathic communication	35.353	33	5.689	32	37	29	47
Deprecating communication	32.471	30	6.501	27	35	25	50

M- mean, Me- median, SD- Standard deviation, Min- minimum, Max- maximum

For depreciative communication, the average is  $M = 28.125$ , which is significantly lower than for empathic communication. The average result among women was  $M = 26.952$ , while among men, it was  $M = 32.471$ . Furthermore, the standard deviation values ( $SD = 7.948$  for women and  $SD = 6.501$  for men) indicate that men were more consistent in their responses. These results suggest that the depreciative communication level among men is at a medium level, while among women, it is at a low level.

Spearman's correlation analysis was conducted to examine whether and what communication forms affect selected dimensions of well-being, allowing for assessment of the strength and direction of the relationship. The results obtained indicate a statistically significant but weak negative correlation between empathic communication and well-being level. The correlation coefficient is  $r = -0.2769$ ,  $p = 0.0129$ . This means that people who score higher in empathic communication

experience lower well-being levels. Therefore, hypothesis 1., proposed by the study's author, was not confirmed.

To verify hypothesis 2, the relationship between empathic communication level and a dimension of well-being – self-acceptance – was examined. The correlation coefficient is  $r = -0.2465$ ,  $p = 0.0275$ . Therefore, there is a significant negative relationship between the variables examined. Accordingly, the higher the empathic communication score, the lower the level of self-acceptance. This result is interesting, and although it does not confirm the hypothesis formed before the study, it finds justification in the literature.

The results obtained in the study indicate a weak but significant correlation ( $r = 0.249$ ,  $p = 0.0259$ ) between empathic communication and the positive relationship subscale of the well-being scale. This means that people with higher empathic communication are more likely to report better quality interpersonal relationships. The obtained result confirms hypothesis 3 proposed by the author. Although this relationship is relatively weak, its statistical significance suggests that empathetic communication plays a role in building positive connections.

Hypothesis 4 presented in the study was also confirmed. The results indicate that women have higher levels of empathic communication, while men score higher on deprecating communication. The statistical significance of these differences was confirmed using the Mann-Whitney U test. The obtained results indicate that women achieved a higher average score in empathic communication ( $M = 39.302$ ,  $SD = 4.445$ ) compared to men ( $M = 35.353$ ,  $SD = 5.689$ ). This difference is statistically significant ( $Z = 304$ ,  $p = 0.006$ ), suggesting that women are more likely to use communication strategies based on understanding, compassion, and willingness to help. Men had a higher average score for deprecatory communication ( $M = 32.471$ ,  $SD = 6.501$ ) compared to women ( $M = 26.952$ ,  $SD = 7.948$ ). This difference was also statistically significant ( $Z = 0.003$ ,  $p = 0.003$ ). This result means that men are more likely to use communication strategies based on rivalry, irony, sarcasm, or verbal aggression.

## 6. Results discussion

Although some of the hypotheses (H1 and H2) proposed by the author were not confirmed, there is an interesting interpretation of the obtained results. Researchers describe a certain paradox of empathy – one that has both positive and negative consequences. According to Batson (2011), empathy is associated with greater involvement in others' problems, which can lead to "emotional overload" and burnout. Empathic people often absorb others' emotions, which can negatively affect their well-being. According to research by Eisenberg et al. (2020), excessive engagement with others' emotions can lead to mental exhaustion. In the context of empathic communication, this means that people who are heavily involved in others' emotions may feel more stress and fatigue. They may also excessively analyze and worry about the situation, affecting their well-being. According to the pro-social cost theory (Perez and Riggio, 2019), engaging in helping and emotional support can lead to sacrificing one's own needs, which can result in reduced well-being. People who display high empathic communication may neglect their own emotions, needs, and rest, leading to mental exhaustion. An interesting explanation for the obtained research results may also be the specificity of the research group. If the study had been conducted on people working in helping professions (e.g., psychologists, doctors, and teachers), they might have experienced the negative effects of empathy more often. However, the study's author has no insight into the occupations performed by the respondents. Although the results obtained do not support the accepted hypothesis, they are consistent with the empathy, emotion regulation, and pro-social cost theories in the literature. According to these theories, empathy can be both a resource and a burden, depending on how it is experienced and how emotions are regulated. According to research by Eisenberg and Strayer (2001) and Deci and Ryan (2000), highly empathetic individuals often prioritize the needs of others over their own. This may lead to self-neglect and prioritizing the emotions of others over their own. People with high empathic communication levels are more likely to compare themselves to others, making them more likely to



view themselves critically, be concerned about others' opinions, and perceive their imperfections (Neff, 2011; Lopez-Correa et al., 2020). Highly empathic people also tend to focus on others' emotions and problems, causing them to downplay their own needs and achievements. Simultaneously, people with high empathy may take too much responsibility for others' emotions, and when their efforts do not have a positive result, they experience failure. Such action can lead to decreased self-esteem and self-acceptance and burnout (Figley, 2002). Empathy is essential for interpersonal relationships but can be associated with lower self-acceptance if it is not accompanied by the ability to self-care.

The hypotheses confirmed in the presented research (H3, H4) are also confirmed in other papers. Batson (2011) indicates that the ability to understand and empathize with others' emotions enhances interpersonal relationship quality. Empathic communication increases trust and closeness. People who can actively listen and understand the perspectives of others build deeper and more satisfying relationships (Davis, 1983). Higher empathy levels reduce conflicts – empathic communication allows for effective dispute resolution, as it allows you to notice the other person's emotions and needs (Rogers, 1951). It also promotes mutual support – people with higher empathy are more likely to engage in pro-social behavior, which has a positive impact on relationships (Eisenberg et al., 2020). Goleman's (1995) research indicates that people with high emotional intelligence – and therefore also able to empathize – perform better in social interactions. Their relationships are more harmonious because they can adapt their communication style to the speaker's emotions and needs. The author's research included people in partner relationships – therefore, the expected relationship between empathic communication and relationships. This interpretation is consistent with empathy, attachment, and emotional intelligence theories. This means that developing empathetic skills can positively affect the relationship quality, but the ability to regulate one's own emotions should also be nurtured. According to Batson's (2011) empathy theory, women are more likely to react in empathetic way, which may result

from biological and social factors. Eisenberg and Fabes' (1998) research indicates that women are more likely to engage in pro-social behavior and recognize and regulate emotions better in interpersonal interactions. Moreover, according to gender role theory (Eagly, 1987), women are often socialized in ways that promote empathy and caregiving, which may be reflected in their communication style. Research by Olweus (1993) indicates that men are more likely to engage in verbal aggression as a form of expressing frustration or achieving dominance. Gender role theory (Bem, 1981) suggests that men are socially conditioned to engage in more assertive and sometimes aggressive communication forms. Research by Cross and Madson (1997) indicates that men are more likely to focus on individualistic behavior, which may lead to less empathy and greater use of deprecating communication.

## **7. Theoretical and practical implications**

Based on the conducted research and the analyzed literature, several important conclusions can be drawn, not only for researchers studying communication in interpersonal relationships but also for practitioners working with patients. Firstly, there is a clear need for further research into the potential negative impact of empathy on the human psyche to describe its effects and potential consequences for the individual. Another conclusion drawn is the need for education children and their parents about emotions and interpersonal relationships. Special emphasis should be placed on learning to protect one's well-being and to skillfully set boundaries in relationships, as being an empathetic person can be aggravating. It is also crucial to foster self-compassion and empathy toward oneself, so that partners can become more emotionally self-aware and better equipped to build fulfilling relationships. The final conclusion is the need to focus on boys and men to cultivate empathetic communication from an early age. To this end, it is essential to educate parents and caregivers about emotional development and relationship skills.

## 8. Future research directions

The conducted research inspires further exploration. It should be expanded to verify other internal and external factors that can influence communication and well-being in close emotional relationships. Understanding these factors is crucial, as it can contribute to better comprehension of relationship dynamics and at least the appropriate therapeutic interventions used in therapy. Future studies should consider individuals' empathy levels, personality traits and temperamen-

tal characteristics. From a research perspective, it would also be valuable to examine attachment styles within romantic partnerships. Further exploration into the distinct types of empathy and the role of self-compassion is recommended. Qualitative studies could provide a more nuanced understanding of the personal determinants of empathic communication. Additionally, it would be worthwhile to investigate the long-term effects of different communication styles on relationship stability and to explore the origins of gender differences in communication patterns.

## Bibliography

- Baron-Cohen, S. (2015). *Teoria zła. O empatii i genezie okrucieństwa*. Warszawa: Smak Słowa.
- Barrett, L. F., Bliss-Moreau, E. (2009). She's emotional. He's having a bad day: Attributional explanations for emotion stereotypes. *Emotion*, 9(5), 649-658. <https://doi.org/10.1037/a0016821>
- Batson, C. (2011). *Altruism in humans*. Oxford University Press.
- Baumeister, R., Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-525.
- Bem, S.L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364.
- Bijak, K., Kleka, P. (2021). Relacje online. Ekstrawersja i inteligencja emocjonalna w kontekście wybranych aspektów komunikacji internetowej. *Człowiek i Społeczeństwo*, 51, 189-203. <https://doi.org/10.14746/cis.2021.51.10>
- Block, J. (2006). *Intymność w związku: Bliskość, czułość, akceptacja*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Bowlby, J. (2007). *Przywiązanie*. Warszawa: PWN
- Christov-Moore, L., et al. (2019). Empathy: Gender differences in neural mechanisms of emotional recognition. *Neuroscience & Biobehavioral Reviews*, 103, 137-145.
- Ciechomski, M. (2017). Wychowanie do empatii jako sposób na redukcję stresu i jego szkodliwych skutków u dzieci i młodzieży. *Forum Pedagogiczne*, 7(2), 49-62.
- Cross, S.E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122(1), 5-37.
- Czyżowska, D., Gurba, E., Czyżowska, N. (2019). Intimate relationship and a chance for a good life in young people. (2019). *Quarterly Journal Fides et Ratio*, 37(1), 183-200. <https://doi.org/10.34766/fetr.v1i37.44>
- Dakowicz, A. (2020). Psychotransgresyjna analiza sfery emocjonalnej małżonków o wyższym i niższym poziomie zadowolenia ze swojego związku. (In:) M. Sroczyńska, A. Linek (eds.), *Społeczne konteksty współżycia i intymności. Szkice z socjologii emocji*, Vol. 1, 145-163, Warszawa: Wydawnictwo Naukowe Uniwersytetu Kardynała Stefana Wyszyńskiego.
- Davoodvandi, M., Navabi Nejad, S., Farzad, V. (2018). Examining the effectiveness of Gottman couple therapy on improving marital adjustment and couples' intimacy. *Iranian Journal of Psychiatry*, 13(2), 135-141.
- Davis, M. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44(1), 113-126.
- Deci, E., Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Diener, E., Lucas, R., Oishi, S. (2018). Advances and open questions in the science of subjective well-being. *Collabra: Psychology*, 4(1), 15. <https://doi.org/10.1525/collabra.115>
- Doroszewicz, K. (2008). Bliskie związki a jakość życia. *Psychologia Jakości Życia*, 7(1/2), 5-18.
- Eagly, A.H. (1987). *Sex differences in social behavior: A social-role interpretation*. Psychology Press
- Eisenberg, N., Fabes, R.A. (1998). Prosocial development. *Handbook of Child Psychology*, 3(5), 701-778.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51(1), 665-697.
- Eisenberg, N., Strayer, J. (2001). *Empathy and its development*. Cambridge University Press.
- Eisenberg, N., Eggum, N., Di Giunta, L. (2020). Empathy-related responding: Associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review*, 14(1), 143-174. <https://doi.org/10.1111/sipr.12058>
- Eisenberg, N., Spinrad, T., Knafo-Noam, A. (2020). Prosocial development from a multi-system perspective. *Annual Review of Psychology*, 71, 91-125. <https://doi.org/10.1146/annurev-psych-010419-050937>
- Feeney, B.C., Collins, N.L. (2019). Thriving through relationships. *Current Opinion in Psychology*, 31, 22-28.
- Figley, C. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*, 58(11), 1433-1441.
- Fischer, A.H., Eagly, A.H. (2021). The socialization of gender differences in emotional expression. *Emotion Review*, 13(2), 91-109.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Gottman, J.M. (1994). *Why marriages succeed or fail and How You Can Make Yours Last*. London: Bloomsbury
- Holt-Lunstad, J. (2021). The Major Health Implications of Social Connection. *Current Directions in Psychological Science*, 30(3), 251-259 <https://doi.org/10.1177/0963721421999630>
- Hazan, C., Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511-524.
- Janicka, I., Niebrzydowski, L. (1994). *Psychologia małżeństwa*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

- Janicka, I. (2012). Poczucie dobrostanu u osób poślubionych, kohabitujących i u singli. (In:) T. Rostowska, M. Lewandowska-Walter (eds.), *Małżeństwo i rodzicielstwo a zdrowie*, 26-53. Toruń: Wydawnictwo Adam Marszałek.
- Janicka, I. (2016). Style komunikacji w związkach kohabitacyjnych. *Psychologiczne Zeszyty Naukowe*, 2, 37-49.
- Janicka, I., Cieślak, M. (2020). Satysfakcja seksualna i jej znaczenie w bliskich związkach emocjonalnych. *Polskie Forum Psychologiczne*, Vol. XXV(4), 389-405.
- Kelly, A., Fincham, F., Beach, S. (2003). Communication skills in couples: A review and discussion of emerging perspectives. (In:) J.O. Greene, B.R. Burleson (eds.), *Handbook of communication and social interaction skills*, 723-751. Lawrence Erlbaum Associates Publishers.
- Kuster, F., Orth, U. (2018). The long-term stability of self-esteem. *Journal of Personality and Social Psychology*, 114(3), 317-334.
- Lemay, E., Clark, M. (2021). Emotions and relationships. *Current Opinion in Psychology*, 44, 1-6.
- Markman, H.J., Stanley, S.M., Blumberg, S.L. (2010). *Fighting for your marriage*. Jossey-Bass.
- Mikolajczak, M., Roy, E., Luminet, O., Fillée, C., de Timary, P. (2015). The mediating role of emotional intelligence in the impact of stress on alcohol consumption. *European Review of Applied Psychology*, 65(2), 71-77.
- Mikolajczak, M., Gross, J., Roskam, I. (2015). The emotion-regulation ability of empathic people. *Emotion*, 15(5), 695-703.
- Min, L., Jianchao, N., Mengyuan, L. (2022). The influence of self-compassion on mental health of postgraduates: Mediating role of help-seeking behavior. *Frontiers of Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.915190>
- Neff, K. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250.
- Neff, K. (2011). Self-compassion, self-esteem, and well-being. *Social and Personality Psychology Compass*, 5(1), 1-12.
- Nęcka, E., Orzechowski, J., Szymura, B. (2006). *Psychologia poznawcza*. Warszawa: Wydawnictwo Naukowe PWN.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Wiley-Blackwell.
- Perez, J.C., Riggio, R.E. (2019). The role of empathy in relationship satisfaction. *Journal of Social and Personal Relationships*, 36(7), 1910-1925.
- Pietromonaco, P.R., Collins, N.L. (2017). Interpersonal mechanisms linking close relationships to health. *American Psychologist*, 72(6), 531-542.
- Płopa, M. (2007). *Węzi w małżeństwie i rodzinie. Metody badań*. Kraków: Oficyna Wydawnicza „Impuls”.
- Reis, H.T., Gable, S.L. (2018). Relationships, well-being, and health. *Annual Review of Psychology*, 69, 207-236.
- Rogers, C. (1951). *Client-centered therapy: Its current practice, implications and theory*. Houghton Mifflin.
- Ryff, C. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Ryś, M. (2009). *Relacje w małżeństwie*. (In:) F. Adamski (ed.) *Miłość, małżeństwo, rodzina*, 177-188. Kraków: Petrus.
- Ryś, M. (2016). Miłość jako podstawa wspólnoty małżeńskiej. Ujęcie psychologiczne. *Kwartalnik Naukowy Fides et Ratio*, 27(3), 57-74.
- Slatcher, R.B., Selcuk, E. (2020). A social psychological perspective on close relationships and health. *Annual Review of Psychology*, 71, 335-359.
- Smoleń, J., Iskra, J. (2023). Inteligencja emocjonalna droga do pokojowego budowania relacji przyjacielskich. *Społeczeństwo. Edukacja. Język*, 18. [https://doi.org/10.19251/sej/2023.18\(6\)](https://doi.org/10.19251/sej/2023.18(6))
- Smith, A.L., Brown, J.D., Lee, C.T. (2021). Emotional regulation and long-term relationship satisfaction. *Journal of Couple and Relationship Therapy*, 20(3), 224-240.
- Sprecher, S., Hatfield, E. (2022). Ratings of the physical attractiveness of an interaction partner after a getting-acquainted interaction. *Personal Relationships*, 29(2), 366-385. <https://doi.org/10.1111/per.12422>
- Sternberg, R. (1986). A triangular theory of love. *Psychological Review*, 93(2), 119-135.
- Suwalska-Barancewicz, D., Malina, A. (2018). Samoocena i styl przywiązania jako predyktory oceny zachowań komunikacyjnych własnych oraz partnera. *Psychologia Rozwojowa*, 23(3), 65-82. <https://doi.org/10.4467/20843879PR.18.017.9358>
- Szurlej, A. (2024). *Inteligencja emocjonalna jako mediator związku między potrzebą przynależności, poczuciem szczęścia i rozwojem osobistym* (Master thesis, Jagiellonian University in Kraków, Poland).
- Taylor, R.D., Morris, J.P., Cameron, C.A. (2022). Enhancing empathy in romantic relationships: A meta-analytic review. *Personality and Social Psychology Bulletin*, 48(5), 667-684.
- Walecka-Matyja, K., Dębska, J. (2023). Interpersonal relationships and communication in romantic relationships vs digitization of life. (2023). *Quarterly Journal Fides et Ratio*, 54(2), 9-23. <https://doi.org/10.34766/fetr.v54i2.1183>
- Walecka-Matyja, K., Szkudlarek, A. (2019). Psychological predictors of satisfaction with a close interpersonal relationship. The role of emotional communication. *Quarterly Journal Fides et Ratio*, 38(2), 50-73. <https://doi.org/10.34766/fetr.v2i38.66>
- Zarzycka, B. (2016). Psychologiczne koncepcje przebaczenia w relacjach międzyludzkich. *Pedagogia Christiana*, 37(1), 163-181.

# The importance of interpersonal commitment in intimate relationships for the relationship between personal resilience and life satisfaction<sup>1</sup>

<https://doi.org/10.34766/fm9mez02>

Dorota Suwalska-Barancewicz<sup>a</sup>, Natalia Pilarska<sup>b</sup>✉, Kamilla Komorowska<sup>c</sup>

<sup>a</sup> Dorota Suwalska-Barancewicz<sup>1</sup>, <https://orcid.org/0000-0001-6495-9796>

<sup>b</sup> Natalia Pilarska<sup>1</sup>, <https://orcid.org/0000-0002-5545-1752>

<sup>c</sup> Kamilla Komorowska<sup>1</sup>, <https://orcid.org/0000-0002-1807-6279>

<sup>1</sup> Faculty of Psychology, Kazimierz Wielki University in Bydgoszcz, Poland

✉ Corresponding author: [pilarska@ukw.edu.pl](mailto:pilarska@ukw.edu.pl)

**Abstract:** *Introduction:* Numerous studies show that good social relationships, including formalised and informal intimate relationships, are important for the quality of life. Personal resources of partners and mature communication are necessary for relationships to be satisfactory, those result from interpersonal commitment and allow for building an authentic dialogue between partners. The presented study aimed to check whether interpersonal commitment (understood as the desire but also the compulsion to remain in a relationship), is associated with personal resilience (defined as the potential to present resourcefulness through available internal and external resources) and life satisfaction. *Method:* The study was conducted on 115 women and men via the Internet by sending Internet users a link to access an electronic form. The study included people in a close formalised or informal relationship. The study used Commitment Inventory, the *Lifespan Individual Resilience Scale* (LIRS) and the *Satisfaction with Life Scale* (SWLS). *Results:* The results of the analysis indicate that there is a statistically significant relationship between the levels of personal resilience and commitment as dedication ( $r = .45$ ;  $p < .001$ ) and as constraint commitment ( $r = .29$ ;  $p = .002$ ), as well as between life satisfaction and commitment as dedication ( $r = .50$ ;  $p < .001$ ) and constraint commitment ( $r = .33$ ;  $p < .001$ ). It was also proven that various aspects of interpersonal commitment in an intimate relationship (bond with the partner, importance of the relationship and concern for the partner's well-being) act as mediators in the relationship between resilience and life satisfaction, which explains the significant role of interpersonal commitment for the quality of life. *Conclusions:* The study results indicate that interpersonal commitment in an intimate relationship plays a mediating role in the relationship between resilience and satisfaction. The discussed topics may be used in preventive and psychotherapeutic work with couples and marriages, especially in a crisis.

**Keywords:** interpersonal commitment, intimate relationships, life satisfaction, personal resilience

## 1. Introduction

Family life, including marital, fiancé or cohabitation relationships, is a space in which many needs and desires may be fulfilled, but also a sphere of misunderstandings, conflicts and even violence. Observing the crisis in the durability of marital relationships (CSO, 2024), psychologists are looking for factors that could have a protective function in the face of numerous relationship breakdowns, including divorce. It seems that a desirable situation is an arrangement in which the individual feels that he or she wants, but also needs, to stay in the relationship (Janicka, Szymczak,

2017), but do people feel satisfaction with their lives in such a situation? Everyone has resources, one of which is personal resilience, which involves, among other things, a willingness to draw on the support they have from those close to them. Research reports the importance of secure attachment for marital relationship satisfaction (Mohd et al., 2023; Shafique, 2023), but we still know little about the relevance of resilience, understood in this way, for interpersonal engagement and, consequently, for life satisfaction. In the study under review, it was decided to verify the

1 Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_pila.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_pila.pdf)

relevance of interpersonal commitment in an intimate relationship to the relationship of personal resilience and life satisfaction, using mediation analysis.

The rationale for carrying out research precisely on this topic is the fact of the great importance of intimate relationships for human psychological functioning. Close contact with other people is an integral part of everyday life and is necessary for the proper social functioning of the individual. Interpersonal relationships are considered one of the most important factors that give life meaning (Adler et al., 2007). Already in 1967, Holmes and Rahe (1967) published the Life Stress Scale, according to which the most stressful event in a person's life is the death of a spouse. Lindemann (1944) and Parkes (1970) found that the loss of a loved one is associated with a change in social status, the way of life so far, and economic stability. If the life changes associated with separation, the end of a relationship, are associated with a whole range of losses (impaired childcare, loss of intimacy and support, economic status), such an event is associated with experiencing high levels of stress and a sense of reduced quality of life. This may be an acknowledgement of the importance of intimate life for life satisfaction, as also reported in other publications (cf. Edwards, 2006; Misztela et al, 2023; Krämer et al, 2024; Sun et al, 2024). The second argument that justifies the implementation of our research refers to the CSO report (2024) mentioned in the introduction, which shows a significant decrease in marriages contracted after 2020, but also a slightly decreasing number of divorces, which consequently increases the gap between marriages contracted and dissolved in favour of the latter. These statistics refer not only to divorces but also to situations of death of spouses, but it is frightening to think that in 2020 nearly 100,000 more marriages were dissolved than were concluded. Probably the circumstances of the pandemic were not insignificant here, but this trend is noted to continue in 2023, meaning that fewer marriages are still being formed than are being dissolved. There are, of course, also couples who, despite the lack of satisfaction in the intimate relationship, do not leave the relationship, even if they would like to. On the one hand, such a situation can build up a sense of being

'trapped in the relationship', but on the other hand, it does not necessarily forecast unfavourably at all, as surviving the crisis and resolving the conflict can be integrative for the marriage (Janicka, Szymczak, 2017). Dissolving marriages going forward should be of concern especially when couples do not attempt to communicate, seek compromise, resolve conflict, and perhaps somewhat hastily and prematurely give up on each other. Interpersonal commitment, which is therefore the opposite of marital dissolution, can therefore be important for life satisfaction.

Interpersonal commitment is the process of building and strengthening relationships in long-term relationships such as fiancé, marriage or cohabitation. According to Beck (2000), commitment can be full (I have confidence in the permanence of the relationship) or incomplete (my marriage may break down because my parents are divorced, besides, quite a few people around me have also experienced marriage breakdown). Interpersonal commitment is described differently by other researchers, pointing to its three dimensions (personal, moral and structural commitment) (Johnson et al., 1999). The construct of interpersonal commitment consists of a bond with one's partner and the importance of the relationship, which together reflect a desire to be with one's partner (commitment results in a sense of creating a certain wholeness with one's partner, in which it is the partners who act for the benefit of the relationship being created), and a concern for one's partner's well-being, which involves a sense of obligation to remain in the relationship due to external (e.g. having children, family pressure, shared home) or internal (e.g. religious and moral issues) compulsions (Rhoades et al., 2009). The need to stay in a relationship comes at several psychological costs to the individual and can lead to a variety of solutions (e.g. being stuck in a relationship that does not bring full happiness). In general, however, research reports that marital commitment as well as family support play a role in marital satisfaction in couples (Lioe, 2023; Owen et al., 2011), which is related to the investment model in which interpersonal commitment is, among other things, a function of life satisfaction (Schoebi et al., 2012), but the commitment dimension remains the weakest predictor of relationship satisfaction.

Psychological resilience is also not insignificant to the quality of a couple's relationship. It has been understood variously in science, ranging from the concept of the trait as "an adaptive personal trait resilient to stress" (Ahern et al, 2008, p. 32), through "a dynamic process influenced by both neuronal and psychological self-organisation, as well as transactions between the ecological context and the developing organism" (Curtis, Cicchetti, 2007, p. 811), or as an outcome or "a class of phenomena characterised by good performance despite serious threats "to adaptation or development" (Masten, 2001, p. 228). Resilience can be spoken of when two elements are present: adversity (i.e. a high-risk or threatening situation) and successful adaptation/competence (Luthar et al, 2000; Masten, 2001; Schilling, 2008). Adversity is assessed based on negative life circumstances and adaptation is defined as the successful performance of age-related developmental tasks (Schilling, 2008).

Resilience is also captured as a construct responsible for: "the potential to demonstrate resourcefulness by using available internal and external resources in response to contextual and developmental changes" (Pooley, Cohen, 2010, p. 34). In this sense, resilience is the awareness of one's resources, the resources of one's environment and the recognition of one and the other as potential in one's life (Hobfoll, 1989). It is a strong personal capacity that continuously grows, develops and survives in the face of situational crises (Chmitorz et al., 2018). It draws on adaptive patterns to overcome difficulties and evaluates them. Thus, it is a predictor of improved psychological well-being because it positively correlates with life satisfaction and negatively with neuroticism (Liu, Wang, 2010). Resilience contributes to psychological well-being because it always uses emotional intelligence. This resource is a source of increasing motivation for feelings of well-being; this provides the space for optimal adjustment even in situations of frightening threats (Hidalgo et al., 2010).

Research indicates that individuals exhibiting high levels of resilience show tolerance of negative emotions and setbacks, which, in a crisis, can protect partners from separation (Semmer, 2006). These individuals are more likely to engage with other people, including their immediate family (Connor, 2006). Research also points to the importance of resilience for positively creating

and maintaining satisfying social bonds (Heszen, Sęk, 2007; cf. Ogińska-Bulik, Juczynski, 2008). According to previous research, resilience is also one of the factors influencing the level of overall life satisfaction (Ogińska-Bulik, 2014). Individuals characterised by high levels of resilience are more positive about life and are characterised by emotional stability, which undoubtedly fosters constructive relationships with the environment.

In view of the difficulties that modern relationships may experience and their not inconsiderable importance for human well-being, it is reasonable to take interpersonal commitment and resilience into account for the assessment of the life satisfaction of people forming relationships.

## **2. Own study**

### **2.1. Purpose of the study**

The aim of the study was to examine whether levels of interpersonal commitment are associated with personal resilience and life satisfaction among people in relationships and to determine whether levels of commitment differentiate respondents' life satisfaction and levels of resilience. The dimensions of interpersonal commitment were assumed to mediate between the level of resilience and life satisfaction of the subjects. Based on the literature, it was hypothesised that high life satisfaction is fostered by high levels of commitment and high resilience.

### **2.2. Procedure**

The survey was conducted online by sending out a link to Internet users to access an electronic form. Participants in the survey included people in a close formalised or non-formalised relationship. A snowball method was used. The survey was conducted based on the guidelines of the International Testing Commission (ITC, 2005). The subjects were informed that participation in the study was voluntary, the questionnaires were anonymous, and information was provided about the possibility of withdrawing from the study at any time.



### 2.3. Characteristics of the study group

A total of 115 participants took part in the study (mean age 34.19;  $SD = 8.73$ ; women represented 86.95% of the total respondents and men 13.04%). The majority of the respondents had a university degree (67.82%), 32 had a secondary education (27.83%) and 5 had a vocational education (4.35%). The vast majority of respondents (65.22%) came from large cities (more than 100,000 inhabitants), 19.13% of respondents lived in smaller cities, and the least – 15.65% – lived in rural areas. Almost 65% of the respondents were married (79.88%), single women accounted for 30.44% of the total respondents and fiancées were 6.09% (Table 1).

### 2.4. Study variables and how they were measured

#### 2.4.1. Dependent variable

A questionnaire method was used in the study. To measure the dependent variable satisfaction with life, the Satisfaction with Life Scale adapted by Zygfryd Juczyński (2001) was used, which determines the respondents' level of satisfaction with their current life situation. The adaptation of the Satisfaction with Life Scale used contains 5 statements to which the respondents are to assign points from 1 to 7, where 1 means "I completely disagree" and 7 means "I completely agree". The sum of the scores assigned to all statements represents the respondent's level of life satisfaction. The reliability index of the SWLS (Cronbach's  $\alpha$ ) established in a survey of 371 people was found to be satisfactory (.81). The stability of the measure diagnosed on a sample of 30 people 6 weeks apart is .86.

#### 2.4.2. Independent variables

The Interpersonal Commitment Questionnaire (*KZI, Commitment Inventory*) in both its original version (Stanley, Markman, 1992) and its Polish adaptation (Janicka, Szymczak, 2017) is used to measure the interpersonal commitment variable, which is designed to measure relationship assessment and, above all, to predict relationship permanence. The tool consists

Table 1. Characteristics of respondents: distribution of numbers and percentage distribution of sociodemographic variables in the study sample

Variable	Number	Percentage
Education		
Professional	5	4.35
Medium	32	27.83
Higher	78	67.82
Place of residence		
Village	18	15.65
City with up to 100,000 inhabitants	22	19.13
City of between 100,000 and 500,000 inhabitants	55	47.83
City with more than 500,000 inhabitants	20	17.39
Marital status		
Miss/relative	35	30.43
Married	79	68.70
Divorced	1	0.87
Form of relationship		
I am in a stable relationship and live with my partner	34	29.56
I am in my fiancé's period of engagement, but I do not live with my fiancé	7	6.09
I am married	74	64.35

Source: own elaboration

of 19 statements to which the subject responds on a 7-point scale (1 – strongly disagree; 7 – strongly agree). The method measures three components of commitment: the bond with the partner, the importance of the relationship (these two factors correspond to the desire to stay in the relationship, the commitment to the partner) and the concern for the well-being of the partner (this factor reflects the compulsion, the duty to stay in the relationship, it is the commitments that limit or even prevent leaving the partner).

The partner bond factor (I want to be with my partner/partner) is made up of 11 items that relate to emotional closeness, honouring commitments made, making sacrifices for the partner, treating the partner as the most important, attractive and necessary person in one's life, as well as being satisfied with living together with the partner and not seeking alternative relationships. The relationship

importance factor (I want to stay in the relationship) consists of 5 statements that refer to taking the relationship seriously and prioritising it, considering the relationship with the partner in future life plans and maintaining it even in the face of difficulties, as well as interdependence and partnership togetherness (“we” instead of “I” and “you”).

The last factor concerns for the wellbeing of the partner (I must/should stay in the relationship) includes 3 items, indicating a sense of being stuck, trapped in the relationship (e.g. “*I would not be able to bear the pain it would cause my partner/my partner if I left*”, “*I would feel guilty/guilty of ‘ruining’ my partner’s/my partner’s life if I ended the relationship*”).

The Interpersonal Commitment Questionnaire has satisfactory internal reliability as measured by the *alpha-Cronbach* coefficient and is as follows: for the factor Tie to Partner .89, for the factor Relationship Importance .71 and for the factor Concern for Partner’s Wellbeing .76.

The *Lifespan Individual Resilience Scale(pl)* (*LIRS(pl)*) was used to measure the second variable, personal *resilience*. It is a self-report tool consisting of 12 statements assigned to three subscales, corresponding to the three components of resilience—personal resources (*‘I achieve what I set out to do’*), family support (*‘My family is a source of strength for me’*) and peer support (*‘I feel a strong bond with my friends’*). It is used to measure resilience, captured as a construct responsible for: “the potential to demonstrate resourcefulness by using available internal and external resources in response to contextual and developmental changes” (Pooley, Cohen, 2010, p. 34). The respondent responds to the statements on a 7-point scale (1-strongly disagree, 7-strongly agree). Testing with the tool allows for an overall resilience score as well as a score for individual subscales.

The reliability of the individual scales of the tool as measured by Cronbach’s alpha coefficient is satisfactory and is for personal resources (.85), for family support (.93) and for peer support (.94). Temporal stability, estimated using Pearson’s correlation coefficient, based on two measurements obtained 4 weeks apart, was as follows: personal resources – .84, family support – .93, peer support – .90 (Malina, Pooley, Harms, 2016).

### 3. Results

The r-Pearson correlation coefficient and regression analysis were used to verify the relationships between variables assumed in the research model. Statistical analyses began with descriptive statistics of the study variables (Table 2). Calculations were performed using the statistical software Statistica 13.0.

#### 3.1. Relationship between personal resilience and life satisfaction and commitment as devotion (bond with partner and relationship importance) and as compulsion (concern for partner’s wellbeing)

As a first step, we proceeded to determine the relationship between personal resilience, life satisfaction perceived by the partners and commitment understood as devotion and as coercion. For this purpose, the r-Pearson correlation coefficient was used. The distribution of the variables followed a normal distribution or was close to it, so parametric statistics were used (Table 3.).

The results of the statistical analysis indicate that there is a statistically significant relationship between the level of personal resilience and involvement as devotion ( $r = .45$ ;  $p < .001$ ) and as compulsion ( $r = .29$ ;  $p = .002$ ), and between life satisfaction and involvement as devotion ( $r = .50$ ;  $p < .001$ ) and compulsion ( $r = .33$ ;  $p < .001$ ). The higher the respondents’ level of resilience and life satisfaction, the higher their level of commitment.

#### 3.2. Relationship between dimensions of interpersonal commitment and personal resilience and life satisfaction

In the next step, the relationships between the individual dimensions of interpersonal engagement and life satisfaction and resilience were estimated (Table 4).

The results of the statistical analysis indicate that there is a significant relationship between the individual dimensions of interpersonal commitment and life satisfaction (bonding with partner  $r = .47$ ;  $p < .001$ ; relationship importance  $r = .54$ ;  $p < .001$ ;



Table 2. Descriptive statistics of the variables analyzed in the study

Variable	Descriptive statistics				
	N	Average	Mini- mum	Maxi- mum	SD
Bond with your partner	115	61.70	12.00	77.00	11.95
Importance of the relationship	115	29.30	5.00	35.00	5.47
Concern for your partner's well-being	115	16.54	3.00	21.00	4.30
Resources	115	23.98	13.00	28.00	3.21
Family	115	25.29	7.00	28.00	3.97
Friends	115	23.37	7.00	28.00	4.35
Total pressure	115	72.64	38.00	84.00	9.09
Satisfaction with life	115	26.31	13.00	35.00	4.87

Source: own elaboration

Table 3. Correlations between personal resilience and life satisfaction and engagement as dedication and as compulsion

Variable	Correlation coefficient r-Pearson N = 115 p < .05	
	Dedication	Compulsion
Personal resilience	.45 p < .001	.29 p = .002
Satisfaction with life	.50 p < .001	.33 p = < .001

Source: own elaboration

Table 4. Correlations between dimensions of interpersonal engagement and personal resilience and life satisfaction

Variable	Correlation coefficient r-Pearson N = 115 p < .05	
	Satisfaction with life	Resilience
Relationship with your partner	.47 p < .001	.40 p < .001
Importance of the relationship	.54 p < .001	.53 p < .001
Concern for your partner's well-being	.33 p < .001	.29 p = .002

Source: own elaboration

concern for partner's well-being  $r = .33$ ;  $p < .001$ ) and between dimensions of interpersonal engagement (bond with partner  $r = .40$ ;  $p < .001$ ; relationship importance  $r = .53$ ;  $p < .001$ ; concern for partner's well-being  $r = .29$ ;  $p < .001$ ) and level of personal resilience. The higher the respondents' level of interpersonal commitment, the higher their level of life satisfaction and the higher their level of resilience.

### 3.3. Interpersonal commitment as a mediator in the relationship between personal resilience and life satisfaction of the subjects

The next analyses presented are concerned with determining the role of interpersonal engagement as a mediator between the respondents' levels of personal resilience and their life satisfaction. To do this, it was first necessary to test the significance of the relationships between:

- level of resilience and level of interpersonal commitment,
- level of interpersonal commitment and life satisfaction,
- level of resilience versus life satisfaction,
- Recognising the significance of the above relationships will allow interpersonal *commitment* to be included in the analysis of the relationship between personal resilience and life satisfaction for those in relationships. If, in this setting, the *interpersonal commitment* variable shows a significant decrease in the beta index for the calculated relationship between the level of resilience and life satisfaction, we can speak of its mediating nature (C'; Figure 1).

A mediation analysis was performed according to the approach proposed by Baron and Kenny (1986) and supplemented by the Sobel test (1982).

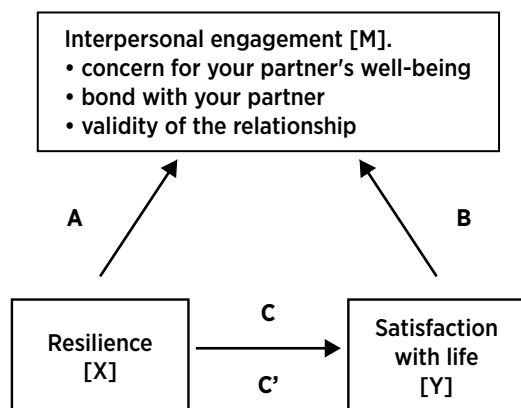


Figure 1: A diagram of the relationship between the independent variable (level of resilience) and the dependent variable (life satisfaction) via a mediating variable (interpersonal engagement) - the sought-after mediator of the relationship between variable X and variable Y. Baron and Kenny's approach.

### 3.4. Concern for partner's well-being as a mediator in the relationship between personal resilience and life satisfaction of the subjects

In the first stage of mediation analyses, the following variables were taken as: independent variable - level of resilience; mediator - concern for partner's wellbeing; and dependent variable - life satisfaction. A direct relationship was confirmed between the independent variable - level of resilience and the mediator - concern for partner/partner's wellbeing (A). As predicted, the higher the respondents' level of resilience, the higher their level of concern for their partner's/partner's wellbeing ( $\beta = .29$ ;  $p < .001$ );  $F(1,113) = 10.27$ ;  $p < .001$ ;  $R^2 = .08$ . The model explains only 8% of the variance in the dependent variable. This is a rather low value, suggesting that the model is not a particularly good fit for the data. In the context of social or psychological research, however, such values are acceptable if the phenomenon under study is complex and depends on multiple factors (Predictive Solutions, 2024).

In the second step of the analysis, the significance of the relationship between the mediator (concern for partner/partner's wellbeing) and the dependent variable (life satisfaction, B) was tested. Again, the relationship was found to be significant: the higher the level of concern for partner/partner's wellbeing in

the subjects, the higher their level of overall life satisfaction was also ( $\beta = .34$ ;  $p < .001$ ),  $F(1,113) = 14.20$   $p < .001$ ;  $R^2 = .10$ . The model still explains a relatively small proportion of the variance (10%).

The third step of the mediation analysis was to determine the relationship between the independent variable (level of resilience) and the dependent variable (life satisfaction, C). It turned out that the higher the level of resilience characterised the respondents, the higher their life satisfaction was ( $\beta = .56$ ;  $p < .001$ ). The regression model tested appeared to fit the data well  $F(1,113) = 51.52$ ;  $p < .001$ ;  $R^2 = .31$ .

Finally, when both the independent variable and the mediator were included in the model tested, the role of the independent variable in the prediction weakened ( $\beta = .51$ ;  $p < .001$ ), while the mediator remained in a significant relationship with the dependent variable ( $\beta = .19$ ;  $p = .02$ ),  $F(2,112) = 29.58$ ;  $p < .001$ ,  $R^2 = .35$ . The Sobel test was 2.21;  $p = .027$ . Here we have a partial mediation of *concern for partner/partner's well-being*, as the result of the Sobel test is statistically significant and the  $\beta$  value in the regression of the independent variable on the dependent variable with the mediator is weakened ( $\beta = .56 \rightarrow \beta = .51$ ). Thus, it can be inferred that concern for the well-being of the partner/partner is a significant mediator of the relationship between the respondents' level of resilience and their life satisfaction: the higher the level of resilience characterises the respondents, the higher their level of life satisfaction, with the contribution of a high level of concern for the well-being of the partner/partner (Figure 2).

### 3.5. The bond with the partner as a mediator in the relationship between personal resilience and life satisfaction of the respondents

In the next step of the mediation analyses, the independent variable - level of resilience, the mediator - bond with partner/partner and the dependent variable - life satisfaction were taken as: the independent variable - level of resilience, the mediator - bond with partner/partner and the dependent variable - life satisfaction. A direct rela-

tionship was confirmed between the independent variable – level of resilience and the mediator – bond with partner/partner (A). As predicted, the higher the respondents' level of resilience, the higher their level of bonding with their partner/partner was ( $\beta = .40$ ;  $p < .001$ ). The regression model tested was found to fit the data on average  $F(1.113) = 21.33$ ;  $p < .001$ ;  $R^2 = .15$ . The independent variable explained a significant but not dominant part of the variance in the dependent variable.

In the second step of the analysis, the significance of the relationship between the mediator (bond with partner/partner) and the dependent variable (life satisfaction, B) was tested. Again, the relationship proved to be significant: the higher the level of bonding with the partner/partner in the subjects, the higher their level of overall life satisfaction was also ( $\beta = .47$ ;  $p < .001$ ) – the model was a moderate fit to the data  $F(1.113) = 31.45$   $p < .001$ ;  $R^2 = .21$ .

The third step of the mediation analysis was to determine the relationship between the independent variable (level of resilience) and the dependent variable (life satisfaction, C). It turned out that the higher the level of resilience characterised the respondents, the higher their life satisfaction was ( $\beta = .56$ ;  $p < .001$ ). The regression model tested appeared to fit the data well  $F(1,113) = 51.52$ ;  $p < .001$ ;  $R^2 = .31$ .

Finally, when both the independent variable and the mediator were included in the model tested, the role of the independent variable in prediction weakened ( $\beta = .44$ ;  $p < .001$ ), while the mediator remained in a significant relationship with the dependent variable ( $\beta = .29$ ;  $p < .001$ )  $F(2.112) = 34.87$ ;  $p < .001$ ,  $R^2 = 0.37$ . Sobel's test was 3.33;  $p < 0.001$ . Here we have a partial mediation of *the bond with the partner/partner*, as the result of Sobel's test is statistically significant and the  $\beta$  value in the regression of the independent variable on the dependent variable with the mediator is weakened ( $\beta = .55 \rightarrow \beta = .44$ ). Thus, it can be deduced that the bond with the partner/partner is a significant mediator of the relationship between the respondents' level of resilience and their life satisfaction: the higher the level of resilience characterises the respondents, the higher their level of life satisfaction, with the participation of a high level of bond with the partner/partner (Figure 3).

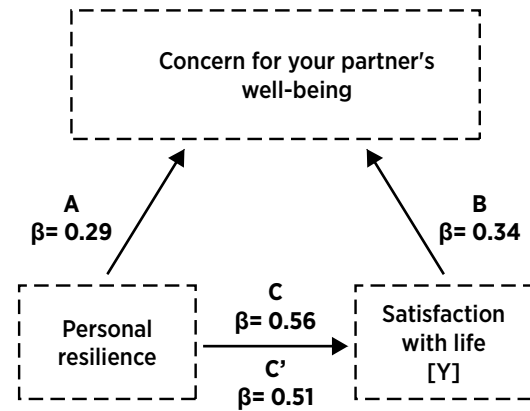


Figure 2: A diagram of the mediating role of concern for partner/partner well-being between respondents' level of resilience and their life satisfaction (\*\* $p < .001$ ).

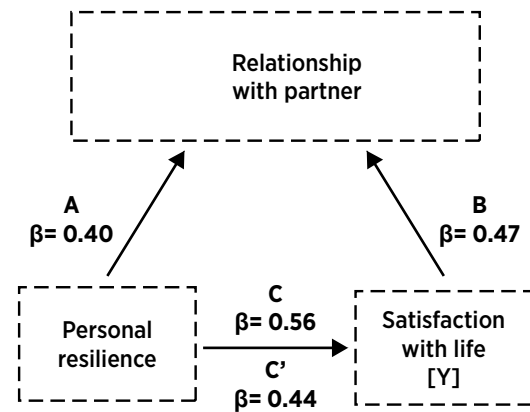


Figure 3: A diagram of the mediating role of partner/partner bonding between respondents' level of resilience and their life satisfaction (\*\* $p < .001$ ).

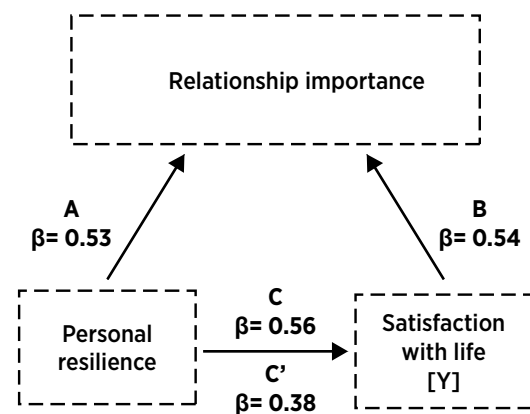


Figure 4: A diagram of the mediating role of relationship importance and respondents' level of resilience and life satisfaction (\*\* $p < .001$ ).

### 3.6. Relationship importance as a mediator in the relationship between personal resilience and respondents' life satisfaction

When analysing the importance of the last dimension of interpersonal commitment – relationship importance – in the first stage of the mediation analyses, the following variables were used: independent variable – level of resilience, mediator – relationship importance and dependent variable – life satisfaction. A direct relationship between the independent variable – level of resilience and the mediator – relationship importance (A) was confirmed. As predicted, the higher the respondents' level of resilience, the more important their relationship was to them ( $\beta = .53$ ;  $p < .001$ ). The regression model tested proved to be a good fit to the data  $F(1.113) = 43.26$ ;  $p < .001$ ;  $R^2 = .28$ .

In the second step of the analysis, the significance of the relationship between the mediator (relationship importance) and the dependent variable (life satisfaction, B) was tested. Again, the relationship was found to be significant: the more important the relationship was for the subjects, the higher their level of overall life satisfaction was also ( $\beta = .54$ ;  $p < .001$ ) – the model was a good fit to the data  $F(1.113) = 45.62$ ;  $p < .001$ ;  $R^2 = .29$ .

The third step of the mediation analysis was to determine the relationship between the independent variable (level of resilience) and the dependent variable (life satisfaction, C). It turned out that the higher the level of resilience characterised the respondents, the higher their life satisfaction was ( $\beta = .56$ ;  $p < .001$ ). The regression model tested appeared to fit the data well  $F(1,113) = 51.52$ ;  $p < .001$ ;  $R^2 = .31$ .

Finally, when both the independent variable and the mediator were included in the model tested, the role of the independent variable in prediction weakened ( $\beta = .38$ ;  $p < .001$ ), while the mediator remained in a significant relationship with the dependent variable ( $\beta = .33$ ;  $p < .001$ )  $F(2.112) = 36.41$ ;  $p < .001$ ,  $R^2 = 0.39$ . Sobel's test was 2.80;  $p < 0.005$ . Here we have a partial mediation of *the importance of the relationship*, as the result of Sobel's test is statistically significant and the  $\beta$  value in the regression of the independent variable on the dependent variable with the mediator is weakened ( $\beta = .56 \rightarrow \beta = .38$ )

Thus, it can be deduced that relationship importance is a significant mediator of the relationship between the level of resilience of the subjects and their life satisfaction: the higher the level of resilience characterises the subjects, the higher their level of life satisfaction, with the contribution of high relationship importance (Figure 4).

## 4. Discussion

Functioning in a relationship involves a wide range of difficulties that may arise in the partners' lives together. The studies conducted show that concern for the well-being of the partner/partner is an important mediator of the relationship between the respondents' level of resilience and their life satisfaction: the higher the level of resilience characterised the respondents, the higher their level of life satisfaction, with the contribution of a high level of concern for the wellbeing of the partner/partner. Studies report that an increase in personal resources (e.g. resilience) predicted increased life satisfaction and reduced depressive symptoms (Fredrickson et al., 2008). High levels of resilience reduce levels of loss and increase feelings of gain in life. An optimistic attitude towards life, as well as mobilising in difficult situations, is a resource before experiencing losses in terms of family life, economic and political issues. Women also experience more gains in the areas of power and prestige (2022), thus confirming the buffering nature of resilience in terms of difficult life situations and stress (Fredrickson, 2001; Ritter et al., 1987). The preoccupation with the partner's well-being (I must/should stay in the relationship) is undoubtedly related to feelings of apprehension in the relationship due to the awareness of the negative consequences that the partner would experience from leaving (the feeling of ruining the other person's life, through material difficulties, deterioration of the relationship with the children). And although, on the one hand, the compulsion to stay in the relationship is not an ideal situation, in the perception of the partners/partners, it can ultimately create a more beneficial solution for the relationship. The fact of

experiencing evaluation by family and friends is in this case a universal factor in favour of remaining in the relationship (Janicka, Szymczak, 2017).

Individuals characterised by high levels of resilience are more positive about life, are more personally stable, and build positive relationships with their environment. They are consistent in their actions and persistent in pursuing their goals. They mobilise themselves in crisis and cope better with illness (Florek et al., 2024). They show tolerance of negative emotions and setbacks, which in a crisis can protect partners from separation (Semmer, 2006; Talik, 2022) and this can be of great importance in a crisis, the difficulties experienced in a relationship. Partners can treat difficult situations as challenges and tasks to be accomplished, thus they can experience positive emotions rather than depressive states or the feeling that they are losing something valuable in their lives. Joseph and Linely (2006) show that intellectual functioning, cognitive flexibility, social support, positive self-image, ability to manage emotions, positive emotions, spirituality, active stress management, toughness, optimism, and hope, are all related to resilience. Abolghasemi and Varaniyab (2010) showed that mental resilience predicted increased life satisfaction in students in both success and failure situations. Similarly, Haddadi and Besharat (2010) showed that resilience was positively related to psychological well-being and negatively related to psychological distress, depression and anxiety. The results of our study seem to correspond with the cited results obtained by other researchers.

The bond with the partner (I want to be with my partner/partner) is about emotional bonding, keeping commitments made, closeness, dedication to him/her, and treating him/her as the most important person. This can make alternative relationships not worthwhile or attractive enough to form a new relationship (Janicka, Szymczak, 2017). They are also a resource to cope with potential difficulties and opportunities to build, to acquire other resources that create a high quality of life. In our study, the bond with the partner/partner is an important mediator of the relationship between the level of resilience of the respondents and their life satisfaction: the higher the level of resilience characterises the re-

spondents, the higher their level of life satisfaction, with the contribution of a high level of bond with the partner/partner.

Relationship importance – another dimension of interpersonal commitment was also found to be a significant mediator of the relationship between respondents' level of resilience and their life satisfaction: the higher the level of resilience characterised by respondents, the higher their level of life satisfaction, with the contribution of high relationship importance. The feeling of relationship importance is the result of appreciating the value of the relationship, as well as the result of working on it together. Resilience in this view, because it is also associated with *flourishing*, signifies the individual's optimum range of functioning. It also means a sense of *goodness*, happiness, satisfaction and a higher level of functioning. *Generativity*, on the other hand, expresses itself in the form of an expanded repertoire of thought and action, *growth* through the building up of lasting personal and social resources (Fredrickson, Losada, 2005), which undoubtedly contributes to the building up of lasting relationships, including a sense of relationship importance. The above, therefore, reveals a very important social mechanism, in which we see that for the sake of high levels of life satisfaction, high rates of interpersonal commitment should also be taken care of, as they confirmed the mediating nature of the constructed research model.

The presented research has some limitations. One concerns the limited generalizability of the research results to the entire population. The narrow possibility of generalising the results is also determined by the purposeful selection of people to the study group – people who were in a relationship. Conducting research in a better-structured group, including a larger number of people in different forms of relationships and at different developmental periods (which would also mean exploring relationships with extensive dynamics of change), could provide more precise information on the nature of the partners' relationship, its quality and the complexity of its determinants.

The majority of participants in the study were women, with higher education and residence in large cities predominating. In future research, it would

be worthwhile to pay more attention to a similar proportion of respondents and more diversity in terms of education or place of residence. Paying more attention in future research to the specificity of the cultural context of couples would provide important data on the relationship between partners with different socialisations. Consequently, it can be expected that studies of couples reflecting greater diversity in age, ethnicity, education and relationship history may transfer new findings that can be generalised (Jarneckie, South, 2013; Weigel, 2008).

Another limitation concerns the self-reported, correlational nature of the research. It would be valuable for future research to consider the possibility of using different measurement methods to obtain more reliable results, as well as to conduct studies that would indicate the structure of causal relationships and the impact of specific variables on the quality of partners' functioning in the relationship. However, the ethical principles governing psychologists seem to exclude the possibility of experimental research in the sphere of intimate relationships.

In future research, it would be worthwhile to include in the area of exploration other variables that may prove to be relevant to the quality of partners' functioning and its importance for overall life satisfaction. One of these could be the personality of the partners (Robins i in., 2000; Rostowski, 1987) and the similarity of the partners in terms of personality. The literature also indicates that partner relationship satisfaction (Suwalska-Barancewicz, 2016), as well as the performance of parental functions (Bakiera, 2013), the way of coping with stress, control of

emotions (Póltorak, 2013), bonding with the child (Bielawska-Batorowicz, 2006), attachment style (Plopa, 2005), and the quality of communication between partners (Suwalska-Barancewicz, Malina, 2018) are important for satisfactory ratings of life satisfaction. In the area of the search for determinants of the functioning of the dyad, it is additionally possible to take into account external conditions relevant to the partner relationship, such as, for example, the housing situation of the couple (e.g. living with the parents of either spouse), the division of household chores and the way they are carried out (including consideration of the impact of the use of electronics on marital satisfaction), since, as the specialist literature indicates, these are potentially conflictogenic factors that can modify the partners' relationship and the quality of their functioning (Brannon, 2002). Despite the numerous limitations of the study, it should be emphasised that the subject matter discussed can have numerous applications in preventive and psychotherapeutic work, as it details the components of interpersonal commitment and shows its importance for life satisfaction.

The research presented here represents just one of many avenues for exploring close relationships in terms of relationship commitment, personal resilience and perceived life satisfaction. In future research, it would be worthwhile to try to explore even more factors, which could deepen the understanding of the quality of close relationships. The results presented here may provide a starting point for further questions and exploration in this area of social life, such as close relationships.

## Bibliography

- Abolghasemi, A., Varaniyab, S.T. (2010). Resilience and perceived stress: Predictors of life satisfaction in the students of success and failure. *Procedia - Social and Behavioral Sciences*, 5, 748-752. <https://doi.org/10.1016/j.sbspro.2010.07.178>
- Ahern, N.R., Ark, P., Byers, J. (2008). Resilience and coping strategies in adolescents. *Paediatric Nursing*, 20, 32-36.
- Adler, B.R., Rosenfeld, L.B., Proctor II R.F. (2018). *Relacje interpersonalne: proces porozumiewania się*. Poznań: Dom Wydawniczy „Rebis”.
- Bakiera L. (2013). *Zaangażowane rodzicielstwo a autokreacyjny aspekt rozwoju dorosłych*. Warszawa: Wydawnictwo Difin.

- Baron, R.M., Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bielawska-Batorowicz, E. (2006). *Psychologiczne aspekty prokreacji*. Katowice: Wydawnictwo Naukowe „Śląsk”.
- Brannon, L. (2002). *Psychologia rodzaju*. Gdańsk: GWP.
- Beck, A.T. (2020). *Miłość nie wystarczy. Jak rozwiązywać nieporozumienia i konflikty małżeńskie*. Poznań: Media Rodzina.

- Chmitorz, A., Kunzler, A., Helmreich, I., Tüscher, O., Kalisch, R., Kubiak, T., Wessa, M., Lieb, K. (2018). Intervention studies to foster resilience – a systematic review and proposal for a resilience framework in future intervention studies. *Clinical Psychology Review*, 59, 78-100. <https://doi.org/10.1016/j.cpr.2017.11.002>
- Connor, K.M. (2006). Assessment of resilience in the aftermath trauma. *Journal of Clinical Psychiatry*, 67, 46-49.
- Curtis, W.J., Cicchetti, D. (2007). Emotion and resilience: A multilevel investigation of hemispheric electroencephalogram asymmetry and emotion regulation in maltreated and no maltreated children. *Development and Psychopathology*, 19, 811-840.
- Edwards, M., R. (2006). The role of husbands' supportive communication practices in the lives of employed mothers. *Marriage & Family Review*, 40(4), 23-46. [https://doi.org/10.1300/J002v40n04\\_03](https://doi.org/10.1300/J002v40n04_03)
- Florek, S., Gościńiewicz, P., Dębski, P., Pudło, R. (2024). The role of ego-resiliency in patients with keratoconus. *Annales Academiae Medicae Silesiensis*, 78, 344-351. <https://doi.org/10.18794/aams/196587>
- Fredrickson, B.L. (2001). The role of positive emotions to positive psychology: The broaden-and build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Fredrickson, B.L., Losada, M. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60, 678-686.
- Fredrickson, B.L., Coffey K.A., Pek, J., Cohn, M.A., Finkel, S.M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 145-1062. <https://doi.org/10.1037/a0013262>
- Haddadia, P., Besharat, M.A. (2010). Resilience, vulnerability and mental health. *Procedia - Social and Behavioral Sciences*, 5, 639-642. <https://doi.org/10.1016/j.sbspro.2010.07.157>
- Heszen-Celińska, I. Sęk, H. (2020). *Psychologia zdrowia*. Warszawa: Wydawnictwo Naukowe PWN.
- Holmes, T.H., Rahe, R.H. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research*, 11(2), 213-218. [https://doi.org/10.1016/0022-3999\(67\)90010-4](https://doi.org/10.1016/0022-3999(67)90010-4)
- Hidalgo, J.L.T., Bravo, B.N., Martínez, I.P., Pretel, F.A., Postigo, J.M., Rabadán, F.E. (2010). Psychological well-being, assessment tools and related factors. *Psychological Well Being*, 77-113.
- Hobfoll, S., E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-534. <https://doi.org/10.1037/0003-066X.44.3.513>
- International Test Commission. (2005). *International guidelines on computer-based and internet delivered testing*. (From:) [https://practest.com.pl/files/ITC\\_Stosowanie\\_testow.pdf](https://practest.com.pl/files/ITC_Stosowanie_testow.pdf)
- Janicka, I., Szymczak, W. (2017). Kwestionariusz Zaangażowania Interpersonalnego – polska adaptacja metody. *Polskie Forum Psychologiczne*, 20(2), 205-218.
- Jarnecka, A.M., South, S.C. (2013). Attachment orientations as mediators in the intergenerational transmission of marital satisfaction. *Journal of Family Psychology*, 27(4), 550-559.
- Johnson, M.P., Caughlin, J.P., Huston, T.L. (1999). The tripartite nature of marital commitment: Personal, moral, and structural reasons to stay married. *Journal of Marriage and the Family*, 61, 160-177.
- Joseph, S., Linely, P., A. (2006). Growth following adversity: theoretical perspective and implications for clinical practice. *Clinical Psychology Review*, 26, 1041-1053.
- Juczyński, Z. (2009). *Narzędzia pomiaru w promocii i psychologii zdrowia*. Warszawa: Pracownia Testów Psychologicznych.
- Komorowska, K. (2022). Wybrane psychospołeczne uwarunkowania samooceny zysków i strat zasobów osobistych oraz oceny natężenia stresu u kobiet w okresie po urodzeniu dziecka. *Polskie Forum Psychologiczne*, 27(1) 81-100. <https://doi.org/10.34767/PFP.2022.01.05>
- Krämer, M.D., Rohrer, J.M., Lucas, R.E., & Richter, D. (2024). Life events and life satisfaction: Estimating effects of multiple life events in combined models. *European Journal of Personality*, 39(1), 3-23. <https://doi.org/10.1177/08902070241231017>
- Li, Z.-S., Hasson, F. (2020). Resilience, stress, and psychological well-being in nursing students: A systematic review. *Nurse Education Today*, 90, 104440. <https://doi.org/10.1016/j.nedt.2020.104440>
- Lindemann, E. (1994). Symptomatology and management of acute grief. *American Journal of Psychiatry*, 151(6), 155. <https://doi.org/10.1176/ajp.151.6.155>
- Liu, Y., Wang, Z.-H., Li, Z.-G. (2012). Affective mediators of the influence of neuroticism and resilience on life satisfaction. *Personality & Individual Differences*, 52(7), 833- 838. <https://doi.org/10.1016/j.paid.2012.01.017>
- Lioe, A.L. (2023). The role of marital commitment and family support for marital satisfaction in childless couples. *Eduvest: Journal of Universal Studies*, 3(1), 1-8. <https://doi.org/10.36418/eduvest.v3i1.712>
- Luthar, S.S., Cicchetti, D., Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543-562.
- Macedo, T., Wilhelm, L., Gonçalves, R., Freire Coutinho, E.S., Vilete, L., Figueira, I., Ventura, P. (2014). Building resilience for future adversity: a systematic review of interventions in non-clinical samples of adults. *BMC Psychiatry*, 14(1), 227-234. <https://doi.org/10.1186/s12888-014-0227-6>
- Magnano, P., Craparo, G., Paolillo, A. (2016). Resilience and emotional intelligence: Which role in achievement motivation. *International Journal of Psychological Research*, 9(1), 9-20. <https://doi.org/10.21500/20112084.2096>
- Malina, A., Pooley, J.A., Harms, C. (2016). Skala Osobistej Adaptacyjności – polska adaptacja Lifespan Individual Resilience Scale. *Przegląd Psychologiczny*, 59, 435-450.
- Masten, A.S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, 227-238.
- Misztela, A., Barszcz, S., Słowińska, A. (2023). Realizacja zadań rozwojowych a poczucie dorosłości i satysfakcja z życia młodych dorosłych. *Psychologia Rozwojowa*, 28(3), 89-99. <https://doi.org/10.4467/20843879PR.23.012.19702>
- Mohd Hasim, M.J., Hashim, N.H., Mustafa, H. (2023). Married life: Measuring adult romantic attachment and satisfaction. *Couple and Family Psychology: Research and Practice*, 12(3), 119-131. <https://doi.org/10.1037/cfp0000188>
- Ogińska-Bulik, N. (2014). Prężność psychiczna a zadowolenie z życia osób uzależnionych od alkoholu. *Alcoholism and Drug Addiction*, 27(4), 319-324.
- Owen, J., Rhoades, G.K., Stanley, S.M., Markman, H.J. (2011). The Revised Commitment Inventory: Psychometrics and use with unmarried couples. *Journal of Family Issues*, 32, 820-841.
- Parkes, C.M. (1970). "Seeking" and "finding" a lost object: evidence from recent studies of the reaction to bereavement. *Social Science & Medicine*, 4(2), 187-201. [https://doi.org/10.1016/0037-7856\(70\)90115-0](https://doi.org/10.1016/0037-7856(70)90115-0)
- Płopa M. (2005). *Wieża w małżeństwie i rodzinie – metody badań*. Kraków: Wydawnictwo „Impuls”.
- Pooley, J., A., Cohen, L. (2010). Resilience: A Definition in Context. *The Australian Community Psychologist*, 22(1), 30-37.
- Półtorak, M. (2013). *Psychiczne mechanizmy odczuwanego stresu i zadowolenia partnerów ze związku w okresie ciąży na świat pierwszego dziecka*. Unpublished doctoral dissertation, University of Warsaw, Poland.
- Predictive Solutions. (2024). Współczynnik determinacji R<sup>2</sup>: Co to jest i jak go interpretować? (From:) <https://predictivesolutions.pl/wspolczynnik-determinacji-r2?utm> (access: 18.03.2025)



- Ritter, Ch., Hobfoll, E.S., Cameron, R.P., Lavin, J., Hulsizer, M.R. (2000). Stress, psychosocial resources, and depressive symptomatology during pregnancy in low-income, inner-city women. *Health Psychology*, 6, 576-585.
- Robins, R.W., Caspi, A., Moffitt, T.E. (2000). Two personalities, one relationship: Both partner's personality traits shape the quality of their relationship. *Journal of Personality and Social Psychology*, 79(2), 251-259.
- Rostowski, J. (1987). *Zarys psychologii małżeństwa*. Warszawa: Państwowe Wydawnictwo Naukowe.
- Rhoades, G.K., Stanley, S.M., Markman, H.J. (2009). Couple's relations for cohabitation: Associations with individual well-being and relationship quality. *Journal of Family Issues*, 2, 233-258.
- Schilling, T.A. (2008). An examination of resilience processes in context: The case of Tasha. *Urban Review*, 40, 296-316.
- Schoebi, D., Karney, B.R., Bradbury, T.N. (2012). Stability and change in the first 10 years of marriage: Does commitment confer benefits beyond the effects of satisfaction. *Journal of Personality and Social Psychology*, 102(4), 729-742.
- Semmer, N. (2006). Personality, stress and coping. (In:) M. Volrath (ed.). *Handbook of personality and health*, 73-113. Chichester: Wiley.
- Shafique, A. (2023). Marital Satisfaction and Quality of Life among Married Women Moderating Role of Attachment Styles. *Bahria Journal of Professional Psychology*, 22(2), 27. <https://doi.org/10.58800/oglm4067>
- Sobel, M.E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. (In:) S. Leinhardt (ed.), *Sociological Methodology*, 290-312. Jossey-Bass.
- Sun, Y., Cheah, C.S. L., Seo, Y.J., Aquino, A.K., Gürsoy, H., Wu, L.-W. (2024). All in the family: The complementary protective roles of spousal and other family support for Chinese immigrant mothers' life satisfaction over time. *Journal of Family Psychology*, 38(5), 831-837. <https://doi.org/10.1037/fam0001212>
- Stanley, S., Markman, H. (1992). Assessing commitment in personal relationships. *Journal of Marriage and the Family*, 54, 595-608.
- Suwalska-Barancewicz, D. (2016). *Jakość bliskich związków interpersonalnych. Znaczenie przywiązania i zależności w budowaniu trwałych relacji*. Wydawnictwo UKW.
- Suwalska-Barancewicz, D., Malina, A. (2018). Samoocena i styl przywiązania jako predyktory oceny zachowań komunikacyjnych własnych oraz partnera. *Psychologia Rozwojowa*, 23(3), 65-82.
- Talik, E. (2022). Martwienie się a strategię radzenia sobie ze stresem u młodzieży. Mediacyjna rola prężności psychicznej. *Przegląd Psychologiczny*, 65(3), 43-58. <https://doi.org/10.31648/przegldpsychologiczny.8228>
- Tavakol, Z., Nikbakht Nasrabadi, A., Behboodi Moghadam, Z., Salehiniya, H., Rezaei, E. (2017). Przegląd czynników związanych z satysfakcją małżeńską. *Galen Medical Journal*, 6(3).
- Weigel, D.J. (2008). A dyadic assessment of how couples indicate their commitment to each other. *Personal Relationships*, 15, 17-19.





# Attachment styles, body image and sexual communication as predictors of sexual satisfaction in young men: A serial mediation model<sup>1</sup>

<https://doi.org/10.34766/07w5bz10>

Piotr Nowicki <sup>a</sup> ✉

<sup>a</sup> Piotr Nowicki, <https://orcid.org/0000-0001-6661-4724>, School of Human Sciences, VIZJA University in Warsaw, Poland

✉ Corresponding author: [p.nowicki@vizja.pl](mailto:p.nowicki@vizja.pl)

**Abstract:** The aim of the present study was to identify the psychological mechanisms that mediate the relationship between attachment style and sexual satisfaction among young men in romantic relationships. Based on a review of the literature, a serial mediation model was proposed in which body image and sexual communication serve as mediators. The study included 187 men aged between 19 and 32 years ( $M = 26$ ;  $SD = 7.26$ ). Standardized psychometric instruments were used to assess attachment style, body image attitudes, sexual communication self-efficacy, and overall sexual satisfaction. Results revealed that secure attachment was positively associated with sexual satisfaction, and this effect was fully mediated by a more positive body image and higher sexual communication efficacy. For the anxious-ambivalent attachment style, a full serial mediation was observed: individuals with high attachment anxiety tended to exhibit a more negative body image, which reduced their openness in sexual communication and, in turn, was linked to lower sexual satisfaction. In the case of avoidant attachment, a partial mediation was identified: the negative impact of avoidant attachment on sexual satisfaction was primarily explained by reduced sexual communication efficacy, with a weaker but still significant link to body image. These findings highlight the importance of complex psychological mechanisms that connect early attachment patterns with the quality of adult sexual functioning. The results also point to the relevance of therapeutic interventions aimed at enhancing body image and developing sexual communication skills among men with insecure attachment styles.

**Keywords:** attachment styles, body image, sexual communication, sexual satisfaction

## Introduction

Sexual quality of life constitutes a significant component of an individual's overall psychological and physical well-being, as well as a key factor influencing the stability and durability of romantic relationships (Gómez-López et al., 2019). Contemporary research on intimacy and relationships indicates that sexual satisfaction plays an important role not only in a person's subjective sense of fulfillment but also in the quality of the partner bond, levels of commitment, emotional closeness, and frequency of sexual encounters (Yech et al., 2006). Individuals reporting high levels of sexual satisfaction are more likely to evaluate their relationships as fulfilling and characterized by greater empathy, trust, and mutual support (Alsop et al., 2021; Zhang et al., 2022).

Furthermore, sexual satisfaction is associated with general mental health – lower levels of stress, higher self-esteem, and better emotional regulation (Carcedo et al., 2020; Fischer et al., 2022; Zayed et al., 2020).

Sexual satisfaction is most commonly defined as a subjective evaluation of one's sexual life, encompassing both emotional and physical aspects (Sánchez-Fuentes et al., 2014). It may include elements such as pleasure derived from sexual activity, a sense of fulfillment, compatibility with a partner regarding needs and preferences, as well as levels of communication and intimacy (Barker, 2005; Shahhosseini et al., 2014). In a more contemporary approach, Pascoal et al. (2014) propose that sexual satisfaction reflects a positive assessment of one's

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_now1.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_now1.pdf)

sexual experience, resulting from the comparison between expectations and actual experiences. Thus, it is a multidimensional construct shaped by both individual and relational factors. In today's context of increasing societal openness towards sexuality, interest in the psychological determinants of satisfying intimate lives is also growing. Nevertheless, many factors influencing sexual satisfaction remain under-researched – particularly regarding their interrelations and underlying mechanisms.

One of the key factors determining the quality of intimate relationships, including sexual life, is attachment style – a psychological disposition formed in early childhood that shapes the perception of oneself and others in close relationships (Mikulincer & Shaver, 2019). Attachment theory posits that experiences with caregivers form internal working models that influence expectations regarding interpersonal relationships in adulthood. The primary attachment styles are secure, anxious-ambivalent, and avoidant (Thompson & Simpson, 2019). Individuals with a secure attachment style tend to exhibit greater openness to intimacy, better communication skills, and effective emotional regulation – all of which translate into higher levels of sexual satisfaction (Gagné et al., 2021). Conversely, individuals with an anxious attachment style often experience an intense need for closeness coupled with a fear of rejection, which may result in an excessive focus on sexuality as a source of self-worth validation (Lafortun et al., 2021; Santona et al., 2022). Those with an avoidant attachment style are more likely to distance themselves emotionally and physically, showing tendencies to avoid sexual contact or disengage from the relational aspects of sexuality (Constant et al., 2021).

Another key psychological factor influencing sexual functioning is body image, defined as the subjective evaluation of one's physical appearance, encompassing cognitive, emotional, and behavioral components (Cash, 2002; Pujols et al., 2010). A positive body image is associated with greater self-acceptance, confidence, and openness to sexual expression. In contrast, a negative body image can lead to feelings of shame, lowered self-esteem, and avoidance of physical intimacy, which may hinder the development of satisfying intimate relationships

(Wiseman & Moradi, 2010). However, body image does not exist in isolation from other personality traits – attachment patterns play a significant role in shaping it. Research shows that individuals with a secure attachment style are more likely to demonstrate higher levels of body acceptance, a stronger sense of self-worth, and greater resistance to societal pressure concerning physical appearance (Laporta-Herrero et al., 2022). On the other hand, individuals with an anxious attachment style tend to be more vulnerable to negative self-evaluation regarding their appearance, react more strongly to rejection, and are more frequently dissatisfied with their bodies, which may contribute to decreased comfort in sexual interactions. Avoidant attachment, by contrast, is linked to a tendency to distance oneself from emotional and bodily experiences, which may result in indifference or even aversion to physicality as a source of closeness and intimacy (Bonev & Matanova, 2021; Cash et al., 2004). Accordingly, body image may serve as an important mediating factor between attachment style and the quality of sexual functioning within a relationship.

Sexual communication – understood as the ability to openly and authentically express needs, boundaries, desires, and emotions related to intimacy – is one of the key factors affecting the quality of sexual life in close relationships (Widman et al., 2021; Mallory, 2022). It includes discussions of sexual preferences, frequency of encounters, as well as concerns, fears, and fantasies. Effective communication in this domain fosters greater partner understanding, increased responsiveness to one another's needs, and the development of an atmosphere of mutual trust and emotional safety (Noar et al., 2006; Moazami, 2023). Two primary types of sexual communication are typically distinguished: instrumental and expressive (affective) communication. Instrumental communication relates to specific, functional aspects of sexual life – such as preferences regarding techniques, timing, frequency, or protection. It is more task-oriented and focused on the physical aspects of sexuality. Expressive communication, on the other hand, involves the articulation of emotions connected to sexuality – such as desire, shame, joy, fears, or the need for closeness (Gauvi & Merwin,

2022; Rancourt et al., 2016). Both instrumental and expressive communication are significantly linked to sexual satisfaction, although they influence it through different mechanisms. Instrumental communication facilitates better sexual compatibility and reduces frustration, whereas expressive communication deepens emotional intimacy and fosters a sense of security within the relationship. A lack of either form of communication can lead to reduced sexual satisfaction, misunderstandings of partner needs, and growing tension in the relationship (Séguin, 2024).

Attachment style can also impact the quality of sexual communication. Individuals with an anxious attachment style often exhibit a strong need for approval and validation from their partner, while simultaneously fearing rejection (Li & Chan, 2012). In the context of sexuality, this may result in hesitation or inhibition in freely expressing personal preferences and desires. Disclosing sexual needs may be perceived as risky due to the potential for partner disapproval, which is interpreted as a threat to the emotional bond (Barnes et al., 2017; Davis et al., 2006). Conversely, individuals with an avoidant attachment style tend to distance themselves from excessive emotional closeness. This distancing extends to the sexual sphere as well – manifesting in difficulties with open, intimate communication and the tendency to avoid discussions about sexual needs (McNeil et al., 2018).

Despite growing interest in the psychological dimensions of sexuality, most existing studies have focused on analyzing individual variables that influence sexual satisfaction, such as attachment style, body image, or sexual communication. Few studies have integrated these factors into comprehensive explanatory models that account for both direct and indirect mechanisms of influence. Therefore, the aim of the present study is to empirically test a serial mediation model in which attachment style influences sexual satisfaction through body image and sexual communication – in that specific sequence. It is hypothesized that individuals with a secure attachment style will demonstrate a more positive

body image, which facilitates greater openness in discussing sexuality, ultimately leading to higher levels of sexual satisfaction. Conversely, individuals with insecure attachment styles – both anxious and avoidant – may experience difficulties in accepting their own bodies and expressing sexual needs freely, which may, in turn, contribute to lower sexual satisfaction. Analyzing such a model enables a more nuanced understanding of the psychological interdependencies and the identification of mediating mechanisms linking attachment patterns to sexual functioning in close relationships.

### Research Hypotheses

- H1.** Attachment style is significantly associated with the level of sexual satisfaction among young men in romantic relationships. Individuals with a secure attachment style are expected to report higher sexual satisfaction compared to those with anxious or avoidant attachment styles.
- H2.** The relationship between attachment style and sexual satisfaction is mediated by body image. A secure attachment style is hypothesized to be associated with a more positive body image, which in turn predicts greater sexual satisfaction.
- H3.** The relationship between body image and sexual satisfaction is mediated by sexual communication. Individuals with a more positive body image are expected to exhibit greater openness in sexual communication, which will translate into higher sexual satisfaction.
- H4.** The proposed model includes a significant serial mediation effect:

*Attachment Style → Body Image → Sexual Communication → Sexual Satisfaction.*

The effect of attachment style on sexual satisfaction is fully or partially mediated by body image and sexual communication, in the specified order.

# 1. Methodology

## 1.1. Procedure and Participants

The study was quantitative, cross-sectional, and anonymous, with the aim of examining the relationships between attachment style, body image, sexual communication, and sexual satisfaction in men. Informed consent was obtained online after participants reviewed the participant information sheet. They were informed about the voluntary nature of their participation, their right to withdraw at any time, and the confidentiality of their data. The questionnaires were administered via an online survey created using Google Forms, and the average completion time was approximately 15-20 minutes. To minimize order effects, the sequence of psychometric instruments was randomized. The first part of the survey included sociodemographic questions (e.g., age, relationship duration, level of education), followed by four standardized instruments: the Attachment Styles Questionnaire (ASQ), the Body Attitudes Test (BAT), the Sexual Communication Self-Efficacy Scale (SCSES), and the Sexual Satisfaction Scale (SSS).

The study sample consisted of 187 heterosexual men aged between 19 and 33 years ( $M = 26$ ,  $SD = 7.26$ ), all of whom were in romantic relationships lasting at least three months at the time of participation. The majority of participants had completed higher education (53.2%) or secondary education (37.8%), while 9% reported having vocational or primary education. The average self-reported duration of the current relationship was 4.2 years ( $SD = 2.8$ ).

## 1.2. Instruments

### 1.2.1. Attachment Styles

Attachment style was measured using the *Attachment Styles Questionnaire* (ASQ) developed by Plopa (2008), a tool designed to assess attachment patterns in adults within the context of romantic relationships. The questionnaire is based on Bowlby's (1969) attachment theory and its extensions to adult romantic relationships by Hazan and Shaver (1987).

It allows for classification into three main attachment styles: secure, avoidant, and anxious-ambivalent. The ASQ comprises 24 diagnostic items grouped into three separate subscales corresponding to each style. Sample items address emotional closeness, the need for intimacy, and tendencies to avoid dependence. Participants respond on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). Raw subscale scores are converted into standardized scores (sten scores), allowing for interpretation of attachment style intensity. The tool demonstrates high psychometric reliability, with Cronbach's alpha values of 0.85 (secure), 0.78 (anxious-ambivalent), and 0.79 (avoidant), indicating strong internal consistency. The ASQ is widely used in research on romantic relationships, emotional functioning, and interpersonal communication.

### 1.2.2. Body Image

Body image was assessed using the *Body Attitudes Test* (BAT) by Ben-Tovim and Walker (1991), in the Polish adaptation by Brytek-Matera and Probst (2014). Originally developed for populations with eating disorders, the BAT is also effectively used in non-clinical samples to evaluate subjective perceptions of one's body and cognitive-emotional attitudes toward physical appearance. The questionnaire consists of 20 items covering three core dimensions: 1) *Emotional detachment from the body* – difficulties in accepting one's physicality and emotional distance from one's own body; 2) *General dissatisfaction with appearance* – negative evaluations of appearance, often associated with emotions such as shame, frustration, or aversion; 3) *Overestimation of body size* – the tendency to perceive oneself as larger than in reality. Participants respond on a 6-point Likert scale (0 = never to 5 = always). Higher scores indicate stronger negative attitudes toward the body. The BAT has demonstrated solid psychometric properties and is commonly used in studies on body image and its relationship with emotional and relational functioning. This study used only the *general dissatisfaction with appearance* subscale, considered most relevant to overall body satisfaction and acceptance in the context of physical intimacy.

### 1.2.3. Sexual Communication

Sexual communication self-efficacy was measured using the *Sexual Communication Self-Efficacy Scale* (SCSES; Quinn-Nilas et al., 2016), in the Polish adaptation by Liberacka-Dwojak and Wilkość-Dęczyńska (2024). Initially developed for adolescents, the tool has also shown strong validity and reliability in adult samples, making it suitable for general population research. The SCSES consists of 20 items rated on a 4-point Likert scale (1 = not at all confident to 4 = very confident), measuring perceived communication efficacy across five domains: 1) *Contraception communication* – confidence in discussing contraception methods, family planning, and decisions related

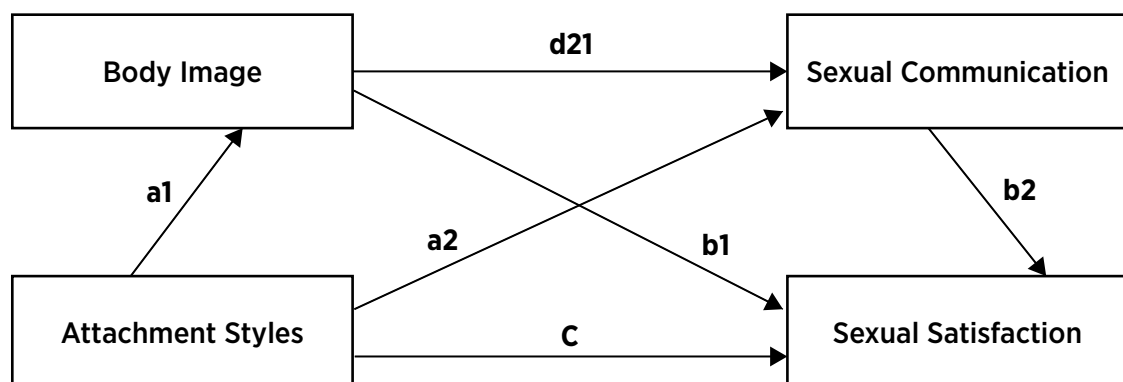
to the use or change of contraceptives; 2) *Negative sexual communication* – ability to express disinterest, discomfort, or dissatisfaction with sexual experiences; 3) *Positive sexual communication* – confidence in expressing desires, preferences, and providing positive feedback; 4) *Discussion of sexual history* – comfort in discussing past sexual experiences, previous partners, STI testing, and related information; 5) *Condom negotiation* – confidence in initiating conversations about condom use, handling partner resistance, and promoting safe sex practices. Higher scores reflect greater sexual communication self-efficacy, which has been linked to increased relationship satisfaction, better sexual health, and enhanced emotional and

Table 1. Means, Standard Deviations, Shapiro-Wilk Test results, and Pearson correlations among the studied variables

	M	SD	1	2	3	4	5	6	W	P
1. Secure Attachment Style	23.26	4.23	-						96	0.52
2. Anxious Attachment Style	26.32	8.02	-0.12	-					96	0.46
3. Avoidant Attachment Style	23.53	4.92	-0.23**	0.22*	-				97	0.25
4. Body Image (Negative)	12.24	4.98	-0.36*	0.42***	0.19*	-			96	0.35
5. Sexual Communication	26.16	6.96	0.31**	-0.35*	-0.34**	-0.27*	-		99	0.97
6. Sexual Satisfaction	42.23	8.06	0.41***	-0.34**	-0.26**	-0.19*	0.29**	-	98	0.55

1. Secure Attachment Style; 2. Anxious Attachment Style; 3. Avoidant Attachment Style; 4. Body Image (Negative); 5. Sexual Communication; 6. Sexual Satisfaction; \*M = Mean; SD = Standard Deviation; \*\*p < .001

Figure 1. Theoretical serial mediation model in which body image and sexual communication mediate the relationship between attachment style and sexual satisfaction



(c) Direct effect of attachment style on sexual satisfaction (prior to including mediators). (a, b) Indirect effect of attachment style on sexual satisfaction through body image. (a<sub>2</sub>, b<sub>2</sub>) Indirect effect of attachment style on sexual satisfaction through sexual communication. (a<sub>1</sub>, d<sub>21</sub>, b<sub>2</sub>) Indirect effect in a serial mediation model, where attachment style influences body image, which in turn affects sexual communication, which then impacts sexual satisfaction. (c') Direct effect of attachment style on sexual satisfaction after accounting for both mediators: body image and sexual communication.

psychological well-being. In the present study, the Polish version of the SCSES was used, demonstrating high reliability with a Cronbach's alpha of 0.81.

#### 1.2.4. Sexual Satisfaction

Sexual satisfaction was assessed using the *Sexual Satisfaction Scale for Women* (SSS-W; Meston & Trappnell, 2005), adapted into Polish by Janowski and Czyżykowska (2013). Although originally designed for female respondents, the Polish version has been successfully applied in studies involving male participants, confirming its versatility for use in general populations. The SSS-W includes 30 items rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating greater sexual satisfaction. The scale measures five dimensions of sexual functioning within relational and emotional contexts: 1) *Contentment* – overall pleasure and emotional fulfillment derived from sexual activity; 2) *Communication* – openness and readiness to express sexual needs, desires, and preferences; 3) *Compatibility* – subjective sense of sexual compatibility with the partner, both physically and emotionally; 4) *Relational concerns* – the influence of relationship quality and emotional dynamics on sexual satisfaction; 5) *Personal distress* – individual tension, dissatisfaction, or anxiety related to one's sexual life. The tool has been positively evaluated for validity and reliability. In this study, the full scale demonstrated high internal consistency, with a Cronbach's alpha of 0.86.

## 2. Data Analysis

All statistical analyses were conducted using IBM SPSS Statistics (version 26) and the PROCESS macro v4.2 by Hayes (2013). To test the serial mediation model, Model 6 in the PROCESS macro was applied, which allows for the simultaneous inclusion of two mediators in a specified sequence. Attachment style was treated as the independent variable (X), body image as the first mediator (M1), sexual communication as the second mediator (M2), and sexual satisfaction as the dependent variable (Y). Indirect

effects were assessed using a bootstrapping procedure with 5,000 resamples (Hayes & Rockwood, 2020). Indirect effects were considered statistically significant if the 95% confidence interval (CI) did not include zero. The analysis included three indirect paths:

- a. Indirect effect 1: attachment style → body image → sexual satisfaction,
- b. Indirect effect 2: attachment style → sexual communication → sexual satisfaction,
- c. Indirect effect 3 (serial): attachment style → body image → sexual communication → sexual satisfaction.

Additionally, the direct effect and the total effect of attachment style on sexual satisfaction were calculated. Pearson correlations were computed to assess basic associations between variables, followed by a mediation regression analysis. Prior to conducting the main analyses, data quality checks were performed, including an assessment of missing data, variable distributions, outliers, and normality tests. In cases of significant deviations from normality, appropriate transformations or robust statistical methods were applied.

## 3. Results

### 3.1. Correlational Analysis

Pearson correlation analysis revealed a number of significant associations among the psychological variables examined. A secure attachment style was positively correlated with both sexual communication ( $r = .31, p < .01$ ) and sexual satisfaction ( $r = .41, p < .001$ ), and negatively correlated with negative body image ( $r = -.36, p < .05$ ). Anxious attachment style showed a positive correlation with negative body image ( $r = .42, p < .001$ ), and negative correlations with sexual communication ( $r = -.34, p < .05$ ) and sexual satisfaction ( $r = -.34, p < .01$ ). Avoidant attachment style was negatively correlated with sexual communication ( $r = -.35, p < .01$ ) and sexual satisfaction ( $r = -.26, p < .01$ ), and positively associated with negative body image ( $r = .19, p < .05$ ). Negative

body image was significantly negatively correlated with both sexual communication ( $r = -.27, p < .05$ ) and sexual satisfaction ( $r = -.19, p < .05$ ). Moreover, sexual communication was significantly positively associated with sexual satisfaction ( $r = .29, p < .01$ ).

### 3.2. Mediation Analysis

#### 3.2.1. Secure Attachment as Independent Variable

The serial mediation model with secure attachment as the independent variable, body image (M1), and sexual communication (M2) as mediators, and sexual satisfaction as the dependent variable, was statistically significant,  $F(3, 246) = 42.31, p < .001$ , explaining 38% of the variance in sexual satisfaction ( $R^2 = .38$ ). The total effect of secure attachment on sexual satisfaction was significant ( $c = .41, SE = .08, t = 5.12, p < .001$ ). Secure attachment significantly predicted a more positive body image ( $a_1 = .36, SE = .07, t = 5.29, p < .001$ ), which in turn positively predicted sexual communication ( $d_{21} = .31, SE = .06, t = 5.17, p < .001$ ). Both body image ( $b_1 = .18, SE = .06, t = 3.33, p = .001$ ) and sexual communication ( $b_2 = .36, SE = .05, t = 6.80, p < .001$ ) significantly predicted sexual satisfaction. After including the mediators, the direct effect of secure attachment became non-significant ( $c' = .11, SE = .07, t = 1.57, p = .118$ ), indicating full mediation. The indirect effect through the serial pathway (secure attachment  $\rightarrow$  body image  $\rightarrow$  sexual communication  $\rightarrow$  sexual satisfaction) was significant ( $b = .044, 95\% \text{ CI } [.023, .068]$ ).

#### 3.2.2. Anxious Attachment as Independent Variable

The model with anxious attachment as the independent variable, body image and sexual communication as mediators, was also significant,  $F(3, 246) = 44.88, p < .001$ , explaining 41% of the variance in sexual satisfaction ( $R^2 = .41$ ). The total effect of anxious attachment on sexual satisfaction was significant and negative ( $c = -.47, SE = .07, t = -6.71, p < .001$ ). Anxious attachment significantly predicted a more

negative body image ( $a_1 = -.40, SE = .06, t = -6.62, p < .001$ ), and body image negatively predicted sexual communication ( $d_{21} = .28, SE = .05, t = 5.60, p < .001$ ). Both body image ( $b_1 = .19, SE = .05, t = 3.56, p < .001$ ) and sexual communication ( $b_2 = .36, SE = .05, t = 7.45, p < .001$ ) were positively associated with sexual satisfaction. After accounting for the mediators, the direct effect of anxious attachment became non-significant ( $c' = -.09, SE = .06, t = -1.52, p = .130$ ), indicating full serial mediation. The indirect effect through body image and sexual communication was significant ( $b = -.051, 95\% \text{ CI } [-.084, -.027]$ ).

#### 3.2.3. Avoidant Attachment as Independent Variable

The third model, with avoidant attachment as the independent variable, and body image and sexual communication as mediators, was also significant,  $F(3, 246) = 39.72, p = .001$ , explaining 31% of the variance in sexual satisfaction ( $R^2 = .31$ ). The total effect of avoidant attachment was significant ( $c = -.43, SE = .07, t = -6.14, p < .001$ ). Avoidant attachment significantly predicted a more negative body image ( $a_1 = -.13, SE = .07, t = -3.34, p = .001$ ), which was associated with lower sexual communication self-efficacy ( $d_{21} = .26, SE = .05, t = 5.20, p < .001$ ). Sexual communication was positively associated with sexual satisfaction ( $b_2 = .36, SE = .05, t = 7.20, p < .001$ ), and body image was also a significant predictor ( $b_1 = .17, SE = .06, t = 2.83, p = .005$ ). After including the mediators, the direct effect of avoidant attachment decreased but remained significant ( $c' = -.19, SE = .06, t = -3.17, p = .002$ ), indicating partial mediation. The serial indirect effect via body image and sexual communication was significant ( $b = -.027, 95\% \text{ CI } [-.049, -.013]$ ).

## 4. Discussion

The aim of the present study was to test a serial mediation model in which attachment style affects sexual satisfaction in men through two psychological mediators: body image and sexual communication.

The findings supported the proposed model, revealing that the relationship between attachment and sexual satisfaction is more complex than simple correlational links suggest. Notably, the indirect effects differed depending on the specific attachment style, contributing meaningful insights to the field of psychological predictors of men's intimate lives.

As hypothesized, secure attachment was significantly associated with higher sexual satisfaction, and this relationship was partly explained by a more positive body image and greater efficacy in sexual communication. This indicates that securely attached individuals not only experience greater emotional closeness in relationships but also demonstrate stronger capacities for bodily self-reflection and sexual expression, contributing to a more fulfilling intimate life. These results are consistent with previous findings by Mikulincer and Shaver (2019), who emphasized that secure attachment fosters the development of stable self-esteem and emotional regulation within relational contexts. Such individuals are more inclined to openly communicate their needs, form trust-based, reciprocal relationships, and perceive their bodily experiences – including sexual ones – as positive and validating.

The positive body image observed in securely attached individuals may stem from early relationships with significant others that were generally supportive, accepting, and non-invasive regarding bodily boundaries (Homan et al., 2018). In adulthood, this translates into greater comfort with one's physicality, higher self-acceptance, and reduced susceptibility to societal pressures regarding physical appearance (Jun et al., 2011). This mindset fosters openness to physical and sexual intimacy without the experience of shame or threat. Furthermore, the high sexual communication efficacy observed in securely attached men appears to be a valuable relational resource, enabling effective boundary negotiation, expression of desires, and attunement to a partner's needs.

For individuals with insecure attachment styles, the psychological pathways leading from attachment to sexual satisfaction varied according to dominant defensive and regulatory mechanisms. In the case of anxious-ambivalent attachment, body image played a central role – those with high attachment anxie-

ty were more likely to report dissatisfaction with their appearance, which negatively affected their psychosexual comfort and openness in sexual communication. This suggests that the anxious style was not directly linked to sexual satisfaction; instead, its impact was mediated through body image dissatisfaction, which in turn impaired the ability to openly express sexual needs and boundaries. According to attachment theory, anxiously attached individuals tend to be preoccupied with the need for acceptance while lacking a stable sense of self-worth (Pascoal et al., 2022). Negative body image may reflect this instability and the tendency to regulate self-worth through relationships.

The link between negative body image and lower sexual communication efficacy may be explained by the fact that individuals who feel ashamed of their appearance – especially in intimate contexts involving nudity or closeness – often avoid sexual situations or limit physical contact. They may also avoid talking about sex because the topic itself triggers discomfort. Studies show that individuals who are dissatisfied with their bodies experience greater difficulty initiating conversations about sexual needs and preferences (Wu & Zheng, 2021). Moreover, negative body image is strongly associated with low self-esteem and reduced confidence, including in relational and sexual contexts (Toussi & Shareh, 2019). Individuals with low body acceptance may not feel „worthy” of pleasure, care, or attention from their partners, which limits their ability to assertively communicate needs, boundaries, or sexual expectations. They may lack the belief that their needs are important and will be met positively. The discovery of full serial mediation for the anxious attachment style strengthens the theoretical basis of the model and underscores the importance of addressing body image and communication skills in psychotherapeutic interventions targeting men with high attachment anxiety.

In the case of avoidant attachment, the results also confirmed a significant link with reduced sexual communication quality. However, consistent with theoretical assumptions, the mechanism differed from that observed in anxious individuals. Those with high avoidance of intimacy tend to distance themselves from both emotional and physical close-



ness with their partner. A strong preference for independence, emotional suppression, and difficulty in expressing feelings contribute to a tendency to avoid discussions about sexual needs, boundaries, or preferences – often viewing such conversations as unnecessary or even threatening. Expressive sexual communication, in particular, may be perceived by avoidant individuals as intrusive, as it requires emotional engagement and vulnerability, which contradicts their dominant strategies of avoiding dependence and controlling relational closeness (Brassard et al., 2015; Wu & Zheng, 2021).

This lack of openness to sexual dialogue does not necessarily stem from a lack of desire but rather from difficulties in identifying and communicating those desires. Avoidant individuals often suppress their own needs or downplay the importance of sexuality as a relational dimension, resulting in limited responsiveness to their partner. Significantly, in the case of avoidant attachment, the analysis revealed full mediation between attachment and sexual satisfaction through sexual communication. This indicates that the level of intimacy avoidance was not directly related to sexual satisfaction but exerted its influence entirely via reduced communication efficacy. This finding reinforces the idea that the main barrier to satisfying sexual experiences among avoidantly attached individuals lies in their lack of openness and expressive capacity within the relationship.

In addition to the observed full mediation through sexual communication, the results also showed a significant association between avoidant attachment and more negative body image. Although this association was weaker than in the anxious group, it suggests that avoidant individuals – despite their apparent self-sufficiency and emotional detachment – may also struggle with bodily self-accept-

ance. This could stem from suppressed discomfort with the body, which may be perceived as a source of dependency, shame, or potential judgment in relational contexts.

According to earlier research, avoidant individuals often disengage from bodily experiences not because they view them positively, but because they are emotionally difficult or threatening (Cash et al., 2004; Mili & Raakhee, 2015). Thus, their dissatisfaction with the body may not always be conscious or overt, but rather operate as a latent source of internal tension that restricts sexual expression and intensifies communication difficulties. Consequently, in avoidant individuals, body image and sexual communication may jointly contribute to decreased sexual satisfaction, although sexual communication appears to play a more central mediating role. These individuals may simultaneously experience dissatisfaction with their bodies and avoid sexual conversations – thereby failing to build relational and sexual closeness effectively.

Overall, the findings confirm that body image and sexual communication function as key psychological mechanisms mediating the relationship between attachment style and sexuality. However, the relative importance of each varies depending on the individual's characteristics. These results have important practical implications. Understanding how attachment styles influence sexual life through body image and communication can inform psychotherapeutic interventions and educational programs in the field of sexual health. In particular, there is a need to support men with insecure attachment styles in developing sexual communication skills and cultivating a more positive relationship with their bodies. Working on these aspects may contribute to improving sexual and relational satisfaction, as well as overall psychological well-being.

## Bibliography

- Allsop, D.B., Leavitt, C.E., Saxey, M.T., Lawlor, J.M., Yorgason, J.B., & James, S.L. (2021). How empathy moderates associations between sexual and relational satisfaction. *Journal of Sex & Marital Therapy*, 47(6), 545-557. <https://doi.org/10.1080/0092623X.2021.1922563>
- Barker, M. (2005). This is my partner, and this is my... partner's partner: Constructing a polyamorous identity in a monogamous world. *Journal of Constructivist Psychology*, 18(1), 75-88. <https://doi.org/10.1080/10720530590523107>
- Barnes, A., Dodson, M., Wood, B., Thomas, H., & Kimberly, C. (2017). The effect of attachment styles on positive communication and sexual satisfaction in relationships. *Journal of Positive Sexuality*, 3(2), 27-31.
- Ben-Tovim, D.I., & Walker, M.K. (1991). The development of the Ben-Tovim Walker Body Attitudes Questionnaire (BAQ), a new measure of women's attitudes towards their own bodies. *Psychological Medicine*, 21(3), 775-784.
- Bonev, N., & Matanova, V. (2021). Adult attachment representations and body image. *Frontiers in Psychology*, 12, 724329. <https://doi.org/10.3389/fpsyg.2021.724329>
- Brytek-Matera, A., & Probst, M. (2014). Psychometric properties of the Polish version of the Body Attitude Test. *Archives of Psychiatry and Psychotherapy*, 1, 39-46.
- Carcedo, R.J., Fernández-Rouco, N., Fernández-Fuertes, A.A., & Martínez-Álvarez, J.L. (2020). Association between sexual satisfaction and depression and anxiety in adolescents and young adults. *International Journal of Environmental Research and Public Health*, 17(3), 841. <https://doi.org/10.3390/ijerph17030841>
- Cash, T.F. (2002). The situational inventory of body-image dysphoria: Psychometric evidence and development of a short form. *International Journal of Eating Disorders*, 32(3), 362-366. <https://doi.org/10.1002/eat.10100>
- Cash, T.F., Theriault, J., & Annis, N.M. (2004). Body image in an interpersonal context: Adult attachment, fear of intimacy and social anxiety. *Journal of Social and Clinical Psychology*, 23(1), 89-103. <https://doi.org/10.1521/jscp.23.1.89.26987>
- Constant, E., Christophe, V., Bodenmann, G., & Nandrin, J.L. (2021). Attachment orientation and relational intimacy: The mediating role of emotional competences. *Current Psychology*, 40, 1374-1385. <https://doi.org/10.1007/s12144-018-0062-x>
- Davis, D., Shaver, P.R., Widaman, K.F., Vernon, M.L., Follette, W.C., & Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, 13(4), 465-483. <https://doi.org/10.1111/j.1475-6811.2006.00130.x>
- Fischer, V.J., Andersson, G., Billieux, J., & Vögele, C. (2022). The relationship between emotion regulation and sexual function and satisfaction: A scoping review. *Sexual medicine reviews*, 10(2), 195-208. <https://doi.org/10.1016/j.sxmr.2021.11.004>
- Gagné, A.L., Brassard, A., Bécotte, K., Lessard, I., Lafontaine, M.F., & Péloquin, K. (2021). Associations between romantic attachment and sexual satisfaction through intimacy and couple support among pregnant couples. *European Review of Applied Psychology*, 71(3), 100622. <https://doi.org/10.1016/j.erap.2020.100622>
- Gauvin, S.E. M., & Merwin, K.E. (2022). Sexual communication among sexual and gender/sex diverse folks: An overview of what we know and suggestions for where to go. *Current Sexual Health Reports*, 14(2), 47-62. <https://doi.org/10.1007/s11930-022-00328-9>
- Gómez-López, M., Viejo, C., & Ortega-Ruiz, R. (2019). Well-being and romantic relationships: A systematic review in adolescence and emerging adulthood. *International Journal of Environmental Research and Public Health*, 16(13), 2415. <https://doi.org/10.3390/ijerph16132415>
- Hayes, A.F., & Rockwood, N.J. (2020). Conditional process analysis: Concepts, computation, and advances in the modeling of the contingencies of mechanisms. *American Behavioral Scientist*, 64(1), 19-54. <https://doi.org/10.1177/0002764219859633>
- Jun, E.Y., Kim, S., Chang, S.B., Oh, K., Kang, H.S., & Kang, S.S. (2011). The effect of a sexual life reframing program on marital intimacy, body image, and sexual function among breast cancer survivors. *Cancer nursing*, 34(2), 142-149. <https://doi.org/10.1097/NCC.0b013e3181fab7a>
- Homan, K.J., Wild, S., Dillon, K.R., & Shimrock, R. (2018). "Don't bring me down" Effects of priming secure and anxious attachment on body image. *Journal of Social and Personal Relationships*, 35(7), 936-955. <https://doi.org/10.1177/0265407517701298>
- Lafortune, D., Girard, M., Bolduc, R., Boislard, M.A., & Godbout, N. (2022). Insecure attachment and sexual satisfaction: A path analysis model integrating sexual mindfulness, sexual anxiety, and sexual self-esteem. *Journal of Sex & Marital Therapy*, 48(6), 535-551. <https://doi.org/10.1080/0092623X.2021.2011808>
- Laporta-Herrero, I., Jáuregui-Lobera, I., Serrano-Troncoso, E., García-Argibay, M., Cortijo-Alcarria, M.C., & Santed-Germán, M.A. (2022). Attachment, body appreciation, and body image quality of life in adolescents with eating disorders. *Eating Disorders*, 30(2), 168-181. <https://doi.org/10.1080/10640266.2020.1763112>
- Liberacka-Dwojak, M., & Wilkość-Dębczyńska, M. (2024). A development and validation of the Polish version of Sexual Communication Self-Efficacy Scale in women. *Psychology & Sexuality*, 15(2), 206-215. <https://doi.org/10.1080/19419899.2023.2243633>
- Li, T., & Chan, D.K. S. (2012). How anxious and avoidant attachment affect romantic relationship quality differently: A meta-analytic review. *European Journal of Social Psychology*, 42(4), 406-419. <https://doi.org/10.1002/ejsp.1842>
- Mallory, A.B. (2022). Dimensions of couples' sexual communication, relationship satisfaction, and sexual satisfaction: A meta-analysis. *Journal of Family Psychology*, 36(3), 358. <https://doi.org/10.1037/fam0000946>
- Mar Sánchez-Fuentes del, M., Santos-Iglesias, P., & Sierra, J.C. (2014). A systematic review of sexual satisfaction. *International Journal of Clinical and Health Psychology*, 14(1), 67-75. [https://doi.org/10.1016/S1697-2600\(14\)70038-9](https://doi.org/10.1016/S1697-2600(14)70038-9)
- McNeil, J., Rehman, U.S., & Fallis, E. (2018). The influence of attachment styles on sexual communication behavior. *The Journal of Sex Research*, 55(2), 191-201. <https://doi.org/10.1080/00224499.2017.1318817>
- Meltzer, A.L., & McNulty, J.K. (2010). Body image and marital satisfaction: Evidence for the mediating role of sexual frequency and sexual satisfaction. *Journal of Family Psychology*, 24(2), 156. <https://doi.org/10.1037/a0019063>
- Mili, M., & Raakhee, A.S. (2015). The relationship between body esteem, attachment anxiety and attachment avoidance among young adults. *SIS Journal of Projective Psychology & Mental Health*, 22(2), 119.
- Mikulincer, M., & Shaver, P.R. (2019). Attachment orientations and emotion regulation. *Current Opinion in Psychology*, 25, 6-10. <https://doi.org/10.1016/j.copsyc.2018.02.006>

- Moazami, S., Ashley, M., Czechowski, K., Courtice, E.L., & Shaughnessy, K. (2023). The Sexual Communication Scale (SeCS). *The Journal of Sex Research*, 60(1), 71-90. <https://doi.org/10.1080/00224499.2022.2129558>
- Najjaran Toussi, H., & Shareh, H. (2019). Changes in the indices of body image concern, sexual self-esteem and sexual body image in females undergoing cosmetic rhinoplasty: A single-group trial. *Aesthetic Plastic Surgery*, 43, 771-779. <https://doi.org/10.1007/s00266-019-01336-2>
- Pascoal, P.M., Narciso, I.D. S.B., & Pereira, N.M. (2014). What is sexual satisfaction? Thematic analysis of lay people's definitions. *Journal of Sex Research*, 51(1), 22-30. <https://doi.org/10.1080/00224499.2013.815149>
- Plopa, M. (2008). *Więzi w małżeństwie i rodzinie. Metody badań*. Kraków: Oficyna Wydawnicza Impuls.
- Pujols, Y., Meston, C.M., & Seal, B.N. (2010). The association between sexual satisfaction and body image in women. *The Journal of Sexual Medicine*, 7(2, Part 2), 905-916. <https://doi.org/10.1111/j.1743-6109.2009.01604.x>
- Quinn-Nilas, C., Milhausen, R.R., Breuer, R., Bailey, J., Pavlou, M., DiClemente, R.J., & Wingood, G.M. (2016). Validation of the sexual communication self-efficacy scale. *Health Education & Behavior*, 43(2), 165-171. <https://doi.org/10.1177/109019811555989>
- Rancourt, K.M., Rosen, N.O., Bergeron, S., & Nealis, L.J. (2016). Talking about sex when sex is painful: Dyadic sexual communication is associated with women's pain, and couples' sexual and psychological outcomes in provoked vestibulodynia. *Archives of Sexual Behavior*, 45, 1933-1944. <https://doi.org/10.1007/s10508-015-0670-6>
- Santona, A., Milesi, A., Tognasso, G., Gorla, L., & Parolin, L. (2022). Anxiety in attachment and sexual relationships in adolescence: A moderated mediation model. *International Journal of Environmental Research and Public Health*, 19(7), 4181. <https://doi.org/10.3390/ijerph19074181>
- Séguin, L.J. (2024). "I've learned to convert my sensations into sounds": Understanding during-sex sexual communication. *The Journal of Sex Research*, 61(2), 169-183. <https://doi.org/10.1080/00224499.2022.2134284>
- Shahhosseini, Z., Gardeshi, Z.H., Pourasghar, M., & Salehi, F. (2014). A review of affecting factors on sexual satisfaction in women. *Materia Socio-Medica*, 26(6), 378. <https://doi.org/10.5455/msm.2014.26.378-381>
- Shaver, P., & Hazan, C. (1987). Being lonely, falling in love. *Journal of Social Behavior and Personality*, 2(2), 105.
- Shaver, P.R., & Mikulincer, M. (2012). Adult attachment and sexuality. *The Wiley-Blackwell Handbook of Couples and Family Relationships*, 159-174. <https://doi.org/10.1002/9781444354119>
- Thompson, R.A., Simpson, J.A., & Berlin, L.J. (2022). Taking perspective on attachment theory and research: Nine fundamental questions. *Attachment & Human Development*, 24(5), 543-560. <https://doi.org/10.1080/14616734.2022.2030132>
- Widman, L., Maheux, A.J., Craig, E., Evans-Paulson, R., & Choukas-Bradley, S. (2022). Sexual communication between adolescent partners: A scoping review and directions for future research. *The Journal of Sex Research*, 59(8), 984-999. <https://doi.org/10.1080/00224499.2022.2099787>
- Wiseman, M.C., & Moradi, B. (2010). Body image and eating disorder symptoms in sexual minority men: A test and extension of objectification theory. *Journal of Counseling Psychology*, 57(2), 154. <https://doi.org/10.1037/a0018937>
- Wu, T., & Zheng, Y. (2021). Effect of sexual esteem and sexual communication on the relationship between body image and sexual function in Chinese heterosexual women. *The Journal of Sexual Medicine*, 18(3), 474-486. <https://doi.org/10.1016/j.jsxm.2020.12.006>
- Yeh, H.C., Lorenz, F.O., Wickrama, K.A. S., Conger, R.D., & Elder Jr, G.H. (2006). Relationships among sexual satisfaction, marital quality, and marital instability at midlife. *Journal of Family Psychology*, 20(2), 339. <https://doi.org/10.1037/0893-3200.20.2.339>
- Zayed, A.A., & El-Hadidy, M.A. (2020). Sexual satisfaction and self-esteem in women with primary infertility. *Middle East Fertility Society Journal*, 25, 1-5. <https://doi.org/10.1186/s43043-020-00024-5>
- Zhang, Y., Zhao, J., Jiang, N., Wang, T., Cao, H., Wang, Q., ... & Yu, J. (2022). Effects of stigma on the relationship between perceived social support and sexual satisfaction among breast cancer survivors. *The Journal of Sexual Medicine*, 19(6), 1002-1011. <https://doi.org/10.1016/j.jsxm.2022.03.617>

# Communication and closeness versus sexual satisfaction of spouses<sup>1</sup>

<https://doi.org/10.34766/qv0x5295>

Małgorzata Weryszko<sup>a</sup>✉, Kinga Dąbrowska<sup>b</sup>

<sup>a</sup> Małgorzata Weryszko, <https://orcid.org/0000-0002-7690-9320>,

Department of Psychology, Institute of Pedagogy and Psychology, Jan Kochanowski University in Kielce, Poland

<sup>b</sup> Kinga Dąbrowska, <https://orcid.org/0009-0004-3166-4421>,

graduate of Psychology at the Faculty of Pedagogy and Psychology of Jan Kochanowski University in Kielce

✉ Corresponding author: [malgorzata.weryszko@ujk.edu.pl](mailto:malgorzata.weryszko@ujk.edu.pl)

**Abstract:** The subject of the presented analyzes is communication and closeness versus sexual satisfaction among married people. The aim of the research was to check the connection between the independent variables—communication and closeness and the dependent variable – sexual satisfaction. 116 people were examined, aged from 20 to 63 years old, who have been married for between 1 month and 35 years. The Kaźmierczak and Plopa's *Communication in Marriage Questionnaire* has been used for the measurements (2008), Ryś's *Marital Intimacy Scale* (1998) and Plopa's *Sexual Satisfaction Questionnaire* (2017). Communication in the areas of support and commitment shows a positive connection with sexual satisfaction in the areas of caressing, closeness and sex, while depreciation in the spouses' communication shows a negative connection with sexual satisfaction. Emotional, intellectual and action-based closeness are also positively related to sexual satisfaction. Additionally, emotional and action-based closeness turned out to be mediators of the connection between communication and sexual satisfaction. The research results allow us to conclude that the spouses' communication and closeness play an important role in their sexual satisfaction. The discussion on the mediating role of emotional and action-based closeness on the connection between communication and sexual satisfaction emphasizes the nonverbal nature of the above phenomena.

**Keywords:** marriage, communication, closeness, sexual satisfaction

## 1. Introduction

Many scientists have attempted examination of the psychological determinants making marriage last longer. These determinants include, most notably, factors comprising elements of the resilience of the marital subsystem. This is so as resilience allows good functioning of an individual or group also under unfavourable conditions (Gąsior, 2014).

The paper investigates three areas of functioning of the marital relationship – communication, closeness, and sexual satisfaction. It has been assumed that those spheres, which oftentimes overlap, are interrelated. Braun-Galkowska (2003, p. 15-16) includes as success conditions for marriage “the capacity to express feelings, affection, and care for closeness, including sexual closeness”, as well as “the capacity of correct communication”. In turn, Rostowski (1987, p. 275, cf. also Komorowska-Pudło, 2014) claims that

“sexuality cannot be separated from other aspects of marital life, and so the emotional, intellectual, and cultural”. Żak-Łykus i Nawrat (2013) add that sexual functions only partially explain sexual satisfaction. The conducted studies checked whether there is a relationship between communication and sexual satisfaction and between closeness and sexual satisfaction in spouses. In addition, the mediating role of closeness in the relationship between communication and sexual satisfaction was being verified.

### 1.1. Communication and sexual satisfaction

#### 1.1.1. Communication in marriage

The leading representative of the systemic approach in psychology, Satir (2002, p. 56) claims that “communication is the most powerful factor determining the type of relationships we have with others and our

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_wery.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_wery.pdf)

own development". As communication is the basic tool for the human being to establish relationships of all sorts (Weryszko, 2020a), it seems obvious that it also constitutes a fundamental set of elements comprising the family system, including marriage. The principles of effective expression, including marital expression, includes direct, immediate, clear, honest and supportive messages – those that allow closeness building (McKay et al., 2007). According to Eggerichs (2010), any negative factors leading to absence of satisfaction in marriage can be eliminated with high communication skills. Properly conducted communication is the tool fundamental for the marital relationship as it is a vehicle for the spouses' expression, serves them to resolve conflicts, creates the air of dialogue, and builds a bond between the spouses. Many studies show that proper communication is also a factor facilitating relationship strength and quality (Chmielewska, 2019; Jankowska, 2016; Kurowska, Nickel, 2023, Orłowski, 2018; Wałęcka-Matyja, Szkudlarek, 2019; Weryszko, 2020b). Nyarks and Hope (2023) argue that effective marital communication is key for every marriage to be successful and lasting. In turn, Lachowska (2022) points out to communication as a factor included in many models and concepts of family strengths.

### **1.1.2. Communication and spouses' sexual satisfaction**

McKay et al. (2007) discuss the myths that make it difficult for spouses to talk about sexual intercourse. The first one is the claim that the sexual act is so biological and natural that it should happen spontaneously. This leads to a conviction that this spontaneity is an expression of love and romance. As a result, the spouses cannot deal with difficulties appearing in their sex life. This is particularly true for spouses who have been together for a long time, who notice differences in their sexual needs. The spouses' frustration or sense that their relationship should not exist. Another myth is that the spouses expect their partner to know how to satisfy their sexual needs. This way, they abandon responsibility for communicating their own needs and require of their partner the improbable ability to read minds and feelings. Yet another trap is the conviction that the knowledge of the partner's sexual

needs shows sensitivity and care. When the needs are not communicated, they are not satisfied and, in effect, the partner is labelled "insensitive" and "uncaring". Conversations about sexual needs are often avoided because of spouses' anxiety. They are afraid that they will be rejected or judged or that their partner will not be able to refuse, hence leading to compulsion. Another myth that blocks communication about sexual matters is the conviction that conflicts with the spouse are to be avoided. However, if problems are not brought to light, they will never be solved. Such anxiety may be related to negative experiences from the past and to the guilt of having needs. Absence of open communication about sex in the marital dyad increases the probability that the unsatisfied sexual needs will be expressed in indirect communication – blaming, withdrawal, or complaining. Repression of needs, thoughts, and feelings has a negative effect on the quality of, and ability to achieve, sexual satisfaction (ibidem).

MacNeil and Byers (2005, after: Liberacka-Dwojak, Izdebski, 2021) claim that communication about sex develops along two pathways – instrumental and expressive. The former involves informing of one's own sexual preferences, leading to better adaptation of the partner's sexual behaviours. This results in more pleasurable sexual experiences. The latter rests on the fact that sexual communication leads to the sense of deeper closeness between the partners, which results in better sex. The above researchers also point out that the effect of both pathways on sexual satisfaction is modified by many individual factors and relationship components.

In their Sexual Satisfaction Scale for Women, Meston and Trapnell (2005) include the sphere of communication, which includes communication between partners around sexual topics and disclosure of deep feelings or emotions. A survey conducted among Canadians has shown that "good sexual communication" is the best predictor for sexual satisfaction for all respondents except for men above the age of 60 (ibidem).

According to Liberacka-Dwojak & Izdebski (2021, p. 1), "open communication about sexuality in the relationship is one of the main components of close partnership relations. It is the basic factor guaranteeing sexual health and sexual satisfaction, and it is the key element allowing achievement of

sexual goals and need satisfaction". The studies done by Komorowska-Pudło (2014) indicate that the level of sexual satisfaction rises as the quality of communication around support and involvement increases and depreciation decreases.

## 1.2. Closeness and sexual satisfaction

### 1.2.1. Definition of closeness

Ryś et al. (2019, p. 223) define closeness as two forces which balance out in every person's life – towards "individuality" and "togetherness". This is a type and manner of the spouses relating to each other, which changes dynamically. Chrost (2020, p. 64) claims that "the essence of closeness is authenticity, trust, and genuine feelings". "There are three types of closeness: emotional (emotional plane), intellectual (cognitive plane) and action-oriented (aspirational plane). They are in a feedback relationship with one another (Ryś et al., 2019). Emotional closeness involves mutual care, affection and interest of the spouses (ibidem). It is assumed to include sharing of emotions, happy and sad feelings, joint experience of those feelings, and the sense of being understood. McKay et al. (2007, p. 47) argue that "the feelings shared with another person are the building blocks of closeness". Emotional closeness also includes the spouses' shared orientation to some values or ideas. It is expressed by showing affection, sensitivity, and empathetic understanding towards the spouse. The closeness is developed by strengthening emotional ties between the spouses. Emotional closeness grants a sense of safety, acceptance, and support (Ryś et al., 2019).

The functioning of the spouses in the intellectual sphere is one of the factors by which they select their life partner – based on similarity (Ryś et al., 2019). Intellectual closeness involves exchange of thoughts insights, and experiences between the spouses, and becoming more and more like one another in the area of views and values. Deep intellectual closeness results in more efficient resolution of conflicts and treating the spouse as an equal. This type of closeness is possible only when the spouses resonate with each other, which in turn is an effect of proper communication, ability to listen, and acceptance of the other person (Chrost, 2020; Ryś et al., 2019).

The third type of closeness of aspirational closeness. It is important in achievement of the basic marital goals and tasks, but it is also vital in daily responsibilities and the spouses' personal development. It involves joint striving, responsibility for the spouses' actions, and facing difficulties (ibidem). The quality of their relationship improves when the spouses feel satisfaction from joint action, their expectations are concordant, they complement each other in their roles, and achieve joint goals (Szpakowski, 2016).

Close and intimate contact relies on openness, authentic feelings and mutual trust (Beisert, 2006). The feelings of closeness and understanding, as experienced by the spouses, show their experience of intimacy (Plopa, 2011). Therefore, it is deemed that closeness is a fundamental part of the marital relationship (Ryś et al., 2019). Based on studies into closeness in marriage (Krawiec, 2018), marriages with high quality of relationship, or deep closeness, have been identified. In moments of conflict, such marriages can separate the person from their behaviour; as a result, the value of a person (their own or their spouse's) is never negated. The other person is still treated as a friend even if there is disagreement. Conflicts happen around facts and current issues, are resolved together, right after they emerge, and with respect for the spouse's feelings and views, which builds stronger unity in the relationship (ibidem).

### 1.2.2. Sexual satisfaction

Sexuality is seen as a key aspect of human life affected by complex factors, and as an integral part of each human being's personality, which integral part must be developed for individual, interpersonal, and social well-being to happen (Kowalczyk, Lew-Starowicz, 2017). According to Komorowska-Pudło (2014), sexuality is a special sphere of marital life.

Sexual satisfaction is most frequently shown as the partners' subjective satisfaction with the quality of their sexual life (Freihart et al., 2020).

Beisert (2005) stresses the impact of biological determinants of sexual satisfaction. These are: (a) ability to experience sexual desires and striving for coitus; (b) ability to get sexually excited, which involves physiological reactions of the body (lubrication, erection, ejaculation); (c) ability to experience orgasm.



Davis *et al.* (2006) have described three components of sexual satisfaction:

- Physical satisfaction – subjective experience of satisfaction and pleasure from sexual activity, evaluation of the partner's sexual skill and physical satisfaction.
- Emotional satisfaction – feelings towards the partner, which may involve anxiety, dilemmas and sexual uncertainty, but also evaluation of the relational satisfaction overall.
- Control-derived satisfaction – evaluation of one's own influence on the decision regarding the time, manner and possibility of sexual contacts.

Advancements in studies into sexual satisfaction led to it being seen as an element of the quality of life (Nomejko *et al.*, 2012). The most recent studies show that high sexual satisfaction brings about numerous psychological, relational and health benefits, is linked particularly with improved sexual performance, reduced depression components, and improved quality of life, and serves as a buffer against a range of health-related problems (Dundon and Rellini, 2010; Leavitt, Lefkowitz, Waterman, 2019; Stephenson and Meston, 2010).

Freihart *et al.* (2020) have noted that most studies into sexual satisfaction conducted so far fail to take into account its relational essence. It is only the most recent reflections on this topic that depict sexual satisfaction with consideration for its interpersonal nature.

This is so as satisfaction with sex life is linked with past sexual experiences as well current and future expectations related to close human relationships (Davis *et al.*, 2006).

### **1.2.3. Sexual satisfaction in marriage**

There is evidence showing that relational factors and the dynamic of the relationship explain the variance of sexual satisfaction to a high degree, which reinforces the conviction that this phenomenon needs to be considered in the context of a relationship (Davis *et al.*, 2006).

There are studies showing that marital satisfaction underlies sexual satisfaction (Vowels, Mark, 2018) and studies looking at sexual satisfaction as a variable

explaining marital satisfaction (Fallis *et al.*, 2016). However, longitudinal data indicate a model where these variables act both ways and change together over time (Quinn-Nilas, 2020). The relationship between sexual and relational satisfaction is also affected by individual factors of the spouses and cultural conditioning (Freihart *et al.*, 2020).

Satisfaction with sex life in the marital dyad positively correlates with the frequency of their sexual activity and their marital satisfaction (Adamski, 2015; Yucel, Gassanov, 2010).

Studies by Komorowska-Pudło (2014) show that the higher the level of marital bond and the stronger the level of the attitude of love towards the spouse, the higher the sexual satisfaction. Also, studies by Buss (2014) show that low levels of sexual satisfaction is a good predictor of divorce. Studies into sexual satisfaction in relationship of different status are ambiguous. Some of them demonstrate absence of difference in sexual satisfaction between different types of relationships; others, however, find a higher level of satisfaction with sex life in marital contexts. Others still show that this pertains only to women in marriage (Birnie-Porter, Hunt, 2015).

In a situation where the spouses have differing ideas of the sexual sphere in their relationship (frequency, duration, quality of sexual acts), they may feel dissatisfaction, anger, disappointment and weakening of closeness between each other (Beck, 1996).

Such a state of affairs may translate into lower interest in coitus and reduction in subjective sexual satisfaction. These add to the factors that move the couple away from each other. Thus, husband and wife fall into a circle of dependency, which results in marital conflicts (Beck, 1996). In addition to divergent expectations and sexual dysfunctions, the factors blocking sexual satisfaction in marriage include pornography consumption by one of the partners (Yucel, Gassanov, 2010).

### **1.2.4. Closeness and sexual satisfaction**

Janicka (2006) counts psychological experiences, including closeness, into the goals of the spouses' sexual activity. She also points to the relationship between the level of integration between the spouses

and their subjective sexual satisfaction (ibidem). Sexual contact with the spouse is by definition an intimate act and may be a means by which to express emotional closeness. Partners may, however, confuse the physical aspect of coitus for intimacy, or treat sex as a means by which to escape from emotional closeness. Both these variants make coitus less satisfactory (Hajcak, Garwood, 2008). Physical love creates a sense of closeness, mutual dependency, and longing for unity between the spouses. Moreover, closeness promotes intensity of intercourse (Hajcak, Garwood, 2008).

In Plopa's Sexual Satisfaction Questionnaire (2017), as many as 6 out of 10 items concerns closeness as he defines it. This aspect is also more reliable (shows higher internal consistency of measurement) for marriages compared to non-formal relationships. Studies by Żak-Łykus i Nawrat (2013) show that high sexual satisfaction is linked with higher levels of intimacy – understood as the need to build a relationship characterised by intimacy, among others.

## 2. Procedure and research methods

### 2.1. Object and goal of study

The object and goal of this independent study was to show a relationship between communication and closeness on one hand and sexual satisfaction of the spouses on the other. The study also aimed to check whether closeness mediates the relationship between communication and sexual satisfaction.

It has been assumed that there is a complex relationship between communication, closeness and sexual satisfaction of the spouses, implying that high levels of communication and closeness have a simultaneous and positive effect on satisfaction with sex life, where closeness plays a significant role of a mediator between communication and sexual satisfaction.

The detailed hypothesis posited that: 1) higher levels of support and involvement in communication leads to a heightened level of sexual satisfaction as regards caressing, closeness and sex between the spouses; 2) there is a connection between low levels of depreciation in communication and high levels of sexual satisfaction

as regards caressing, closeness and sex between the spouses; 3) there is a relationship between high levels of intellectual, emotional, and aspirational closeness, and high levels of sexual satisfaction as regards caressing, closeness, and sex between the spouses; 4) closeness mediates the relationship between communication and sexual satisfaction of the spouses.

### 2.2. Study group

The study enrolled 116 individuals ( $N = 116$ ): women ( $n = 81$ ) and men ( $n = 35$ ). The subjects' age ranged from 20 to 63 years ( $M = 34.22$ ;  $SD = 9.60$ ). The vast majority of the subjects lives in rural areas ( $n = 64$ ). The rest lives in a city of up to 100 thousand ( $n = 17$ ) or a city of 100 to 500 thousand ( $n = 35$ ). The subjects have vocational ( $n = 15$ ), secondary ( $n = 44$ ), or higher ( $n = 57$ ) education. The length of the subjects' marital relationships ranged from 1 month to 35 years ( $M = 9$  years and 5 months;  $SD = 9$  years and 9 months). 38 individuals declared no children, 27 subjects had one children, 31 had two, 12 had three, and 8 subjects had four or more children.

### 2.3. Research methods

Three methods were applied in this independent study: Communication in Marriage Questionnaire (CMQ) developed by Kaźmierczak and Plopa (2008), Spouse Closeness Scale made by Ryś (1998), and the Sexual Satisfaction Questionnaire (SSQ) prepared by Plopa (2017).

#### 2.3.1. Communication in marriage questionnaire

The Communication in Marriage Questionnaire (CMQ) was developed by Kaźmierczak and Plopa in 2008. Studies and analyses gave birth to two versions of the Questionnaire – one for evaluation of one's own communication behaviours, and the other for evaluation of one's partner's behaviours. Each variant includes 30 statements to which the subject relates on a five-point Likert scale. This results in the pool of 30 to 150 points to be obtained in each variant. The score obtained for each dimension are



converted into sten scores. Cronbach's alpha for each variant and their scales ranges from 0.77 to 0.91. The Communication in Marriage Questionnaire (Każmierczak, Plopa, 2008) deals with three aspects of communication: support (10 items), involvement (9 items), and depreciation (11 items).

The first aspect – support – is understood by the authors as appreciation to the efforts made by the partner, which is expressed as the attitude of respect towards them, and showing interest in their needs and problems. The authors observe that support is expressed in communication by active participation in joint resolution of those problems. They stress the fact that this is a type of care shown to the partner in daily and common events, not only those difficult ones. The authors define this aspect as the need for social support, satisfaction of need for caring, giving resources to the spouse, the need for affirmation, and cooperation with the partner (*ibidem*).

The next aspect – involvement – is strictly linked with mutual support. The authors define it as openness and clarity in communication, an air of closeness, and active listening along with efforts made to understand the spouse's point of view. This aspect also includes adoration of the partner, adding variety to the daily living, and preventing conflicts. They stress the fact that mutual involvement modifies the message and receipt of information within marital communication. They claim that these are factors promoting strength and quality of marriage (Każmierczak, Plopa, 2008; Plopa, 2011).

The third aspect of the Communication in Marriage Questionnaire (Każmierczak, Plopa, 2008) – depreciation – belongs to the negative attitudes shown in communication. The authors define depreciation as signs of aggression towards the spouse, absence of equality and respect between the partners, absence of involvement in the relationship, absence of mutual understanding of needs, and absence of the sense of community in daily living. Intensification of this aspect in the marital dyad may lead to mutual exploitation (maximisation of one's own benefits) or mutual hostility (reciprocation of negative behaviours), which may result in depreciation of the partner, reduced quality of marriage, or even its breakdown. Depreciation also involves violating

the partner's dignity and willingness to dominate and control in the relationship. Such behaviours of the spouses introduce emotional coldness, frustration and blaming the partner (Każmierczak, Plopa, 2008).

In an attempt to differentiate constructive communication behaviours of the spouses, the authors (Każmierczak, Plopa, 2008) detailed the aspects of support and involvement. This led to those four aspects: support oriented towards the partner's general wellbeing (5 items), support oriented towards the partner's specific needs (5 items), involvement oriented to the partner's general wellbeing (5 items), and involvement oriented towards expression of emotions towards the partner (4 items).

The aspect of support was divided into two factors: emotional and practical-informative. The former deals with orientation towards the partner's general wellbeing. It shows by way of expression of psychological support and interest in their matters. The latter is oriented towards the spouse's specific needs and entails the activity taken in response to the needs reported by them and in extraordinary situations, and supporting them in their views and actions.

The aspect of involvement was further specified into the aspects of communication related to emotions expressed towards the spouse – showing affection and closeness to them, signalling their physical attractiveness to them; and messages oriented towards the partner's general wellbeing – making time spent together more appealing and striving for mutual understanding, for instance by initiating actions promoting conflict resolution (*ibidem*).

### **2.3.2. Spouse Closeness Scale**

The Spouse Closeness Scale was developed by Ryś in 1998. It is based on the tenet that closeness develops by interactions in the intellectual, emotional, and aspirational spheres. In this independent study, the latter version of the instrument was used, which serves to evaluate the current marital situation. The method involves 27 two-point statements selected by expert judges. The subjects answer them on a seven-point Likert scale. The values of individual aspects of closeness are means generated from the questionnaire statements assigned to those aspects. The accuracy of

this instrument was determined by testing marriages, out of which 60 relationships were selected – 30 deeming their marriage successful and 30 deeming it unsuccessful. Person's correlation coefficient for reliability, calculated by retest after two months, was 0.74 (Ryś, 1998).

### 2.3.3. Sexual Satisfaction Questionnaire

Sexual satisfaction was evaluated with the Sexual Satisfaction Questionnaire (SSQ) developed by Plopa, published in 2017. The instrument contains 10 items resulting in an overall score, which is then converted into sten scores. These are then interpreted as intensification of a variable towards the desired and undesired direction. The subjects answer the provided statements on a six-point Likert scale, where zero means *absence of given activity*, and five – *maximum satisfaction*. As a result, the subjects could obtain 0 through 50 points as the overall score. The method was divided into three factors: closeness, caressing, and sex.

The author (Plopa, 2017) assumes that sexual satisfaction includes both the sexual aspect (biological component) and emotional aspect (sense of closeness). The first aspect in the questionnaire – closeness – defines the relation of intimacy and closeness of romantic nature, level of openness, confiding, and acceptance of the partner's smell and body. The aspect of caressing defines the evaluation of satisfaction with physical contact, unrelated to sexual intercourse, levels of satisfaction with foreplay, mutual touching. The last aspect, sex, relates to the evaluation of sexual intercourse and orgasmic satisfaction (ibidem).

### 2.4. Testing Procedure

The tests were conducted anonymously among married individuals. The responses were gathered electronically and with the pencil & paper method. To verify the hypotheses, statistical analyses were performed with IBM SPSS Statistics 28. Using the software, the basic descriptive statistics were analysed and the Kolmogorov–Smirnov test was performed. Spearman's rho test and mediation analysis were used for the analyses. The significance level of  $\alpha = 0.05$  was used to present the results.

## 3. Results

### 3.1. Relationships between marital communication and sexual satisfaction

Spearman's rho test was performed to verify the hypotheses that there is a relationship between the aspects of the Communication in Marriage Questionnaire (Każmierczak, Plopa, 2008) and the Sexual Satisfaction Questionnaire (Plopa, 2017). The results are presented in Table 1.

#### 3.1.1. Support and involvement in communication between spouses and subjective sexual satisfaction

The results from Table 1 indicate that when the subject evaluated their partner's communication, support and involvement in communication showed a moderate positive correlation with the aspects of sexual satisfaction, at statistical significance of  $p < 0.01$ . The strongest correlation occurred between the following aspects: support with closeness ( $r = 0.56$ ), support with caressing ( $r = 0.55$ ), or support oriented towards the partner's specific needs with closeness ( $r = 0.55$ ) and caressing ( $r = 0.54$ ). The aspect of sex correlates with lesser strength, but still is statistically significant. For instance, the correlation of this variable with support is at  $r = 0.35$ , and with involvement oriented towards generation of emotions towards the spouse at  $r = 0.29$ . The overall score of the Communication in Marriage Questionnaire shows a positive moderate correlation with the overall score of the Sexual Satisfaction Questionnaire when the subject evaluated the quality of communication of their spouse ( $r = 0.56$ ;  $p < 0.01$ ).

Similar results were obtained for the subjects' answers about themselves. However, correlations between communication and sexual satisfaction seem weaker (poor and moderate). In addition, not all correlations for the aspect of sex are statistically significant. There is no significance in the case of involved communication, involved communication oriented towards the partner's overall wellbeing, and involved communication oriented towards generation of emotions towards the spouse ( $p > 0.05$ ). That said, the overall score of the Communication in Marriage

Table 1. Statistical analysis. Spearman's Rho test for the dimensions of the Communication in Marriage Questionnaire (Każmierczak, Plopa, 2008) and the Sexual Satisfaction Questionnaire (Plopa, 2017)

Quality rating of spouse's communication	Closeness	Caresses	Sex	KSS overall result
Support	0.56**	0.55**	0.35**	0.57**
Focused on the partner's overall well-being	0.51**	0.51**	0.31**	0.52**
Oriented to the specific needs of the spouse	0.55**	0.54**	0.34**	0.55**
Quality rating of spouse's communication	Closeness	Caresses	Sex	KSS overall result
Committed communication	0.50**	0.47**	0.31**	0.49**
Focused on the partner's overall well-being	0.46**	0.38**	0.30**	0.45**
Oriented towards generating emotions towards the spouse	0.46**	0.49**	0.29**	0.47**
Depreciation	-0.36**	-0.26**	-0.28**	-0.36**
KKM overall result	0.57**	0.49**	0.36**	0.56**
Self-assessment of communication quality	Closeness	Caresses	Sex	KSS overall result
Support	0.45**	0.44**	0.21*	0.45**
Focused on the partner's overall well-being	0.41**	0.41**	0.20*	0.42**
Oriented to the specific needs of the spouse	0.45**	0.41**	0.21*	0.44**
Committed communication	0.42**	0.31**	0.18	0.38**
Focused on the partner's overall well-being	0.33**	0.19*	0.16	0.28**
Oriented to expressing emotions towards the spouse	0.41**	0.39**	0.17	0.41**
Depreciation	-0.25**	-0.18*	-0.10	-0.24*
KKM overall result	0.47**	0.39**	0.23*	0.45**

\*\*\*- $p < 0,001$ ; \*\*- $p < 0,01$ ; \*- $p < 0,05$

Questionnaire shows a positive moderate correlation with the overall score of the Sexual Satisfaction Questionnaire when the subject evaluated the quality of their own communication ( $r = 0.45$ ;  $p < 0.01$ ).

The above results confirm the first detailed hypothesis, which goes that higher levels of support and involvement in communication are associated with higher levels of sexual satisfaction in the sphere of caressing, closeness, and sex in individuals in marriage.

### 3.1.2. Levels of depreciation and the spouses' subjective sexual satisfaction

Table 1 also shows that levels of depreciation has a negative correlation, at a weak, albeit statistically significant, level ( $p < 0.01$ ), with the aspects of sexual satisfaction, that is closeness ( $r = -0.36$ ), caressing ( $r = -0.26$ ), and sex ( $r = -0.28$ ) when the subjects

evaluated their partner's communication. When evaluation of the quality of the spouse's communication indicates presence of depreciation, the overall perception of sexual satisfaction is at  $r = -0.36$ ,  $p < 0.01$ .

When the subjects evaluated their own communication behaviours, the correlation with closeness was at  $r = -0.25$ ,  $p < 0.01$ ; with caressing at  $r = -0.18$ ,  $p < 0.05$ , and with sex at  $r = -0.10$ ,  $p > 0.05$  (result without statistical significance).

When evaluation of the quality of one's own communication indicates presence of depreciation, the overall perception of sexual satisfaction is at  $r = -0.24$ ,  $p < 0.05$ .

The collected data confirm the second of the detailed hypothesis: that there is a negative correlation between the levels of depreciation in communication the levels of sexual satisfaction in the sphere of caressing, closeness, and sex in partners.

### 3.2. Correlations between intellectual, emotional, and aspirational closeness, and levels of sexual satisfaction

Spearman's rho test was performed to verify the third of the detailed hypotheses: that there is a correlation between the aspects of the Spouse Closeness Scale (Ryś, 1998) and the Sexual Satisfaction Questionnaire (Plopa, 2017). The results are presented in Table 2.

The results presented in Table 2 indicates that all aspects of the Spouse Closeness Scale show a positive (weak or moderate) correlation with the aspects of the Sexual Satisfaction Questionnaire at a statistically significant level ( $p < 0.01$ ). The relationship between emotional closeness and the overall SSQ score ( $r = 0.56$ ), closeness ( $r = 0.55$ ),

Table 2. Statistical analysis. Spearman's Rho test for the dimensions of the Marital Intimacy Scale (Ryś, 1998) and the Sexual Satisfaction Questionnaire (Plopa, 2017)

	Closeness	Caresses	Sex	KSS over-all result
Emotional closeness	0.55**	0.53**	0.38**	0.56**
Intellectual closeness	0.40**	0.37**	0.26**	0.40**
Action-based closeness	0.46**	0.42**	0.29**	0.45**

\*\*\*- $p < 0.001$ ; \*\*- $p < 0.01$ ; \*- $p < 0.05$

Table 3. Statistical analysis. Spearman's Rho test for the dimensions of the Spouses' Intimacy Scale (Ryś, 1998) and the Communication in Marriage Questionnaire (Każmierczak, Plopa, 2008)

Communication in Marriage Questionnaire	Emotional closeness	Intellectual closeness	Action-based closeness
Overall result for quality assessment Cof spouse's communication	0.69***	0.48***	0.52***
Total result for self-assessment of quality of communication	0.61***	0.38***	0.47***

\*\*\*- $p < 0.001$ ; \*\*- $p < 0.01$ ; \*- $p < 0.05$

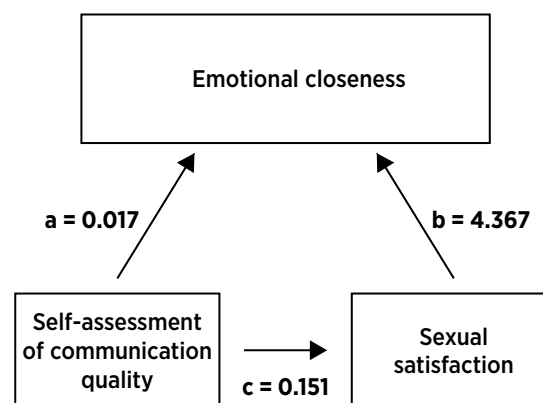


Figure 1. Mediation analysis. Emotional closeness as a mediator between the influence of self-assessment of communication quality on sexual satisfaction among spouses.

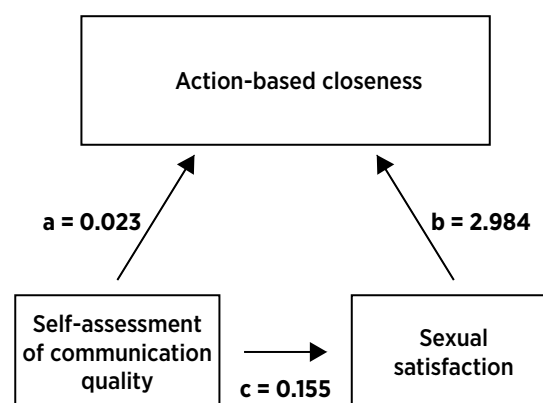


Figure 2. Mediation analysis. Functional closeness as a mediator between the influence of self-assessment of communication quality on sexual satisfaction among spouses.

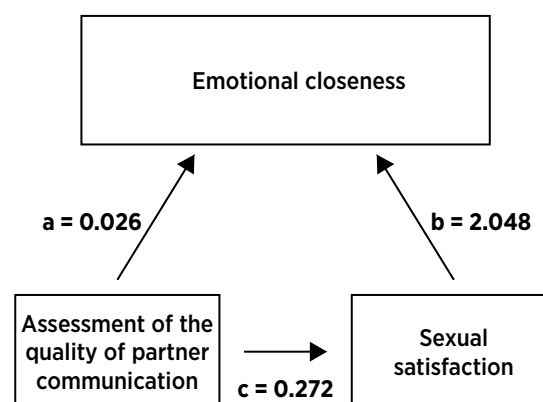


Figure 3. Mediation analysis. Emotional closeness as a mediator between the impact of the assessment of the quality of a partner's communication on sexual satisfaction among spouses.

and caressing ( $r = 0.53$ ) is the strongest. A weaker, albeit still statistically significant, relationship occurs between intellectual closeness and sex ( $r = 0.26$ ) or caressing ( $r = 0.37$ ), and between aspirational closeness and sex ( $r = 0.29$ ).

The presented data confirm the third of the detailed hypotheses, which states a relationship between high levels of intellectual, emotional, and aspirational closeness, and high levels of sexual satisfaction in terms of caressing, closeness, and sex.

### 3.3. Closeness as a variable mediating the relationship between communication and sexual satisfaction

In order to verify whether the variable defining levels of closeness in marriage mediates the relationship between quality of communication and sexual satisfaction of the partners, a mediation analysis was conducted and then complemented by Aroian test. Firstly, it was verified whether there is a relationship between an independent variable (quality of the partner's and one's own communication) and a dependent variable (sexual satisfaction). The results are

Table 4. Mediation analysis with the Aroian test (assessment of one's own communication)

	Effect	Label	Estimate	SE	Z	p		Z	SE	p
Mediator – emotional closeness	Indirect	a x b	0.07	0.03	2.74	<0.01	Aroian Test	2.70	0.03	<0.01
	Direct	c	0.15	0.05	2.86	<0.01				
	Total	c + a x b	0.23	0.06	4.10	<0.001				
	Effect	Label	Estimate	SE	Z	p		Z	SE	p
Mediator – intellectual closeness	Indirect	a x b	0.04	0.02	1.99	<0.05	Aroian Test	1.95	0.02	0.051
	Direct	c	0.18	0.05	3.44	<0.001				
	Total	c + a x b	0.23	0.06	4.10	<0.001				
	Effect	Label	Estimate	SE	Z	p		Z	SE	p
Mediator – action-based closeness	Indirect	a x b	0.07	0.03	2.69	<0.01	Aroian Test	2.65	0.03	<0.01
	Direct	c	0.16	0.05	2.88	<0.01				
	Total	c + a x b	0.23	0.06	4.10	<0.001				

Table 5. Mediation analysis with the Aroian test (assessment of partner's communication)

	Effect	Label	Estimate	SE	Z	p		Z	SE	p
Mediator – emotional closeness	Indirect	a x b	0.07	0.03	2.06	<0.01	Aroian Test	2.04	0.03	<0.05
	Direct	c	0.16	0.05	6.02	<0.01				
	Total	c + a x b	0.23	0.06	8.41	<0.001				
	Effect	Label	Estimate	SE	Z	p		Z	SE	p
Mediator – intellectual closeness	Indirect	a x b	0.05	0.03	1.67	<0.05	Aroian Test	1.64	0.02	0.1
	Direct	c	0.27	0.05	6.68	<0.001				
	Total	c + a x b	0.33	0.04	8.41	<0.001				
	Effect	Label	Estimate	SE	Z	p		Z	SE	p
Mediator – action-based closeness	Indirect	a x b	0.04	0.02	1.85	0.06	Aroian Test	1.83	0.02	0.07
	Direct	c	0.28	0.04	6.41	<0.001				
	Total	c + a x b	0.33	0.04	8.41	<0.001				

presented in Table 1. A similar analysis was conducted on the independent variables: communication and closeness, the results of which are shown in Table 3.

When the subject evaluated themselves in terms of spousal communication, the mediation analysis showed that, having considered a third variable (closeness) as a mediator, it became an important variable in predicting the levels of sexual satisfaction. This happened in two cases: when the variables of emotional closeness and aspirational closeness were the mediator. Table 4 shows the obtained coefficients. The above mediations are presented in Figures 1 and 2.

The result indicating partial mediation of the levels of emotional closeness in the relationship was confirmed by Aroian test, which proved statistically significant ( $Z = 2.70$ ;  $p < 0.01$ ). A similar result was obtained when the aspirational closeness was the mediator ( $Z = 2.65$ ;  $p < 0.01$ ).

When the quality of the partner's communication was the predictor, as evaluated by the subject, closeness turned out to be a valid mediator only when emotional analysis was analysed ( $Z = 2.04$ ;  $p < 0.05$ ). Table 5 shows the obtained coefficients. The above mediation is presented in Figure 3.

## 4. Discussion

The conducted analyses allowed demonstration of relationships between support and involvement in communication between the spouses and their subjective sexual satisfaction. Given the overall scores obtained in the questionnaires, correlations occur both when the spouse evaluated both their partner's and their own communication.

The surveys also confirmed the second hypothesis, which stated a relationship between low levels of depreciation in communication and high levels of sexual satisfaction in spouses. The overall scores obtained in the questionnaires showed the expected correlation for both versions of the Communication in Marriage Questionnaire.

The results obtained for those two variables have been confirmed in studies (Meston, Trapnell, 2005; Plopa, 2017) which have been cited in the theoretical

part above. The studies by Nomejko et al. (2017) demonstrate a relationship both between evaluation of quality of the partner's communication – and between evaluation of one's own communication – and sexual satisfaction. They also show that the significance of communication for sexual satisfaction goes up along with the length of the relationship; this is so because this variable starts to play the role of a buffer for decreased levels of satisfaction with sexual activity or routine (ibidem). The analysis of the independent surveys can, therefore, be enriched by the length of the subjects' marital relationship. The results of the surveys, contrary to Nomejko et al. (2017), showed that work with a couple should involve special attention to support in communication, not involvement and depreciation. It is worth verifying in further studies whether this difference is demonstrated in the events occurring between the above studies by Nomejko et al. (2017) and this independent study – COVID-19 pandemic, military conflicts, and economic crisis. Situations difficult to overcome on one's own may bring out to light the need for mutual spousal support in the marital context.

The relationship between communication and sexual satisfaction proves stronger in women compared to men (Komorowska-Pudło, 2014). In light of Plopa's (2017) considerations, these differences may result from the fact that women put more emphasis on the relational aspects of sexual satisfaction (closeness, intimacy, and openness), and for men, physical sensations are more important. This begs further analysis of independent studies – for sex differences.

Studies (Mallory, 2022) also confirm that verbal communication about sex in marriage is associated with the spouses' subjective sexual satisfaction. In turn, satisfaction with sexual communication predicts satisfaction with sex life (Blunt-Vinti et al., 2019). This puts forth a rationale for psycho-education activities aiming to draw attention to the verbal and non-verbal communication during the intercourse itself, and not only before or after. This bears particular importance in light of cultural transmission, where conversations about sexuality-related topics cause embarrassment, and language still lacks neutral terms for the phenomena in this sphere (Rogodzińska, Obrębska, 2018).

From the clinical perspective, disordered mental health in one of the partners, resulting in deterioration in that partner's communication, leads to lowered sexual satisfaction (Scott et al., 2012). For this reason, it is good practice to advise patients that if one of the partners develops mental disorders, they both should communicate their expectations or fears related to the sexual sphere.

The relationship between the quality of spouses' communication and their satisfaction with sex life is highly applicable in life. This is so as promotion of communication and working on its quality during marital therapy leads to increased sexual satisfaction in spouses (Botlani et al., 2012).

Validation of the third hypothesis is a valuable source of knowledge, coming from the present study. The independent study has revealed relationships between individual aspects of closeness and sexual satisfaction, and between the overall scores of the Spouse Closeness Scale and the Sexual Satisfaction Questionnaire. These results correspond with the studies by Træen and Kvaalem (2022), where it was sexual satisfaction that was the factor that affected the perceived closeness with the partner the most. This happens for both sexes and regardless of the length of the relationship (ibidem).

The results of studies by Nagy and Theiss (2013) show that the partners of men who take care of their children may feel deeper closeness with their partner. In light of such information, studies analogous to those presented in this paper may be considered, but enriched by accounting for the current phase of the subjects' marital relationship and the number of offspring. In addition, the above study from Norway has shown that the sense of closeness and sexual satisfaction correlate more strongly in men compared to women, and that remaining in a monogamous relationship promotes closeness between the spouses (ibidem). For this reason, the independent study may be expanded by comparing the relationship between closeness and sexual satisfaction for both sexes, and it may be compared to with the result obtained by individuals remaining in relationships other than marriage.

Please note that in the aspects of closeness, and in the overall score of the Sexual Satisfaction Questionnaire (Plopa, 2017), it is emotional close-

ness that has the strongest relationship with sexual satisfaction. This may be justified by studies conducted among young adults, who have expressed their expectation that sex with their partner will result in emotional closeness (Blumenstock, 2022). Interestingly enough, a study conducted among women with breast cancer and their partners has shown that the relationship between closeness and sexual satisfaction occurs not only in relation to the closeness felt by the subject (Rottmann et al., 2017). The results have demonstrated that sexual satisfaction of the women increased as emotional closeness experienced by their partner went up (ibidem). This confirms the feedbacks occurring in romantic relationships.

Moreover, the relationship between closeness and sexual satisfaction begs a question about the role of attachment style of each spouse. This is a basis for conducting studies into the impact of that sphere, as an effect of experiencing closeness in early childhood, on the observed relationship between closeness and sexual satisfaction in romantic relationships.

Asking questions and verifying relationships between closeness and other psychological phenomena may pave way to use this variable in practical contexts. Studies show that among the examined marriages where the spouses' age was at least 65 years, marital closeness dampened negative effects of the subjects' functional disability (Mancini, Bonanno, 2006). Closeness was strongly associated with reduced depression and anxiety, and increased the sense of self-worth in the subjects. It is, therefore, a vital resource for elderly people, also as a factor adapting to illness (ibidem).

When discussing closeness, it is worth looking at the relationship between it and communication. It has not been covered by a separate research hypothesis in this paper because it has been presented solely to examine the mediating role of closeness. Despite this, the results obtained within those variables may, without doubt, inspire further studies focusing on those two spheres. The studies cited when discussing the relationship between communication and sexual satisfaction show that communication about sex is related to the closeness between the spouses (Mallory, 2022).

The result of the independent study seem to partly confirm the last hypothesis. Emotional and aspirational closeness proved mediators of the relationship between communication and sexual satisfaction in the subjects where they evaluated the quality of their own communication. In turn, for the version of the Communication in Marriage Questionnaire where the subjects evaluated their spouse's communication, the mediating role between communication and sexual satisfaction was demonstrated only by emotional closeness. The mediating role of emotional closeness in both cases points to the fact that this aspect of closeness showed the strongest relationship with communication and sexual satisfaction alike.

The role of emotional closeness as a mediator for evaluation of one's own communication and of the quality of the partner's communication may be explained through the relationship of that type of closeness with communication and sexuality of the spouses. It is this aspect of closeness that is reinforced by non-verbal communication particularly strongly (Szopiński, 1973). Similarly, aspirational closeness involves components of non-verbal communication to a high degree. Spousal sex may be the platform for mutual exchange of experiences and sensations, which cannot be expressed verbally. In turn, Babin (2013) has discovered that non-verbal communication predicts levels of sexual satisfaction. This is so as it is the primordial means of communication during coitus – through touch, gestures, facial expressions, eye contact, and vocalics.

The above reasoning about the relationship between the said variables through the non-verbal aspect is also confirmed by the fact that intellectual closeness does not show up as a mediator between communication and sexual satisfaction. This may happen as intellectual closeness, as opposed to emotional and aspirational closeness, revolves around verbal communication. However, its share in the spouses' sexual acts is decidedly smaller. The subjects indicate that they avoid verbal communication during sex to keep the mood, protect their partner's feelings, or avoid negative emotions and judgment on the part of their partner (Séguin, 2024). Moreover, they believe that verbal communication is sim-

pler for expression and clearer for interpretation by the partner, and so more effective (Lutmer, Walker, 2024). This is the reason for them to prefer verbal conversations about sexual matters to occur before or after the act (ibidem). This preference may also be related to the popularisation of pornography and the way sex is depicted in the media (Séguin, 2024). In line with the above arguments, the relationship between verbal and non-verbal communication and sexual satisfaction should be explored, taking the phenomenon of closeness between the partners into consideration.

A study by Lutmer and Walker (2024) shows one more regularity that may explain the mediating role of closeness. They specified a certain type of comfort as one of the main reasons explaining occurrence of communication during sexual activity. This type of comfort occurs in close friendship, trust and/or long history of the partners. One might therefore infer that the development of closeness between spouses, particularly that expressed non-verbally, leads to this type of freedom and peace, and – in turn – to sexual satisfaction.

## 5. Summary

The conducted analyses have shown that there is a complex relationship between communication and closeness of spouses on one hand and their sexual satisfaction on the other. High evaluation of the quality of one's own communication and that of the partner – and so high levels of support and involvement and low levels of depreciation shown in the relationship, and high levels of emotional, intellectual, and aspirational closeness – are positively associated with satisfaction with sex life. Moreover, emotional and aspirational closeness play a mediating role between communication and sexual satisfaction.

The results suggest that both communication and closeness are linked to the spouses' satisfaction with sex life. The examined variables form interconnected systems, which could be used practically, for instance in sexual counselling, couple therapy, or sexual health prevention. Psy-



chologists and therapists working with marriages can strengthen the inner locus of control in their patients/clients as each of the studied variables may change in level depending on mutual references or taken interventions. This is immensely important, particularly as more and more relationships are going down the path of breakdown. In addition, the practical application of the conclusions derived from the studies presented in this paper lies in the public interest as it may protect individuals from the negative complications of divorce, including psychological consequences.

The strong point of the conducted studies is that they are applicable in practice. More and more people, including couples, are reporting for sexual assistance, and so studies laying foundations for applied methods and techniques in this field are vital. A significant aspect of the above studies is that they allow building the sense in the population that they have influence over the studied variables – communication, closeness, and sexual

satisfaction. This may prove highly important particularly for spouses struggling with problems in their relationships. For many years, psychology has also been dealing with examining the effects of sexuality on the individual's life in order to – in line with the tenets of positive psychology – garner information about striving for and achieving mental wellbeing. In addition, the conducted studies enrich the current scientific achievements around the topics tackled in this paper, particularly in the field of closeness and sexuality.

The weak point of this paper is the lack of a social approval scale in the employed tools. Studies into sexuality are particularly vulnerable to high declarativity in subjects' responses, which could be the cause of results deviating from normal distribution. The impact of this phenomenon was strived to be limited by not requiring both of the spouses to participate. Studies could also be expanded by subjects in romantic relationships structured differently to marriage.

## Bibliography

- Adamski, M. (2015). Miłość a satysfakcja małżeńska u par z krótkim i długim stażem małżeńskim. *Kwartalnik Naukowy Fides et Ratio*, 24(4), 172-181. (From:) <https://stowarzyszeniefidesetratio.pl/Presentations0/2015-4-14Adamski.pdf>
- Babin, E.A. (2013). An examination of predictors of nonverbal and verbal communication of pleasure during sex and sexual satisfaction. *Journal of Social and Personal Relationships*, 30(3), 270-292. <https://doi.org/10.1177/0265407512454523>
- Beck, A.T. (1996). *Miłość nie wystarczy. Jak rozwiązywać nieporozumienia i konflikty małżeńskie*. Poznań: Media Rodzina.
- Beisert, M. (2005). Psychologia zaburzeń seksualnych. (In:) H. Sęk (eds.), *Psychologia kliniczna: Vol. 2*, 202-220. Warszawa: Wydawnictwo Naukowe PWN.
- Beisert, M. (ed.), (2006). *Seksualność w cyklu życia człowieka*. Warszawa: Wydawnictwo Naukowe PWN.
- Birnie-Porter, C., Hunt, M. (2015). Does relationship status matter for sexual satisfaction? The roles of intimacy and attachment avoidance in sexual satisfaction across five types of ongoing sexual relationships. *Canadian Journal of Human Sexuality*, 24(2), 174-183. <https://doi.org/10.3138/cjhs.242-A5>
- Blumenstock, S.M. (2022). Expectations and sexual desire in romantic relationships: An experimental investigation of pleasure and emotional closeness expectancies among young adults. *Journal of Sex Research*, 59(3), 283-302. <https://doi.org/10.1080/00224499.2021.1991260>
- Blunt-Vinti, H., Jozkowski, K.N., Hunt, M. (2019). Show or tell? Does verbal and/or nonverbal sexual communication matter for sexual satisfaction? *Journal of Sex & Marital Therapy*, 45(3), 206-217. <https://doi.org/10.1080/0092623X.2018.1501446>
- Botlani, S., Shahsiah, M., Padash, Z., Ahmadi, A., Bahrami, F. (2012). The effect of attachment-based couple therapy on couples' attachment style, sexual intimacy and sexual satisfaction. *Interdisciplinary Journal of Contemporary Research in Business*, 3, 375-390.
- Braun-Gałkowska, M. (2003). Profilaktyka życia rodzinnego. (In:) I. Janicka, T. Rostowska (eds.), *Psychologia w służbie rodziny*, 10-18. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Buss, D.M. (2014). *Zazdrość: Niebezpieczna namiętność*. Sopot: Gdańskie Wydawnictwo Psychologiczne.
- Chmielewska, M. (2019). Rola miłości w budowaniu wysokiej jakości związku małżeńskiego. (In:) E. Chodźko, M. Śliwa (eds.), *Motywy miłości w literaturze polskiej i obcej*, 270-286. Lublin: Wydawnictwo Naukowe Tygiel.
- Chrost, M. (2020). Wiąż małżeńska jako doświadczenie miłości w ujęciu chrześcijańskim. *Studia Paedagogica Ignatiana*, 23(1), 51-68. <https://doi.org/10.12775/SPI.2020.1.003>
- Davis, D., Shaver, P.R., Widaman, K.F., Vernon, M.L., Follette, W.C., Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, 13(4), 465-483. <https://doi.org/10.1111/j.1475-6811.2006.00130.x>
- Dundon, C., Rellini, A. (2010). More than sexual function: Predictors of sexual satisfaction in a sample of women age 40-70. *The Journal of Sexual Medicine*, 7(2), 896-904. <https://doi.org/10.1111/j.1743-6109.2009.01557.x>

- Eggerichs, E. (2010). *Język miłości i szacunku: Jak odnaleźć klucz do porozumiewania w małżeństwie*. Kraków: Wydawnictwo Esprit.
- Fallis, E.E., Rehman, U.S., Woody, E.Z., Purdon, C. (2016). The longitudinal association of relationship satisfaction and sexual satisfaction in long-term relationships. *Journal of Family Psychology*, 30(7), 822-831. <https://doi.org/10.1037/fam0000205>
- Freihart, B.K., Sears, M.A., Meston, C.M. (2020). Relational and interpersonal predictors of sexual satisfaction. *Current Sexual Health Reports*, 12, 136-142. <https://doi.org/10.1007/s11930-020-00260-w>
- Gąsior, K. (2014). Prężność rodzinna – nowe wyzwanie dla profilaktyki. *Resocjalizacja Polska*, 6, 79-88.
- Hajcak, F., Garwood, P. (2008). *Dlaczego ze sobą spimy? 17 nieseksualnych powodów, dla których ludzie uprawiają seks*. Sopot: Gdańskie Wydawnictwo Psychologiczne.
- Janicka, I. (2006). *Kohabitacja a małżeństwo w perspektywie psychologicznej*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Jankowska, M. (2016). Komunikacja pomiędzy małżonkami a ocena jakości związku małżeńskiego. *Kwartalnik Naukowy Fides et Ratio*, 28(4), 119-139. (From:) <https://fidesetratio.com.pl/ojs/index.php/FetR/article/view/728/579>
- Kaźmierczak, M., Płopa, M. (2008). *Kwestionariusz Komunikacji Małżeńskiej*. Warszawa: Wydawnictwo AEH.
- Komorowska-Pudło, M. (2014). Satysfakcja seksualna małżonków a jakość ich relacji w innych sferach funkcjonowania związku. *Kwartalnik Naukowy Fides et Ratio*, 20(4), 162-195. (From:) <https://stowarzyszeniefidesetratio.pl/Presentations0/2014-4Komorowska.pdf>
- Kowalczyk, R., Lew-Starowicz, Z. (2017). Definicja i koncepcja normy w seksuologii. (In:) M. Lew-Starowicz, Z. Lew-Starowicz, V. Skrzypulec-Plinta (eds.), *Seksuologia*, 21-34. Warszawa: Wydawnictwo Lekarskie PZWL.
- Krawiec, G. (2018). Wybrane uwarunkowania powodzenia i niepowodzenia w małżeństwach. (In:) M. Rucki (ed.), *Wpływ ideologii na naukę i życie społeczne*, 257-274. Warszawa: Chrześcijańskie Forum Pracowników Nauki.
- Kurowska, I., Nikel, Ł. (2023). Cechy temperamentu i zachowania komunikacyjne pomiędzy partnerami a satysfakcja ze związku. (In:) K. Pujer (ed.), *Humanistyka i nauki społeczne: Doświadczenia Konteksty Wyzwania: Vol. 17: Wokół (nie) korzystnych zjawisk i przemian sfery prywatnej, finansów oraz przedsiębiorczości*, 23-35. Wrocław: Exante Wydawnictwo Naukowe.
- Lachowska, B. (2022). Pozytywna psychologia rodziny – w teorii i praktyce. (In:) I. Janicka, H. Liberska (eds.), *Psychologia rodziny*, 537-565. Warszawa: Wydawnictwo Naukowe PWN.
- Leavitt, C.E., Lefkowitz, E.S., Waterman, E.A. (2019). The role of sexual mindfulness in sexual wellbeing, relational wellbeing, and self-esteem. *Journal of Sex & Marital Therapy*, 45(6), 497-509. <https://doi.org/10.1080/0092623X.2019.1572680>
- Liberacka-Dwojak, M., Izdebski, P. (2021). Psychospołeczne wyznaczniki komunikacji seksualnej: przegląd badań. *Seksuologia Polska*, 19, 1-12. <https://doi.org/10.5603/SP.2021.0002>
- Lutmer, A., Walker, A.M. (2024). Patterns of verbal and nonverbal communication during sex. *Archives of Sexual Behaviour*, 53(4), 1449-1462. <https://doi.org/10.1007/s10508-024-02811-x>
- Mallory, A.B. (2022). Dimensions of couples' sexual communication, relationship satisfaction, and sexual satisfaction: A meta-analysis. *Journal of Family Psychology*, 36(3), 358-371. <https://doi.org/10.1037/fam0000946>
- Mancini, A., Bonanno, G.A. (2006). Marital closeness, functional disability, and adjustment in late life. *Psychology and Aging*, 21(3), 600-610. <https://doi.org/10.1037/0882-7974.21.3.600>
- McKay, M., Davis, M., Fanning, P. (2007). *Sztuka skutecznego porozumiewania się: Praca, rodzina, zabawa*. Sopot: Gdańskie Wydawnictwo Psychologiczne.
- Meston, C., Trapnell, P. (2005). Development and validation of a five-factor sexual satisfaction and distress scale for women: The Sexual Satisfaction Scale for Women (SSS-W). *Journal of Sexual Medicine*, 2(1), 66-81. <https://doi.org/10.1111/j.1743-6109.2005.20107.x>
- Nagy, M.E., Theiss, J.A. (2013). Applying the relational turbulence model to the empty-nest transition: Sources of relationship change, relational uncertainty, and interference from partners. *Journal of Family Communication*, 13(4), 280-300. <https://doi.org/10.1080/15267431.2013.823430>
- Nomejko, A., Dolińska-Zygmunt, G., Mucha, A. (2017). Znaczenie jakości komunikacji dla satysfakcji seksualnej kobiet i mężczyzn w bliskich związkach o różnym stażu. *Seksuologia Polska*, 15(1), 1-8.
- Nomejko, A., Dolińska-Zygmunt, G., Zdrojewicz, Z. (2012). Poczucie jakości życia a satysfakcja z życia seksualnego – badania własne. *Seksuologia Polska*, 10(2), 54-60.
- Nyarks, A., Hope, M.M. (2023). Impact of effective communication in a marriage. *International Journal of Research in Education, Science and Technology*, 4(2), 33-40.
- Orłowski, G. (2018). Czynniki warunkujące powodzenie małżeństwa. *Kwartalnik Naukowy Fides et ratio*, 35(3), 19-39. (From:) <https://fidesetratio.com.pl/ojs/index.php/FetR/article/view/512>
- Płopa, M. (2011). *Psychologia rodziny: Teoria i badania*. Kraków: Oficyna Wydawnicza „Impuls”.
- Płopa, M. (2017). Kwestionariusz Satysfakcji Seksualnej. *Polskie Forum Psychologiczne*, 22(4), 517-543. <https://doi.org/10.14656/PFP20170401>
- Quinn-Nilas, C. (2020). Relationship and sexual satisfaction: A developmental perspective on bidirectionality. *Journal of Social and Personal Relationships*, 37(2), 624-646. <https://doi.org/10.1177/0265407519876018>
- Rogodzińska, K., Obrębska, M. (2018). Współczesne tabu językowe, czyli o czym nie mówią Polacy. *Człowiek i Społeczeństwo*, 45, 128-149. <https://doi.org/10.14746/cis.2018.45.7>
- Rostowski, J. (1987). *Zarys psychologii małżeństwa: psychologiczne uwarunkowania dobrego związku małżeńskiego*. Warszawa: Państwowe Wydawnictwo Naukowe.
- Rottmann, N., Gilså Hansen, D., dePont Christensen, R., Hagedoorn, M., Frisch, M., Nicolaisen, A. (2017). Satisfaction with sex life in sexually active heterosexual couples dealing with breast cancer: A nationwide longitudinal study. *Acta Oncologica*, 56(2), 212-219. <https://doi.org/10.1080/0284186X.2016.1266086>
- Ryś, M. (1998). *Konflikty w rodzinie: Niszczą czy budują?* Warszawa: Centrum Metodyczne Pomocy Psychologiczno-Pedagogicznej Ministerstwa Edukacji Narodowej.
- Ryś, M., Greszta, E., Grabarczyk, K. (2019). Intelktualna, emocjonalna i działaniowa bliskość małżonków a ich gotowość do rozwiązywania konfliktów oraz przebaczenia. *Kwartalnik Naukowy Fides et Ratio*, 38(2), 221-254. <https://doi.org/10.34766/fetr.v2i38.77>
- Satir, V. (2002). *Rodzina: Tu powstaje człowiek*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Scott, V.C., Sandberg, J.G., Harper, J.M., Miller, R.B. (2012). The impact of depressive symptoms and health on sexual satisfaction for older couples: Implications for clinicians. *Contemporary Family Therapy*, 34(3), 376-390. <https://doi.org/10.1007/s10591-012-9198-2>
- Séguin, L.J. (2024). “I’ve learned to convert my sensations into sounds”: Understanding during-sex sexual communication. *The Journal of Sex Research*, 61(2), 169-183. <https://doi.org/10.1080/00224499.2022.2134284>


- Stephenson, K., Meston, C. (2010). Differentiating components of sexual well-being in women: Are sexual satisfaction and sexual distress independent constructs? *The Journal of Sexual Medicine*, 7(7), 2458-2468. <https://doi.org/10.1111/j.1743-6109.2010.01836.x>
- Szopiński, J. (1973). Rozwój kontaktu osobowego we współczesnym małżeństwie. *Zdrowie Psychiczne*, 4, 28-34.
- Szpakowski, B. (2016). *Bliskość, która leczy*. Kraków: Wydawnictwo Salwator.
- Træen, B., Kvaem, I.L. (2022). The longer it is, the closer one feels: Perception of emotional closeness to the partner, relationship duration, sexual activity, and satisfaction in married and cohabiting persons in Norway. *Sexuality & Culture*, 27, 761-785. <https://doi.org/10.1007/s12119-022-10037-z>
- Vowels, M.L., Mark, K.P. (2018). Relationship and sexual satisfaction: a longitudinal actor-partner interdependence model approach. *Sexual and Relationship Therapy*, 35(4), 1-14. <https://doi.org/10.1080/14681994.2018.1441991>
- Walecka-Matyja, K., Szkudlarek, A. (2019). Psychological predictors of satisfaction with a close interpersonal relationship. The role of emotional communication. *Quarterly Journal Fides et Ratio*, 38(2), 50-73. <https://doi.org/10.34766/fetr.v2i38.66>
- Weryszko, M. (2020a). Interpersonal communication as the essence of social interaction. *Quarterly Journal Fides et Ratio*, 42(2), 253-268. <https://doi.org/10.34766/fetr.v42i2.287>
- Weryszko, M. (2020b). Marriage love – conditions for the success of fundamental relationship in the family. *Quarterly Journal Fides et Ratio*, 41(1), 129-143. <https://doi.org/10.34766/fetr.v41i1.220>
- Yucel, D., Gassanov, M.A. (2010). Exploring actor and partner correlates of sexual satisfaction among married couples. *Social Science Research*, 39(5), 725-738. <https://doi.org/10.1016/j.ssresearch.2009.09.002>
- Żak-Łykus, A., Nawrat, M. (2013). Satysfakcja seksualna, życiowa i partnerska. *Family Forum*, 13(3), 171-186.

# Maternal attachment styles and maternal-fetal attachment: The serial mediation role of alexithymia and depressive symptoms<sup>1</sup>

<https://doi.org/10.34766/1pb4hw72>

Piotr Nowicki <sup>a</sup> 

<sup>a</sup> Piotr Nowicki, <https://orcid.org/0000-0001-6661-4724>, School of Human Sciences, VIZJA University in Warsaw, Poland

 Corresponding author: [p.nowicki@vizja.pl](mailto:p.nowicki@vizja.pl)

**Abstract:** Maternal-fetal attachment refers to the emotional and cognitive bond a pregnant woman develops with her unborn child. This bond plays a significant role in prenatal care behaviors and the later formation of the mother-infant relationship. The aim of the present study was to identify the psychological mechanisms underlying maternal-fetal attachment, with particular emphasis on maternal attachment styles, alexithymia, and depressive symptoms, using a serial mediation model. The study sample consisted of 173 women in their second and third trimesters of pregnancy. The findings indicated that maternal attachment styles – secure, anxious, and avoidant – significantly influenced emotional bonding with the unborn child. Alexithymia and depressive symptoms functioned as successive mediators in this process. A secure attachment style was associated with lower levels of alexithymia and depressive symptoms, which in turn facilitated stronger maternal-fetal attachment. Conversely, anxious and avoidant attachment styles were linked to higher levels of alexithymia and depressive symptoms, which weakened maternal-fetal attachment.

**Keywords:** maternal-fetal attachment, maternal attachment styles, alexithymia, depressive symptoms

## Introduction

Maternal-fetal attachment refers to the emotional bond that develops between a mother and her unborn child during pregnancy. It is a dynamic process that gradually evolves as the pregnancy progresses, encompassing both conscious and unconscious aspects of the maternal relationship with the fetus during the prenatal stage (Walsh, 2010). Maternal-fetal attachment is expressed through various behaviors exhibited by pregnant women, such as talking to the baby, touching or stroking the belly, imagining life with the child, and responding to fetal movements (Abasi, 2021). This concept has been widely explored in developmental psychology, where it is recognized as a crucial factor influencing maternal well-being (McNamara et al., 2019). The emotional bond a mother feels toward the fetus can shape prenatal behaviors, including attending medical

check-ups, following health recommendations, and avoiding harmful substances (Rahimi et al., 2025). Strong maternal-fetal attachment has been associated with positive outcomes during both the prenatal and postnatal periods (Branjerdporn et al., 2021). Studies have shown that maternal-fetal attachment is linked to later caregiving behaviors, including maternal sensitivity, responsiveness, and emotional engagement in the postnatal relationship with the child (Sacchi et al., 2021). The development of maternal-fetal attachment is influenced by numerous factors, including biological (e.g., hormonal changes, fetal activity), psychological (e.g., maternal emotional state, anxiety levels, maladaptive coping mechanisms), and social factors (e.g., partner and community support, life circumstances) (Lutkiewicz & Bidzan, 2023; Pisoni et al., 2014).

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_now2.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_now2.pdf)

One of the most significant psychological factors influencing maternal-fetal attachment is the mother's attachment style, which reflects her own early attachment experiences (Kucharska, 2021). Attachment theory, originally proposed by John Bowlby (1979), posits that early relationships with primary caregivers form the foundation of internal working models of attachment. These models shape expectations and behavioral patterns in future emotional relationships, including the relationship between a mother and her unborn child. According to Hazan and Shaver (1987), the consistency and quality of early caregiving experiences lead to the development of specific attachment styles-secure, anxious, avoidant, or disorganized. These styles tend to remain relatively stable throughout life and influence how individuals perceive and form emotional bonds (Shaver et al., 2016). Mothers with a secure attachment style typically hold a positive view of themselves as caregivers and possess a strong sense of trust in their partners, which facilitates the formation of strong, emotionally attuned bonds with the unborn child (Zdolska-Wawrzkiwicz et al., 2018). In contrast, mothers with insecure attachment styles often encounter relational difficulties during pregnancy, which can hinder the development of a deep prenatal bond with the fetus. Research findings indicate that higher levels of attachment insecurity are associated with lower levels of maternal-fetal attachment (Zhang, 2021; Damri et al., 2024).

The concept of alexithymia was first introduced by Sifneos (1970) as an emotional disturbance used to describe a cluster of symptoms observed in patients with psychosomatic illnesses (e.g., skin rashes, insomnia, fatigue, gastric ulcers), who exhibited difficulties in distinguishing between emotional and bodily sensations. Contemporary research defines alexithymia as a multidimensional personality trait encompassing difficulties in identifying one's own emotions (limited emotional awareness), difficulties in describing emotions (an inability to verbally express feelings), and an externally oriented thinking style (a tendency to avoid introspection), often accompanied by restricted imaginative capacity (Preece & Gross, 2023). Individuals with high levels of alexithymia struggle to recognize others' emotions, which hampers

their ability to form close interpersonal relationships (Koppelberg et al., 2023). Studies have demonstrated a link between alexithymia and insecure attachment styles, suggesting that early relational experiences may influence the development of emotional awareness and emotion regulation capacity (Montebarocci et al., 2004). Furthermore, alexithymia has been identified as a mediator between insecure attachment styles and the severity of psychopathological symptoms (Barberis et al., 2023; Ferraro & Taylor, 2021). Several studies (Ierardi et al., 2022; Satil et al., 2023; Mangialavori et al., 2024) highlight the negative impact of alexithymia on maternal-fetal attachment, indicating that mothers with higher levels of alexithymia tend to form weaker emotional bonds with their unborn children.

In light of the findings discussed above, increasing attention is being paid to the emotional functioning of pregnant women and its role in shaping the relationship with the unborn child. In addition to alexithymia, a significant risk factor for the quality of maternal-fetal attachment is the presence of perinatal depressive symptoms. Notably, a positive correlation has been identified between alexithymia and the severity of depressive symptoms during pregnancy (Mangialavori et al., 2024). Perinatal depression – which includes both the prenatal period (during pregnancy) and the postpartum period (up to 12 months after childbirth) – is characterized by depressive symptoms of varying intensity, which can have serious consequences for both mother and child (Rollè et al., 2020). Depression during pregnancy is among the most common psychiatric disorders in pregnant women, with an estimated prevalence ranging from 10% to 30% (Sánchez-Polán et al., 2021). Symptoms of perinatal depression- persistent sadness, anxiety, loss of interest in daily activities, sleep disturbances, confusion, and emotional instability- pose a serious threat to maternal mental well-being (Dias & Figueiredo, 2020). Research has shown that antenatal depression is a strong predictor of postpartum depression (Borchers et al., 2021). When left untreated, perinatal depression can impair mother-infant interactions, manifesting in behaviors such as less frequent breastfeeding, reduced responsiveness to the infant's needs, and limited emotional stimulation- all

of which are crucial for healthy infant development (Bernard-Bonnin & Canadian Paediatric Society, 2004; Rodriguez et al., 2021). Therefore, perinatal depression represents a serious risk not only to the mother's quality of life but also to the early development of the child (Dadi et al., 2020). Moreover, the presence of depression during pregnancy significantly disrupts the emotional bond between mother and fetus (Lutkiewicz & Bidzan, 2022).

The aim of the present study is to empirically test a serial mediation model hypothesizing that alexithymia and depressive symptoms mediate the relationship between pregnant women's attachment styles and the level of maternal-fetal attachment. It is assumed that women with insecure attachment styles will exhibit higher levels of alexithymia, manifested in difficulties identifying and verbalizing emotional states. Elevated levels of alexithymia may, in turn, predispose individuals to develop depressive symptoms, which- according to the proposed model- may further interfere with the formation of a healthy bond with the unborn child. The study seeks to determine whether the effect of attachment style on the quality of the maternal-fetal relationship is sequentially mediated by two variables: alexithymia and depressive symptoms.

## 1. Methodology

### 1.1. Procedure

The study was conducted online using a secure survey platform. Participants were recruited via social media and pregnancy support groups. Inclusion criteria were: being in the second or third trimester of pregnancy, being at least 18 years old, and proficiency in Polish. Women with a history of severe psychiatric disorders or high-risk pregnancy complications were excluded. Interested individuals accessed an online informed consent form, which outlined the study's aims, procedures, and participants' rights. Upon providing electronic consent, participants completed a questionnaire assessing romantic attachment style, levels of alexithymia, depressive symptoms, and maternal-fetal attachment. Completing the survey took

approximately 20 minutes. All data were collected anonymously. The study received approval from the Ethics Committee of the Academy of Economics and Humanities in Warsaw on November 20, 2024.

### 1.2. Participants

The final sample consisted of 173 pregnant women, with 90 in the second trimester and 83 in the third trimester. Participants ranged in age from 20 to 42 years ( $M = 29.7$ ,  $SD = 4.6$ ). The majority were in marital or committed relationships (87%), held a higher education degree (68%), and reported a medium socioeconomic status (76%).

### 1.3. Measures

#### 1.3.1. Attachment Styles Questionnaire (ASQ; Plopa, 2008)

The ASQ is a tool designed to assess adult attachment styles in the context of romantic relationships, applicable to both women and men. Developed by Plopa (2008) and based on the attachment theory of Hazan and Shaver (1987), the questionnaire distinguishes three attachment styles: secure, avoidant, and anxious – ambivalent. It consists of 24 items divided into respective subscales. Responses are given on a 7-point scale, and raw scores are converted into standardized sten scores for analysis. Reliability coefficients are high: 0.90 for the secure style, 0.84 for the anxious style, and 0.83 for the avoidant style. The Cronbach's alpha for the full scale is 0.89.

#### 1.3.2. Toronto Alexithymia Scale (TAS-20; Parker et al., 1993)

The TAS-20 is a widely used, standardized self-report instrument for assessing alexithymia—a personality trait characterized by difficulties in identifying and describing emotions and a tendency toward externally oriented thinking. It includes three components: difficulty identifying feelings, difficulty describing feelings to others, and externally oriented thinking. The scale consists of 20 items rated on a 5-point Likert scale (from 1 – strongly disagree to 5 – strongly agree).



Total scores range from 20 to 100, with higher scores indicating greater alexithymia. The Polish adaptation by Ścigala et al. (2020) confirms its linguistic and cultural validity. In the current study, the TAS-20 demonstrated high reliability, with a Cronbach's alpha of 0.81.

### **1.3.3. Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1987)**

The EPDS is a widely used screening tool for detecting depressive symptoms in the perinatal period, including both prenatal and postpartum phases. This self-report scale consists of 10 items specifically designed to detect depressive symptoms in women experiencing mood disturbances during pregnancy or early motherhood. The study employed the Polish version developed by Kossakowska (2013), ensuring linguistic and cultural accuracy. Participants rated each item on a 4-point Likert scale (from 0 – no symptoms to 3 – severe symptoms). Total scores range from 0 to 30, with scores of 10 or above indicating mild symptoms and scores of 12 or above suggesting clinically significant depression. The EPDS demonstrated solid reliability in this study, with a Cronbach's alpha of 0.79.

### **1.3.4. Maternal-fetal Attachment Scale (MFAS; Cranley, 1981)**

The MFAS is a self-report measure assessing the emotional bond between a pregnant woman and her unborn child. It consists of 24 items grouped into five dimensions: acceptance of the maternal role, viewing the fetus as a separate entity, interaction with the fetus, attribution of characteristics to the fetus, and orientation toward the fetus's needs. Each item is rated on a 5-point Likert scale (from A – definitely yes to E – definitely no). The MFAS is commonly used in both research and clinical practice to assess prenatal bonding. Stronger attachment is associated with a positive pregnancy experience and higher quality postnatal bonding, while lower scores may indicate a need for psychological support. The Polish adaptation by Bielawska-Batorowicz (1995) confirmed the tool's reliability, with a Cronbach's alpha of 0.83, making it a valuable instrument for assessing the emotional aspects of pregnancy and early mother-child bonding.

## **2. Data analysis**

Data were analyzed using IBM SPSS Statistics version 26. In the initial stage, descriptive statistics were calculated for all study variables. Pearson correlation coefficients were also computed to examine the relationships between the variables included in the study.

In the next step, to test the theoretical model, a mediation analysis was conducted to assess the role of alexithymia (mediator 1) and depressive symptoms (mediator 2), as well as their combined effect on the relationship between maternal attachment styles (independent variables) and maternal-fetal attachment (dependent variable). Given the assumed interdependence between the mediators, a serial multiple mediation model was applied using the PROCESS macro for SPSS, Model 6 (Hayes, 2018). This model accounts for correlations between mediators, reflecting the nature of the studied relationships, and allows for the estimation of both the unique and combined effects of the mediators on the link between the independent and dependent variables. This approach enabled the examination of indirect effects of maternal attachment styles on maternal-fetal attachment through alexithymia and depressive symptoms.

## **3. Results**

### **3.1. Descriptive statistics and correlations**

Tables 1 and 2 present the means, standard deviations, Shapiro-Wilk test results, and Pearson correlation coefficients for the analyzed variables. The analysis revealed significant correlations among maternal attachment styles, alexithymia, depressive symptoms, and maternal-fetal attachment. As hypothesized, alexithymia was negatively correlated with a secure attachment style and with maternal-fetal attachment, and positively correlated with depressive symptoms and insecure attachment styles (anxious and avoidant). Moreover, depressive symptoms showed positive correlations with alexithymia and insecure attachment styles, and negative correlations with secure attachment and maternal-fetal attachment.

Table 1. Pearson correlation matrix between variables: alexithymia, attachment styles, prenatal depressive symptoms, and maternal-fetal attachment, along with means, standard deviations, and Shapiro–Wilk test results

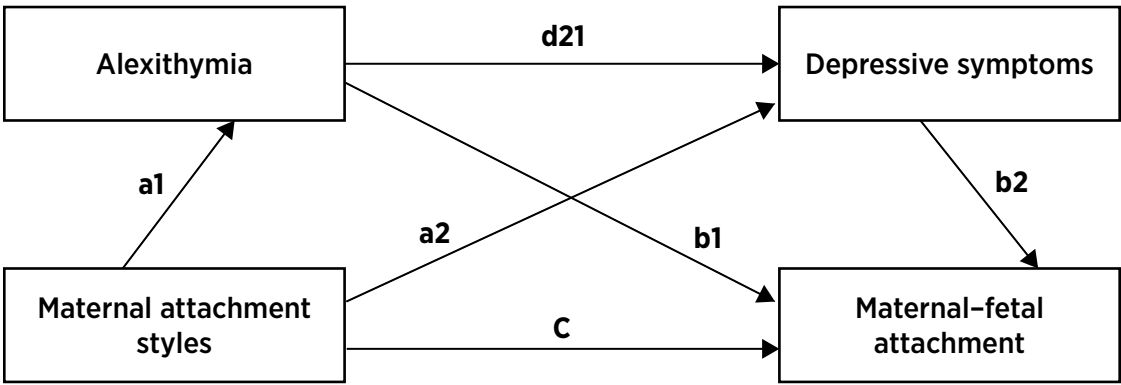
Variables	1	2	3	4	5	6
1. Alexithymia	-					
2. Secure attachment	-0.21***	-				
3. Avoidant attachment	0.34**	-0.22*	-			
4. Anxious attachment	0.29**	-0.18*	0.15	-		
5. Depressive symptoms	0.45***	-0.31**	0.38**	0.32***	-	
6. Maternal-fetal attachment	-0.38**	0.29***	-0.22**	-0.21**	-0.38***	-

p – level of statistical significance, \*p < 0.05, \*\*\*p < 0.01

Table 2. Means, standard deviations, and Shapiro–Wilk test results

Variables	<i>M</i>	<i>SD</i>	<i>W</i>	<i>P</i>
1. Alexithymia	41.34	11.52	0.98	0.32
2. Secure attachment	23.25	5.55	0.96	0.08
3. Avoidant attachment	22.56	3.67	0.99	0.14
4. Anxious attachment	25.54	6.12	0.97	0.22
5. Depressive symptoms	19.78	4.18	0.98	0.56
6. Maternal-fetal attachment	81.22	10.15	0.99	0.33

Figure 1. Graphical representation of the serial mediation model, in which alexithymia and depressive symptoms mediate the relationship between maternal attachment styles and maternal-fetal attachment



Theoretical model of serial mediation in the relationship between maternal attachment styles and maternal-fetal attachment, with alexithymia and depressive symptoms as mediators. (c) Direct effect of maternal attachment styles on maternal-fetal attachment. (a<sub>1</sub>, b<sub>1</sub>) Indirect effect of maternal attachment styles on maternal-fetal attachment through alexithymia as a single mediator. (a<sub>2</sub>, b<sub>2</sub>) Indirect effect of maternal attachment styles on maternal-fetal attachment through depressive symptoms as a single mediator. (a<sub>1</sub>, d<sub>21</sub>, b<sub>2</sub>) Indirect effect of maternal attachment styles on maternal-fetal attachment through alexithymia and depressive symptoms as sequential mediators. (c') Direct effect of maternal attachment styles on maternal-fetal attachment after accounting for both mediators.



### **3.2. Serial Mediation Models**

#### **3.2.1. Secure Attachment Style as the independent variable**

The first serial mediation model examined the relationship between a secure attachment style and maternal-fetal attachment, with alexithymia and depressive symptoms as mediators. The overall model was statistically significant,  $F(3, 250) = 48.76$ ,  $p < .001$ , explaining 23% of the variance in maternal-fetal attachment ( $R^2 = .23$ ). The total effect of secure attachment on maternal-fetal attachment was significant ( $c = 0.47$ ;  $SE = 0.09$ ;  $t = 5.24$ ;  $p < .001$ ). Secure attachment significantly predicted lower levels of alexithymia ( $a_1 = -0.38$ ;  $SE = 0.07$ ;  $t = -5.43$ ;  $p < .001$ ). Alexithymia was a significant positive predictor of depressive symptoms ( $d_{21} = 0.52$ ;  $SE = 0.06$ ;  $t = 8.67$ ;  $p < .001$ ), and negatively predicted maternal-fetal attachment ( $b_1 = -0.30$ ;  $SE = 0.06$ ;  $t = -5.00$ ;  $p < .001$ ). In addition, depressive symptoms had a significant negative effect on maternal-fetal attachment ( $b_2 = -0.29$ ;  $SE = 0.05$ ;  $t = -5.61$ ;  $p < .001$ ). After accounting for the mediators, the direct effect of secure attachment on maternal-fetal attachment was no longer significant ( $c' = 0.12$ ;  $SE = 0.07$ ;  $t = 1.69$ ;  $p = .09$ ), indicating full mediation. The indirect effect through alexithymia and depressive symptoms was statistically significant (point estimate = 0.12; 95% BCa CI [0.06, 0.19]).

#### **3.2.2. Anxious Attachment Style as the independent variable**

The second model investigated the mediating role of alexithymia and depressive symptoms in the relationship between an anxious attachment style and maternal-fetal attachment. The model was significant,  $F(3, 250) = 51.29$ ,  $p < .001$ , accounting for 45% of the variance in maternal-fetal attachment ( $R^2 = .45$ ). The total effect of anxious attachment on maternal-fetal attachment was significant ( $c = -0.55$ ;  $SE = 0.08$ ;  $t = -6.87$ ;  $p < .001$ ). Anxious attachment significantly predicted higher alexithymia levels ( $a_1 = 0.44$ ;  $SE = 0.08$ ;  $t = 5.63$ ;  $p < .001$ ). Alexithymia was positively associated with depressive

symptoms ( $d_{21} = 0.50$ ;  $SE = 0.07$ ;  $t = 7.39$ ;  $p < .001$ ) and negatively associated with maternal-fetal attachment ( $b_1 = -0.31$ ;  $SE = 0.05$ ;  $t = -5.44$ ;  $p < .001$ ). Depressive symptoms also negatively affected maternal-fetal attachment ( $b_2 = -0.28$ ;  $SE = 0.06$ ;  $t = -4.91$ ;  $p < .001$ ). After including the mediators, the direct effect of anxious attachment was no longer statistically significant ( $c' = -0.13$ ;  $SE = 0.07$ ;  $t = -1.81$ ;  $p = .07$ ), indicating full mediation. The indirect effect through alexithymia and depressive symptoms was statistically significant (point estimate = -0.15; 95% BCa CI [-0.23, -0.08]).

#### **3.2.3. Avoidant Attachment Style as the independent variable**

The third model tested the mediating effect of alexithymia and depressive symptoms in the relationship between an avoidant attachment style and maternal-fetal attachment. This model was statistically significant,  $F(3, 250) = 49.32$ ,  $p < .001$ , explaining 34% of the variance in maternal-fetal attachment ( $R^2 = .34$ ). The total effect of avoidant attachment was significant ( $c = -0.51$ ;  $SE = 0.08$ ;  $t = -6.38$ ;  $p < .001$ ). Avoidant attachment significantly predicted higher alexithymia ( $a_1 = 0.37$ ;  $SE = 0.09$ ;  $t = 4.23$ ;  $p < .001$ ). Alexithymia positively predicted depressive symptoms ( $d_{21} = 0.51$ ;  $SE = 0.06$ ;  $t = 7.39$ ;  $p < .001$ ) and negatively predicted maternal-fetal attachment ( $b_1 = -0.32$ ;  $SE = 0.05$ ;  $t = -4.96$ ;  $p < .001$ ). Depressive symptoms also had a significant negative impact on maternal-fetal attachment ( $b_2 = -0.26$ ;  $SE = 0.05$ ;  $t = -5.08$ ;  $p < .001$ ). After including the mediators, the direct effect of avoidant attachment style was no longer significant ( $c' = -0.14$ ;  $SE = 0.07$ ;  $t = -1.99$ ;  $p = .05$ ), indicating full mediation. The indirect effect through alexithymia and depressive symptoms was statistically significant (point estimate = -0.14; 95% BCa CI [-0.21, -0.07]).

## **Discussion**

The aim of the present study was to explore a model in which maternal attachment styles function as predictors of maternal-fetal attachment, with alexithy-

mia and depressive symptoms serving as mediators. The results indicate that attachment styles – secure, anxious, and avoidant – shape prenatal attachment, and their effects are mediated by alexithymia and depressive symptoms.

Research on attachment styles highlights their importance for the development of the maternal-fetal bond and more broadly, for the transition into motherhood. In this study, insecure attachment styles (anxious and avoidant) were negatively associated with maternal-fetal attachment, whereas the secure style acted as a protective factor, facilitating the formation of a strong emotional bond with the unborn child. These findings are consistent with previous research showing that a secure attachment style is linked to better emotional functioning and regulation, which supports prenatal bonding (McDonald, 2021; Matthies et al., 2020).

One possible explanation for these findings is that women with a secure attachment style draw on internalized representations of safe and supportive caregivers, fostering a sense of emotional security that enables connection with the fetus. Their ability to mentally simulate a responsive and nurturing caregiver may reinforce positive expectations about their future maternal role. In contrast, women with an anxious attachment style often experience heightened fears about the stability of their romantic relationships and seek constant reassurance from their partners (Simpson et al., 2003). This preoccupation with interpersonal concerns may drain emotional resources away from the fetus, hindering the development of a deep prenatal bond. Similarly, women with an avoidant attachment style, who typically suppress emotional needs and avoid closeness, may struggle to emotionally engage with pregnancy. Their tendency to minimize dependency and emotional expression may lead to a distanced attitude toward pregnancy and limited emotional involvement with the unborn child. This detachment may also impair postnatal sensitivity and responsiveness, which are crucial for early mother-infant interactions (Walsh et al., 2014; Zhang, 2021).

The results also revealed strong associations between attachment styles and levels of alexithymia. Mothers with a secure attachment style exhibited lower levels of alexithymia, suggesting better emo-

tional recognition and expression. This aligns with previous studies showing that securely attached individuals are more emotionally aware and better able to manage affective states (Ferraro & Taylor, 2021), thus enabling greater emotional involvement during pregnancy. In contrast, women with insecure attachment styles – both anxious and avoidant – displayed higher levels of alexithymia, indicating difficulties in identifying, understanding, and expressing emotions. These findings are consistent with prior research linking insecure attachment to heightened alexithymic traits (Zhang et al., 2024). Such emotional difficulties may limit emotional expression and disrupt interpersonal connections, negatively affecting maternal-fetal attachment.

Consistent with earlier findings (Mangialavori et al., 2024; Ierardi et al., 2022), the present results confirm a negative association between high alexithymia and maternal-fetal attachment. Difficulties in recognizing and expressing emotions may hinder a mother's ability to form a mental representation of the baby and experience the affective states necessary for bonding. Alexithymia may function as a secondary defense mechanism, protecting against overwhelming emotional experiences while simultaneously limiting the ability to process them constructively (Messina et al., 2014). During pregnancy, this mechanism may operate as an „emotional shield,” dampening unpleasant feelings but also weakening the ability to form a connection with the fetus. In this context, alexithymia reflects not only deficits in emotional processing but also a barrier to psychological adaptation to pregnancy. In the current study, alexithymia served as a mediator weakening maternal-fetal attachment, especially among mothers with insecure attachment styles.

The study also revealed strong links between attachment styles and depressive symptoms. Mothers with anxious and avoidant attachment styles exhibited higher levels of depressive symptoms, consistent with literature showing that insecure styles increase vulnerability to depression (Dagan et al., 2018; Muris et al., 2001). For women with an anxious style, chronic stress related to concerns about relationship stability may heighten depressive symptoms (Zhang, 2021). Similarly, avoidantly attached mothers are vulnerable to depression, likely due to their tendency

toward emotional withdrawal and avoidance of intimacy (Jones et al., 2015). The emotional distancing characteristic of avoidant attachment may prevent full engagement in the prenatal relationship, deepening depressive symptoms and increasing emotional distance from the fetus.

Perinatal depression is often associated with sadness, exhaustion, and lack of energy, which can obstruct the development of an emotional bond with the fetus. Low motivation and reduced emotional engagement may hinder bonding behaviors such as imagining life with the baby or responding to fetal movements (Lutkiewicz & Bidzan, 2022). Women experiencing perinatal depression may also hold negative beliefs about their parenting abilities, their future with the child, and their capacity to provide care. These self-perceptions, driven by low self-esteem, can lead to emotional withdrawal and intensify the distance from the unborn child. In this framework, depression functions as an additional mediator, amplifying the negative impact of emotional difficulties.

The finding of full serial mediation suggests that alexithymia and depressive symptoms are key variables explaining the impact of attachment styles on maternal-fetal attachment. Once both mediators are accounted for, the direct effect of attachment style becomes non-significant. This means that women with insecure attachment styles struggle to form prenatal bonds primarily due to limited emotional awareness and regulation, which in turn increases depressive symptoms. These two factors act as successive links in a chain weakening maternal-fetal attachment.

For secure attachment styles, mediation through alexithymia and depressive symptoms was also observed. However, mothers with a secure attach-

ment style exhibited significantly lower levels of emotional difficulties. This mediation suggests that although emotional processes still play a role in shaping prenatal bonding, these women are less likely to experience problems in emotional processing and are less susceptible to depression, which facilitates stronger attachment. This highlights the protective role of psychological mechanisms such as emotional recognition and regulation in securely attached women.

These findings carry important implications for clinical practice and the organization of psychological care for pregnant women. They point to the need for early identification of women with insecure attachment styles, alexithymic traits, and depressive symptoms, as these factors pose a significant risk to the development of maternal-fetal bonding. Incorporating screening for attachment styles and emotional competencies into routine prenatal care may enable more accurate identification of women in need of psychological support. Furthermore, the development and implementation of preventive and interventional programs aimed at enhancing emotional awareness, emotion recognition and expression skills, and mood regulation may help strengthen prenatal attachment. Such interventions, delivered by trained psychologists or midwives, can be integrated into prenatal education. Additionally, considering attachment style in working with pregnant women may help healthcare providers adopt a more personalized approach, fostering trust and enhancing emotional safety during pregnancy. Thus, the findings support the integration of psychological components into perinatal care as an essential element in promoting maternal and infant health.

## Bibliography

- Abasi, E., Keramat, A., Borghei, N.S., Goli, S., & Farjamfar, M. (2021). Evaluating the effect of prenatal interventions on maternal-foetal attachment: A systematic review and meta-analysis. *Nursing Open*, 8(1), 4-16. <https://doi.org/10.1002/nop2.648>
- Barberis, N., Cannavò, M., Calaresi, D., & Verrastro, V. (2023). Reflective functioning and Alexithymia as mediators between attachment and psychopathology symptoms: Cross-sectional evidence in a community sample. *Psychology, Health & Medicine*, 28(5), 1251-1262. <https://doi.org/10.1080/13548506.2022.2045331>
- Bernard-Bonnin, A.C., Canadian Paediatric Society, & Mental Health and Developmental Disabilities Committee. (2004). Maternal depression and child development. *Paediatrics & Child Health*, 9(8), 575-583. <https://doi.org/10.1093/pch/9.8.575>
- Bielawska-Batorowicz, E. (1995). *Determinanty postrzegania dziecka przez rodziców w okresie poporodowym*. Wydawnictwo Uniwersytetu Łódzkiego.
- Borchers, L.R., Dennis, E.L., King, L.S., Humphreys, K.L., & Gotlib, I.H. (2021). Prenatal and postnatal depressive symptoms, infant white matter, and toddler behavioral problems. *Journal of Affective Disorders*, 282, 465-471. <https://doi.org/10.1016/j.jad.2020.12.075>
- Bowlby, J. (1979). The Bowlby-Ainsworth attachment theory. *Behavioral and Brain Sciences*, 2(4), 637-638. <https://doi.org/10.1017/S0140525X00064955>
- Branjerdorn, G., Meredith, P., Wilson, T., & Strong, J. (2021). Maternal-fetal attachment: Associations with maternal sensory processing, adult attachment, distress and perinatal loss. *Journal of Child and Family Studies*, 30, 528-541. <https://doi.org/10.1007/s10826-020-01876-1>
- Cox, J.L., Holden, J.M., & Sagovsky, R. (1987). Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *The British Journal of Psychiatry*, 150(6), 782-786. <https://doi.org/10.1192/bjp.150.6.782>
- Cranley, M.S. (1981). Development of a tool for the measurement of maternal attachment during pregnancy. *Nursing Research*, 30, 281-284. <https://doi.org/10.1097/00006199-198109000-00008>
- Dagan, O., Facompré, C.R., & Bernard, K. (2018). Adult attachment representations and depressive symptoms: A meta-analysis. *Journal of Affective Disorders*, 236, 274-290. <https://doi.org/10.1016/j.jad.2018.04.091>
- Dadi, A.F., Miller, E.R., Bisetegn, T.A., & Mwanri, L. (2020). Global burden of antenatal depression and its association with adverse birth outcomes: An umbrella review. *BMC Public Health*, 20, 1-16. <https://doi.org/10.1186/s12889-020-8293-9>
- Dias, C.C., & Figueiredo, B. (2020). Mother's prenatal and postpartum depression symptoms and infant's sleep problems at 6 months. *Infant Mental Health Journal*, 41(5), 614-627. <https://doi.org/10.1002/imhj.21869>
- Ferraro, I.K., & Taylor, A.M. (2021). Adult attachment styles and emotional regulation: The role of interoceptive awareness and alexithymia. *Personality and Individual Differences*, 173, 110641. <https://doi.org/10.1016/j.paid.2021.110641>
- Hayes, A.F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4-40. <https://doi.org/10.1080/03637751.2017.1352100>
- Ilerardi, E., Bottini, M., Facchinetti, M., & Crugnola, C.R. (2022). Maternal anxiety, depression, alexithymia, and social support: Association with maternal-fetal attachment in pregnancy. *International Journal of Childbirth*, 12(2). <https://doi.org/10.1891/IJC-2021-0047>
- Jones, J.D., Cassidy, J., & Shaver, P.R. (2015). Parents' self-reported attachment styles: A review of links with parenting behaviors, emotions, and cognitions. *Personality and Social Psychology Review*, 19(1), 44-76. <https://doi.org/10.1177/1088868314541858>
- Koppelberg, P., Kersting, A., & Suslow, T. (2023). Alexithymia and interpersonal problems in healthy young individuals. *BMC Psychiatry*, 23(1), 688. <https://doi.org/10.1186/s12888-023-05191-z>
- Kossakowska, K. (2013). Edynburska Skala Depresji Poporodowej – właściwości psychometryczne i charakterystyka. *Acta Universitatis Lodziensis. Folia Psychologica*, 17, 39-50. <https://doi.org/10.18778/1427-969X.17.03>
- Kucharska, M. (2021). Selected predictors of maternal-fetal attachment in pregnancies with congenital disorders, other complications, and in healthy pregnancies. *Health Psychology Report*, 9(3), 193-206.
- Lutkiewicz, K., & Bidzan, M. (2022). Maternal adult attachment and maternal-fetal attachment in the context of romantic relationship quality after premature birth – a cross sectional study. *Frontiers in Psychiatry*, 13, 935871. <https://doi.org/10.3389/fpsy.2022.935871>
- Mangialavori, S., Fontana, A., Terrone, G., Topino, E., Trani, L., Trincia, V., & Cacioppo, M. (2024). Maternal Perinatal Depression, Alexithymia, and Couple Functioning: Which Relationship Exists with Prenatal Attachment. *Behavioral Sciences*, 14(9), 773. <https://doi.org/10.3390/bs14090773>
- Matthies, L.M., Müller, M., Doster, A., Sohn, C., Wallwiener, M., Reck, C., & Wallwiener, S. (2020). Maternal-fetal attachment protects against postpartum anxiety: The mediating role of postpartum bonding and partnership satisfaction. *Archives of Gynecology and Obstetrics*, 301, 107-117. <https://doi.org/10.1007/s00404-019-05402-7>
- McDonald, H. (2021). *Mindful awareness, emotion regulation, and attachment style in the experience of psychological distress during pregnancy and the postpartum*. (Doctoral dissertation, Macquarie University).
- McFarland, J., Salisbury, A.L., Battle, C.L., Hawes, K., Halloran, K., & Lester, B.M. (2011). Major depressive disorder during pregnancy and emotional attachment to the fetus. *Archives of Women's Mental Health*, 14, 425-434. <https://doi.org/10.1007/s00737-011-0237-z>
- McNamara, J., Townsend, M.L., & Herbert, J.S. (2019). A systemic review of maternal wellbeing and its relationship with maternal-fetal attachment and early postpartum bonding. *PloS One*, 14(7). <https://doi.org/10.1371/journal.pone.0220032>
- Messina, A., Beadle, J.N., & Paradiso, S. (2014). Towards a classification of alexithymia: Primary, secondary and organic. *Journal of Psychopathology*, 20, 38-49.
- Montebarocci, O., Codispoti, M., Baldaro, B., & Rossi, N. (2004). Adult attachment style and alexithymia. *Personality and Individual Differences*, 36(3), 499-507. [https://doi.org/10.1016/S0191-8869\(03\)00110-7](https://doi.org/10.1016/S0191-8869(03)00110-7)
- Muris, P., Meesters, C., Van Melick, M., & Zwambag, L. (2001). Self-reported attachment style, attachment quality, and symptoms of anxiety and depression in young adolescents. *Personality and Individual Differences*, 30(5), 809-818. [https://doi.org/10.1016/S0191-8869\(00\)00074-X](https://doi.org/10.1016/S0191-8869(00)00074-X)
- Parker, J.D., Michael Bagby, R., Taylor, G.J., Endler, N.S., & Schmitz, P. (1993). Factorial validity of the 20-item Toronto Alexithymia Scale. *European Journal of Personality*, 7(4), 221-232.

- Pisoni, C., Garofoli, F., Tzialla, C., Orcesi, S., Spinillo, A., Politi, P., ... & Stronati, M. (2014). Risk and protective factors in maternal-fetal attachment development. *Early Human Development*, 90, S45-S46? [https://doi.org/10.1016/S0378-3782\(14\)50012-6](https://doi.org/10.1016/S0378-3782(14)50012-6)
- Plopa, M. (2008). *Węzi w małżeństwie i rodzinie. Metody badań*. Kraków: Oficyna Wydawnicza Impuls.
- Preece, D.A., Mehta, A., Becerra, R., Chen, W., Allan, A., Robinson, K., & Gross, J.J. (2022). Why is alexithymia a risk factor for affective disorder symptoms? The role of emotion regulation. *Journal of Affective Disorders*, 296, 337-341. <https://doi.org/10.1016/j.jad.2021.09.085>
- Preece, D.A., & Gross, J.J. (2023). Conceptualizing alexithymia. *Personality and Individual Differences*, 215, 112375. <https://doi.org/10.1016/j.paid.2023.112375>
- Quinto, R.M., De Vincenzo, F., Graceffa, D., Bonifati, C., Innamorati, M., & Iani, L. (2022). The relationship between alexithymia and mental health is fully mediated by anxiety and depression in patients with psoriasis. *International Journal of Environmental Research and Public Health*, 19(6), 3649.
- Rahimi, T., Sedghi, R., Yousefi, S., & Sarikhani, Y. (2025). The association between maternal-fetal attachment and adherence to health behaviors among pregnant women. *BMC Research Notes*, 18(1), 16. <https://doi.org/10.1186/s13104-024-07071-5>
- Rodriguez, N., Tun, H.M., Field, C.J., Mandhane, P.J., Scott, J.A., & Kozyskyj, A.L. (2021). Prenatal depression, breastfeeding, and infant gut microbiota. *Frontiers in Microbiology*, 12, 664257. <https://doi.org/10.3389/fmicb.2021.664257>
- Rollè, L., Giordano, M., Santoniccolo, F., & Trombetta, T. (2020). Prenatal attachment and perinatal depression: A systematic review. *International Journal of Environmental Research and Public Health*, 17(8), 2644. <https://doi.org/10.3390/ijerph17082644>
- Sacchi, C., Miscioscia, M., Visentin, S., & Simonelli, A. (2021). Maternal-fetal attachment in pregnant Italian women: Multidimensional influences and the association with maternal caregiving in the infant's first year of life. *BMC Pregnancy and Childbirth*, 21, 1-8. <https://doi.org/10.1186/s12884-021-03964-6>
- Sánchez-Polán, M., Franco, E., Silva-José, C., Gil-Ares, J., Pérez-Tejero, J., Barakat, R., & Refoyo, I. (2021). Exercise during pregnancy and prenatal depression: A systematic review and meta-analysis. *Frontiers in Physiology*, 12, 640024. <https://doi.org/10.3389/fphys.2021.640024>
- Shaver, P.R., Mikulincer, M., Sahdra, B., & Gross, J. (2016). Attachment security as a foundation for kindness toward self and others. *The Oxford Handbook of Hypo-Egoic Phenomena*, 10. <https://doi.org/10.1093/oxfordhb/9780199328079.013.15>
- Sifneos, P.E. (1973). The prevalence of 'alexithymic' characteristics in psychosomatic patients. *Psychotherapy and Psychosomatics*, 22(2-6), 255-262. <https://doi.org/10.1159/000286529>
- Simpson, J.A., Rholes, W.S., Campbell, L., Tran, S., & Wilson, C.L. (2003). Adult attachment, the transition to parenthood, and depressive symptoms. *Journal of Personality and Social Psychology*, 84(6), 1172. <https://doi.org/https://doi.org/10.1037/0022-3514.84.6.1172>
- Ściagała, D.K., Zdankiewicz-Ściagała, E., Bedyńska, S., & Kokońska, A. (2020). Psychometric properties and configural invariance of the Polish – Language Version of the 20-Item Toronto Alexithymia Scale in non-clinical and alcohol-addict persons. *Frontiers in Psychology*, 11, 1241. <https://doi.org/10.3389/fpsyg.2020.01241>
- Walsh, J., Hepper, E.G., & Marshall, B.J. (2014). Investigating attachment, caregiving, and mental health: A model of maternal-fetal relationships. *BMC pregnancy and childbirth*, 14, 1-9. <https://doi.org/10.1186/s12884-014-0383-1>
- Walsh, J. (2010). Definitions matter: If maternal-fetal relationships are not attachment, what are they?. *Archives of Women's Mental Health*, 13, 449-451. <https://doi.org/10.1007/s00737-010-0152-8>
- Zdolska-Wawrzekiewicz, A., Chrzan-Dętkoś, M., & Bidzan, M. (2018). Maternal attachment style during pregnancy and becoming a mother in Poland. *Journal of Reproductive and Infant Psychology*, 36(1), 4-14. <https://doi.org/10.1080/02646838.2017.1395400>
- Zhang, J., Zhang, Y., Mao, Y., & Wang, Y. (2024). The relationship between insecure attachment and alexithymia: A meta-analysis. *Current Psychology*, 43(7), 5804-5825. <https://doi.org/10.1007/s12144-023-04749-0>
- Zhang, L., Wang, L., Yuan, Q., Huang, C., Cui, S., Zhang, K., & Zhou, X. (2021). The mediating role of prenatal depression in adult attachment and maternal-fetal attachment in primigravida in the third trimester. *BMC Pregnancy and Childbirth*, 21, 1-9. <https://doi.org/10.1186/s12884-021-03779-5>



# Spousal attachment style and the level of marital satisfaction in parents of preschool and early school children in rural and urban settings<sup>1</sup>

<https://doi.org/10.34766/j4e7zd39>

Małgorzata Marmola<sup>a</sup> ✉, Anna Wańczyk-Welc<sup>a</sup>

<sup>a</sup> Małgorzata Marmola, <https://orcid.org/0000-0003-2915-8891>, Institute of Psychology, University of Rzeszów, Poland

<sup>b</sup> Anna Wańczyk-Welc, <https://orcid.org/0000-0002-4743-1049>, Institute of Psychology, University of Rzeszów, Poland

✉ Corresponding author: [marmola@ur.edu.pl](mailto:marmola@ur.edu.pl)

**Abstract:** The article addresses the issues of relationships between spousal attachment style and marital satisfaction in spouses living in rural and urban settings and raising at least one preschool-age or early school-age child. Research was conducted among 131 married couples (262 individuals), using the *Attachment Styles Questionnaire* by Mieczysław Płopa and the *Well-Matched Marriage Questionnaire* developed by Mieczysław Płopa and Jan Rostowski. The results indicated significant relationships between secure spousal attachment style and overall marital satisfaction level and a relationship between avoidant style and a high level of disappointment in marriage.

**Keywords:** attachment, attachment style, secure attachment style, marital satisfaction, marital relations, family functioning

## Introduction

A review of the literature on attachment indicates that in recent years there has been a growing interest in the significance of close bonds in interpersonal relationships, not only in childhood but also in different periods of human development (Płopa, 2011; Rostowski, 2003). Scholars have been looking for mechanisms explaining the formation of close bonds in adulthood (Karbowa-Płowens, 2019). Accordingly, attachment can be treated as a prototype of adult social relationships, and a favorable attachment pattern in childhood probably results in plasticity to new relationships and experiences. It can therefore be assumed that the affective regulation pattern in early childhood relations with the caregiver constitutes the emotional basis and, consequently, a kind of prototype for self-regulation in adult life (Goldberg, 2000; Płopa, 2014), especially in marital relationships. The present study aimed to investigate the relationship between spousal attachment style and

satisfaction with different dimensions of the marital relationship: intimacy, self-fulfillment, similarity, and disappointment.

## 1. Spousal attachment

The attachment theory has enjoyed interest for years, particularly among developmental psychologists. Its author, John Bowlby (2016), defined attachment as a bond with an individual of the same species and posited that it had a biological basis. It can therefore be assumed that the bonds between a child and their primary caregiver, most often the mother, are manifestations of behavioral system activity, resulting in the child's need for closeness with the mother. Bowlby (2016) treats it as a genetically determined and primordially rooted need. From the evolutionary perspective, genetically programmed behavior

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_marm.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_marm.pdf)



patterns or predispositions to learn them in the course of first social interactions are activated early in individuals of various species, which is related to the adaptive function of bonds and to the role of early experiences in the development of individuals' resources (Goldberg, 2000). Thus, attachment is a behavior system that organizes an individual's feelings towards the caregiver in childhood and may induce many positive emotions (Taylor, 2019). Based on these early experiences, the child develops an internal operating model, which is a mental representation of the predicted course of interactions with the people around them. From the moment of its emergence, the model becomes a template for social bonds that is used in the subsequent stages of development.

Research on attachment concerns mainly the mother-child dyad (Włodarczyk, 2016). It leads to the conclusion that breaking the emotional bond with the mother or the lack of such a bond causes negative and essentially irreversible outcomes for the child's development (Czub, 2003). The loss of maternal care results in mental anguish and pain, which the child may show with their behavior, through crying, violent protests, and refusal to accept caregivers other than the mother (Marchwicki, 2004, 2006).

Based on observations concerning the mother-child relationship, simultaneously considering the quality of this relationship and the mother's sensitivity and availability when the child signals his or her needs, Mary Ainsworth (2015) distinguished three attachment styles. The secure style is characterized by trust in the object of attachment, which stems from the object's availability in the areas of sensitivity in situations when the child experiences discomfort. The anxious-ambivalent style develops when the child experiences uncertainty about the mother's/caregiver's availability; it then produces what is called "hypervigilance," a lowered sense of security, and separation anxiety, which can manifest itself even in situations when the mother is available. Finally, the avoidant style is associated with experiencing the unavailability of the object of attachment or the object's insensitivity in situations of threat or an unsatisfied need. Such situations activate defense mechanisms and, consequently, lead to the avoidance of close contact as a form of protection against being

hurt. In this case, separation does not have to trigger negative emotions (Plopa, 2008). The avoidant style develops when the caregivers are indifferent and uncommitted. The child develops a belief that he or she is not worthy of love, that other people are not particularly available, and that contacts with them lead to failure and frustration (Adamczyk, 2016). The described attachment styles explain the significance of trust and security in social relationships and generalize an individual's internal expectations regarding how to function in interactions with others. In this context, it is reasonable to assert that a specific attachment style formed in childhood as a prototype of interpersonal relationships serves as a foundation for intimate relationships in adulthood. Naturally, it should be noted that this relational prototype may undergo modifications throughout subsequent life stages as a result of new experiences. Moreover, adult romantic relationships possess a distinct specificity, as they are based on mutuality and the reciprocal exchange of caregiving without the necessity of the partner's physical presence (Byra & Parchoniuk, 2015). Different attachment styles either support or disrupt interpersonal behaviors in adulthood and become particularly salient in the context of partners' functioning within a romantic relationship and their perceived relationship satisfaction.

Marta Komorowska-Pudło (2016) analyzed previous studies, paying special attention to the significance of upbringing styles for individuals' development; her analysis indicates that the secure attachment style is associated with a high sense of security later in life, higher self-esteem, trust, emotional maturity, openness to others, and the belief that one can count on and receive help from others. The anxious-ambivalent style results in a lowered sense of security, heightened vigilance, lower self-esteem, shyness, withdrawal, and susceptibility to stress. The avoidant style leads to difficulties in relations with others later in life, uncertainty, irritability, and impulsiveness. Thus, childhood is the period when a person develops their characteristic matrix of conduct and a characteristic pattern of how they treat themselves. The experience of being treated like an object by others leads to the loss of independence and limits the sense of freedom (Ryś, 2014).

Bowlby assumed that this early childhood attachment to a parent or caregiver might have an effect on bonds in adult life, which means a tendency for the attachment patterns that develop between adult partners in romantic relationships to be similar to those that previously existed between the mother or a different caregiver and the child (as cited in Karbowa-Płowens, 2019; Liberska & Suwalska, 2011; Malina, 2011; Suwalska-Barancewicz, 2016a). The experience of attachment can be an important element in the formation of personal resources (Goldberg, 2000), especially personal openness, and other broadly defined social behaviors.

The concept of attachment became the basis for the understanding of adults' love and loneliness, based on the assumption that the depth of this loneliness was influenced by the history of attachment relationships in childhood (Shaver & Hazan, 1987), and love began to be treated as an attachment process. This means that romantic relationships are governed by mechanisms similar to those governing the infant-mother relationship, which leads to the conclusion that adults also feel secure and display creative behaviors when their partner is available and sensitive to their needs. A romantic partner is a source of security and protection and provides a sense of comfort.

Chris Fraley and Phillip Shaver (2000) adapted the attachment patterns defined by Mary Ainsworth to describe different styles of love in adults – namely, individual differences in thinking, feeling, and behaving in romantic relationships. In their opinion, there are three types of attachment here as well: avoidant attachment – associated with a lack of comfort in closeness with the partner, difficulties in showing complete trust in the partner, and a lack of consent to complete dependence on him or her; secure attachment – leading to the experience of satisfaction with the close relationship and to the acceptance of behaviors aimed at greater intimacy; and anxious-ambivalent attachment – associated with the feeling that the partner does not show willingness to enter into the expected intimate relationship, which leads to irritation and to undermining the partner's positive feelings and his or her desire to be in a close relationship.

The research conducted by Blanka Chrobaczyńska (2018) indicated a correlation between secure attachment style and the character of the marital relationship, assessed in terms of features such as intimacy, passion, commitment, and spouse depreciation. The results showed that there were significant relationships between secure spousal attachment style and the levels of marital intimacy, passion, and commitment. However, this relationship was not confirmed for depreciation. Significant associations between insecure attachment style and the characteristics of the marital relationship were not found, either.

In turn, a study conducted by Alicja Malina and Dorota Suwalska-Barancewicz (2017) revealed statistically significant relationships between the anxious-ambivalent attachment style and life satisfaction ( $r = -.199$ ;  $p = .027$ ). It was found that as the intensity of the anxious-ambivalent attachment style increased, participants' life satisfaction decreased.

## 2. Marital satisfaction and its determinants

Marriage is a unique and at the same time the most important subsystem of the family system, composed of adults from two different families of origin who have decided to start a relationship with each other in order to live together (Plopa, 2008). It is usually a lasting relationship, and at the same time a dynamic one that develops through interactions, the performance of tasks, and striving towards certain values (Krok, 2015).

Marital satisfaction is the case when both the man and the woman feel happy and are satisfied with each other (Zadeh & Tabrizi, 2014). It is, however, not an easy concept to define, and it is described using terms such as marital quality, marital adjustment, marital success, and a well-matched marriage (Bukalski, 2013; Stanley et al., 2012). In the Polish context, Jan Rostowski (2009) is particularly noteworthy for having proposed, as early as the 1980s, the concept of a well-matched marriage, which refers to successful or unsuccessful marital life across various dimensions, including love, commitment, intimacy,



similarity, attractiveness, sexual relations, having children, and partner selection motives. According to Maria Ryś (2004), communication between spouses must not be overlooked. She emphasizes that high-quality relationships are characterized by strong closeness – emotional and intellectual – as well as closeness related to the performance of everyday tasks and shared activities. Furthermore, the quality of communication between partners is associated with attachment style. Research has shown that individuals with a secure attachment style are perceived as supportive and communicatively engaged partners who are less likely to be demeaning (Suwalska-Barancewicz & Malina, 2018).

Marital quality can be assessed on several dimensions. Mieczysław Plopa and Jan Rostowski (2008) proposed four dimensions: intimacy, self-fulfillment, similarity, and disappointment. Intimacy is the first dimension contributing to marital quality. It consists in satisfaction with being in a close relationship based on openness, mutual trust, and honesty. This kind of intimate relationship is based on true love and motivates the spouses to care for it in order to be happy in it. The second dimension is self-fulfillment, which means that in marriage it is possible to fulfill oneself and be oneself and to have one's own values, beliefs and personal life plans, and that performing marital and family roles does not collide with this. On the contrary, it becomes a way to live a fulfilling and happy life. The third dimension is similarity, which indicates a high degree of agreement between the partners. The spouses are able to define their important marital and family goals together and without conflict; the goals include the ways of bringing up children, family traditions, spending free time, or setting family boundaries. They can specify how to develop their relationship in a satisfying manner and share their household duties. The last dimension is disappointment, associated with a sense of failure in life caused by entering into a marriage perceived as limiting the individual's autonomy. In such a marriage, thoughts about divorce appear frequently; the spouses avoid each other and experience no pleasure of being together; consequently, they feel increasingly less responsible for their relationship. The study by Anna Wańczyk-Welc and Małgorzata Marmola (2020)

demonstrates a correlation between the quality of the marital relationship and the functioning of the family of origin. The experience of growing up in a family of origin that guarantees a sense of autonomy, is coherent, communicates properly, and has a sense of identity becomes a condition of high marital quality in adult life. This suggests the repetition of certain patterns, which has an effect on performing family and marital roles in specific ways.

Graham Spanier and Robert Lewis (1980), who are considered precursors of marital quality research, pointed to partners' sense of integration, satisfaction, adjustment, and communication as elements that the marital relationship rests on. According to Maria Braun-Gałkowska (1992), it is possible to identify the factors that contribute to a successful marital relationship, which simultaneously determine its quality. According to the author, these include factors that operate prior to marriage, such as marital maturity and partner selection, as well as factors that operate during the course of marriage – both internal and external to the relationship itself. Awareness of these factors can support intentional actions aimed at ensuring the longevity of the relationship, fostering satisfaction, and promoting marital happiness. Research by Renata Doniec (2001) indicates that the most important factors contributing to marital success are mutual understanding, tolerance, and love, as they foster effective communication and thus help prevent conflicts and dysfunctional interpersonal interactions.

The research conducted by Mieczysław Plopa (2008) indicates that the motives for partner selection are crucial for relationship satisfaction and marital stability. Long-lasting marriages were typically based on love and the desire to have a family; for wives, the partner's character was particularly important, while for husbands, sexual satisfaction played a more significant role. The author concluded that stable marriages more often relied on values such as love and shared interests, whereas in unsuccessful relationships, these values were of lesser importance. A higher level of marital satisfaction was also observed among individuals who had good relationships with their mothers (the relationship with the father did not show significant correlations). Additionally, material resources were found to be a factor associated with marital satisfaction.

The findings highlight the role of partner personality traits as determinants of marital success. Andrzej Dakowicz (2014) highlights temperamental traits, attitudes, and self-image as predictors of both high and low relationship quality. Maria Braun-Galkowska (1992) identifies the maturity and activity of the spouses as the primary determinants of marital success – factors that require continuous effort and daily commitment from both partners in order to nurture marital love – while personality similarity is considered of lesser importance. A good marriage involves supporting the partner (Dakowicz & Dakowicz, 2021), which increases individuals' marital satisfaction and psychological well-being (Karakose, 2022). Marital satisfaction may also depend on good communication between the spouses (Dakowicz & Dakowicz, 2021; Omoboye, Eneh, Titor-Addingi, 2024; Plopa, 2008; Rostowska, 2001). An effective way of communicating means active exchange of information, reflects commitment and represents the emotional climate in the relationship (expressing the feeling of love) and the levels of trust, support, concern, and respect for the partner; it also favors the quicker resolution of conflicts and generally reduces them (Dakowicz, 2014; Taggart et al., 2019).

A review of studies on marital satisfaction conducted by Lila Fotovate and Zahra Khezri (2018) indicates that a successful marriage positively influences the psychological well-being of spouses. Greater satisfaction may result from the use of mindfulness techniques and spending quality time together. Certain aspects of premarital sexuality were also found to be related to relationship quality: cohabitation before marriage influenced marital quality, whereas its effect on relationship stability was limited.

Very interesting results were obtained in cross-cultural research conducted in 33 countries (Dobrowolska et al., 2020). It turned out that greater marital satisfaction was associated with a smaller number of negative experiences in the relationship, better communication, high mutual support and advice in the dyad, fewer symptoms of stress, and generally better health. Regardless of culture, men were more satisfied with marriage (which resulted from the unequal division of duties, including childcare). Satisfaction also varied depending on the stage of marriage and

spouses' age and correlated negatively with their socioeconomic status. Moreover, the authors of the study pointed out the different perception of the roles of the family and spouses in collectivistic cultures – in such cultures, satisfaction was derived from living in multigenerational homes, where all family members lived together, helped one another, and were loyal to and cooperated with one another. In individualistic cultures, by contrast, marriage was perceived as satisfying when it contributed to the autonomy and independence of husband and wife. Marital satisfaction was also positively correlated with religiosity. From a cross-cultural perspective, marital satisfaction was found not to be significantly related to the number of children (this relationship is probably moderated by other variables) and to spouses' level of education.

The research conducted by Amber Jarnecke and Susan South (2013) suggested that there was an intergenerational transmission of marital satisfaction, which meant that parents' marital satisfaction translated into that of their adult child. However, the mechanisms explaining this phenomenon remain relatively unknown. The authors tested the role of parent-child attachment orientation and romantic relationship attachment orientation as mediators in the intergenerational transmission of marital satisfaction. The results partially supported the mediation effect of parent-child attachment and romantic partner attachment on intergenerational marital satisfaction transmission, though the effects differed depending on gender. In the case of husbands, the direct effect of parents' marital satisfaction on respondents' marital satisfaction partially depended on anxious attachment styles. There was no direct effect of parents on the marital satisfaction of wives; however, there were significant associations between parents' satisfaction and wives' attachment orientation in childhood and adulthood, which in turn influenced their marital satisfaction. The results of that study allowed for an integrated look at the relationship between attachment and marital functioning.

In a 31-year longitudinal study, Eva Klohnen and Stephan Bera (1998) investigated attachment styles in 52-year-old women with avoidant or secure attachment, considering several factors: life satisfaction,

behavior descriptions, personality traits, and self-report. The researchers collected data from women at the age of 21, 27, 43, and 52 years. The results from these diverse sources of data provided evidence of the continuity of behavior and experience patterns associated with attachment styles in adulthood. Compared to secure attachment style, the avoidant style among female respondents was characteristic of less happy and less lasting relationships, greater defensiveness and sensitivity, distrustful self-reliance, and greater interpersonal and emotional distance. Research indicated that their environment in childhood offered fewer opportunities to develop close interpersonal bonds, which translated into a worse quality of such bonds in adulthood.

Numerous studies have shown that marital satisfaction is a product of many factors: individual, interpersonal, and cultural. Sohrab Zarrin and Maryam Theri (2020) predicted marital satisfaction based on communication patterns, attachment styles, and psychological resilience, which were found in studies to have high predictive value. Based on these variables, it is possible to improve relationship quality, since its high level correlates with constructive communication, secure attachment style, and high psychological resilience. Marital satisfaction is significantly and negatively correlated with anxious attachment style and mutual communication avoidance.

Expanding the analysis of marital satisfaction and its determinants, it is worth considering an additional aspect related to changes in the quality of the marital relationship over time. In the initial phase of family life, before children are born, spouses tend to perceive their shared life as highly satisfying. It is only after the birth of the first and subsequent children that numerous adjustments become necessary, which may lead to a decline in satisfaction due to the demands of childcare, lack of time for each other, and, in some cases, worsened financial circumstances (Abele & Wojciszke, 2018; Weryszko, 2020). A key factor that supports the transition from a childless phase to parenthood is the attachment style, which is associated with both declared and perceived partner empathy (Każmierczak, 2015). According to the findings of Alicja Malina and Dorota Suwalska-Barancewicz (2017), instrumental support also plays a significant

role for spouses raising children. The authors describe this support as the provision of everyday help with childcare and household duties. In this context, the importance of emotional bonding tends to decrease, thereby changing the nature of the relationship between partners.

### **3. Methodological assumptions of the present study**

Our study was devoted to the relationship between spouses' attachment styles and their marital satisfaction. The research aim was to examine attachment styles and the level of satisfaction in spouses living in rural and urban settings, who were at the same time parents of preschool and early school children, and to determine the relationships between these variables. The main problem was the following question:

- Are there statistically significant relationships between attachment styles in marriage and the level of marital satisfaction in spouses living in urban and rural settings, bringing up preschool and early school children?

We formulated the following detailed questions:

1. What marital attachment styles are found in spouses bringing up preschool and early school children? Are there significant differences in attachment styles between women and men?
2. What attachment styles are displayed by spouses living in rural and urban settings? Are there statistically significant differences between spouses living in rural and urban settings?
3. What is the level of marital satisfaction among spouses raising preschool and early school-aged children? What level of marital satisfaction is reported by wives, and what by husbands?
4. What level of marital satisfaction is found in spouses living in rural and urban settings? Are there statistically significant differences in marital satisfaction between spouses living in rural and urban settings?

The following hypotheses were formulated:

- The main hypothesis of the research: there are statistically significant relationships between marital attachment styles and the level of marital satisfaction among spouses residing in urban and rural areas.

Detailed hypotheses resulting from the main hypothesis are:

1. It is assumed that the dominant attachment style among the participants is the secure style; that the avoidant style occurs more frequently among husbands than wives; and that the anxious-ambivalent style is more common among wives than among men.
2. It is assumed that there are significant differences in attachment styles between spouses from rural and urban areas. Spouses living in rural areas are expected to exhibit the secure attachment style more often than those from urban areas.
3. It is assumed that the studied parents will demonstrate high levels of marital satisfaction. Wives are expected to score higher on the disappointment scale, while husbands are expected to score higher on intimacy and self-actualization.
4. It is presumed that there are statistically significant differences in marital satisfaction between spouses from rural and urban areas. It is expected that spouses from urban settings will report higher levels of marital disappointment and also a higher level of self-actualization than spouses from rural areas.

Research was conducted among 131 married couples from the Podkarpacie region (a total of 262 individuals, including 65 couples residing in rural areas and 66 couples living in urban areas). The age of the participants ranged from 23 to 57 years, with an average age of 37.6 years (men: 24-57 years,  $M = 39$ ; women: 23-49 years,  $M = 36.5$ ). The length of marriage among participants ranged from 1 to 35 years, with a mean duration of 12 years. Twenty-six participants came from single-parent families, while the remainder were from two-parent households. The inclusion criterion

for the study group was that the couples were raising at least one child of preschool or early school age. The number of children in the participants' families ranged from 1 to 6.

To assess marital attachment styles, the *Attachment Styles Questionnaire* by Mieczysław Plopa was used. This tool identifies three styles of attachment to one's spouse: secure, anxious-ambivalent, and avoidant:

1. Secure attachment style – is associated with satisfaction in the relationship with one's partner, the belief that the partner is available in important, difficult, or crisis situations, mutual expressions of affection and attachment, and communication based on openness and mutual trust.
2. Anxious-ambivalent attachment style – is characterized by anxiety about the stability of the relationship, fear of losing the partner, and constant worry that the relationship may not be attractive or important enough for the partner. This style also involves heightened vigilance, often unjustified, stemming from a lowered sense of security.
3. Avoidant attachment style – involves a lack of tendency to form close, open relationships with the spouse, discomfort when the partner seeks closeness, and a preference for clearly defined boundaries – whose violation is perceived as irritating. Individuals with this style often lack spontaneity and openness to intimate dialogue (Plopa, 2008).

The questionnaire demonstrates high reliability across all dimensions, with a reliability coefficient of 0.91 for the secure attachment style, 0.78 for the anxious-ambivalent style, and 0.80 for the avoidant style. Satisfactory results were also obtained in terms of the questionnaire's validity, which was assessed through theoretical validity, analysis of the internal structure of the test, examination of intergroup differences, and criterion validity methods (Plopa, 2008).

To assess the level of marital satisfaction, the *Well-Matched Marriage Questionnaire* developed by Mieczysław Plopa and Jan Rostowski was used. The questionnaire allows for the calculation of a general marital satisfaction score as well as scores on four subscales:

1. *Intimacy* – refers to satisfaction with a close relationship with one's partner, the need to build a relationship based on closeness, trust, and openness toward the partner, high motivation to work on the relationship, and a commitment to the partner's happiness.
2. *Self-fulfillment* – refers to perceiving marriage as an opportunity for self-fulfillment, for achieving life goals and expressing personal values. Through the realization of marital roles, one experiences satisfaction from being the person one wants to be, and marriage is seen as a path to a happy life.
3. *Similarity* – reflects a high level of agreement between partners regarding marital and family goals, and shared views on developing the relationship, spending free time, child-rearing practices, and maintaining family traditions.
4. *Disappointment* – reflects a sense of life failure due to the marriage, lack of pleasure in being with the partner, feelings of restricted autonomy and independence, and thoughts of ending the relationship (Plopa, 2008).

The applied questionnaire demonstrated satisfactory reliability: 0.89 for the *Intimacy* scale, 0.88 for the *Disappointment* scale, 0.83 for the *Self-fulfillment* scale, and 0.81 for the *Similarity* scale. Validity testing (including theoretical validity, internal structure, intergroup differences, and criterion validity) also yielded satisfactory results (Plopa, 2008).

For statistical analyses, the Shapiro-Wilk test was used to assess the normality of distributions, the Mann-Whitney U test was used to assess differences between groups, and Spearman's rho correlation coefficient was applied.

## 4. Results

Based on the results of the Shapiro-Wilk test, presented in Table 1., it can be concluded that the distributions of scores on both the attachment style scales and the marital satisfaction scales deviate from normality. Therefore, subsequent analyses employed the Mann-Whitney U test and Spearman's rho coefficient.

Table 1. Shapiro-Wilk test values for scales measuring attachment styles and marital satisfaction

Scale	Shapiro-Wilk Test	Significance
Secure style	0.924	< 0.001
Anxious-ambivalent style	0.990	0.060
Avoidant style	0.928	< 0.001
Intimacy	0.897	< 0.001
Self-fulfillment	0.856	< 0.001
Similarity	0.879	< 0.001
Disappointment	0.948	< 0.001

### 4.1. Respondents' spousal attachment styles

The attachment styles of the test subjects are shown in Table 2. It presents both raw and sten results, along with standard deviations – for the entire group under study and for the subgroups by gender.

The results presented in Table 2 indicate that the highest scores among the surveyed spouses were observed in the secure attachment style (high levels of relationship satisfaction, expressions of affection and attachment, and the belief in the partner's availability in difficult situations), average scores were recorded for the anxious-ambivalent attachment style (moderate levels of concern about relationship stability, fear of losing the partner, and vigilance), and low scores were found for the avoidant attachment style (spouses do not tend to avoid contact with their partner). Attention should be drawn to the high standard deviation values, which indicate considerable variability in the results, particularly within the secure attachment style dimension. The findings point to the predominance of the secure attachment style in both male and female subgroups. In the case of the anxious-ambivalent style, average scores were observed in both subgroups; however, statistically significant differences were found between men and women, with significantly higher scores among women. Scores for the avoidant attachment style in both subgroups remained within the low range.

Both spouses residing in rural and urban areas obtained high scores in the secure attachment style, average scores in the anxious-ambivalent style, and low scores in the avoidant style (Table 3). No sta-

Table 2. Differences between male and female subgroups in terms of attachment styles

Attachment style	Total Sample				Men				Women				U	p
	raw scores		sten scores		raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD		
Secure	42.24	10.51	7.87	4.67	41.87	9.87	7.79	2.18	42.62	7.95	7.94	2.31	9192	0.318
Anxious-ambivalent	24.45	8.94	4.66	2.25	23.52	8.42	4.50	2.17	25.36	9.35	4.82	2.31	9519	0.126
Avoidant	18.74	9.19	2.63	2.21	19.06	9.50	2.74	2.29	18.42	8.84	2.53	2.13	8328	0.680

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

Table 3. Differences between subgroups of spouses residing in rural and urban areas in terms of attachment styles

Attachment style	Spouses from rural settings				Spouses from urban settings				U	p
	raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD		
Secure	42.80	9.14	8.01	2.02	41.65	11.73	7.73	2.45	8465	0.852
Anxious-ambivalent	24.79	8.48	4.77	2.17	24.09	9.39	4.55	2.33	7969	0.320
Avoidant	18.54	9.26	2.63	2.20	18.94	9.10	2.64	2.23	8848	0.660

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

Table 4. Differences between subgroups of men residing in rural and urban areas in terms of attachment styles

Attachment style	Men from rural settings				Men from urban settings				U	p
	raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD		
Secure	41.91	9.32	7.83	2.11	41.81	10.42	7.75	2.26	2170	0.905
Anxious-ambivalent	24.31	8.01	4.72	2.08	22.70	8.75	4.28	2.25	1879	0.221
Avoidant	19.16	9.88	2.81	2.39	18.95	9.09	2.69	2.18	2157	0.954

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

Table 5. Differences between subgroups of women residing in rural and urban areas in terms of attachment styles

Attachment style	Women from the countryside				Women from towns and cities				U	p
	raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD		
Secure	43.71	8.85	8.18	1.91	41.51	12.89	7.70	2.62	2087	0.789
Anxious-ambivalent	25.27	8.90	4.82	2.26	25.46	9.79	4.83	2.38	2107	0.861
Avoidant	17.91	8.55	2.45	1.97	18.93	9.11	2.60	2.28	2272	0.560

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

tistically significant differences were found between spouses living in rural and urban areas across any of the measured attachment styles.

No statistically significant differences were found in spousal attachment styles between men residing in rural areas and those living in urban areas (Table 4). In both groups of male participants, relatively high scores were observed in the secure attachment style (above the 7th sten), scores close to the average (between the 4th and 5th sten) in the anxious-ambivalent style, and low scores (below the 3rd sten) in the avoidant style.

Women living in rural settings scored slightly higher on secure style and lower on ambivalent and avoidant styles, but these differences were not statistically significant (Table 5).

#### 4.2. Marital satisfaction in spouses

The results of the surveyed spouses in terms of marital satisfaction are presented in Table 6, which includes raw and standardized (sten) mean scores, standard deviations for the entire sample and gender subgroups, as well as the Mann-Whitney U test value indicating the level of differences between the groups.

The spouses' scores were in the average range on all marital satisfaction scales included in the KDM-2. Respondents' scores were the highest on the Similarity scale, measuring harmony between the spouses in the pursuit of goals, in defining external boundaries, and in cultivating traditions and the similarity of their views – the levels of these aspects of our respondents' married life were average. The score

was the lowest on the Disappointment scale – but it was also average, which may mean that there was a feeling of disappointment with spousal relations and a sense of freedom and autonomy being limited.

Husbands' and wives' scores were similar. There were no statistically significant differences between these groups on any of the KDM-2 scales. It can therefore be concluded that husbands and wives had a similar level of marital satisfaction. Men's scores were similar on different scales, with the highest score on the Intimacy scale (the need to build relations based on closeness, trust, and openness and willingness to work on the relationship) and the lowest score on the Self-Fulfillment scale (the possibility of fulfilling oneself, one's goals, and one's system of values). In the case of women, the score was the highest on the Similarity scale (similar views on the development of the relationship, similar values and goals) and the lowest on the Disappointment scale.

The results summarized in Table 7 indicate that spouses residing in rural areas report a slightly higher level of marital satisfaction compared to those living in urban areas. Minor differences between the groups were observed in the overall score as well as in the self-fulfillment and disappointment subscales – where spouses from urban areas scored higher. However, these differences are not statistically significant.

Male respondents' scores on the scales measuring marital satisfaction were slightly higher in the subgroup living in rural settings, but the differences between the groups turned out to be statistically non-significant (Table 8).

Table 6. Differences between male and female subgroups in terms of marital satisfaction

KDM-2 scale	Total sample				Men				Women				U	p
	raw scores		sten scores		raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD		
Intimacy	30.7	6.33	5.58	2.2	30.6	6.49	5.57	2.3	30.7	6.17	5.6	2.09	8540	0.947
Self-fulfill- ment	27.3	4.37	5.32	1.81	27.3	4.45	5.29	1.98	27.2	4.29	5.35	1.62	8554	0.965
Similarity	27.1	5.27	5.66	2.22	27.0	5.48	5.54	2.24	27.2	5.05	5.77	2.19	8609	0.963
Disappoint- ment	22.5	9.21	5.3	2.29	22.3	8.99	5.55	2.35	22.7	9.43	5.32	2.32	8736	0.800
Total score	122.58	21.6	5.46	2.13	122.74	21.88	5.48	2.21	122.42	21.38	5.51	2.05	8534	0.940

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

Slight differences between wives living in rural and urban settings were found in scores on the Self-fulfillment and Disappointment scales. Women from towns and cities reported a lower level of marital

self-fulfillment and a higher level of marital disappointment – indicating a stronger sense that marriage limited their freedom and autonomy. However, these differences are not statistically significant (Table 9).

Table 7. Differences in marital satisfaction between subgroups of participants residing in rural and urban areas

KDM-2 scale	Spouses from rural settings				Spouses from urban settings				U	p
	raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD		
Intimacy	30.93	5.42	5.59	1.98	30.35	7.12	5.57	2.40	8699	0.843
Self-fulfillment	27.71	3.66	5.34	1.61	26.82	4.96	5.29	2.00	8077	0.411
Similarity	27.46	4.29	5.72	1.93	26.69	6.09	5.59	2.47	8408	0.780
Disappointment	21.43	7.85	5.38	2.08	23.66	10.30	5.49	2.42	9262	0.264
Total score	124.75	18.10	5.51	1.9	120.34	24.56	5.48	2.32	8078	0.414

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

Table 8. Differences in marital satisfaction between subgroups of men residing in rural and urban areas

KDM-2 scale	Men from rural settings				Men from urban settings				U	p
	raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD		
Intimacy	31.07	5.61	5.58	2.13	30.20	7.26	5.56	2.46	2131	0.950
Self-fulfillment	27.68	3.66	5.32	1.77	26.98	5.12	5.25	2.18	2111	0.877
Similarity	27.67	4.39	5.73	2.05	26.29	6.35	5.34	2.39	1948	0.365
Disappointment	21.38	7.69	5.48	2.04	23.29	10.07	5.62	2.31	2261	0.591
Total score	125.27	18.05	5.53	1.99	120.09	25.01	5.44	2.34	1975	0.435

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.

Table 9. Differences in marital satisfaction between subgroups of women residing in rural and urban areas

KDM-2 scale	Women from rural settings				Women from urban settings				U	p
	raw scores		sten scores		raw scores		sten scores			
	M	SD	M	SD	M	SD	M	SD		
Intimacy	30.80	5.22	5.61	1.82	30.51	6.99	5.58	2.34	2218	0.738
Self-fulfillment	27.73	3.66	5.36	1.42	26.66	4.78	5.34	1.81	1921	0.300
Similarity	27.26	4.17	5.71	1.79	27.08	5.81	5.83	2.53	2259	0.600
Disappointment	21.48	8.02	5.27	2.11	24.01	10.51	5.36	2.52	2372	0.296
Total score	124.23	18.14	5.49	1.79	120.58	24.11	5.53	2.30	2072	0.737

Legend: U – Mann-Whitney U test; p – significance level; M – arithmetic mean; SD – standard deviation.



#### 4.3. Relationships between attachment styles and marital satisfaction

To determine the relationships between the variables, we computed *rho-Spearman's* correlation coefficients, both for the total sample and for the groups distinguished according to gender and place of residence (Table 10).

The analysis of correlation coefficients revealed relatively strong and highly significant positive associations of secure spousal attachment style with general marital satisfaction and with intimacy and similarity scores, its weaker positive association with the self-fulfillment score, and its negative association with disappointment score (the more secure the spousal attachment, the lower the marital disappointment). Also the avoidant style was significantly negatively correlated with marital satisfaction total score and with the scores on intimacy, similarity, and self-fulfillment as well as positively correlated with disappointment score. Weaker associations were found in the case of anxious-ambivalent style: with overall marital satisfaction and intimacy and similarity scores (positive) and with disappointment (negative).

In the male group, we found significant correlations of secure and avoidant spousal attachment styles with marital satisfaction scales and overall score on that satisfaction (Table 11). The strongest correlations were those of secure style with overall marital satisfaction score ( $\rho = .661$ ;  $p < .001$ ) and with intimacy score ( $\rho = .616$ ,  $p < .001$ ). These correlations were positive, which means the more secure the spousal attachment, the higher the general marital satisfaction and the sense of intimacy in marriage. We also found a negative correlation between secure style and disappointment (the more secure the spousal attachment, the less disappointment there was with the marital relationship). Also avoidant style correlated with disappointment, but in this case the correlation was positive ( $\rho = .623$ ,  $p < .001$ ). The remaining correlations of that style with marital satisfaction scales were negative: the higher the avoidance score, the lower the scores on the Intimacy, Similarity, and Self-fulfillment scales and the lower the overall level of marital satisfaction. Only two weak correlations were found in the case of anxious-ambivalent style – a positive correlation with disappointment score and a negative correlation with marital satisfaction overall score.

Table 10. Correlations between attachment styles and marital satisfaction scales for the total sample

Attachment style	KDM-2 scale				
	Intimacy	Self-fulfillment	Similarity	Disappointment	Total score
Secure	0.665***	0.377***	0.575***	-0.539***	0.676***
Anxious-ambivalent	-0.219**	-0.032	-0.183*	0.352**	-0.208*
Avoidant	-0.498***	-0.217**	-0.415***	0.634***	-0.551***

Note. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 11. Correlations between attachment styles and marital satisfaction scales in male and female subgroups

Scale	Men					Women				
	I	S	P	R	WO	I	S	P	R	WO
SB	0.616***	0.392***	0.534***	-0.634***	0.616***	0.679***	0.282***	0.564***	-0.631***	0.658***
SLA	-0.270**	-0.026	-0.263**	0.289***	-0.270**	-0.310***	-0.032	-0.257**	0.356***	-0.289***
SU	-0.527***	-0.311***	-0.470***	0.623***	-0.527***	-0.606***	-0.232**	-0.489***	0.618***	-0.612***

Legend: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ ; SB – secure attachment style; SLA – anxious-ambivalent attachment style; SU – avoidant attachment style; I – intimacy; S – self-fulfillment; P – similarity; R – disappointment; WO – overall marital satisfaction score.

Table 12. Correlation coefficients between attachment styles and marital satisfaction scales in subgroups of participants residing in rural and urban areas

Scale	Participants residing in rural areas					Participants residing in urban areas				
	I	S	P	R	WO	I	S	P	R	WO
SB	0.575***	0.331***	0.494***	-0.593***	0.617***	0.704***	0.342***	0.586**	-0.632***	0.682***
SLA	-0.223*	0.029	-0.190*	0.322***	-0.261**	-0.323***	-0.055	-0.289***	0.322***	-0.294***
SU	-0.548***	-0.238**	-0.436***	0.641***	-0.614***	-0.594***	-0.298***	-0.516***	0.594***	-0.636***

Legend: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ; SB – secure attachment style; SLA – anxious-ambivalent attachment style; SU – avoidant attachment style; I – intimacy; S – self-fulfillment; P – similarity; R – disappointment; WO – overall marital satisfaction score.

In the female group, more significant and strong correlations can be observed between attachment styles and marital satisfaction. As in the case of men, the strongest correlations were found between secure spousal attachment and intimacy score ( $\rho = .679$ ,  $p < .001$ ), overall score ( $\rho = .658$ ,  $p < .001$ ), and disappointment ( $\rho = -.631$ ,  $p < .001$ ) – in the last case, the correlation was negative, indicating an inversely proportional relationship between the variables. The correlation with similarity score was not much weaker. Similar correlation coefficients were observed in the case of avoidant style, which correlated positively with disappointment and negatively with the remaining marital satisfaction scales and with marital satisfaction overall score. Also in the case of anxious-ambivalent style there were weaker but statistically significant associations with intimacy, similarity, and disappointment scores and with marital satisfaction total score.

Among respondents living in rural settings, correlation analysis also revealed relatively strong statistically significant correlations of secure and avoidant styles with marital satisfaction scales and with marital satisfaction overall score. The strongest correlation was found between avoidant style and disappointment ( $\rho = .641$ ,  $p < .001$ ), and it was a positive one, which means the higher the score on avoidance, the higher the level of marital disappointment. There was a relatively strong negative correlation between avoidant style and overall marital satisfaction (the higher the score on avoidant style, the higher the level of marital satisfaction) and a positive correlation between secure style score and overall marital satisfaction. The fewest statistically significant correlations were found between anxious-ambivalent style and marital satisfaction scales

– only disappointment was correlated with this style, and in the case of overall marital satisfaction score there was a weak negative correlation.

In the case of respondents living in urban settings, the relationships were the strongest between secure style and intimacy as well as marital satisfaction total score. Significant relationships were also found between all marital satisfaction scales and secure and avoidant styles. Interestingly, in this group, also anxious-ambivalent style showed significant though rather weak correlations with the Intimacy and Similarity scales (negative correlations), with the Disappointment scale (positive correlation), and with marital satisfaction total score (Table 12).

## 5. Discussion of results

Mother-child attachment styles are a model that is subsequently used in adulthood for all interpersonal relations, including the close ones in marriage. Naturally, the secure, anxious-ambivalent, or avoidant style manifesting itself in relations between spouses is not an exact copy of the childhood pattern of attachment to the caregiver, but it constitutes the foundation and the starting point for adult relationships. It may therefore have a significant impact on the quality of those relationships and the perceived marital satisfaction resulting from their quality. This point of view contributed to the search for associations between attachment styles and marital satisfaction.

The conducted study of married couples did not reveal any differences between men and women, nor between spouses residing in rural and urban areas, in terms of the examined attachment styles or the

specific dimensions of marital satisfaction. Therefore, the hypotheses formulated in the methodological section that predicted such differences were not confirmed. However, the remaining hypotheses regarding the relationships between attachment styles and marital satisfaction – both the overall result and the dimensions of intimacy, self-actualization, similarity, and disappointment – were largely supported.

The collected results indicate that a secure attachment style to one's spouse is associated with a high level of marital satisfaction. In this kind of secure relationship, men and women give each other trust, honesty, and openness. They build an intimate relationship based on love that is worth caring for. Such a style protects spouses against disappointment and behaviors that lead to the breakdown of their marriage – unlike an insecure avoidant style, in the case of which the associations are opposite. The latter style suggests much lower marital satisfaction, limited trust in the partner, incompatibility, conflictive tendencies, and considerable marital disappointment. Moreover, in respondents living in urban settings the secure style primarily builds intimacy between the spouses, whereas in respondents living in the countryside it was the avoidant style that was more significant, being particularly strongly associated with marital disappointment – a sense of failure in life caused by marriage, interpreting marriage as a limitation of autonomy, and avoiding each other. Khaled Bedair, Eid Abo Hamza, and Samuel Gladding (2020) also found a link between secure attachment and marital satisfaction. Similar findings were yielded by research conducted in Asian (Huang et al., 2020), Arab (Amani & Khosroshahi, 2020), Indian (Rosalina et al., 2020), and South American cultures (Costa & Mosmann, 2020).

Interestingly, the results of our study indicate that marital satisfaction shows the weakest correlations with the anxious-ambivalent attachment style. In both the male and female subgroups, as well as among participants residing in rural and urban areas, negative correlations were observed between this attachment style and the overall marital satisfaction score, as well as the intimacy and similarity scales. Additionally, a positive correlation was found between the anxious-ambivalent style and the dis-

appointment scale. However, this attachment style did not show statistically significant associations with the self-fulfilment scale.

The conducted study allows for the conclusion that a secure attachment style displayed by spouses is associated with a higher level of relationship satisfaction, while insecure attachment styles, particularly the avoidant style, are clearly linked to significantly lower satisfaction. The weakest association between marital satisfaction was observed with the anxious-ambivalent attachment style. A similar relationship was established by Hanna Liberska and Dorota Suwalska (2011), who identified secure attachment as the pattern most strongly associated with satisfying relationships.

## Summary

Attachment theory continues to serve as a rich source of inspiration for a wide spectrum of research, both developmental and those centered on marriage and family, offering a solid foundation for describing and explaining human functioning and interpersonal relationships, including those within the marital context (Suwalska-Barancewicz, 2016b). The present study, conducted among married couples living in both rural and urban areas, revealed no significant differences between these groups in terms of attachment styles toward one's spouse or overall marital satisfaction. However, the findings clearly demonstrated that specific attachment styles within the marital relationship are significantly correlated with levels of marital satisfaction. The associations between attachment styles and marital satisfaction described in this article require further empirical validation, employing diverse research instruments and involving a broader and more varied sample. In particular, the role of the anxious-ambivalent attachment style as a model for adult marital relationships remains ambiguous, pointing to the necessity of identifying potential mediators of these associations.

In conclusion, it is also important to acknowledge a limitation of the present study related to the use of a self-report instrument, which explicitly refers to attachment categories. Although such tools are widely used, prior research (e.g., Gallo, Smith, & Ruiz,

2003; Stein et al., 2002) suggests that a dimensional approach may offer a more nuanced depiction of adult attachment. Considering this, future research would benefit from incorporating instruments that

assess attachment along dimensional scales, thereby enhancing measurement precision and allowing for broader cross-cultural comparisons with studies conducted in other countries.

## Bibliography

- Abele, A., Wojciszke, B. (2018). *Agency and Communion in Social Psychology*. London: Routledge.
- Adamczyk, M. (2016). Style przywiązania a psychospołeczne funkcjonowanie młodzieży w oparciu o studia przypadków [Attachment styles and adolescents' psychosocial functioning: Case studies]. *Psychoterapia*, 3(173), 89-102.
- Ainsworth, M.D.S., Blehar, M.C., Waters, E., Wall, S.N. (2015). *Patters of attachment: A psychology study of the strange situation*. New York-London: Routledge.
- Amani, R., & Khosroshahi, A.S. (2020). The structural model of marital quality based on secure attachment style through the mediating role of self-compassion, resilience, and perspective-taking. *The American Journal of Family Therapy*, 49(1), 16-36. <https://doi.org/10.1080/01926187.2020.1813653>
- Bedair, K., Hamza, E.A., & Gladding, S.T. (2020). Attachment style, marital satisfaction, and mutual support attachment style in Qatar. *The Family Journal*, 28(3), 329-336. <https://doi.org/10.1177/1066480720934377>
- Bowlby, J.A. (2016). *Przywiązanie* [Attachment]. Wydawnictwo Naukowe PWN.
- Braun-Gałkowska, M. (1992). *Psychologiczna analiza systemów rodzinnych osób zadowolonych i niezadowolonych z małżeństwa* [Psychological analysis of the family systems of people satisfied and dissatisfied with marriage]. Towarzystwo Naukowe KUL.
- Bukalski, S. (2013). *Style przywiązaniowe nupturientów oraz inne czynniki psychologiczne jako predyktory jakości narzeczeństwa* [Attachment styles of the betrothed and other psychological factors as predictors of the quality of the engagement]. Volumina.pl Daniel Krzanowski.
- Byra, S., Parchomiuk, M. (2015). Przywiązanie a satysfakcja małżeńska współmałżonków osób z niepełnosprawnością ruchową [Attachment and marital satisfaction of spouses of individuals with physical disabilities]. *Studia nad Rodziną*, 37(2), 199-220. <http://dx.doi.org/10.21697/snr.2015.37.2.10>
- Chrobaczynska, B. (2018). *Styl przywiązania a charakter relacji w związku małżeńskim* [Attachment style and the character of the marital relationship] (Master's thesis, Jagiellonian University, Kraków).
- Costa, C.B., & Mosmann, C.P. (2020). Aspects of the marital relationship that characterize secure and insecure attachment in men and women. *Estudos de Psicologia* (Campinas), 37, e190045. <https://doi.org/10.1590/1982-0275202037e190045>
- Czub, M. (2003). Znaczenie wczesnych więzi społecznych dla rozwoju emocjonalnego dziecka [The significance of early social bonds for the child's emotional development]. *Forum Oświatowe*, 2(29), 31-49.
- Dakowicz, A. (2014). *Powodzenie małżeństwa: uwarunkowania psychologiczne w perspektywie transgresyjnego modelu Józefa Koźmieleckiego* [Marital success: Psychological determinants in the perspective of Józef Koźmielecki's transgressive model]. Wydawnictwo Uniwersyteckie Trans Humana.
- Dakowicz, L., & Dakowicz, A. (2021). The quality of marital communication of spouses with a higher and lower level of satisfaction with their relationship. *Quarterly Journal Fides et Ratio*, 2(46), 129-141. <https://doi.org/10.34766/fetr.v46i2.797>
- Dobrowolska, M., Groyecka-Bernard, A., Sorokowski, P., Randall, A.K., & Hilpert, P. (2020). Global perspective on marital satisfaction. *Sustainability*, 12, 1-15. <https://doi.org/10.3390/su12218817>
- Doniec, R. (2001). *Rodzina wielkiego miasta: przemiany społeczno-moralne w świadomości trzech pokoleń* [The family of the big city: sociomoral transformations in the consciousness of three generations]. Wydawnictwo Uniwersytetu Jagiellońskiego.
- Fotovate, L., & Khezri, Z. (2018). Important Factors in Marital Success and Satisfaction and Marital Communication. *European Academic Research*, 6(9), 5394-5412.
- Gallo, L.C., Smith, T.W., & Ruiz, J.M. (2003). An interpersonal analysis of adult attachment style: Circumplex descriptions, recalled developmental experiences, selfrepresentations, and interpersonal functioning in adulthood. *Journal of Personality*, 71(2), 141-181. <https://doi.org/10.1111/1467-6494.7102003>
- Goldberg, S. (2000). *Attachment and development*. Arnold, a Member of the Hodder Headline Group.
- Hazan, C., & Shaver, P.R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511-524. <https://doi.org/10.1037/0022-3514.52.3.511>
- Huang, Ch-Y., Sirikantraporn, S., Pichayayothin, N.B., & Turner-Cobb, J.M. (2020). Parental attachment, adult-child romantic attachment, and marital satisfaction: An examination of cultural context in Taiwanese and Thai heterosexual couples. *International Journal of Environmental Research and Public Health*, 17(3), 692. <https://doi.org/10.3390/ijerph17030692>
- Jarnecke, A.M., & South, S.C. (2013). Attachment orientations as mediators in the intergenerational transmission of marital satisfaction. *Journal of Family Psychology*, 27(4), 550-559. <https://doi.org/10.1037/a0033340>
- Karakose, S. (2022). Marital satisfaction and depression in older adults: A literature review. *Journal of Aging and Long-Term Care*, 5(1), 7-16.
- Karbowa-Płowens, M. (2019). Rozwój i charakterystyka więzi przywiązaniowej w relacji romantycznej [The development and characteristics of the attachment bond in romantic relationships]. *Psychologia Rozwojowa*, 24(4), 83-95. <https://doi.org/10.4467/20843879PR.19.024.11730>
- Kaźmierczak, M. (2015). Couple empathy – the mediator of attachment styles for partners adjusting to parenthood. *Journal of Reproductive and Infant Psychology*, 33(1), 15-27. <https://doi.org/10.1080/02646838.2014.974148>
- Klohn, E.C., & Bera, S. (1998). Behavioral and experiential patterns of avoidantly and securely attached women across adulthood: A 31-year longitudinal perspective. *Journal of Personality and Social Psychology*, 74(1), 211-223. <https://doi.org/10.1037/0022-3514.74.1.211>
- Komorowska-Pudło, M. (2016). The attachment style and stress coping strategies in adult men and women. *Polskie Forum Psychologiczne*, 4, 573-588. <https://doi.org/10.14656/PFP20160405>

- Krok, D. (2015). Satysfakcja ze związku małżeńskiego a poziom hedonistycznego i eudajmonistycznego dobrostanu psychicznego małżonków [Marital satisfaction and the levels of hedonic and eudaimonic psychological well-being in spouses]. *Family Forum*, 5, 141-160.
- Liberska, H., & Suwalska, D. (2011). Styl przywiązania a relacje partnerskie we wczesnej dorosłości [Attachment style and partner relationships in early adulthood]. *Psychologia Rozwojowa*, 16(1), 25-39. <https://doi.org/10.4467/20843879PR.11.002.0175>
- Malina, A. (2011). Styl przywiązania młodych kobiet a ich satysfakcja z życia w różnych fazach rozwoju rodziny [The attachment style of young women and their life satisfaction in different stages of family development]. *Psychologia Rozwojowa*, 16(1), 41-55. <https://doi.org/10.4467/20843879PR.11.003.0176>
- Malina, A., & Suwalska-Barancewicz, D. (2017). Wzajemne przywiązanie partnerów i wsparcie a ich satysfakcja z życia na różnych etapach rozwoju rodziny [Mutual attachment and support and their life satisfaction at different stages of family development]. *Psychologia Rozwojowa*, 22(2), 55-69. <https://doi.org/10.4467/20843879PR.17.010.7042>
- Marchwicki, P. (2004). Style przywiązania a postawy rodzicielskie. Doniesienie z badań [Attachment styles and parenting attitudes. Research report]. *Roczniki Psychologiczne*, 7(2), 81-103. <https://ojs.tnkul.pl/index.php/rpsych>
- Marchwicki, P. (2006). Teoria przywiązania J. Bowlby'ego [J. Bowlby's attachment theory]. *Seminare. Poszukiwania Naukowe*, 23, 365-383.
- Omoboye, M., Eneh, N.E., Titor-Addingi, M.C. (2024). Communication patterns and marital satisfaction: A review of English language discourse in family counseling. *World Journal of Advanced Research and Reviews*, 21(02), 1883-1891. <https://doi.org/10.30574/wjarr.2024.21.2.0634>
- Plopa, M. (2011). *Psychologia rodziny: teoria i badania* [Family psychology: Theory and research]. Oficyna Wydawnicza „Impuls”.
- Plopa, M. (2008). *Węzi w małżeństwie i rodzinie. Metody badań*. [Bonds in marriage and family: Research methods]. Oficyna Wydawnicza „Impuls”.
- Plopa, M., & Rostowski, J. (2008). Kwestionariusz Dobranego Małżeństwa (KDM-2) [The Well-Matched Marriage Questionnaire (KDM-2)]. (In:) M. Plopa, *Węzi w małżeństwie i rodzinie. Metody badań* [Bonds in marriage and family: Research methods], 49-93. Oficyna Wydawnicza „Impuls”.
- Plopa, M. (2014). Węzi małżeńskie i rodzinne w perspektywie teorii przywiązania [Marriage and family ties in the perspective of attachment theory]. (In:) I. Janicka, H. Liberska (eds.). *Psychologia rodziny* [Family psychology], 141-166. Polskie Wydawnictwo Naukowe.
- Rosalina, G., Tiatri, S., & Veraul, R. (2020). Correlation between internal working model of attachment and marital satisfaction of young adult. *Advances in Social Science, Education and Humanities Research*, 439, 662-670. <https://doi.org/10.2991/assehr.k.200515.109>
- Rostowski, J. (2003). Style przywiązania a kształtowanie związków interpersonalnych w rodzinie [Attachment styles and the development of interpersonal relationships in the family]. (In:) I. Janicka & T. Rostowska (eds.), *Psychologia w służbie rodziny* [Psychology in the service of the family], 19-31. Wydawnictwo Uniwersytetu Łódzkiego.
- Rostowski, J. (2009). Współczesne przemiany rozumienia związku małżeńskiego [Modern changes in the understanding of marriage]. (In:) T. Rostowska (ed.). *Psychologia rodziny. Małżeństwo i rodzina wobec współczesnych wyzwań* [Family psychology. Marriage and family in the face of contemporary challenges], 15-46. Warszawa: Difin SA.
- Ryś, M. (2004). Quality of the marital relationship, level of partner closeness, and conflict resolution strategies. *Studia Psychologica*, 4, 57-68.
- Ryś, M. (2014). *Rodzina z problemem alkoholowym. Metody badań relacji interpersonalnych w dysfunkcyjnych systemach rodzinnych* [Family with an alcohol problem: Methods for research on interpersonal relations in dysfunctional family systems]. Mazowieckie Centrum Polityki Społecznej.
- Spanier, G.B., & Lewis, R.A. (1980). Marital quality: A review of the seventies. *Journal of the Marriage and the Family*, 42(4), 825-839. <https://doi.org/10.2307/351827>
- Stein, H., Koontz, A.D., Fonagy, P., Allen, J.G., Fultz, J., Brethour, J.R., Allen, D., & Evans, R.B. (2002). Adult attachment: What are the underlying dimensions? *Psychology and Psychotherapy: Theory, Research and Practice*, 75(1), 77-91. <https://doi.org/10.1348/147608302169562>
- Suwalska-Barancewicz D. (2016). *Jakość bliskich związków interpersonalnych. Znaczenie przywiązania i zależności w budowaniu trwałych relacji* [The quality of close interpersonal relationships: the role of attachment and dependency in building lasting bonds]. Bydgoszcz: Wydawnictwo UKW.
- Suwalska-Barancewicz, D. (2016a). Przywiązanie w dorosłości a jakość funkcjonowania w bliskim związku emocjonalnym w świetle wybranych wyników badań [Adult attachment and the quality of functioning in close emotional relationships in light of selected research findings]. *Psychologia Rozwojowa*, 21(2), 41-52. <https://doi.org/10.4467/20843879PR.16.009.5087>
- Suwalska-Barancewicz, D., & Malina, A. (2018). Samoocena i styl przywiązania jako predyktory oceny zachowań komunikacyjnych własnych oraz partnera [Self-esteem and attachment style as predictors of communication behaviors of self and partner]. *Psychologia Rozwojowa*, 23(3), 65-82. <https://doi.org/10.4467/20843879PR.18.017.9358>
- Taggart, T.C., Bannon, S.M., & Hammett, J.F. (2019). Personality traits moderate the association between conflict resolution and subsequent relationship satisfaction in dating couples. *Personality and Individual Differences*, 139, 281-289. <https://doi.org/10.1016/j.paid.2018.11.036>
- Taylor, Ch. (2019). *Zaburzenia przywiązania u dzieci i młodzieży* [A practical guide to caring for children and teenagers with attachment difficulties]. GWP.
- Wańczyk-Welc, A., & Marmola, M. (2020). The relations in the family of origin and the marital satisfaction among parents of preschool children. *Quarterly Journal Fides et Ratio*, 41(1), 206-223. <https://doi.org/10.34766/fetr.v41i1.229>
- Weryszko, M. (2020). Interpersonal communication as the essence of social interaction. *Quarterly Journal Fides et Ratio*, 42(2), 253-268. <https://doi.org/10.34766/fetr.v42i2.287>
- Włodarczyk, E. (2016). Znaczenie wczesnodziecięcego przywiązania w diadzie 'matka/opiekun-dziecko' [The significance of early childhood attachment in the 'mother/caregiver-child' dyad]. *Studia Edukacyjne*, 39, 377-394. <https://doi.org/10.14746/se.2016.39.21>
- Wojciszke, B. (2018). *Psychologia miłości* [The psychology of love]. Gdańskie Wydawnictwo Psychologiczne.
- Zadeh, A.N., & Tabrizi, A.M. (2014). Study predicting marriage satisfaction based on emotional intelligence, spiritual intelligence and self-efficiency. *Asian Journal of Medical and Pharmaceutical Research*, 4(4), 160-166.
- Zarrin, S.A., & Taheri, M. (2020). The prediction of marital satisfaction based on communication patterns, attachment styles, and psychological hardness. *Family Counseling and Psychotherapy*, 10(1), 179-208. <https://doi.org/10.22034/fcp.2020.61742>

# Parental attitudes and screen time in early primary school children: The role of digital prevention<sup>1</sup>

<https://doi.org/10.34766/47e79t34>

Malwina Dankiewicz<sup>a</sup>✉, Agnieszka Kotowicz<sup>b</sup>

<sup>a</sup> Malwina Dankiewicz, <https://orcid.org/0000-0002-6511-7686>,

Institute of Psychology, University of the National Education Commission in Kraków, Poland

<sup>b</sup> Agnieszka Kotowicz, <https://orcid.org/0009-0005-3845-4010>, University of Rzeszów, Poland

✉ Corresponding author: [malwina.dankiewicz@up.krakow.pl](mailto:malwina.dankiewicz@up.krakow.pl)

**Abstract:** In the context of the increasing digitalization of society, the ways in which early primary school children spend their time are undergoing significant transformation, necessitating a thorough analysis of its consequences. Parents play a crucial role in this process by mediating their children's interactions with digital technologies, which has a substantial impact on their cognitive, emotional, and social development. This article presents a detailed examination of how various parenting practices, including screen time monitoring, shape children's engagement with digital media. The aim of this study was to explore the relationship between parental attitudes and children's screen exposure time, as well as the identification of preventive measures most frequently undertaken by parents. The study involved 173 participants aged 29 to 44 years ( $M = 36.56$ ;  $SD = 3.16$ ;  $Me = 37$ ), including 127 mothers and 46 fathers of children aged 7 to 10 years from Podkarpackie Voivodeship in Poland. The research employed the *Parental Attitudes Scale* (Skala Postaw Rodzicielskich, SPR) by Mieczysław Płopa (2008) and a self-constructed questionnaire aimed at collecting data on the number and type of preventive actions taken by parents in the context of screen education and children's screen time. The findings indicate that fathers' autonomous attitudes are negatively correlated with children's screen time – less autonomy granted by fathers is associated with longer screen exposure. Furthermore, the number of preventive actions taken by mothers is negatively correlated with overprotective and inconsistent parental attitudes, suggesting that more protective and inconsistent mothers engage in preventive measures less frequently. Conversely, among fathers, an accepting attitude and support for the child's autonomy (an autonomous attitude) are linked to greater involvement in preventive actions. The qualitative analysis of parental responses suggested that their efforts focus primarily on controlling screen time, highlighting the need for further education and support in digital mediation. The study's conclusions emphasize the importance of parental mediation, media literacy education, and the implementation of effective preventive strategies to minimize digital risks.

**Keywords:** digital prevention, media literacy education, parental attitudes, parental mediation, screen time

## Introduction

The continued digitalization of contemporary society is profoundly altering the patterns of time use among early school-aged children, particularly in relation to their engagement in daily activities. This transformation calls for a comprehensive, multidimensional analysis of its implications across the domains of developmental psychology, pedagogy, sociology, and neuroscience. Recent research underscores the long-term consequences of children's interactions with digital technologies, encompassing both the development of cognitive abilities and the acquisition of social and emotional

competencies. Emerging evidence further highlights the importance of individual differences – including child temperament, family dynamics, and parental mediation strategies – in shaping patterns of digital media engagement. Parental concerns predominantly centre around the amount of time children spend on screen-based activities (Canadian Paediatric Society, 2019; Christakis, Hale, 2025; Globokar, 2018; Hassinger-Das, Brennan, Dore, Golinkoff, Hirsh-Pasek, 2020; Kardefelt-Winther, 2017). A significant number of parents attempt to regulate their children's screen time and voice

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_dank.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_dank.pdf)



concerns about potential negative consequences, especially with regard to ocular health (Internet Matters, 2018; Ofcom, 2023).

However, a growing body of research emphasizes that parental mediation – defined as “any strategy parents use to control, supervise or interpret media content for children” (Warren, 2001, p. 212) – should extend beyond time restrictions alone. There is growing recognition that the quality of children’s interactions with digital media, alongside the proactive involvement of parents as guides and facilitators, constitutes a crucial influence on children’s digital experiences. Several studies question the efficacy of strict screen time restrictions, advocating instead for a more nuanced, context-sensitive approach that emphasizes access to developmentally appropriate educational content and encourages shared media engagement between parents and children (Przybylski, Weinstein, 2017). The establishment of explicit household guidelines for media use – such as setting daily screen time limits, implementing device-free routines prior to bedtime, and monitoring media content – continues to represent a key element of effective parental mediation (Uhls, 2016). However, evidence suggests that optimal outcomes are achieved when parents take an active role in their children’s digital experiences, co-using devices and providing guidance within the media landscape (Canadian Paediatric Society, 2019; Pyżalski, Klichowski, Przybyła, 2014). Modelling healthy technology use and fostering self-regulation and media literacy in children have therefore become central aims of contemporary digital parenting practices (Clark, 2011; Valcke, Bonte, De Wever, Rots, 2010). Equally vital is the development of parental awareness concerning the influence of digital media on everyday life, alongside a sustained commitment to continuous learning within this rapidly evolving landscape (Bębas, Jędrzejko, Kasprzak, Szwedzik, Taper, 2017). Moreover, researchers emphasize the importance of promoting a balanced engagement between screen-based activities and face-to-face social interactions, the latter being essential for fostering healthy social-emotional development (Uhls, 2016).

In recent years, there has been a growing scholarly focus on *co-use mediation* – a form of parental involvement defined by active engagement in chil-

dren’s digital activities. In this approach, parents assist children in interpreting media content and foster the development of critical thinking and reflective skills (Livingstone, Third, 2017; Sanders, Parent, Forehand, Sullivan, Jones, 2016). In the context of the growing prevalence of remote learning and the widespread availability of screen-based technologies, the development of integrative strategies that combine educational and preventive dimensions of digital parenting has become a pressing imperative (Livingstone, Blum-Ross, 2020).

## **1. The role of parents in shaping children’s screen media habits**

The existing body of literature consistently highlights parents as central agents in shaping and mediating children’s interactions with digital technologies. By setting clear usage guidelines and actively engaging with digital technologies alongside their children, parents can significantly influence various dimensions of children’s development, including cognitive, emotional, and social domains (Ofcom, 2023). Media psychology research distinguishes among several regulatory strategies employed by parents, including a restrictive model (limiting access to digital technologies via time limits and content filtering), a monitoring model (tracking children’s online activities and reviewing browsing histories), and an educational model (discussing online risks and teaching safe and responsible Internet use) (Uhls, 2016). Parental influence on children’s technology use encompasses not only screen time management but also the quality of media content and the nature of children’s media interactions (Canadian Paediatric Society, 2019). Scholars emphasize that parental attention should extend beyond the mere duration of media exposure to include the types of content engaged with and the cognitive and emotional processes involved in interpreting such content (Przybylski, Weinstein, 2017).

Recent studies further underscore the importance of dynamic parental involvement in children’s use of digital technologies, highlighting the value of modelling balanced screen-use behaviours and fostering positive digital habits (Saltuk, Erciyes, 2020). An in-

creasing body of research advocates for interactive mediation strategies, wherein parents assume the role of co-participants in their children's digital experiences, rather than functioning solely as gatekeepers regulating media access. In this context, cultivating children's critical thinking skills and promoting intentional and responsible technology use are identified as core objectives of contemporary media education (Clark, 2011; Livingstone, Third, 2017; Sanders i in., 2016; Valcke i in., 2010). This issue assumes particular significance in light of shifting family dynamics and the growing role of remote education, which necessitates the expanded use of screen-based devices in instructional contexts (Livingstone, Blum-Ross, 2020). Accordingly, parental mediation should be understood not solely as a means of shielding children from digital risks, but as a proactive strategy aimed at fostering children's developmental competencies and enhancing their adaptive capacities within an increasingly digitalized environment.

### **1.1. Parental attitudes and digital mediation strategies**

Empirical research highlights substantial variation in parental digital mediation strategies, shaped by factors such as parental educational attainment, socioeconomic status, and access to educational resources. Cultural context and prevailing social norms regarding acceptable levels of children's digital media use also play a significant role (Haddon, Vincent, 2015). Studies indicate that in highly technologized societies, children encounter digital media at an earlier age and exercise greater autonomy in their use, as parents in these contexts often prioritize the development of their children's digital competencies. By contrast, in developing countries – where access to technology, parental digital literacy, and digital competencies are often limited – and within more traditional cultural contexts, restrictive and controlling forms of digital mediation continue to predominate (Livingstone et al., 2017). Comparable patterns were observed by Nikken and Oprea (2018), who investigated variations in parental mediation strategies as a function of socioeconomic status. Their findings suggest that parents from higher socioeconomic backgrounds

are more inclined to encourage children's autonomy and the development of digital competencies, while those from lower socioeconomic strata tend to adopt more controlling strategies.

Mróz and Solecki (2017) investigated the relationship between parental attitudes and adolescents' engagement in entertainment-related, risky, and social online activities. Their analysis revealed that lower levels of autonomy granted by parents and greater parental control were associated with higher frequencies of entertainment-oriented Internet use among adolescents. Moreover, maternal control was found to be positively associated with adolescents' involvement in risky online behaviour (e.g. online gambling), as well as with their participation in social activities such as the use of social networking platforms and content commenting. Notably, parental control by both parents was linked to higher scores on Internet addiction measures.

Further evidence comes from Hsieh et al. (2018), who explored multidimensional parenting practices and their association with problematic media use. The authors observed significant correlations between certain parenting practices and Internet addiction in children. Specifically, parental excessive control – characterized by excessive supervision and restrictions on Internet use – was positively associated with higher levels of online addiction. These findings suggest that increased parental control may paradoxically elevate the risk of Internet overuse, undermining its intended protective function. The authors propose that stringent restrictions and heightened surveillance may foster frustration and oppositional behaviour in children, potentially driving them toward escapism within virtual environment.

Van den Eijnden, Spijkerman, Vermulst, van Rooij, and Engels (2010) also examined bidirectional parent-child relationships in the context of compulsive Internet use among adolescents. Their findings highlight the critical role of family dynamics in shaping the emergence and progression of problematic online behaviours. Specifically, negative parent-child relationships – characterized by limited parental support and heightened levels of control – were associated with increased tendencies toward compulsive media use. Conversely, high levels of



Internet use were found to contribute to deteriorating parent-child relationships, creating a reinforcing negative cycle. These results underscore the significance of parental involvement as a key factor in both the prevention and remediation of problematic screen media use during adolescence. Moreover, the authors advocate for prevention programmes that explicitly address family relationship dynamics, emphasizing the promotion of positive parenting styles marked by warmth, support, and understanding, alongside clearly defined boundaries – rather than excessive control. Accordingly, family relationships and parenting style are frequently cited in psychological research as influential factors shaping children's and adolescents' online behaviours.

### **1.2. The role of parental digital prevention**

In an era characterized by the pervasive availability of digital media to children, the parental role in cultivating healthy technology use habits has gained heightened significance. Parental digital prevention encompasses a range of strategies aimed not only to safeguard children from online risks, but also to facilitate the development of their digital competencies. Research indicates that effective interventions in this domain should integrate elements of educational mediation, parental control, and joint participation in screen-based activities (Livingstone, Blum-Ross, 2020).

A substantial body of research on parental mediation – understood as the diverse strategies parents employ to regulate their children's digital media use – investigates how specific approaches, such as restrictive measures, co-viewing, and content-related discussions, impact children's screen time and exposure to associated risks. Numerous studies have demonstrated a relationship between children's screen time and the preventive actions undertaken by parents. For instance, Livingstone (2009) found that prolonged use of screen devices by young children under parental supervision may lead to a decreased parental awareness of potential online risks, as media use becomes normalized within the context of constant monitoring. Conversely, heightened parental perception of online risks tends to be associated with an increase in preventive interventions. Sim-

ilarly, Valkenburg, Piotrowski, Hermanns, and de Leeuw (2013) demonstrated that parents who adopt restrictive mediation practices – actively limiting media access and exercising parental control – exhibit greater awareness of potential risks associated with their children's media use. In a related study, Beyens, Valkenburg, and Piotrowski (2019) examined the developmental trajectory of parental mediation strategies, analysing how these approaches change across early and middle childhood. Their findings suggest that parents who rely more frequently on restrictive or controlling mediation strategies tend to perceive a higher level of potential risks related to children's media use.

Addressing the impact of screen devices on children in early childhood necessitates a multidimensional approach that integrates psychological, social, and educational perspectives. Of particular concern is the growing body of research on the neurobiological effects of intensive early exposure to digital technology, which points to potential alterations in the functioning of the brain's reward systems and mechanisms underlying emotion regulation (Neumann, 2015). Within the context of research on brain neuroplasticity, scholars also emphasize that excessive exposure to audiovisual stimuli may contribute to impairments in attentional regulation, emotional processing, and a diminished capacity for deep information processing (Kardaras, 2018). In this regard, parents' approaches and their ability to consciously manage children's screen time represent key protective factors against the negative consequences of early and prolonged technology use. Particularly harmful effects of excessive screen use may become evident when combined with other factors, such as parental attitudes, the nature of consumed media content, parental modelling of screen-related behaviours, and specific characteristics of both parents and children (Konca, 2022).

Given the rapid pace of technological advancement and the increasing centrality of digital media in children's lives, continued research is imperative to deepen our understanding of how parental strategies shape children's media engagement. It is particularly important to identify which parental attitudes foster the implementation of effective preventive and educational practices, and how these practices impact

children's long-term development. A major challenge in digital prevention lies in striking an appropriate balance between setting boundaries and fostering children's autonomy in their use of screen devices. Excessive parental control may elicit psychological reactance and inadvertently enhance the attractiveness of prohibited content, while the lack of clearly defined guidelines increases the likelihood of unregulated exposure to potentially harmful content (Hsieh et al., 2018). Consequently, it is essential to develop strategies that are tailored to both the child's developmental stage and individual needs, combining protective elements with an educational approach to technology use.

## 2. Methods

The issues discussed above served as inspiration for conducting the research presented in this article. The aim of the study was to analyse the relationships between parental attitudes and both the amount of children's exposure to screen technologies and the number and types of preventive actions undertaken by parents with regard to children's use of screen devices in early school age. The implementation of preventive strategies aimed at mitigating digital risks plays a crucial role in supporting children's cognitive, social, and emotional development from a long-term perspective. In addition, an important aspect of the study was to identify which preventive measures are most commonly employed by parents. Accordingly, the research aimed to gain a deeper understanding of the relationship between parental attitudes and their actual practices in guiding children's screen-related experiences. This study represents an effort to advance knowledge on children's exposure to digital technologies, with particular attention to familial mediation processes and their influence on the development of children's digital competencies.

In the context of the research problem outlined above, one hypothesis and two research questions were formulated:

- Hypothesis: The amount of time a child spends using screen devices is related to the type of parental attitude.

Previous research (Mróz, Solecki, 2017) suggests that a controlling attitude exhibited by both parents is associated with higher scores on Internet addiction tests among children. On the basis of these findings, it may be hypothesized that autonomy-supportive parenting is associated with variations in the duration of children's screen time. More specifically, a reduced degree of autonomy afforded to children appears to be linked with longer periods of screen engagement. Support for this hypothesis can also be found in the studies of van den Eijnden et al. (2010) and Hsieh et al. (2018), which demonstrated that a controlling parenting style is associated with increased screen time in children.

The implementation of preventive actions concerning children's screen use is widely recognized by researchers as an important task for contemporary parents. Many studies have explored the role, primary goals, and target groups of such preventive actions (Livingstone, 2009; Valkenburg et al., 2013; Beyens et al., 2019). However, the literature includes relatively few studies examining the relationship between parental attitudes and the number of preventive actions undertaken by parents to protect children from harmful screen use. Therefore, the study formulated the following research question:

- Research Question 1. Is the number of preventive actions regarding children's use of screen devices related to the type of parental attitude?

To further explore the phenomenon under investigation, a supplementary question was posed:

- Research Question 2. Which preventive actions concerning children's use of screen devices are most frequently undertaken by parents?

Two research tools were employed in the present study:

1. *The Parental Attitudes Scale* (Skala Postaw Rodzicielskich, SPR) by Mieczysław Płopa (2008) consists of 50 statements to which parents respond using a five-point Likert scale. The author of the questionnaire identified six types of parental attitudes. The positive (adaptive) attitudes

include *accepting* and *autonomous*, while the negative (maladaptive) attitudes comprise *rejecting*, *overprotective*, *overdemanding*, and *inconsistent*. The tool demonstrates high reliability indices for both the mother and father versions (Cronbach's  $\alpha$  ranging from 0.75 to 0.88). Its theoretical validity has been supported by factor analysis and demonstrated through significant correlations with other established measurement instruments.

2. A self-constructed questionnaire comprising both closed- and open-ended questions, designed to gather information about the number and types of preventive actions undertaken by parents regarding screen-related education, as well as the amount of time their children spend using screen devices on weekdays and weekends. According to the theoretical definition of attitudes, although individuals may express various beliefs, their actual attitude is reflected in behaviour – that is, in the behavioural component. For this reason, the study incorporated two objective indicators for assessing opportunities and risks related to children's use of screen devices: the amount of time children spend in front of screens, and the preventive actions implemented by parents.

### 3. Characteristics of participants

The study was conducted between September 2022 and March 2023. In the initial phase, data were collected using paper-based questionnaires distributed during parent meetings at small schools in the Podkarpackie Voivodeship. Given the relatively small sample size obtained through this method and the gender imbalance among participants – attributable to the predominance of mothers attending such meetings – the subsequent phase of data collection involved distributing an online version of the questionnaire. The online survey was distributed via school principals from four primary schools in the Podkarpackie region, who shared the questionnaire with parents of children in grades 1-3 using the school's electronic communication system. The study sample comprised parents (127 mothers and 46 fathers) of children aged 7 to 10 years. A total of 173 individuals completed

the questionnaire, with participant ages ranging from 29 to 44 years ( $M = 36.56$ ;  $SD = 3.16$ ;  $Me = 37$ ). The youngest mother was 29 years old, and the oldest was 44 years old ( $M = 36.08$ ;  $SD = 3.26$ ;  $Me = 36$ ). Among the fathers, the youngest was 33 years old and the oldest 44 years old ( $M = 37.91$ ;  $SD = 2.46$ ;  $Me = 37.5$ ). The children of the participating parents were enrolled in either a pre-primary class ("grade 0"; children with deferred compulsory schooling – 1% of the sample) or in primary grades 1-3 (grade 1 – 31% of the sample, grade 2 – 39%, grade 3 – 29%).

### 4. Results

The statistical analysis was conducted using the IBM SPSS software package. Descriptive statistics, the Shapiro-Wilk test, and Spearman's rank-order correlation analysis ( $\rho$ ) were performed. A significance level of  $\alpha = 0.05$  was adopted; however, probability values in the range of  $0.05 < p < 0.1$  were interpreted as indicative of a statistical trend.

In the first step, basic descriptive statistics were calculated for the quantitative variables under study, along with the Shapiro-Wilk test to assess the normality of their distributions (see Table 1). For most of the variables analysed, the Shapiro-Wilk test yielded non-significant results, indicating that the distribution of these variables did not significantly deviate from normality. For variables where the test result was statistically significant, additional verification of the skewness values was performed. If the skewness value fell within the range of  $\pm 2$ , the distribution was considered not substantially asymmetric relative to the mean. The skewness values for most variables fell within this acceptable range. However, due to violations of normality assumptions (most notably the elevated kurtosis value of 24.91 for the maternal acceptance–rejection scale) it was deemed appropriate to employ non-parametric statistical analyses.

To verify Hypothesis H, separate Spearman's  $\rho$  rank correlation analyses were conducted for mothers and fathers to examine the relationship between parental attitudes and the number of hours their child spent using screen devices on weekdays and weekends. For mothers, the analysis results re-

Table 1. Descriptive statistics for mother and father attitudes ( $N = 173$ )

Parental attitudes	<i>M</i>	<i>Me</i>	<i>SD</i>	<i>Sk.</i>	<i>Kurt.</i>	<i>Min.</i>	<i>Maks.</i>	<i>S-W</i>	<i>p</i>
Mother's accepting –rejecting attitude	45.72	47.00	4.60	-3.75	24.91	11.00	50.00	0.85	0.001
Mother's autonomous attitude	34.94	35.00	3.74	-0.94	2.48	18.00	43.00	0.98	0.603
Mother's overprotective attitude	25.49	24.00	8.62	0.49	-0.34	10.00	48.00	0.95	0.050
Mother's overdemanding attitude	26.08	25.00	8.01	0.18	-0.76	11.00	45.00	0.98	0.622
Mother's inconsistent attitude	21.24	19.00	9.00	0.87	0.02	10.00	47.00	0.89	0.000
Father's accepting –rejecting attitude	42.04	42.00	4.59	-0.45	-0.10	31.00	50.00	0.97	0.275
Father's autonomous attitude	37.43	38.00	3.31	0.44	0.14	31.00	46.00	0.97	0.307
Father's overprotective attitude	23.98	23.00	7.09	0.22	-0.74	11.00	40.00	0.97	0.279
Father's overdemanding attitude	30.26	31.00	7.18	0.00	0.39	15.00	49.00	0.97	0.353
Father's inconsistent attitude	25.41	25.00	8.64	0.06	-0.46	11.00	46.00	0.97	0.222

*M* – mean; *Me* – median; *SD* – standard deviation; *Sk.* – skewness; *Kurt.* – kurtosis; *Min* and *Max* – minimum and maximum value of the distribution; *S-W* – Shapiro-Wilk test result; *p* – significance level

vealed no statistically significant correlations. These findings indicate that maternal parental attitudes are not significantly associated with the number of hours children spend using screen devices on either weekdays or weekends. Accordingly, Hypothesis H was not supported in the case of mothers (see Table 2).

In the subsequent phase of the analysis, the relationship between the number of hours children spend using screen devices and paternal parental attitudes was examined. The results showed that the number of hours the child spends on screen devices during the week is significantly correlated with the father's autonomous attitude. This correlation is negative and moderately weak ( $r = -0.292$ ). No statistically significant correlations were found for the remaining variables. In summary, the results suggest that lower levels of autonomy granted by fathers are associated with increased screen time among children on weekdays (see Table 3), thereby providing support for Hypothesis H regarding fathers' attitudes.

The next step was to examine the relationship between fathers' parental attitudes and the number of hours children spend using screens on weekends. The results revealed that the number of hours the child spends on screen devices during the weekend is significantly correlated with the father's autonomous attitude. This correlation is negative and moderate ( $r = -0.320$ ). No statistically significant correlations were found for the remaining variables. In summary,

the results indicate that the less autonomy a child is granted by the father, the more time the child spends using screen devices on weekends (see Table 3), which supports the proposed Hypothesis H with regard to fathers' attitudes.

In the next step, Research Question Q1 was addressed. To this end, a Spearman's rank correlation analysis was conducted to examine the relationship between parental attitudes and the number of preventive measures undertaken with regard to children's use of screen devices. The results indicated that the number of preventive actions taken by fathers was positively correlated with the scales of acceptance and autonomy. Both correlations reached statistical significance: the association with the accepting attitude was weak ( $r = 0.294$ ), while the correlation with the autonomous attitude was moderate in strength ( $r = 0.489$ ). No statistically significant correlations were found for the remaining variables (see Table 4). For mothers, the number of preventive actions correlated negatively and significantly with the overprotection scale ( $r = -0.237$ ), and the inconsistency scale ( $r = -0.304$ ). Both correlations were weak. No statistically significant correlations were found for the remaining variables (see Table 4).

To answer the Research Question Q2, both quantitative and qualitative analyses were conducted on the responses obtained from the survey questionnaire. The results are presented in Table 5.

Table 2. Relationship between the mother's parental attitude and the number of hours the child spends using screen devices on weekdays and weekends ( $N = 127$ , Spearman's  $\rho$ )

Mother's parental attitude	Number of hours the child spends using screen devices	
	on weekdays	on weekends
Accepting – rejecting attitude	-0.018	-0.060
Autonomous attitude	0.094	0.092
Overprotective attitude	0.008	-0.038
Overdemanding attitude	0.072	0.133
Inconsistent attitude	0.135	0.149

Table 3. Relationship between the father's parental attitude and the number of hours the child spends using screen devices on weekdays and weekends ( $N = 46$ , Spearman's  $\rho$ )

Father's parental attitude	Number of hours the child spends using screen devices	
	on weekdays	on weekends
Accepting – rejecting attitude	0.016	0.111
Autonomous attitude	-0.292*	-0.320*
Overprotective attitude	0.095	0.057
Overdemanding attitude	0.063	0.017
Inconsistent attitude	-0.008	0.048

Table 4. Relationship between parental attitudes and the number of preventive actions taken by parents regarding children's use of screen devices ( $N = 173$ , Spearman's  $\rho$ )

Parental attitude	Number of preventive actions taken by	
	mothers ( $n = 127$ )	fathers ( $n = 46$ )
Accepting – rejecting attitude	0.161	0.294*
Autonomous attitude	0.075	0.489*
Overprotective attitude	-0.237*	-0.097
Overdemanding attitude	-0.189	0.190
Inconsistent attitude	-0.304*	0.125

Table 5. Preventive actions taken by parents regarding children's use of screen devices ( $N = 173$ )

Preventive actions	Mothers ( $n = 127$ )	Fathers ( $n = 46$ )
Monitoring the duration of screen use	95%	91%
Engaging in discussions with the child about potential screen-related risks	84%	65%
Familiarizing themselves with the websites, games, and applications used by the child	72%	72%
Verifying age restrictions for films or games	59%	59%
Using parental control applications	53%	59%
Setting the applications, websites, and games the child is allowed to use	60%	50%
Implementing filtering software to restrict access to inappropriate content	46%	50%
Maintaining physical presence while the child is using screen devices	27%	30%
Establishing and enforcing rules for the safe use of screen devices	31%	20%

## 5. Discussion

Previous research indicates that parental attitudes play a significant role in shaping children's habits related to screen device use and may also influence the risk of excessive exposure to digital technologies (Ulman, 2011). Effective prevention in this domain necessitates not only media literacy education for children but also the enhancement of parental competencies and the implementation of appropriate regulatory strategies. Understanding the factors that determine the frequency of children's screen device usage is crucial for designing effective preventive

strategies. A growing body of research confirms that children are spending increasing amounts of time engaged with screen-based media (Ofcom, 2023), highlighting the critical need for active involvement of both parents and educators in promoting safe and balanced technology use. Younger school-aged children, in particular, need parental support in this regard. The study by Uhls (2016) on parenting attitudes towards children's screen device use identified distinct types of parents: highly controlling,

active guides, and those who are disengaged from their children's screen lives. These categories can be compared to parental attitudes observed in everyday life. To better understand the nature of this phenomenon, an analysis of data obtained from a survey study was conducted. This analysis served as the basis for addressing the proposed hypothesis and research questions.

### **5.1. Hypothesis: The amount of time a child spends using screen devices is related to the type of parental attitude.**

The verification of Hypothesis H revealed no statistically significant relationships between mothers' parental attitudes and the number of hours their children spent in front of screens, either on weekdays or weekends. One possible explanation for this finding is that mothers tend to hold predominantly negative perceptions of children's screen use. As demonstrated in previous research, mothers tend not to assess their children's use of screen devices positively – none of the surveyed mothers expressed a positive attitude; all were either neutral or negative (Dankiewicz, Kotowicz, 2024). This may result in less maternal involvement in digital mediation and media education compared to fathers, and thus a reduced influence on children's screen-related behaviour, regardless of the specific parental attitude adopted.

In contrast, verification of H for fathers revealed a significant relationship: an autonomous parenting attitude was negatively correlated with children's screen time on both weekdays and weekends. This suggests that children whose fathers grant them less autonomy tend to spend more time in front of screens. This result aligns with the findings of Mróz and Solecki (2017), who indicated that excessive parental control may increase the risk of Internet addiction. Similar conclusions were drawn by van den Eijnden et al. (2010) and Hsieh et al. (2018), who noted that a restrictive parenting style fosters compulsive screen use. A controlling parenting style may contribute to the development of problematic Internet use, and is consequently associated with increased time spent by children on screen devices.

Several potential mechanisms may explain this effect. First, excessive parental control may undermine a child's capacity for self-regulation, thereby increasing the risk of compulsive screen use as a means of coping with psychological tension or stress (Bae, Yang, 2023). Second, limiting autonomy can paradoxically increase the attractiveness of technology as a "forbidden object", a phenomenon explained by psychological reactance theory (Brehm, 1966). As such, a more effective approach appears to be modelling healthy screen-use behaviours and engaging actively in children's digital experiences. Moreover, behavioural therapy theory suggests that effective behaviour control requires managing environmental stimuli and applying appropriate reinforcements. Currently, screen device use functions as one of the most powerful reinforcers for younger school-aged children. By providing immediate gratification, screens act as a form of strong positive reinforcement, significantly influencing and shaping children's behaviour (Muppalla, Vuppalapati, Reddy Pulliahgaru, Sreenivasulu, 2023). Faced with a choice between engaging in screen use or performing a task that requires effort, children often choose the screen, which is consistent with the principles of operant conditioning. Therefore, strategies such as simply controlling screen time, punishing children by restricting access to screen devices, or implementing total bans are insufficient. Research indicates that parental interventions – particularly those that limit screen time – can be effective, especially when combined with other strategies such as jointly setting rules, offering alternative activities, and promoting parental mediation (Muppalla et al., 2023). It is crucial that these interventions are consistent, age-appropriate, and paired with positive reinforcement of desirable behaviours (Nikken, 2017).

### **5.2. Research Question 1: Is the number of preventive actions regarding children's use of screen devices related to the type of parental attitude?**

Statistical analysis revealed that maladaptive maternal attitudes – overprotective and inconsistent – were negatively correlated with the number of preventive

actions undertaken. This indicates that mothers who exhibit these attitudes are less likely to engage in their children's media education.

An overprotective attitude may involve restricting access to media, which – paradoxically – can hinder the development of children's critical thinking skills and their ability to cope with potential risks. This result is consistent with a broader body of research on parental mediation. Studies have demonstrated that restrictive mediation (characterized by prohibiting and limiting access to media) is not effective as a long-term strategy for managing children's media use. More effective strategies involve active parental engagement in media education, such as co-viewing, discussing media content, and developing children's critical media literacy skills (Clark, 2011; Livingstone, Third, 2017; Mendoza, 2013; Ofcom, 2023; Przybylski, Weinstein, 2017; Saltuk, Erciyes, 2020; Sanders i in., 2016; Uhls, 2016; Valcke i in., 2010).

Inconsistency in maternal behaviour refers to a lack of stability and coherence in decision-making and responses to parenting situations. The observed negative correlation between inconsistent maternal attitude and the number of preventive measures undertaken suggests that mothers who display greater inconsistency and unpredictability are less likely to engage in systematic efforts to educate their children about appropriate media use. This finding can be interpreted in the context of literature on parental styles – consistent parenting, based on clear rules and coherent communication, fosters a child's sense of safety and predictability, which in turn supports emotional and social development. The literature on parental mediation and the effectiveness of preventive strategies emphasizes the critical importance of consistency in parenting practices. Studies confirm that a lack of consistency in enforcing parenting decisions and rules can lead to behavioural issues and hinder children's internalization of norms and values (Gardner, 1989; Weller, Parker, Reynolds, Kirisci, Michaels, 2024). Children need clearly defined and consistently enforced rules to feel secure and understand parental expectations. This principle also applies to media use, as parents who are inconsistent in other areas of parenting may also neglect their children's media literacy training. Inconsistency in enforcing

rules related to screen time or media content may contribute to children's confusion, increased boundary-testing behaviours, and a diminished effectiveness of parental interventions. In contrast, consistent rule enforcement – combined with open dialogue and shared rule-setting – helps children form healthy media habits and navigate the digital world safely (American Academy of Pediatrics, 2016).

This result may also suggest that mothers who are overprotective or inconsistent may have a limited ability to cope with digital risks – and consequently, a limited repertoire of preventive strategies – despite being aware of potential threats and perceiving their children's screen use negatively. A solely negative assessment of screen device usage may result in more stringent restrictions on access; however, this does not necessarily correspond to the implementation of the most effective preventative strategies, nor does it contribute to enhanced support or the informed and constructive integration of children into the digital environment (Dankiewicz, Kotowicz, 2024; Nikken, Schols, 2015). Similarly, strict limitations on screen time imposed by parents do not necessarily improve the quality of technology use or support the development of children's digital competencies (Przybyła-Basista, Kołodziej, 2014). Therefore, an overprotective parenting attitude in daily life does not inherently lead to the implementation of effective preventive actions, which may consist solely of monitoring screen time and may be inconsistently applied. These findings point to the need for media education programmes specifically aimed at mothers (particularly those demonstrating overprotective and inconsistent parenting styles) focused on the prevention of screen-related risks.

In contrast, the study showed that fathers who demonstrated adaptive parenting attitudes – accepting and autonomous – were more likely to undertake preventive actions, including those based on dialogue with the child. Previous research indicates that parental mediation grounded in conversation and co-participation is more effective than restriction-based strategies (O'Keeffe, Clarke-Pearson, 2011). Moreover, many scholars in the field of digital risk prevention emphasize the importance of communication and setting rules for ensuring children's

online safety, particularly when combined with other strategies such as parental supervision, media education, and co-use of media (Muppalla *et al.*, 2023; O’Keeffe, Clarke-Pearson, 2011). The findings of the present study indicate that discussions with children about screen-related risks occurred more frequently in the context of positive parenting attitudes.

### **5.3. Research Question 2: Which preventive actions concerning children’s use of screen devices are most frequently undertaken by parents?**

An analysis of mothers’ responses indicates that the most commonly used preventive strategy is time control (reported by 95% of participants), followed by discussions with their children (84%). Among fathers, time control also ranked highest (91%), while the second most frequent strategy was familiarizing themselves with the content (websites, games, and applications) used by the child (72%). These results point to a discrepancy between theory and practice. Although existing literature underscores that the establishment of clear and consistent rules represents the most effective parental mediation strategy for managing children’s technology use (Livingstone, Blum-Ross, 2020), empirical findings from the present study reveal that this approach is among the least frequently applied in practice (reported by only 31% of mothers and 20% of fathers). Similarly, research commissioned by the Office of Electronic Communications in Poland (Garlicki *et al.*, 2022) revealed that 81.9% of parents tend to regulate their children’s digital activities through various restrictions, such as parental control applications and software. This pattern may reflect a lack of knowledge about effective preventive strategies and a tendency to rely on the most accessible and intuitive forms of control, such as screen time limitation (Garlicki *et al.*, 2022).

## **Summary**

The findings of the present study, which explored the relationship between parenting styles and mediation practices, suggest that positive parental atti-

tudes – characterized by acceptance and support for children’s autonomy – are associated with a greater frequency of preventive measures implemented by fathers. Conversely, negative parenting styles, such as overprotectiveness and inconsistency observed among mothers, appear to hinder the effectiveness of such interventions. These results point to the need for targeted educational initiatives aimed at equipping digital parents with effective mediation strategies, particularly those that promote constructive and developmentally appropriate engagement with digital media. Among the preventive measures undertaken by parents, the most effective strategies should predominate – those based on open dialogue about screen-related risks and focused on establishing and implementing clear rules for safe media use. Consistent guidelines regarding screen time and the types of content accessed are essential components of effective digital prevention.

An important implication of these findings is the need to promote participatory mediation strategies rather than relying solely on control-based approaches. Supporting the child’s autonomy while setting clear expectations regarding media use may provide more effective protection against online risks than the exclusive use of restrictive strategies. This parenting model fosters the development of children’s self-regulation and critical thinking skills in the digital environment. Educational interventions should therefore prioritize the enhancement of parental competencies that support the development of relationships based on mutual respect and trust – foundational conditions for open and effective communication about digital media use. Furthermore, such initiatives should aim to foster children’s self-regulation, critical thinking, and digital literacy, thereby contributing to the cultivation of a more informed, reflective, and responsible media culture.

In an era of ubiquitous access to digital media, the parental role in shaping healthy technology habits is increasingly critical. Adults are expected to demonstrate technological proficiency, awareness of digital risks, and responsibility for media education (Tosun, Mihci, 2020). Effective digital parenting should thus combine educational mediation, supervisory control, and shared screen-based activities – an ap-



proach supported by empirical research (Livingstone, Blum-Ross, 2020). Consistency in parenting is vital for creating an environment conducive to a child's development in a digital world. However, consistency should not be conflated with rigidity; rather, it entails the ability to adjust parenting approaches to the individual needs of the child while preserving coherence in underlying values and established rules.

Daily screen activity presents an ongoing challenge for parents, particularly since media supervision should be implemented in a natural, non-invasive manner so that it is not perceived by the child as excessive monitoring. Research conducted in Poland shows that more than 10% of students report receiving no support from their parents when encountering risks associated with screen media use (Dębski, Bigaj, 2019). Therefore, identifying the factors that facilitate parental involvement is key. These factors primarily include elements that promote

a positive family context, such as open communication, a supportive emotional climate, a sense of closeness, and parents' positive attitudes toward technology (Krzyżak-Szymańska, 2018; Lunkenheimer, Dunning, Diercks, Kelm, 2023; Shah, Phadke, 2023). Parents should become their children's first educators in digital prevention, helping them develop critical thinking skills, information management competencies, and safe practices in navigating digital technologies (Nikken, 2017). Prevention and education are essential for supporting children in developing healthy habits and attitudes toward screen use, grounded in an awareness of both the opportunities and risks associated with digital engagement. There is, therefore, an urgent need to support parents in formulating and consistently applying clear rules for screen media use in daily life, in order to protect digital children from the potential risks associated with the online environment.

## Bibliography

- American Academy of Pediatrics (2016). Media and young minds. *Pediatrics*, 138(5), e20162591.
- Bae, Y., Yang, S. (2023). Impacts of parenting and child self-regulation on the problematic use of smart media: A latent profile analysis approach. *Korean Journal of Child Studies*, 44(4), 485-498. <https://doi.org/10.5723/kjcs.2023.44.4.485>
- Beyens, I., Valkenburg, P.M., Piotrowski, J. (2019). Developmental trajectories of parental mediation across early and middle childhood. *Human Communication Research*, 45(2), 226-250. <https://doi.org/10.1093/hcr/hqy016>
- Bębas, S., Jędrzejko, M.Z., Kasprzak, K., Szwedzik, A., Taper, A. (2017). *Cyfrowe dzieci. Zjawisko, uwarunkowania, kluczowe problemy*. Warszawa: Oficyna Wydawnicza Aspra.
- Brehm, J.W. (1966). *A theory of psychological reactance*. New York: Academic Press.
- Canadian Paediatric Society (2019). Digital media: Promoting healthy screen use in school-aged children and adolescents. *Paediatrics & Child Health*, 24(6), 402-408. <https://doi.org/10.1093/pch/pxz095>
- Christakis, D.A., Hale, L. (2025). Introduction. (In:) D.A. Christakis & L. Hale (eds.), *Handbook of children and screens. Digital media, development, and well-being from birth through adolescence*, 1-4. Springer. <https://doi.org/10.1007/978-3-031-69362-5>
- Clark, L.S. (2011). Parental mediation theory for the digital age. *Communication Theory*, 21(4), 323-343. <https://doi.org/10.1111/j.1468-2885.2011.01391.x>
- Dankiewicz, M., Kotowicz, A. (2024). The relationship between parental attitudes and the assessment of the benefits and risks of screen devices use among children in early primary school years. *Quarterly Journal Fides et Ratio*, 58(2), 18-26. <https://doi.org/10.34766/fetr.v58i2.1278>
- Dębski, M., Bigaj, M. (2019). *Młodzi Cyfrowi. Nowe technologie. Relacje. Dobrostan*. Gdańsk: GWP. (From:) [https://dbamomojzasieg.pl/wp-content/uploads/2021/03/Mlodzi-Cyfrowi.-Nowe-technologie.-Relacje.-Dobrostan\\_ksiazka-1.pdf](https://dbamomojzasieg.pl/wp-content/uploads/2021/03/Mlodzi-Cyfrowi.-Nowe-technologie.-Relacje.-Dobrostan_ksiazka-1.pdf) (access: 19.03.2025).
- Eijnden, van den, R.J.J.M., Spijkerman, R., Vermulst, A.A., van Rooij, T.J., Engels, R.C.M.E. (2010). Compulsive Internet use among adolescents: Bidirectional parent-child relationships. *Journal of Abnormal Child Psychology*, 38, 77-89. <https://doi.org/10.1007/s10802-009-9347-8>
- Gardner, F.E.M. (1989). Inconsistent parenting: Is there evidence for a link with children's conduct problems? *Journal of Abnormal Child Psychology*, 17, 223-233. <https://doi.org/10.1007/BF00913796>
- Garlicki, M., Wróblewski, J., Mider, D., Suska, A., Terlikowski, W., Kargul, A. (2022). *Analiza funkcjonowania rynku usług telekomunikacyjnych w Polsce oraz ocena preferencji konsumentów. 2022 rok. Badania dzieci i rodziców*. Urząd Komunikacji Elektronicznej. (From:) [https://cik.uke.gov.pl/gfx/cik/userfiles/\\_public/badania\\_dzieci\\_i\\_rodzicow\\_2022.pdf](https://cik.uke.gov.pl/gfx/cik/userfiles/_public/badania_dzieci_i_rodzicow_2022.pdf) (access: 19.03.2025).
- Globokar, R. (2018). Impact of digital media on emotional, social and moral development of children. *Nova Pristutnost*, 16(3), 545-560. <https://doi.org/10.31192/np.16.3.8>
- Haddon, L., Vincent, J. (2015). UK children's experience of smartphones and tablets: Perspectives from children, parents and teachers. *Net Children Go Mobile*. <https://doi.org/10.13140/RG.2.1.4178.0881>
- Hassinger-Das, B., Brennan, S., Dore, R., Golinkoff, R.M., Hirsh-Pasek, K. (2020). Children and screens. (In:) A.J. Sameroff (ed.), *Annual Review of Developmental Psychology*, 2, 69-92. <https://doi.org/10.1146/annurev-devpsych-060320-095612>

- Hsieh, Y.-P., Shen, A.C.-T., Wei, H.-S., Feng, J.-Y., Huang, S.C.-Y., Hwa, H.-L. (2018). Internet addiction: A closer look at multidimensional parenting practices and child mental health. *Cyberpsychology, Behavior, and Social Networking*, 27(12), 768-773. <https://doi.org/10.1089/cyber.2018.0435>
- Internet Matters (2018). *Look both ways. Practical parenting in the age of screen*. (From:) <https://www.internetmatters.org/pl/hub/research/screen-time-report-2018/> (access: 19.03.2025).
- Kardaras, N. (2018). *Dzieci ekranu. Jak uzależnienie od ekranu przejmie kontrolę nad naszymi dziećmi – i jak wyrwać je z transu*. Warszawa: Wydawnictwo CeDeWu.
- Kardefelt-Winther, D. (2017). *How does the time children spend using digital technology impact their mental well-being, social relationships and physical activity? An evidence-focused literature review*. Innocenti Discussion Paper 2017-2. UNICEF Office of Research Innocenti. (From:) <https://www.unicef.org/innocenti/media/8181/file/UNICEF-Innocenti-Time-Using-Digital-Tech-Impact-on-Wellbeing-2017.pdf> (access: 19.03.2025).
- Konca, A.S. (2022). Digital technology usage of young children: Screen time and families. *Early Childhood Education Journal*, 50(7), 1097-1108. <https://doi.org/10.1007/s10643-021-01245-7>
- Krzyżak-Szymańska, E. (2018). *Uzależnienia technologiczne wśród dzieci i młodzieży. Teoria, profilaktyka, terapia – wybrane zagadnienia*. Kraków: Oficyna Wydawnicza „Impuls”.
- Livingstone, S. (2009). *Children and the Internet: Great expectations, challenging realities*. Cambridge: Polity Press.
- Livingstone, S., Blum-Ross, A. (2020). *Parenting for a digital future: how hopes and fears about technology shape children's lives*. New York: Oxford University Press. <https://doi.org/10.1093/oso/9780190874698.001.0001>
- Livingstone, S., Lemish, D., Lim, S.S., Bulger, M., Cabello, P., Claro, M., Cabello-Hutt, T., Khalil, J.F., Kumpulainen, K., Nayar, U.S., Nayar, P., Park, J., Tan, M.M., Prinsloo, J., Wei, B. (2017). Global perspectives on children's digital opportunities: an emerging research and policy agenda. *Pediatrics*, 140(2), 137-141. <https://doi.org/10.1542/peds.2016-1758S>
- Livingstone, S., Third, A. (2017). Children and young people's rights in the digital age: An emerging agenda. *New Media & Society*, 19(5), 657-670. <https://doi.org/10.1177/1461444816686318>
- Lunkenheimer, E., Dunning, E.D., Diercks, C.M., Kelm, M.R. (2023). Parental regulation of parent and child screen-based device use. *International Journal of Behavioral Development*, 47(5), 410-422. <https://doi.org/10.1177/01650254231179978>
- Mendoza, K. (2013). Surveying parental mediation: Connections, challenges and questions for media literacy. *Journal of Media Literacy Education*, 1(1). <https://doi.org/10.23860/jmle-1-1-3>
- Mróz, A., Solecki, R. (2017). Postawy rodziców wobec aktywności nastolatków w Internecie w percepcji uczniów. *E-mentor*, 4(71), 19-24. <http://dx.doi.org/10.15219/em71.1316>
- Muppalla, S.K., Vuppapalapati, S., Reddy Pulliahgaru, A., Sreenivasulu, H. (2023). Effects of excessive screen time on child development: An updated review and strategies for management. *Cureus*, 15(6): e40608. <https://doi.org/10.7759/cureus.40608>
- Neumann, M.M. (2015). Young children and screen time: Creating a mindful approach to digital technology. *Australian Educational Computing*, 30(2), 1-15. (From:) <https://journal.acce.edu.au/index.php/AEC/article/view/67> (access: 19.03.2025).
- Nikken, P. (2017). Implications of low or high media use among parents for young children's media use. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 11(3). <https://doi.org/10.5817/CP2017-3-1>
- Nikken, P., Oprea, S.J. (2018). Guiding young children's digital media use: SES-differences in mediation concerns and competence. *Journal of Child and Family Studies*, 27, 1844-1857. <https://doi.org/10.1007/s10826-018-1018-3>
- Nikken, P., Schols, M. (2015). How and why parents guide the media use of young children. *Journal of Child and Family Studies*, 24, 3423-3435. <https://doi.org/10.1007/s10826-015-0144-4>
- Ofcom (2023). *Children and parents: Media use and attitudes. Report 2023*. (From:) <https://www.ofcom.org.uk/media-use-and-attitudes/media-habits-children/children-and-parents-media-use-and-attitudes-report-2023/> (access: 19.03.2025).
- O'Keeffe, G.S., Clarke-Pearson, K., Council on Communications and Media (2011). The impact of social media on children, adolescents, and families. *Pediatrics*, 127(4), 800-804. <https://doi.org/10.1542/peds.2011-0054>
- Plopa, M. (2008). *Skala postaw rodzicielskich*. Warszawa: PWN.
- Przybylski, A.K., Weinstein, N. (2017). Digital screen time limits and young children's psychological well-being: Evidence from a population-based study. *Child Development*, 90(1), e56-e65. <https://doi.org/10.1111/cdev.13007>
- Przybyła-Basista, H., Kołodziej, A. (2014). Parental monitoring of the internet activity of young children and preadolescents. *The New Educational Review*, 36, 315-325. <https://doi.org/10.15804/tner.14.36.2.25>
- Pyżalski, J., Klichowski, M., Przybyła, M. (2014). *Szanse i zagrożenia w obszarze wykorzystania technologii informacyjno-komunikacyjnych (TIK), ze szczególnym uwzględnieniem aplikacji mobilnych (TIK-mobApp) przez dzieci w wieku 3-6 lat*. Raport z badań finansowanych w ramach Innowacji Społecznych Narodowego Centrum Badań i Rozwoju. (From:) <http://hdl.handle.net/10593/12555> (access: 19.03.2025).
- Saltuk, M.C., Erciyes, J.C. (2020). Investigation and attitude of parents about the use of technology in preschool children. *e-Journal of New Media*, 4(2), 106-120. <https://doi.org/10.17932/IAU.EJNM.25480200.2020.4/2.106-120>
- Sanders, W., Parent, J., Forehand, R., Sullivan, A.D., Jones, D.J. (2016). Parental perceptions of technology and technology-focused parenting: Associations with youth screen time. *Journal of Applied Developmental Psychology*, 44, 28-38. <https://doi.org/10.1016/j.appdev.2016.02.005>
- Shah, S.A., Phadke, V.D. (2023). Mobile phone use by young children and parent's views on children's mobile phone usage. *Journal of Family Medicine and Primary Care*, 12(12), 3351-3355. [https://doi.org/10.4103/jfmpc.jfmpc\\_703\\_23](https://doi.org/10.4103/jfmpc.jfmpc_703_23)
- Tosun, N., Mihci, C. (2020). An examination of digital parenting behavior in parents with preschool children in the context of lifelong learning. *Sustainability*, 12(18), 7654. <https://doi.org/10.3390/su12187654>
- Uhls, Y.T. (2016). *Cyfrowi rodzice. Dzieci w sieci. Jak być czujnym, a nie przeczułym*. Kraków: Wydawnictwo IUVI.
- Ulman, P. (2011). Społeczne i rodzinne uwarunkowania uzależnień u dzieci i młodzieży. *Kwartalnik Naukowy Fides et Ratio*, 4(8), 74-86. (From:) <https://www.stowarzyszeniefidesetratio.pl/Presentations0/06-2011-4.pdf> (access: 19.03.2025).
- Warren, R. (2001). In words and deeds: Parental involvement and mediation of children's television viewing. *Journal of Family Communication*, 1(4), 211-231. [https://doi.org/10.1207/S15327698JFC0104\\_01](https://doi.org/10.1207/S15327698JFC0104_01)
- Weller, J.A., Parker, A.M., Reynolds, M., Kirisci, L., Michaels, L. (2024). Longitudinal associations between parenting practices and children's later decision-making competence. *Applied Developmental Science*, 29(2), 93-109. <https://doi.org/10.1080/10888691.2023.2287203>
- Valcke, M., Bonte, S., De Wever, B., Rots, I. (2010). Internet parenting styles and the impact on Internet use of primary school children. *Computers & Education*, 55(2), 454-464. <https://doi.org/10.1016/j.compedu.2010.02.009>
- Valkenburg, P.M., Piotrowski, J.T., Hermanns, J., de Leeuw, R. (2013). Developing and validating the Perceived Parental Media Mediation Scale: A self-determination perspective. *Human Communication Research*, 39(4), 445-469. <https://doi.org/10.1111/hcre.12010>

# Attachment styles as mediators between autistic traits and psychological distress: The role of social and communication difficulties<sup>1</sup>

<https://doi.org/10.34766/62jbzk38>

Agnieszka Siedler<sup>a</sup>, Anna Waligórska<sup>b</sup>

<sup>a</sup> Agnieszka Siedler, <https://orcid.org/0000-0002-8713-9464>, Department of Psychology, Maria Grzegorzewska University, Warsaw

<sup>b</sup> Anna Waligórska, <https://orcid.org/0000-0003-3736-7984>, Department of Special Education, Maria Grzegorzewska University, Warsaw

✉ Corresponding author: [siedleragnieszka@gmail.com](mailto:siedleragnieszka@gmail.com)

**Abstract:** Autistic traits such as social skill and communication difficulties are linked to increased risk of depression and anxiety. Attachment theory offers a useful framework for understanding these associations, as insecure attachment styles are known to affect emotion regulation and mental health. This study examined whether adult attachment styles (secure, avoidant, anxious-ambivalent) mediate the relationship between autistic traits and psychological distress. A sample of 130 adults completed measures of autistic traits, attachment, and psychological functioning. Mediation analyses revealed that social difficulties – but not communication deficits – consistently mediated the link between attachment styles and psychological symptoms. Secure attachment was protective, while avoidant and especially anxious-ambivalent styles predicted greater distress. These findings highlight the importance of addressing attachment-related processes and social functioning in interventions for individuals with elevated autistic traits.

**Key words:** autistic traits, broader autism phenotype, attachment styles, social functioning, communication.

## Introduction

Autism Spectrum Disorder (ASD) is a spectrum of neurodevelopmental condition characterized by challenges in social communication and interaction, alongside restricted and repetitive behaviors (WHO, 2023). The prevalence of ASD has been increasing, with estimates suggesting it affects about 1 in 36 children (Hirota & King, 2023; Hodges et al., 2020; Sharma et al., 2018). Individuals with ASD often experience difficulties in social interaction and communication, which can manifest as challenges in understanding social cues, maintaining conversations, or forming relationships (Hodges et al., 2020; Hyman et al., 2019; Lord et al., 2018; Sharma et al., 2018). Many individuals with ASD also experience comorbid conditions such as ADHD, anxiety, depression, and epilepsy, which can complicate diagnosis and treatment (Hirota & King, 2023; Lord et al., 2020; Sharma et al., 2018).

Autism spectrum disorders are influenced by a combination of genetic and environmental factors. ASD is highly heritable, with numerous genetic variants contributing to its risk. Both common and rare genetic mutations have been implicated (Havdahl et al., 2021; Yoon et al., 2020). Factors such as parental age, prenatal exposure to certain drugs, and environmental toxins may also increase ASD risk (Sharma et al., 2018; Yoon et al., 2020).

The broader autism phenotype (BAP) refers to a set of subclinical traits that are similar to, but milder than those observed in individuals with autism spectrum disorder (ASD). BAP includes mild expressions of autistic-like traits, such as social communication difficulties and rigid personality traits, which do not meet the full criteria for an ASD diagnosis (Ingersoll & Wainer, 2014; Landry & Chouinard, 2016; Piven et al., 1997).

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_sied.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_sied.pdf)

Key domains include social and communication deficits, stereotyped behaviors, and cognitive traits such as face processing and executive function (Dawson et al., 2002; Pickles et al., 2000; Piven et al., 1997).

These traits are often found in family members of individuals with ASD and can provide insights into the genetic and environmental factors associated with autism. Studies show a strong genetic component to BAP, with higher concordance rates in monozygotic twins compared to dizygotic twins, indicating heritability (Couteur et al., 1996; Piven et al., 1997). Siblings and parents of individuals with ASD often exhibit BAP traits, which can manifest as intermediate levels of autistic traits compared to typical controls and those with ASD (Pisula & Ziegart-Sadowska, 2015; Ruzich et al., 2015).

The presence of subclinical autistic traits is in negative relation to mental health (Pisula et al., 2015; Stimpson et al., 2021). This relation was also reported in parents of children with autism and older adults. Parents of children with autism often exhibit subclinical traits, which are linked to reduced mental health indicators, including increased symptoms of anxiety, depression, and stress. Psychological inflexibility and challenging parenting experiences are significant mediators in this relationship, suggesting that interventions targeting these areas could improve mental health outcomes for parents (El-Bouhali-Abdellaoui et al., 2024; Kulasinghe et al., 2021; Pruitt et al., 2018). Fathers with stronger subclinical autism traits also experience higher levels of emotional distress. In mothers, the presence of a child with autism and the child's emotional dysregulation are more closely associated with psychological distress (El-Bouhali-Abdellaoui et al., 2024).

Attachment theory, originally developed by John Bowlby and Mary Ainsworth (1982), is a psychological framework that explores the dynamics of long-term relationships between humans, particularly as it relates to how early attachments influence personal development and behavior throughout life. This theory has been widely applied across various domains, including developmental psychology, mental health, and organizational behavior. Attachment is considered an inborn behavioral system essential for survival, with individual differences in attachment

security emerging during child development. These differences are traditionally explained by the internalization of experiences with caregivers into working models of attachment. Recent perspectives suggest that these differences can also be understood through the principles of classical and operant conditioning, integrating neurocognitive and endocrinological processes such as cortisol, oxytocin, and dopamine (Bosmans et al., 2020).

Attachment influences the processing of social information throughout life. Secure attachment models allow for open and safe processing of both positive and negative social information, while insecure models may lead to defensive exclusion or negatively biased processing. This pattern is consistent across childhood, adolescence, and adulthood, affecting attention, memory, and attributions (Dykas & Cassidy, 2011).

Attachment is potentially affecting mental health outcomes such as anxiety and depression. This theory posits that insecure attachment styles, characterized by anxiety and avoidance, can lead to increased vulnerability to these mental health issues. Research consistently shows that attachment anxiety is more strongly associated with depressive symptoms compared to attachment avoidance. Individuals with high attachment anxiety tend to experience greater depressive symptoms due to their heightened sensitivity to perceived threats in relationships and a constant need for reassurance (Zhang et al., 2022; Zheng et al., 2020). This relationship is moderated by factors such as cultural orientation, sex, and age, indicating that the impact of attachment anxiety on depression can vary across different demographic groups (Zheng et al., 2020). While attachment avoidance is also linked to depressive symptoms, the association is generally weaker than that of attachment anxiety. Avoidant individuals may suppress emotional needs and avoid closeness, which can lead to feelings of isolation and depression, but to a lesser extent than those with attachment anxiety (Zhang et al., 2022; Zheng et al., 2020).

Social anxiety can mediate the relationship between attachment styles and depression. For instance, the effect of attachment on depression can be partially mediated by social anxiety, suggesting that individuals with insecure attachment may develop social anxiety, which in turn contributes to

depressive symptoms (Manes et al., 2016). Emotion regulation strategies also mediate the relationship between attachment and depressive symptoms. Anxious attachment is associated with hyperactivating strategies, which exacerbate depressive symptoms, while avoidant attachment is linked to deactivating strategies, though evidence for their mediating role is mixed (Malik et al., 2015).

Persons with higher level of autism traits often experience attachment insecurity. Higher autism characteristics are linked to increased attachment anxiety and avoidance, which in turn affect relationship satisfaction. Specifically, pragmatic language difficulties are associated with avoidant attachment, while aloofness and rigidity contribute to both anxious and avoidant attachment styles (Beffel et al., 2021; Hirokawa et al., 2019; Lamport & Turner, 2014).

Research indicates that adults with high-functioning autism can form secure attachments, although they may exhibit less coherent narratives and lower reflective function compared to controls. This suggests that while attachment security is possible, it may manifest differently in this population (Taylor et al., 2008).

Attachment styles have been shown to mediate the relationship between childhood experiences and adult mental health outcomes. For instance, insecure attachment styles, such as anxious and avoidant attachment, are linked to higher levels of anxiety and depression (Widom et al., 2018). This mediation effect suggests that attachment styles could similarly mediate the relationship between autism traits and mental health problems, potentially exacerbating or mitigating mental health issues depending on the attachment style (Parada-Fernández et al., 2021; Sechi et al., 2020).

Understanding the mediating role of attachment styles can inform therapeutic strategies for neurodiverse population. Interventions that focus on enhancing secure attachment and addressing attachment-related issues may improve mental health outcomes for persons with high autistic traits (Jennissen et al., 2024). Additionally, targeting attachment styles in therapy could help reduce emotion dysregulation and improve psychological well-being (Parada-Fernández et al., 2021).

## 1. Aims and hypothesis

The present study aimed to examine whether attachment styles mediate the relationship between autistic traits – particularly communication difficulties and social skill deficits – and symptoms of depression and anxiety. Building on previous research linking subclinical autistic characteristics (Broader Autism Phenotype) with emotional distress, we investigated the role of three attachment styles (anxious-ambivalent, avoidant, and secure) as potential psychological mechanisms explaining how these traits may influence mental health.

Given that both autistic traits and insecure attachment have been associated with internalizing symptoms, we hypothesized that:

1. Higher levels of autistic traits, particularly difficulties in communication and social skills, would be positively associated with symptoms of depression and anxiety.
2. Insecure attachment styles (anxious-ambivalent and avoidant) would be positively associated with depression and anxiety symptoms, whereas secure attachment would be negatively associated with these symptoms.
3. The relationship between autistic traits (especially communication and social difficulties) and symptoms of depression and anxiety would be mediated by attachment styles:
  - The anxious-ambivalent and avoidant styles would increase symptoms.
  - The secure style would decrease symptoms, serving a protective role.

## 2. Methods

### 2.1. Participants

The study included 130 participants (65 couples) aged 25-55 years ( $M = 36.66$ ,  $SD = 4.83$ ). Groups included parents of children with developmental disorders – autism spectrum and Down syndrome. Participants were recruited through therapeutic and diagnostic centers that provide support for families of



children with developmental difficulties. Recruitment was conducted with the assistance of staff members at these institutions, who informed eligible parents about the opportunity to participate in the study. Parents who expressed interest received detailed information about the study's purpose, scope, and ethical considerations. Each participant provided written informed consent prior to participation. They were explicitly informed that the study was anonymous, voluntary, and that they could withdraw at any point without providing a reason and without any consequences. Participants completed the battery of questionnaires individually, in paper form. The study was conducted in accordance with the ethical standards of the 1964 Helsinki Declaration and its later amendments.

## 2.2. Measures

*Autism Spectrum Quotient* (AQ) is a self-report questionnaire used to measure autism traits in adults within the intellectual norm. The scale consists of 50 statements, to which the respondent responds on a four-point scale. High results on this scale indicate more pronounced autistic traits. Persons diagnosed with autism spectrum disorders achieve significantly higher results compared to the general population (Baron-Cohen et al., 2001). In addition to the overall score, five subscales can also be calculated: social skills, attention switching, attention to detail, communication, and imagination (Hoekstra et al., 2008). The Polish adaptation of the scale (Pisula et al., 2013) was proven to have satisfactory internal consistency and accuracy. In the Polish adaptation of the tool, 80% of people with ASD scored above 25 points (Pisula et al., 2013). The suggested cut-off point for screening for ASD in the original version was 32 points (Baron-Cohen et al., 2001).

*The General Health Questionnaire* (GHQ-30; Goldberg, 1972) is a self-report screening tool used to assess general mental health in adults. The 30-item version represents an intermediate form between the longer GHQ-60 and the shorter GHQ-12 and

GHQ-20 versions. Respondents rate each item on a 4-point Likert scale, reflecting the frequency or intensity of psychological symptoms. Responses were scored using a 0-1-2-3 method, with higher scores indicating greater psychological distress. The Polish adaptation of the GHQ-30 (Małyszczak & Pawłowski, 2003) demonstrates excellent internal consistency (Cronbach's  $\alpha = .97$ ) and good psychometric properties, including sensitivity (.85) and specificity (.80). The GHQ-30 has shown strong correlations with clinical diagnoses of mental disorders ( $\tau = .53$ ) and with the Global Assessment of Functioning Scale ( $r = -.74$ ), confirming its validity in assessing psychological functioning in the general population. The scale can be analyzed as either unidimensional or multidimensional, with three subscales: anxiety and depression, social functioning, and general well-being (Frydecka et al., 2010).

*The Attachment Style Questionnaire* (Kwestionariusz Stylów Przywiązania, KSP; Plopa, 2008) is a Polish self-report instrument based on the classic tripartite model of attachment. It measures three attachment styles in adults: secure, anxious-ambivalent, and avoidant. The questionnaire consists of 24 items, divided into three 8-item subscales. Each item is rated on a 7-point Likert scale, indicating the degree to which the statement reflects the respondent's typical experiences in close relationships.

The KSP has demonstrated high internal consistency (Cronbach's  $\alpha$  ranging from .85 to .90) and has been validated in both clinical and non-clinical Polish populations. It is one of the most frequently used tools for measuring attachment styles in Poland.

## 2.3. Statistical Analysis

All statistical analyses were conducted using IBM SPSS Statistics version 29 with the PROCESS macro (version 4.2; Hayes, 2022). To examine the mediating role of attachment styles in the relationship between autistic traits and symptoms of depression and anxiety, a series of mediation models (Model 4 in PROCESS) were applied.

### 3. Results

Prior to conducting the main analyses, descriptive statistics were computed for all study variables, including means, standard deviations, skewness, and kurtosis. The Kolmogorov-Smirnov test was used to assess the normality of distribution. As shown in Table 1, most variables deviated significantly from the normal distribution, except for the anxious-ambivalent attachment style, which did not differ significantly from normality.

#### 3.1. Bivariate correlations

Spearman's correlation analyses were conducted to examine the associations between autistic traits, attachment styles, and symptoms of depression and anxiety. As shown in Appendix A, total autistic traits (AQ total) were positively correlated with overall mental health difficulties (GHQ total;  $r = .32, p < .001$ ), as well as with all three GHQ subscales, particularly anxiety and depression ( $r = .27, p < .01$ ).

The secure attachment style was negatively associated with GHQ ( $r = -.27, p < .01$ ), suggesting a protective role. In contrast, both the avoidant ( $r = .25, p < .01$ ) and anxious-ambivalent ( $r = .46, p < .001$ ) styles were positively associated with GHQ scores. Secure attachment also showed

significant negative correlations with autistic traits (e.g.,  $r = -.46$  with AQ total), while insecure styles correlated positively with AQ subscales.

#### 3.2. Mediation analyses of attachment styles in predicting general mental health problems

The series of three mediation models was conducted, employed Hayes' PROCESS macro (Model 4) for mediation in SPSS. In each model, the independent variable was a different attachment style (secure, avoidant, anxious), and the dependent variable was the total level of psychological symptoms (GHQ Total). Two concurrent mediators were included: AQ Social Skills (social difficulties) and AQ Communication (communication difficulties).

##### 3.2.1. Model 1 – secure attachment

In the first model, secure attachment negatively predicted both social difficulties ( $\beta = -1.78, p < .001$ ) and communication difficulties ( $\beta = -1.39, p < .001$ ). An indirect effect through AQ – Social Skills was statistically significant, while the direct effect was non-significant. This indicates a full mediation via social functioning: individuals with a secure attachment style experienced fewer social difficulties, which in turn was associated with lower psychological symptom severity.

Table 1. Descriptive statistics and with Kolmogorov-Smirnov Test

Variable	Min	Max	Mean	SD	Skewness	Kurtosis	K – S test	p-value
AQ – Attention Switching	0	27	5.58	3.23	2.334	13.77	0.119	.000
AQ – Communication	0	14	2.16	2.43	1.702	4.108	0.199	.000
AQ – Attention to Detail	0	27	5.68	3.60	1.812	8.214	0.136	.000
AQ – Imagination	0	11	4.05	2.66	0.434	-0.207	0.093	.008
GHQ – Total Score	10	82	32.98	13.85	1.092	1.202	0.120	.000
GHQ – Anxiety and Depression	2	32	12.19	6.50	0.711	0.228	0.104	.001
GHQ – General Functioning	0	19	8.28	3.37	0.966	1.477	0.211	.000
GHQ – Interpersonal Relationships	0	7	3.37	1.40	0.299	0.835	0.273	.000
ASQ – Secure Attachment	2.75	6.75	4.49	0.70	-0.141	0.504	0.113	.000
ASQ – Avoidant Attachment	2.00	6.50	4.26	0.82	0.053	0.255	0.093	.008
ASQ – Anxious-Ambivalent Attachment	2.00	6.00	4.12	0.76	0.001	0.000	0.050	.200

### 3.2.2. Model 2 – avoidant attachment

Avoidant attachment positively predicted AQ – Social Skills ( $\beta = 1.21, p < .001$ ) and AQ Communication ( $\beta = 0.76, p = .003$ ). The model revealed both a significant direct effect on psychological symptoms ( $\beta = 3.37, p = .033$ ) and a significant indirect effect through AQ – Social Skills. This indicates a partial mediation, with avoidant attachment contributing to increased symptom severity both directly and indirectly via impaired social functioning.

### 3.2.3. Model 3 – anxious-ambivalent attachment

Anxious attachment significantly predicted both AQ Social Skills ( $\beta = 0.60, p = .031$ ) and AQ Communication ( $\beta = 0.63, p = .024$ ). The model showed a strong direct effect on psychological symptoms ( $\beta = 7.73, p < .001$ ) and a significant indirect effect via AQ – Social Skills, but no mediation through AQ Communication. This pattern suggests that anxious attachment contributes to psychological distress through both direct and indirect pathways, the latter via increased social difficulties.

## 3.3. Mediation analyses of attachment styles in predicting anxiety and depression symptoms

This series of analyses aimed to examine whether the relationship between three adult attachment styles (secure, avoidant, anxious-ambivalent) and symptoms of anxiety and depression (GHQ – Anxiety and Depression subscale) is mediated by social (AQ Social Skills) and communication (AQ Communication) difficulties.

### 3.3.1. Model 1 – secure attachment

Secure attachment was a strong negative predictor of both social difficulties ( $\beta = -1.78, p < .001$ ) and communication difficulties ( $\beta = -1.39, p < .001$ ). There was a significant indirect effect via AQ – Social Skills, while the direct effect on GHQ – Anxiety and Depression was non-significant. This pattern

supports a full mediation, suggesting that secure attachment protects mental health through its impact on social functioning.

### 3.3.2. Model 2 – avoidant attachment

Avoidant attachment significantly predicted both AQ Social Skills ( $\beta = 1.21, p < .001$ ) and AQ Communication ( $\beta = 0.76, p = .003$ ). The indirect effect via AQ – Social Skills was statistically significant, while the direct effect on GHQ – Anxiety and Depression approached significance ( $\beta = 1.31, p = .077$ ). This pattern is consistent with a partial mediation, with the avoidant attachment style affecting anxiety and depression symptoms both directly and through social difficulties.

### 3.3.3. Model 3 – anxious-ambivalent attachment

Anxious attachment showed the strongest direct effect on GHQ – Anxiety and Depression ( $\beta = 3.60, p < .001$ ), along with a significant indirect effect via AQ – Social Skills (CI = [0.03; 0.97]). Interestingly, AQ Communication played a suppressing role, with a significant negative indirect effect (CI = [-0.76; -0.01]). The total indirect effect was not significant, indicating a mixed mediation pattern. Anxious-ambivalent individuals experience greater anxiety and depression both directly and indirectly via AQ – Social Skills, but this is partially counterbalanced by communication effects.

## 3.4. Mediation analyses of attachment styles in predicting general psychological functioning

This set of analyses aimed to explore how different adult attachment styles predict general psychological functioning, measured by the GHQ – General Functioning subscale. Across the three models, none of the attachment styles demonstrated significant indirect effects through AQ – Social Skills or AQ – Communication.



### 3.5. Mediation analyses of attachment styles in predicting interpersonal functioning

The following mediation models were conducted to assess how distinct adult attachment styles influence interpersonal functioning, measured by the GHQ Interpersonal Relationships subscale.

#### 3.5.1. Model 1 – secure attachment

In the model including secure attachment as the predictor, results revealed a significant negative direct effect of secure attachment on interpersonal dysfunction ( $\beta = -0.46, p = .022$ ), indicating that individuals with a higher level of secure attachment report fewer interpersonal difficulties. Moreover, secure attachment was a significant negative predictor of both mediators: AQ – Social Skills ( $\beta = -1.78, p < .001$ ) and AQ – Communication ( $\beta = -1.39, p < .001$ ).

Table 2. Comparative summary of the three mediation models

Direct Effect (X → Y)	Total Indirect Effect	Mediation via AQ – Social Skills	Mediation via AQ – Communication	Mediation Pattern
-3.25 (p = .104)	-1.55	-2.44 [CI: -4.45; -0.28]	0.89 (ns)	Full via AQ – Social Skills
3.37 (p = .033)	1.18 (ns)	1.57 [CI: 0.07; 3.20]	-0.39 (ns)	Partial via AQ – Social Skills
7.73 (p < .001)	0.39 (ns)	0.92 [CI: 0.02; 1.93]	-0.53 (ns)	Partial via AQ – Social Skills

\*Note: ns – not statistically significant

Table 3. Summary of mediation results for GHQ – anxiety and depression

Attachment Style	Direct Effect (X → Y)	Total Indirect Effect	Mediation via AQ – Social Skills	Mediation via AQ – Communication	Mediation Pattern
Secure	-1.22 (p = .193)	-0.73 (ns)	-1.32 [CI: -2.31; -0.34]	0.59 (ns)	Full via AQ_Soc
Avoidant	1.31 (p = .077)	0.57 (ns)	0.85 [CI: 0.14; 1.66]	-0.29 (ns)	Partial via AQ_Soc
Anxious-Ambivalent	3.60 (p < .001)	0.13 (ns)	0.47 [CI: 0.03; 0.97]	-0.33 [CI: -0.76; -0.01]	Mixed/Suppression

\*Note: ns – not statistically significant

Table 4. Mediation models predicting GHQ – interpersonal relationships

Attachment Style	Direct Effect (X → Y)	Total Indirect Effect	Mediation via AQ – Social Skills	Mediation via AQ – Communication	Mediation Pattern
Secure	-0.46 (p = .022)	-0.15 (ns)	-0.25 [CI: -0.54; -0.00]	0.11 (ns)	Partial via AQ-Social Skills
Avoidant	0.30 (p = .055)	0.14 (ns)	0.19 (ns)	-0.05 (ns)	Marginal, borderline
Anxious-Ambivalent	0.48 (p = .003)	0.06 (ns)	0.11 [CI: 0.00; 0.27]	-0.05 (ns)	Partial via AQ-Social Skills

\*Note: ns – not statistically significant

The indirect pathway through AQ – Social Skills was statistically significant ( $CI = [-0.54; -0.00]$ ), confirming a partial mediation.

### 3.5.2. Model 2 – avoidant attachment

In the model with avoidant attachment as the independent variable, avoidant attachment was associated with higher levels of AQ – Social Skills difficulties ( $\beta = 1.21, p < .001$ ) and AQ – Communication difficulties ( $\beta = 0.76, p = .003$ ). The direct effect of avoidant attachment on GHQ-RI was marginally significant ( $\beta = 0.30, p = .055$ ), indicating a possible tendency toward greater interpersonal dysfunction in avoidantly attached individuals. The indirect effect through AQ – Social Skills approached significance ( $CI = [-0.01; 0.40]$ ), while the mediation via AQ – Communication was not significant.

### 3.5.3. Model 3 – anxious-ambivalent attachment

The final model, with anxious-ambivalent attachment as the predictor, showed the strongest direct effect on interpersonal dysfunction among the three models ( $\beta = 0.48, p = .002$ ). Anxiously attached individuals also demonstrated higher levels of social ( $\beta = 0.60, p = .031$ ) and communication ( $\beta = 0.63, p = .024$ ) difficulties. Importantly, the indirect effect via AQ – Social Skills was significant ( $CI = [0.00; 0.27]$ ), indicating that the impact of anxious attachment on interpersonal functioning is partially mediated by social deficits. No significant mediation via AQ – Communication was observed.

## 4. Discussion

The present study sought to investigate the psychological mechanisms linking adult attachment styles to various dimensions of psychological functioning, with a particular focus on potential mediating roles of social and communication difficulties. Across five subscales of the General Health Questionnaire (GHQ) – including overall psychological symptoms (GHQ Total), anxiety and depression (GHQ – Anxiety and

Depression), general functioning (GHQ – General Functioning), and interpersonal functioning (GHQ – Interpersonal Relationships) – consistent and nuanced patterns emerged, highlighting the differential impacts of secure, avoidant, and anxious-ambivalent attachment styles. These findings offer both theoretical insights and clinically relevant implications regarding how early relational experiences, internalized as attachment patterns, shape mental health outcomes through interpersonal functioning.

One of the most robust findings across all models was the consistent predictive role of secure attachment in promoting psychological resilience. Secure attachment was associated with fewer social and communication difficulties, which in turn predicted lower levels of psychological symptoms. In particular, for general psychological distress and interpersonal functioning, the protective effect of secure attachment was mediated through better social skills, confirming long-standing theoretical assertions that secure attachment fosters interpersonal competence.

This aligns with previous literature demonstrating that secure individuals typically possess more adaptive emotion regulation strategies, greater trust in others, and more effective communication skills – all of which are fundamental to psychosocial adjustment. Secure attachment is associated with lower levels of anxiety, depression, and other mental health issues. Individuals with secure attachment styles generally have better emotional regulation, higher self-esteem, and the ability to form satisfying relationships, which contribute to their psychological well-being (Ginalska & Cichopek, 2024; Schuman et al., 2023; Watt, 2023; Xinchen, 2024). Secure attachment is also a key factor in resilience, providing individuals with the ability to cope with adverse life events without developing psychological or psychiatric symptoms. This resilience is partly mediated by better emotion regulation and social support (Karreman & Vingerhoets, 2012; Rasmussen et al., 2018; Svanberg, 1998). Studies show that individuals with secure attachment styles have higher resilience scores compared to those with insecure attachment styles, such as preoccupied, dismissive, or fearful attachments. Insecure attachment styles

are linked to higher levels of mental health problems and lower resilience (Başal et al., 2020 ; Schuman et al., 2023; Xinchen, 2024).

Notably, in the models predicting anxiety and depression, the mediation by social difficulties was again significant, further supporting the role of interpersonal competencies as a protective buffer. However, for general functioning, no significant indirect or direct effects were observed, suggesting that the benefits of secure attachment may not extend as clearly to global functional impairment, which may be influenced by broader psychosocial or contextual factors beyond the scope of interpersonal variables. Literature shows, that individuals with secure attachment styles experience less anxiety and depression and perceive more social support, which contributes to better affect regulation (Adar et al., 2022; Priel & Shamai, 1995). Social support partially mediates the relationship between attachment styles and psychological distress. Secure attachment enhances perceived social support, which in turn reduces anxiety and depression (Adar et al., 2022; Dark-Freudeman et al., 2020). Both social self-efficacy and emotional awareness are significant mediators for attachment anxiety and avoidance, impacting psychological distress and perceived social support (Mallinckrodt & Wei, 2005).

In contrast, avoidant attachment was consistently associated with increased interpersonal difficulties, particularly in social functioning and communication, yet its impact on psychological outcomes was more complex and, in some cases, less direct. While avoidantly attached individuals reported elevated interpersonal challenges, these did not consistently translate into higher levels of psychological symptoms across outcomes. This may reflect the avoidant individual's defensive deactivation of attachment needs and a tendency to suppress distress or vulnerability, which might attenuate the conscious experience or reporting of psychological symptoms despite underlying interpersonal dysfunction. Interestingly, in the domain of interpersonal functioning (GHQ-RI), avoidant attachment showed a marginally significant direct effect and a potential trend toward partial mediation via social difficulties. This suggests that while avoidant individuals may be socially withdrawn

or emotionally distant, the subjective experience of dysfunction may be more subtle or context-dependent – emerging more clearly in relational settings that demand emotional availability or social reciprocity.

Anxious-ambivalent attachment, on the other hand, showed the strongest and most consistent associations with psychological distress across models. Individuals with this attachment style demonstrated elevated symptoms of anxiety, depression, interpersonal dysfunction, and poorer general functioning. Notably, these associations were explained both directly and indirectly, with social difficulties playing a key mediating role. This suggests that the heightened emotional reactivity, fear of abandonment, and relational preoccupation characteristic of anxious attachment contribute not only to direct psychological distress, but also to impaired interpersonal effectiveness. Anxiously attached individuals may display hyperactivating strategies – such as excessive reassurance seeking, emotional volatility, and dependency – which impair social relationships and, in turn, exacerbate symptoms of distress. These findings reinforce the notion that anxious attachment represents a particularly potent risk factor for internalizing psychopathology, particularly when social functioning is compromised.

Research shows that anxious – ambivalent and avoidant attachment styles are linked to higher levels of anxiety and depression. These styles often result in difficulties with emotional regulation and increased psychological distress (Cooley et al., 2010; Manning et al., 2017; Wang, 2023). Individuals with avoidant attachment often report higher levels of anxiety and depression. They tend to have smaller and less satisfying social support networks, which can exacerbate feelings of distress (Anders & Tucker, 2000; Mikulincer & Orbach, 1995; Priel & Shamai, 1995). Avoidant individuals often maintain emotional distance, which can lead to increased feelings of isolation and anxiety (Birnbaum et al., 1997; Tidwell et al., 1996). Anxious-ambivalent attachment style is strongly associated with anxiety and depression. Anxious-ambivalent individuals often experience high levels of anxiety and have difficulty regulating negative emotions, which can lead to depressive symptoms (Cooley et al., 2010; Mikulincer, 1998;

Mikulincer & Orbach, 1995). They tend to have a negative self-view and are highly concerned about their relationships, which can contribute to their mental health challenges (Mikulincer, 1995, 1998). Both avoidant and anxious-ambivalent individuals often have deficits in interpersonal communication competence, which affects their ability to form and maintain supportive social networks. This lack of social competence can mediate the relationship between attachment style and mental health outcomes, such as anxiety and depression (Anders & Tucker, 2000; Priel & Shamai, 1995). For avoidant individuals, lower levels of self-disclosure and assertiveness contribute to smaller social networks and less satisfaction with social support. Anxious individuals also struggle with assertiveness, which affects their social interactions and satisfaction (Anders & Tucker, 2000).

Across all models, a consistent and theoretically significant finding was the limited mediating role of communication difficulties (AQ – Communication). Despite being predicted by attachment styles, AQ Communication subscale did not mediate the relationship between attachment and psychological outcomes in a statistically robust manner in any model. This suggests that it is not general communication per se, but rather relational and emotional aspects of social functioning that form the crucial link between attachment and mental health. From a psychological standpoint, this supports the emphasis placed by attachment theory on affective attunement, emotional regulation, and relational responsiveness over the pragmatic or linguistic features of communication.

The implications of these findings are substantial. From a theoretical perspective, the results underscore the central role of social functioning in mediating the impact of attachment on mental health, providing empirical support for interpersonal and social-cognitive

models of psychopathology. These models posit that early attachment experiences shape internal working models of self and others, which in turn influence social behaviors, interpersonal expectations, and emotion regulation strategies – all of which converge to impact mental health outcomes. Insecure attachment, particularly of the anxious type, appears to set the stage for maladaptive social patterns that may compromise both interpersonal functioning and psychological well-being.

From a clinical perspective, these results suggest that attachment-based interventions, particularly those aimed at enhancing social skills and interpersonal effectiveness, may hold promise for reducing psychological distress in individuals with insecure attachment patterns. Psychotherapeutic approaches such as Emotionally Focused Therapy (EFT), Mentalization-Based Therapy (MBT), and Interpersonal Therapy (IPT) that address relational schemas and promote healthier social functioning may be especially effective. In particular, interventions that target the improvement of social skills – such as assertiveness training, perspective-taking, and emotional expressiveness – may serve as key mediators in improving psychological outcomes among individuals with insecure attachment styles.

In conclusion, this study provides a comprehensive account of the relational pathways through which adult attachment styles contribute to various dimensions of psychological functioning. By illuminating the mediating role of social functioning – and to a lesser extent, communication – the findings point toward the interpersonal fabric of mental health. They call for both theoretical models and clinical approaches that place attachment, relationships, and social competence at the center of psychological well-being.

## Appendix

Variables	GHQ total	AQ total	AQ Social Skills	AQ Attention Switching	AQ Communication	AQ Attention to Detail	AQ Imagination	GHQ – Anxiety & Depression	GHQ – General Functioning	GHQ – Interpersonal	ASQ – Secure	ASQ – Avoidant	ASQ – Anx-Ambivalent
GHQ total	$\rho = 1.000$ ; $p = -$	$\rho = .319$ ; $p < .001$	$\rho = .272$ ; $p = .002$	$\rho = .283$ ; $p = .001$	$\rho = .138$ ; $p = .117$	$\rho = .059$ ; $p = .502$	$\rho = .167$ ; $p = .057$	$\rho = .943$ ; $p < .001$	$\rho = .766$ ; $p < .001$	$\rho = .667$ ; $p < .001$	$\rho = -.269$ ; $p = .002$	$\rho = .250$ ; $p = .004$	$\rho = .456$ ; $p < .001$
AQ total	$\rho = .319$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .606$ ; $p < .001$	$\rho = .587$ ; $p < .001$	$\rho = .650$ ; $p < .001$	$\rho = .603$ ; $p < .001$	$\rho = .693$ ; $p < .001$	$\rho = .273$ ; $p = .002$	$\rho = .212$ ; $p = .015$	$\rho = .358$ ; $p < .001$	$\rho = -.456$ ; $p < .001$	$\rho = .357$ ; $p < .001$	$\rho = .402$ ; $p < .001$
AQ Social Skills	$\rho = .272$ ; $p = .002$	$\rho = .606$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .314$ ; $p < .001$	$\rho = .542$ ; $p < .001$	$\rho = .165$ ; $p = .060$	$\rho = .248$ ; $p = .004$	$\rho = .247$ ; $p = .005$	$\rho = .072$ ; $p = .418$	$\rho = .283$ ; $p = .001$	$\rho = -.534$ ; $p < .001$	$\rho = .442$ ; $p < .001$	$\rho = .250$ ; $p = .004$
AQ Attention Switching	$\rho = .283$ ; $p = .001$	$\rho = .587$ ; $p < .001$	$\rho = .314$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .324$ ; $p < .001$	$\rho = .108$ ; $p = .220$	$\rho = .191$ ; $p = .029$	$\rho = .346$ ; $p < .001$	$\rho = .078$ ; $p = .379$	$\rho = .168$ ; $p = .056$	$\rho = -.245$ ; $p = .005$	$\rho = .178$ ; $p = .043$	$\rho = .319$ ; $p < .001$
AQ Communication	$\rho = .138$ ; $p = .117$	$\rho = .650$ ; $p < .001$	$\rho = .542$ ; $p < .001$	$\rho = .324$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .164$ ; $p = .062$	$\rho = .366$ ; $p < .001$	$\rho = .092$ ; $p = .298$	$\rho = .038$ ; $p = .669$	$\rho = .162$ ; $p = .066$	$\rho = -.415$ ; $p < .001$	$\rho = .208$ ; $p = .018$	$\rho = .224$ ; $p = .010$
AQ Attention to Detail	$\rho = .059$ ; $p = .502$	$\rho = .603$ ; $p < .001$	$\rho = .165$ ; $p = .060$	$\rho = .108$ ; $p = .220$	$\rho = .164$ ; $p = .062$	$\rho = 1.000$ ; $p = -$	$\rho = .386$ ; $p < .001$	$\rho = -.015$ ; $p = .861$	$\rho = .145$ ; $p = .099$	$\rho = .162$ ; $p = .065$	$\rho = -.140$ ; $p = .113$	$\rho = .259$ ; $p = .003$	$\rho = .273$ ; $p = .002$
AQ Imagination	$\rho = .167$ ; $p = .057$	$\rho = .693$ ; $p < .001$	$\rho = .248$ ; $p = .004$	$\rho = .191$ ; $p = .029$	$\rho = .366$ ; $p < .001$	$\rho = .386$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .111$ ; $p = .211$	$\rho = .136$ ; $p = .124$	$\rho = .292$ ; $p = .001$	$\rho = -.243$ ; $p = .005$	$\rho = .194$ ; $p = .027$	$\rho = .147$ ; $p = .095$
GHQ – Anxiety & Depression	$\rho = .943$ ; $p < .001$	$\rho = .273$ ; $p = .002$	$\rho = .247$ ; $p = .005$	$\rho = .346$ ; $p < .001$	$\rho = .092$ ; $p = .298$	$\rho = -.015$ ; $p = .861$	$\rho = .111$ ; $p = .211$	$\rho = 1.000$ ; $p = -$	$\rho = .619$ ; $p < .001$	$\rho = .523$ ; $p < .001$	$\rho = -.223$ ; $p = .011$	$\rho = .221$ ; $p = .012$	$\rho = .436$ ; $p < .001$
GHQ – General Functioning	$\rho = .766$ ; $p < .001$	$\rho = .212$ ; $p = .015$	$\rho = .072$ ; $p = .418$	$\rho = .078$ ; $p = .379$	$\rho = .038$ ; $p = .669$	$\rho = .145$ ; $p = .099$	$\rho = .136$ ; $p = .124$	$\rho = .619$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .562$ ; $p < .001$	$\rho = -.105$ ; $p < .001$	$\rho = .101$ ; $p = .236$	$\rho = .326$ ; $p < .001$
GHQ – Interpersonal	$\rho = .667$ ; $p < .001$	$\rho = .358$ ; $p < .001$	$\rho = .283$ ; $p = .001$	$\rho = .168$ ; $p = .056$	$\rho = .162$ ; $p = .066$	$\rho = .162$ ; $p = .065$	$\rho = .292$ ; $p = .001$	$\rho = .523$ ; $p < .001$	$\rho = .562$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = -.334$ ; $p < .001$	$\rho = .275$ ; $p = .002$	$\rho = .369$ ; $p < .001$
ASQ – Secure	$\rho = -.269$ ; $p = .002$	$\rho = -.456$ ; $p < .001$	$\rho = -.534$ ; $p < .001$	$\rho = -.245$ ; $p = .005$	$\rho = -.415$ ; $p < .001$	$\rho = -.140$ ; $p = .113$	$\rho = -.243$ ; $p = .005$	$\rho = -.223$ ; $p = .011$	$\rho = -.105$ ; $p = .236$	$\rho = -.334$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = -.572$ ; $p < .001$	$\rho = -.297$ ; $p = .001$
ASQ – Avoidant	$\rho = .250$ ; $p = .004$	$\rho = .357$ ; $p < .001$	$\rho = .442$ ; $p < .001$	$\rho = .178$ ; $p = .043$	$\rho = .208$ ; $p = .018$	$\rho = .259$ ; $p = .003$	$\rho = .194$ ; $p = .027$	$\rho = .221$ ; $p = .012$	$\rho = .101$ ; $p = .255$	$\rho = .275$ ; $p = .002$	$\rho = -.572$ ; $p < .001$	$\rho = 1.000$ ; $p = -$	$\rho = .335$ ; $p < .001$
ASQ – Anx-Ambivalent	$\rho = .456$ ; $p < .001$	$\rho = .402$ ; $p < .001$	$\rho = .250$ ; $p = .004$	$\rho = .319$ ; $p < .001$	$\rho = .224$ ; $p = .010$	$\rho = .273$ ; $p = .002$	$\rho = .147$ ; $p = .095$	$\rho = .436$ ; $p < .001$	$\rho = .326$ ; $p < .001$	$\rho = .369$ ; $p < .001$	$\rho = -.297$ ; $p = .001$	$\rho = .335$ ; $p < .001$	$\rho = 1.000$ ; $p = -$

 $\rho - r_{ho}$ 

## Bibliography

- Adar, T., Davidof, M., & Elkana, O. (2022). Social Support Mediates the Association between Attachment Style and Psychological Distress during COVID-19 in Israel. *Viruses*, 14. <https://doi.org/10.3390/v14040693>
- Ainsworth, M.D.S. (1982). Attachment: Retrospect and Prospect. (In:) C.M. Parkes, & J. Stevenson-Hinde (eds.), *The Place of Attachment in Human Behavior*, 3-30. New York: Basic Books.
- Anders, S., & Tucker, J. (2000). Adult attachment style, interpersonal communication competence, and social support. *Personal Relationships*, 7, 379-389. <https://doi.org/10.1111/J.1475-6811.2000.TB00023.X>
- Başal, F., Onur, S., Yamaç, D., Karaçin, C., Zengin, G., Bilgetekin, I., Demirci, U., & Oksuzoglu, B. (2020). Does a Secure Attachment Style Predict High Psychological Resilience in Patients With Cancer Receiving Chemotherapy? *Cureus*, 12. <https://doi.org/10.7759/cureus.10954>
- Beffel, J., Cary, K., Nuttall, A., Chopik, W., & Maas, M. (2021). Associations between the broad autism phenotype, adult attachment, and relationship satisfaction among emerging adults. *Personality and Individual Differences*, 168, 110409. <https://doi.org/10.1016/J.PAID.2020.110409>
- Birnbaum, G., Orr, I., Mikulincer, M., & Florian, V. (1997). When Marriage Breaks Up-Does Attachment Style Contribute to Coping and Mental Health?. *Journal of Social and Personal Relationships*, 14, 643-654. <https://doi.org/10.1177/0265407597145004>
- Bosmans, G., Bakermans-Kranenburg, M., Vervliet, B., Verhees, M., & Van IJzendoorn, M. (2020). A learning theory of attachment: Unraveling the black box of attachment development. *Neuroscience & Biobehavioral Reviews*, 113, 287-298. <https://doi.org/10.1016/j.neubiorev.2020.03.014>
- Cooley, E., Buren, A., & Cole, S. (2010). Attachment Styles, Social Skills, and Depression in College Women. *Journal of College Counseling*, 13, 50-62. <https://doi.org/10.1002/J.2161-1882.2010.TB00047.X>
- Couteur, A., Bailey, A., Goode, S., Pickles, A., Gottesman, I., Robertson, S., & Rutter, M. (1996). A broader phenotype of autism: the clinical spectrum in twins. *Journal of Child Psychology and Psychiatry*, 37(7), 785-801. <https://doi.org/10.1111/J.1469-7610.1996.TB01475.X>

- Dagan, O., Facompré, C., & Bernard, K. (2018). Adult attachment representations and depressive symptoms: A meta-analysis. *Journal of Affective Disorders*, 236, 274-290. <https://doi.org/10.1016/j.jad.2018.04.091>
- Dark-Freudeman, A., Pond, R., Paschall, R., & Greskovich, L. (2020). Attachment style in adulthood: Attachment style moderates the impact of social support on depressive symptoms. *Journal of Social and Personal Relationships*, 37, 2871-2889. <https://doi.org/10.1177/0265407520941091>
- Dawson, G., Webb, S., Schellenberg, G., Dager, S., Friedman, S., Aylward, E., & Richards, T. (2002). Defining the broader phenotype of autism: Genetic, brain, and behavioral perspectives. *Development and Psychopathology*, 14, 581-611. <https://doi.org/10.1017/S0954579402003103>
- Dykas, M., & Cassidy, J. (2011). Attachment and the processing of social information across the life span: theory and evidence. *Psychological Bulletin*, 137 (1), 19-46. <https://doi.org/10.1037/a0021367>
- El-Bouhali-Abdellaoui, F., Voltas, N., Morales-Hidalgo, P., & Canals, J. (2025). Examining the Relationship Between Parental Broader Autism Phenotype Traits, Offspring Autism, and Parental Mental Health. *Autism research*, 18(2), 387-401. <https://doi.org/10.1002/aur.3295>
- Ginalska, K., & Cichopek, A. (2024). Exploring links between attachment and mental health. *Quarterly Journal Fides et Ratio*, 59(3):73-83. <https://doi.org/10.34766/fer.v59i3.1299>
- Havdahl, A., Niarchou, M., Starnawska, A., Uddin, M., Van Der Merwe, C., & Warrier, V. (2021). Genetic contributions to autism spectrum disorder. *Psychological Medicine*, 51, 2260-2273. <https://doi.org/10.1017/S0033291721000192>
- Hirota, T., & King, B. (2023). Autism Spectrum Disorder: A Review. *JAMA*, 329(2), 157-168. <https://doi.org/10.1001/jama.2022.23661>
- Hodges, H., Fealko, C., & Soares, N. (2020). Autism spectrum disorder: definition, epidemiology, causes, and clinical evaluation. *Translational Pediatrics*, 9, S55-S65. <https://doi.org/10.21037/tp.2019.09.09>
- Hyman, S., Levy, S., & Myers, S. (2019). Identification, evaluation, and management of children with autism spectrum disorder. *Pediatrics*, 145. <https://doi.org/10.1542/peds.2019-3447>
- Ingersoll, B., & Wainer, A. (2014). The broader autism phenotype. (In:) F.R. Volkmar, S.J. Rogers, R. Paul, & K.A. Pelphrey (eds.). *Handbook of autism and pervasive developmental disorders: Diagnosis, development, and brain mechanisms* (4th ed.), 28-56. John Wiley & Sons, Inc.. <https://doi.org/10.1002/9781118911389.hautc02>
- Jennissen, S., Volz, M., Schauenburg, H., & Dinger, U. (2024). State and trait characteristics of attachment as predictors of outcome in inpatient psychotherapy. *Psychotherapy*, 61(3), 212 – 221. <https://doi.org/10.1037/pst0000529>
- Karremans, A., & Vingerhoets, A. (2012). Attachment and well-being: The mediating role of emotion regulation and resilience. *Personality and Individual Differences*, 53, 821-826. <https://doi.org/10.1016/j.paid.2012.06.014>
- Keller, H. (2013). Attachment and Culture. *Journal of Cross-Cultural Psychology*, 44, 175-194. <https://doi.org/10.1177/0022022112472253>
- Kulasinghe, K., Whittingham, K., & Mitchell, A. (2021). Mental health, broad autism phenotype and psychological inflexibility in mothers of young children with autism spectrum disorder in Australia: A cross-sectional survey. *Autism*, 25, 1187-1202. <https://doi.org/10.1177/1362361320984625>
- Lamport, D., & Turner, L. (2014). Romantic attachment, empathy, and the broader autism phenotype among college students. *The Journal of Genetic Psychology*, 175, 202-213. <https://doi.org/10.1080/00221325.2013.856838>
- Landry, O., & Chouinard, P. (2016). Why We Should Study the Broader Autism Phenotype in Typically Developing Populations. *Journal of Cognition and Development*, 17, 584-595. <https://doi.org/10.1080/15248372.2016.1200046>
- Levy, K., Johnson, B., Clouthier, T., Scala, J., & Temes, C. (2015). An Attachment Theoretical Framework for Personality Disorders. *Canadian Psychology*, 56, 197-207. <https://doi.org/10.1037/CAP0000025>
- Lord, C., Brugha, T., Charman, T., Cusack, J., Dumas, G., Frazier, T., Jones, E., Jones, R., Pickles, A., State, M., Taylor, J., & Veenstra-VanderWeele, J. (2020). *Autism Spectrum Disorder. Nature Reviews Disease Primers*, 6, 1-23. <https://doi.org/10.1038/s41572-019-0138-4>
- Lord, C., Elsabbagh, M., Baird, G., & Veenstra-VanderWeele, J. (2018). Autism spectrum disorder. *The Lancet*, 392, 508-520. [https://doi.org/10.1016/S0140-6736\(18\)31129-2](https://doi.org/10.1016/S0140-6736(18)31129-2)
- Malik, S., Wells, A., & Wittkowski, A. (2015). Emotion regulation as a mediator in the relationship between attachment and depressive symptomatology: A systematic review. *Journal of Affective Disorders*, 172, 428-44. <https://doi.org/10.1016/j.jad.2014.10.007>
- Mallinckrodt, B., & Wei, M. (2005). Attachment, Social Competencies, Social Support, and Psychological Distress. *Journal of Counseling Psychology*, 52, 358-367. <https://doi.org/10.1037/0022-0167.52.3.358>
- Manes, S., Nodop, S., Altmann, U., Gawlytta, R., Dinger, U., Dymel, W., Ehrenthal, J., Joraschky, P., Nolting, B., Petrowski, K., Ritter, V., Schauenburg, H., Stangier, U., Willutzki, U., & Strauss, B. (2016). Social anxiety as a potential mediator of the association between attachment and depression.. *Journal of Affective Disorders*, 205, 264-268. <https://doi.org/10.1016/j.jad.2016.06.060>
- Manning, R., Dickson, J., Palmier-Claus, J., Cunliffe, A., & Taylor, P. (2017). A systematic review of adult attachment and social anxiety. *Journal of Affective Disorders*, 211, 44-59. <https://doi.org/10.1016/j.jad.2016.12.020>
- Mikulincer, M. (1995). Attachment style and the mental representation of the self. *Journal of Personality and Social Psychology*, 69, 1203-1215. <https://doi.org/10.1037/0022-3514.69.6.1203>
- Mikulincer, M. (1998). Adult attachment style and affect regulation: strategic variations in self-appraisals. *Journal of Personality And Social Psychology*, 75(2), 420-35. <https://doi.org/10.1037/0022-3514.75.2.420>
- Mikulincer, M., & Orbach, I. (1995). Attachment styles and repressive defensiveness: the accessibility and architecture of affective memories. *Journal of Personality and Social Psychology*, 68(5), 917-925 <https://doi.org/10.1037/0022-3514.68.5.917>
- Parada-Fernández, P., Herrero-Fernández, D., Oliva-Macías, M., & Rohwer, H. (2021). Analysis of the mediating effect of mentalization on the relationship between attachment styles and emotion dysregulation. *Scandinavian Journal of Psychology*, 62(3), 312-320. <https://doi.org/10.1111/sjop.12717>
- Pickles, A., Starr, E., Kazak, S., Bolton, P., Papanikolaou, K., Bailey, A., Goodman, R., & Rutter, M. (2000). Variable expression of the autism broader phenotype: findings from extended pedigrees. *Journal of Child Psychology and Psychiatry*, 41(4), 491-502. <https://doi.org/10.1111/1469-7610.00634>
- Pisula, E., Danielewicz, D., Kawa, R., & Pisula, W. (2015). Autism spectrum quotient, coping with stress and quality of life in a non-clinical sample – an exploratory report. *Health and Quality of Life Outcomes*, 13, 1-9. <https://doi.org/10.1186/s12955-015-0370-x>
- Pisula, E., & Ziegart-Sadowska, K. (2015). Broader Autism Phenotype in Siblings of Children with ASD – A Review. *International Journal of Molecular Sciences*, 16, 13217-13258. <https://doi.org/10.3390/ijms160613217>



- Piven, J., Palmer, P., Jacobi, D., Childress, D., & Arndt, S. (1997). Broader autism phenotype: evidence from a family history study of multiple-incidence autism families. *The American Journal of Psychiatry*, 154(2), 185-90. <https://doi.org/10.1176/AJP.154.2.185>
- Priel, B., & Shamai, D. (1995). Attachment style and perceived social support: Effects on affect regulation. *Personality and Individual Differences*, 19, 235-241. [https://doi.org/10.1016/0191-8869\(95\)91936-T](https://doi.org/10.1016/0191-8869(95)91936-T)
- Pruitt, M., Rhoden, M., & Ekas, N. (2018). Relationship between the broad autism phenotype, social relationships and mental health for mothers of children with autism spectrum disorder. *Autism*, 22, 171-180. <https://doi.org/10.1177/1362361316669621>
- Rasmussen, P., Storebø, O., Løkkeholt, T., Voss, L., Shmueli-Goetz, Y., Bojesen, A., Simonsen, E., & Bilenberg, N. (2018). Attachment as a core feature of resilience: A systematic review and meta-analysis. *Psychological Reports*, 122, 1259-1296. <https://doi.org/10.1177/0033294118785577>
- Rivers, A., Bosmans, G., Rivera, I., Ruan-lu, L., & Diamond, G. (2022). Maternal and paternal attachment in high-risk adolescents: Unique and interactive associations with anxiety and depressive symptoms. *Journal of Family Psychology*, 36(6), 954-963. <https://doi.org/10.1037/fam0000989>
- Ruzich, E., Allison, C., Smith, P., Watson, P., Auyeung, B., Ring, H., & Baron-Cohen, S. (2015). Subgrouping siblings of people with autism: Identifying the broader autism phenotype. *Autism Research*, 9, 658-665. <https://doi.org/10.1002/aur.1544>
- Schuman, D., Whitworth, J., Galusha, J., Carbajal, J., Ponder, W., Shahan, K., & Jetelina, K. (2023). Differences in resilience and mental health symptoms among us first responders with secure and insecure attachment. *Journal of Occupational and Environmental Medicine*, 65, 378-386. <https://doi.org/10.1097/JOM.0000000000002799>
- Sechi, C., Vismara, L., & Lucarelli, L. (2020). Attachment to parents and peers and adolescent mental health: The mediating role of alexithymia. *Community Mental Health Journal*, 56, 894-905. <https://doi.org/10.1007/s10597-020-00553-3>
- Sharma, S., Gonda, X., & Tarazi, F. (2018). Autism Spectrum Disorder: Classification, diagnosis and therapy. *Pharmacology & Therapeutics*, 190, 91-104. <https://doi.org/10.1016/j.pharmthera.2018.05.007>
- Svanberg, P. (1998). Attachment, resilience and prevention. *Journal of Mental Health*, 7, 543-578. <https://doi.org/10.1080/09638239817716>
- Stimpson, N.J., Hull, L., & Mandy, W. (2021). The association between autistic traits and mental well-being. *Journal of Happiness Studies*, 22(1), 287-304. <https://doi.org/10.1007/s10902-020-00229-5>
- Taylor, E., Target, M., & Charman, T. (2008). Attachment in adults with high-functioning autism. *Attachment & Human Development*, 10, 143-163. <https://doi.org/10.1080/14616730802113687>
- Tidwell, M., Reis, H., & Shaver, P. (1996). Attachment, attractiveness, and social interaction: a diary study. *Journal of Personality and Social Psychology*, 71(4), 729-45. <https://doi.org/10.1037/0022-3514.71.4.729>
- Wang, H. (2023). Impact of attachment relationships on anxiety and depression. *SHS Web of Conferences*, 180(6). <https://doi.org/10.1051/shsconf/202318002028>
- Watt, J. (2023). Mental health, resilience and attachment theory. *Mental Health & Human Resilience International Journal*, 7(1). <https://doi.org/10.23880/mhrij-16000225>
- Widom, C., Czaja, S., Kozakowski, S., & Chauhan, P. (2018). Does adult attachment style mediate the relationship between childhood maltreatment and mental and physical health outcomes? *Child Abuse & Neglect*, 76, 533-545. <https://doi.org/10.1016/j.chiabu.2017.05.002>
- Yoon, S., Choi, J., Lee, W., & T., J. (2020). Genetic and epigenetic etiology underlying autism spectrum disorder. *Journal of Clinical Medicine*, 9. <https://doi.org/10.3390/jcm9040966>
- Zhang, X., Li, J., Xie, F., Chen, X., Xu, W., & Hudson, N. (2022). The relationship between adult attachment and mental health: A meta-analysis. *Journal of Personality And Social Psychology*, 123(5), 1089-1137. <https://doi.org/10.1037/pspp0000437>
- Zheng, L., Luo, Y., & Chen, X. (2020). Different effects of attachment anxiety and attachment avoidance on depressive symptoms: A meta-analysis. *Journal of Social and Personal Relationships*, 37, 3028-3050. <https://doi.org/10.1177/0265407520946482>

# The importance of family fat talk and body image for indirect self-destructiveness of adult girls and boys in late adolescence<sup>1</sup>

<https://doi.org/10.34766/xpqz5563>

Sandra Anna Januszevska<sup>a</sup>, Julia Banach<sup>b</sup> ✉

<sup>a</sup> Sandra Anna Januszevska, <https://orcid.org/0009-0009-7748-2005>,  
graduate of Casimir the Great University in Bydgoszcz, Poland

<sup>b</sup> Julia Banach, <https://orcid.org/0009-0008-4606-833>,

Department of Clinical Psychology, Casimir the Great University in Bydgoszcz, Poland

✉ Corresponding author: [sandra010300@wp.pl](mailto:sandra010300@wp.pl)

**Abstract:** *Introduction:* During adolescence, relationships and communication within the family undergo significant changes, but they remain important, and a supportive family reduces the risk of mental health disorders in the future. However, caregivers – apart from engaging in various activities for the children's development – also initiate fat talk, which refers to conversations that devalue the shape and weight of their own bodies and/or the bodies of others. This article addresses the potential connections between family fat talk conversations and body image, as well as the significance of these phenomena for the indirect self-destructiveness of both girls and boys in late adolescence. An exploratory study was designed using a correlational model, as the literature review indicates that these relationships – particularly in Poland – have not been empirically verified before, since the tool for assessing family fat talk conversations was only published in December 2024. *Method:* The study involved 83 individuals aged 18 and 19 – late adolescence. The following measurement tools were used: a) *Personal Questionnaire* – used to collect data characterizing the sample (e.g., age, gender, siblings), b) *Body Esteem Scale for Adolescents and Adults* (BESAA) in the Polish adaptation by Słowińska to measure body image, c) *Family Fat Talk Questionnaire* (FFTQ-PL) in the Polish adaptation by Ziółkowska et al. to measure body-related conversations within the family, d) *Indirect Self-Destructiveness Scale* (PAD-25) in the Polish adaptation by Piłarska and Suchańska to measure the intensity of risky behaviors. *Results:* The study confirmed that the greater the involvement in fat talk conversations within the family, the more negative self-perception and body image. It was shown that more intense participation in family fat talk conversations could be associated with a reduction of indirect self-destructiveness symptoms. Furthermore, higher frequency of family fat talk conversations is linked to a more negative self-image and a higher level of indirect self-destructive behaviors. *Conclusions:* Participation in family fat talk conversations may alleviate emotional tension related to dissatisfaction with one's body, while temporarily protecting against more drastic forms of self-destructive behaviors. On the other hand, these conversations can also be considered a form of indirect self-destructive behavior due to their self-deprecating nature and the negative consequences that manifest over time. It is important to emphasize that further exploration of these areas and their co-occurrence is necessary to obtain more representative results.

**Keywords:** body image, family fat talk, indirect self-destructiveness, late adolescence

## 1. Overview and aim of the study

Adolescence is a time of significant physical changes and heightened sensitivity to socio-cultural influences, making it especially crucial to have a suitable body image (Ziółkowska, Łoboda, Dąbrowska, Szrajda, 2024). While fat talk has been recognized as a socially acceptable way to communicate negative body and appearance-related feelings and is relevant for peer relationships (Katrech, Register, Aruguete, 2014). Simultaneously, it can also lead to the development of unhealthy eating habits and

body image dissatisfaction, especially in teenagers (Shannon, Mills, 2015).

Prior researches (e.g., Arroyo & Andersen, 2016; Berlin, 2023; Mills & Fuller-Tyszkiewicz, 2017) have mostly focused on family fat talk in relation to body image, particularly among young women and adolescent girls. However, associations between such conversations and other psychological factors have not yet been sufficiently investigated (Mills & Fuller-Tyszkiewicz, 2017). The review of the lit-

<sup>1</sup> Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_janu.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_janu.pdf)



erature shows that, especially in the Polish context, the connections between family fat talk, body image and indirect self-destructiveness have not yet been empirically confirmed.

Thus, this study's main goal is to investigate and comprehend the connections between family fat talk conversations, body image among older adolescents, which could – firstly pave the way for more thorough investigation and secondly – could be beneficial for psychological prevention as well as clinical practice.

## **2. Theoretical framework of the study**

Conversations that include negative comments about one's own or others' weight and body shape are referred to as "fat talk" (Ziółkowska et al., 2024). Salk and Engeln-Maddox (2011, as cited in Ziółkowska et al., 2024) emphasize that fat talk is about "feeling fat" rather than "being fat," suggesting that these discussions take place regardless of one's actual body weight. In research works (e.g., Chow & Tan, 2018; Hooper, Kilpela, Ogubuike, Becker, 2023) fat talk has been linked to body dissatisfaction and its negative self-perception which appear in statements like: "I'm too fat," "My thighs are huge," or "My arms are sagging". It's interesting to note that Hooper et al. (2023) postulate that "positive" undertones may also occur in fat talk conversations, such as: "You look great! Have you lost weight?" or "You've changed! Are you on a diet?"

Relationships and communication within family are essential for adolescence, and future mental health problems are less likely happening in a healthy, supportive family setting (Teleon & Włoszczak-Szubzda, 2019). Nonetheless, families in addition to taking number of actions aimed at children's development, also initiate fat talk; which can be observed especially in relationships between mothers and daughters (Rogers, Martz, Webb, Galloway, 2017). According to Arroyo, Segin, and Harwood (2014), bulimic symptoms, drive for thinness, and body dissatisfaction were all associated with mother-daughter fat talk. It has been documented that both mothers' engagement

in fat talk and their daughters' observation of these conversations in the family may lead to body dissatisfaction and the emergence of bulimic tendencies (Arroyo & Anderson, 2016).

Body image is a mental representation that is created to view our own bodies (Shilder, 1935, cited in Mirucka, 2003). Mentioned by Mirucka (2003, as cited in Mioduchowska-Zienkiewicz, 2015) „creation” of one's body image is shaped by both internal and external information as well as life experiences, which means it can be modified throughout a person's life. Due to the substantial physical and psychological changes that occur during adolescence, body image formation is especially crucial during this time (Kubacka-Jasiecka, 2021). Teenagers frequently face the necessity to alter their bodies and incorporate these modifications with their preexisting self-image in today's rapidly evolving cultural changes, which can be frustrating (Favazza, 1996; Klayman-Farber, 2004; Kowalik, 2003; Turner, 1996).

The construct of indirect self-destructiveness was defined by Kelley, Cheung, Rodrigues-Carrillo, Singh, Wan & Becker (1985, as cited in Pilarska & Suchańska, 2021) who recognized that the harm resulting from these behaviors is deferred in time and is most often a side effect rather than the purpose of the conduct. The intention of human being is not to attack his/her own body/life, but to succumb to dangerous desires, despite the physical, social or psychological costs incurred (Kelley et al., 1985, as cited in Pilarska & Suchańska, 2021). According to Suchańska and Wycisk (1998) indirect self-destructiveness is defined as a generalised tendency to engage in behaviors that endanger well-being and life quality, while excluding one-time behaviors, accidents and illness from its definition. Risky behaviors, health neglect, inadequate planning, and passivity in the face of difficulties are a few examples of indirect self-destructiveness (Tsirigotis, 2021). On the other hand, Achte (1978, as cited in Suchańska, 1998) explains that indirect self-destructiveness may refer to behaviors (body modification, addiction, and risk-taking), life events (accidents, neglecting medical care) and intrapsychic mechanisms (learned helplessness).

### 3. Methodology

After receiving approval from Casimir the Great University's Faculty of Psychology's Research Ethics Committee (Opinion No. 7/14.01.2025), the study was carried out from February to April 2025. In addition to online participants who fulfilled the inclusion criteria and completed the survey, participants were gathered from the Craft Vocational School Complex in Inowrocław with consent from the school administration. Participants had to be 18 or 19 years old to be eligible, and those who were younger than 18 or older than 19 were excluded. The goal of the study was explained honestly and clearly to participants in order to protect them. At no point during the study was any identifying personal information needed, and all data gathered is safely kept. Participants were asked to provide informed consent after reading the study details. They were made aware that they could leave the study at any moment, for any reason, and that there would be no repercussions. Since the project was carried out without outside funding, there was no payment for participation. As stated in the research title, the purpose of this pilot study was to investigate important variables and possible correlations.

Based on literature analysis, the following research questions were posed:

1. Is there a association between family fat talk conversations and body image among adult girls and boys in late adolescence?
2. Do family fat talk conversations and body image correlate with symptoms of indirect self-destructiveness?
3. Can family fat talk conversations serve as a moderator between body image and indirect self-destructiveness?

#### 3.1. Sample characteristics

Teenagers between the ages of 18 and 19 were included in the sample ( $M = 18.6$ ,  $SD = 0.49$ ). Out of the 83 responses ( $N = 83$ ), 30% of participants identify as male, 70% as female, and 1 person identify as a gender other

than the one assigned at birth. 87% of respondents declare they are heterosexual, 7% are bisexual, 4% are homosexual, and 2% are asexual. 90% of participants report living with their parents or legal guardians, while 10% report living somewhere else. Furthermore, 20% do not have siblings, whereas 80% report having siblings. More than half (53%) declare experiencing psychological difficulties that interfered with daily functioning, although only 30% receive professional mental health support. Respectively 54% of participants report smoking cigarettes or e-cigarettes, 42% drinking alcohol, 37% consuming energy drinks, 36% binge eating, 26% gaming, 17% using pornography, 10% speeding while driving, 8% casual sex, 8% using psychoactive substances, and 5% gambling as risk behaviors involving loss of control and/or compulsivity. Gathered data was used to describe the study group.

#### 3.2. Research tools

Family fat talk, body image, and the degree of indirect risk behaviors were measured using three self-report scales. Respondents were asked to take a stance to the statements contained in the questionnaires in accordance with the instructions preceding them. A demographic questionnaire was also filled out by the participants, gathering data on biological sex and gender identity, body measurements (height, current weight, and ideal weight), subjective evaluations of relationships with parents/guardians and siblings, mental health status (self and family), and use of psychological services (self and family).

##### 3.2.1. Family Fat Talk Questionnaire (FFTQ-PL)

Family Fat Talk Questionnaire (FFTQ) was created by MacDonald et al. (2015). Polish adaptation conducted by Ziółkowska, Łoboda, Dąbrowska, and Szrajda (2024) of this questionnaire was used in the present research. FFTQ-PL can be used to identify people who engage in self-devaluating conversations under the influence of family and close ones. It has 16 items across two subscales: "Family" (perceptions of family members' body image behaviors) and "Self" (evaluation of one's own body image). A 5-point scale

is used to rate the responses: 1 – „never”, 2 – „rarely”, 3 – „sometimes”, 4 – „very often” and 5 – „always”. Cronbach’s alpha values for the validation study were 0.89 overall, 0.85 for the “Self” subscale, and 0.91 for the “Family” subscale, confirming a two-factor structure and high reliability (Ziółkowska et al., 2024). In this authors own study, Cronbach’s alpha coefficient was 0.88, confirming high reliability of the tool.

### 3.2.2. Body Esteem Scale for Adolescents and Adults (BESAA)

Authors of the BESAA are B. K. Mendelson, White, and M. J. Mendelson (2001), whereas Słowińska (2019) adapted it into polish conditions. It measures self-evaluation of appearance and includes three subscales: appearance esteem (general feelings about one’s appearance), weight esteem (satisfaction with one’s weight), and assigned appearance assessment (beliefs about the assessments of one’s appearance formulated by others). Cronbach’s alpha for each subscale is greater than 0.75, indicating high validity and reliability (Słowińska, 2019). In this questionnaire 23 items on the scale are rated on a 5-point scale, where: 1 – „never”, 2 – „rarely”, 3 – „sometimes”, 4 – „very often” and 5 – „always”. In authors’ own analyses Cronbach’s alpha coefficient was 0.96, indicating high reliability of the scale.

### 3.2.3. Indirect Self-Destructiveness Scale (The PAD-25)

The study used PAD-25 questionnaire by Kelley, Byrne, Przybyla, C. Eberly, B. Eberly, Greendlinger et al. (1985), after adaptation to polish conditions by Pilarska and Suchańska (2021). With a Cronbach’s alpha of 0.81, its validity and reliability were confirmed (Pilarska & Suchańska, 2021). The shortened and unified version of PAD-25 distinguishes between genders comparably to the full version and differentiates levels of indirect self-destructive tendencies. The scale includes 25 items, rated on a 5-point scale: A – „strongly agree”, B – „rather agree”, C – „difficult to decide”, D – „rather disagree” and E – „strongly disagree”. In the present study, Cronbach’s alpha result was 0.82, again confirming high reliability.

## 4. Results

Statistical analyses were conducted using *jamovi* software (version 2.3). Descriptive statistics (Table 1) were used to characterize the sample, while Pearson’s *r* correlation and linear regression analyses were applied to verify the research questions. Considering the sample size, acceptable levels of skewness and kurtosis, it was assumed that the distributions approximated normality (Table 1).

The mean score for the body image variable measured with the BESAA questionnaire was 69.3, and the range of scores from 24 to 106 points for the study group, which indicates its internal differentiation. The analysis of normality with the Shapiro-Wilk test showed a distribution consistent with the normal. The mean scores for family fat talk conversations verified with the FFTQ-PL are in the range from 16 to 62, with an average score of 30.4 – also confirming the internal differentiation of the group. Considering the size of the group, as well as the value of skewness and kurtosis, it was assumed that the distribution is close to normal. The mean score for the indirect self-destructiveness variable measured with the PAD-25 scale was 90.3 with a range from 52 to 119 – also indicating the internal differentiation of the group. The analysis of normality with the Shapiro-Wilk test showed the normality of the distribution.

Table 1. Descriptive statistics for mean results and normality values for variables: body image, family body-related conversations and indirect risk behaviors (N=83)

	Body Image	Family Fat Talk Conversations	Indirect self-destructiveness
N	83	83	83
M	69.3	30.4	90.3
SD	21.6	10.4	13.5
Min.	24	16	52
Max.	106	62	119
SK	-0.115	0.820	-0.363
K	-1.10	0.231	0.263
<i>p</i>	0.017	<.001	0.394

N-group size; M-mean, SD-standard deviation, *p*-statistical significance for the results obtained in the study group, SK-skewness, K-kurtosis

Correlation analysis examining the association between family fat talk conversations and body image in the studied adolescents showed a statistically significant negative and moderate ( $r = -0.494$ ) relationship (Table 2). This means that the perception of one's body and the self-esteem associated with it, decreases when people engage more intensively in conversations that depreciate their own body.

Correlation analysis verifying the relationship between family fat talk conversations and body image with symptoms of indirect self-destructiveness revealed statistically significant relationships between variables (Table 3). Indirect risky behaviors correlate positively and moderately with body image ( $r=0.482$ ), while negatively and at a weaker level correlate with family fat talk conversations ( $r = -0.325$ ). People with a more favorable perception of themselves and their bodies may engage in indirect risky behaviors more often. In turn, people who more often engage in conversations devaluing their own body and the bodies of others engage in other forms of indirect self-destructiveness to a lesser extent.

Regression analysis showed that family fat talk conversations significantly explained both body perception ( $R^2 = 0.25$ ,  $\beta = -0.496$ ,  $p<.001$ ) and the level of indirect self-destructiveness ( $R^2 = 0.11$ ,  $\beta = -0.326$ ,  $p = .003$ ) in the study group (Table 4). Higher intensity of family fat talk conversations were associated with worse body perception and higher level of indirect self-destructiveness.

5. Discussion

Present research revealed statistically significant relationships between family fat talk conversations and body image measured with the BESAA questionnaire. It was confirmed that the higher the score in the FFTQ-PL, the: (a) lower satisfaction with one's weight, (b)

Table 2. Relationship between family fat talk conversations and body image in the studies adolescents (N=83)

Variable	Family Fat Talk Conversations
Body Image	
<i>r</i>	-0.494
<i>p</i>	<.001

*r*-Pearson correlation coefficient; *p*-statistical significance coefficient

Table 3. Association between family fat talk and body image with symptoms of indirect self-destructiveness (N=83)

Variable	Body Image		Family Fat Talk Conversations	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Indirect self-destructiveness	0.482	<.001	-0.325	0.003

*r*-Pearson correlation coefficient; *p*-statistical significance coefficient

Table 4. The role of family fat talk as a moderator between body image and indirect self-destructiveness (N=83)

	Body Image						
	<i>b</i>	$\beta$	SE	<i>t</i>	<i>p</i>	<i>R</i>	<i>R</i> <sup>2</sup>
—	100.50		6.427	15.64	<.001		
Family Fat Talk Conversations	-1.03	-0.496	0.200	-5.12	<.001	0.494	0.25

	Indirect self-destructiveness						
	<i>b</i>	$\beta$	SE	<i>t</i>	<i>p</i>	<i>R</i>	<i>R</i> <sup>2</sup>
—	103.200		4.389	23.51	<.001		
Family Fat Talk Conversations	-0.423	-0.326	0.137	-3.09	0.003	0.325	0.11

*b*-unstandardized regression coefficient,  $\beta$ -standardized beta coefficient; SE-standard error of estimate; *t*-value of the *t* statistic, *p*-statistical significance index, *R*-correlation coefficient; *R*<sup>2</sup>-coefficient of determination

more negative beliefs of the individual in the context of being perceived by others, (c) more negative general feelings regarding one's appearance. These results are consistent with reports from other researchers. For instance: Becker, Diedrichs, Jankowski, and Werchan (2013) in their study, in which women aged 18 to 87 participated, observed that fat talk conversations were significantly correlated with a disturbed perception of one's body, as well as with symptoms of eating disorders. Similar results were obtained by Hooper et al. (2023), examining fat talk in a group of women and men – in both groups, conversations deprecating one's body were correlated with dissatisfaction with one's own body. Moreover, Ziółkowska et al. (2024) also found that more intense engagement in family fat talk may deepen negative opinions about one's appearance.

An important role in shaping the attitude towards oneself, especially among children and adolescents, is played by the family system and the use of messages related to appearance or body weight. Interestingly, it turns out that the reaction of others to fat talk conversations can also be significant. In their research, Mills, Mort, and Trawley (2019) proved that ignoring fat talk conversations leads to reduced body satisfaction, while questioning these conversations leads to a reduced sense of shame and a greater sense of support.

Current research also revealed that engaging in conversations that depreciate one's body may be associated with a reduction in symptoms of indirectly self-destructive behaviors. As stated by Dutkiewicz (2018), it is suggested that there are short-term and positive consequences of fat talk such as: reduction in the unpleasant emotional state of the individual. Similarly, Nichter (2000, as cited in Ziółkowska et al., 2024) states that verbalizing one's dissatisfaction with one's body during conversations can be a valve for negative emotions. Perhaps, therefore, engaging in self-devaluating conversations and conversations protects against more radical forms of self-destructive behaviors.

At the same time, in the analyses it was observed that a greater intensity of family fat talk conversations is associated with a worse perception of one's body and a higher level of indirect self-destructiveness. According to Dutkiewicz (2019), there can also be observed negative and long-term effects of fat talk conversations, which are related to: body dissatisfac-

tion, the development of eating disorders, depressive disorders and/or body dysmorphic disorders. Taking into account these reports and the results of present research, it can be assumed that perhaps fat talk conversations in the family (and not only) is one of the forms of indirect self-destructive behaviors, due to its self-devaluating nature and negative consequences that are distant in time.

The obtained research results are only a pilot of the issues, which – in the authors' opinion – are worth delving into in order to explain better the connections between the phenomena in question, especially due to their application value. It is also necessary to emphasize the limitations of this project, in particular the relatively small group of respondents, consisting mostly of adolescent girls. Therefore, it is necessary to further explore these areas based on a more representative sample, and also taking into account younger adolescents.

## 6. Conclusions

Statistical analysis of the obtained results allows for the formulation of the following conclusions:

- there is a statistically significant relationship between family fat talk conversations and the body image of the studied adolescents, indicating that the greater the involvement in body-deprecating conversations within family, the more negative the perception of oneself and one's body;
- engaging in family fat talk conversations may be associated with a reduction in symptoms of indirect self-destructiveness – perhaps participating in self-devaluating conversations reduces the emotional tension associated with body dissatisfaction and, as a result, protects against more radical forms of self-destructive behavior;
- greater intensity of family fat talk conversations is associated with a more negative self-image and a higher level of indirect risky behaviors – perhaps family fat talk conversations are one of the forms of indirect self-destructive behaviors, due to their self-deprecating nature and negative consequences that are distant in time.

## Acknowledgements

*We sincerely thank dr hab. Beata Ziółkowska for her honorary patronage and substantive support of the project.*

## Bibliography

- Arroyo, A., Anderson, K.K. (2016). Appearance-related communication and body image outcomes: Fat talk and old talk among mothers and daughters. *Journal of Family Communication*, 16, 95-110. <https://doi.org/10.1080/15267431.2016.1144604>
- Arroyo, A., Sergin, C., Harwood, J. (2014). Appearance-related communication mediates the link between self-objectification and health and well-being outcomes. *Human Communication Research*, 40(4), 463-482. <https://doi.org/10.1111/HCRE.12036>
- Becker, C.B., Diedrichs, P.C., Jankowski, G., Werchan, C. (2013). I'm not just fat, I'm old: has the study of body image overlooked "old talk"? *Journal of Eating Disorders*, 1(6), 1-12. <https://doi.org/10.1186/2050-2974-1-6>
- Berlin, J. (2023). *Family Influences on Body Image: How Family Fat Talk Impacts How Women See Themselves* (Doctoral dissertation, Roosevelt University).
- Chow, C.M., Tan, C.C. (2018). The role of fat talk in eating pathology and depressive symptoms among mother-daughter dyads. *Body Image*, 24, 36-43. <https://doi.org/10.1016/j.bodyim.2017.11.003>
- Dutkiewicz, A. (2019). Fat talk – mechanizmy i konsekwencje dewaluacji własnego wyglądu. *Psychiatria i Psychologia Kliniczna*, 18(2), 208-211. <https://doi.org/10.15557/PIPK.2018.0025>
- Favazza, A.R. (1996). *Bodies under siege: Self-mutilation and body modification in culture and psychiatry*. The Johns Hopkins University Press.
- Hooper, S.C., Kilpela, L.S., Ogubuike, V., Becker, C.B. (2023). Fat Talk, old talk, or both? Association of negative body talk with mental health, body dissatisfaction, and quality of life in men and women. *Journal of Eating Disorders*, 11(77), 1-17. <https://doi.org/10.1186/s40337-023-00803-1>
- Katrevich, A., Register J., Aruguete M. (2014). The effects of negative body talk in an ethnically diverse sample of college students. *North American Journal of Psychology*, 16(1), 43-53.
- Klayman-Farber, S. (2004). *When the body is the target, self-harm, pain and traumatic attachments*. Rowman Littlefield Publishers, Inc.
- Kowalik, S. (2003). Ja-cielesne – Próba nowego spojrzenia. *Polskie Forum Psychologiczne*, 8, 1-2.
- Kubacka-Jasiecka, D. (2021). Tataż i pirsing – wpływ wzorów kultury czy autoagresja? *Sztuka Leczenia*, 2, 47-60. (From:) <https://www.sztukaleczenia.pl/pub/2021/2/SL-2-2021-5.pdf> (access: 28.03.2025)
- MacDonald, D.E., Dimitropoulos, G., Royal, S. (2015). The Family Fat Talk Questionnaire: Development and psychometric properties of measure of fat talk behaviors within family context. *Body Image*, 12, 44-52. <https://doi.org/10.1016/j.bodyim.2014.10.001>
- Mills, J., Mort, O., Trawley, S. (2019). The impact of different responses to fat talk on body image and socioemotional outcomes. *Body Image*, 29, 149-155. <https://doi.org/10.1016/j.bodyim.2019.03.009>
- Mills, J., Fuller-Tyszkiewicz, M. (2017). Fat talk and body image disturbance: A systematic review and meta-analysis. *Psychology of Woman*, 41, 1. <https://doi.org/10.1177/0361684316675317>
- Mioduchowska-Zienkiewicz, A. (2015). Zachowania autoagresywne a obraz własnego ciała u kobiet z zaburzeniami odżywiania się. *Studia Psychologica*, 15(1), 45-62.
- Mirucka, B. (2003). Ja-cielesne fundamentem osobowości. *Polskie Forum Psychologiczne*, 8(1-2), 30-40.
- Pilarska, A., Suchańska, A. (2021). Skrócona wersja Skali Pośredniej Autodestruktywności PAD-25. *Psychiatria Polska*, 55(5), 1121-1137. <https://doi.org/10.12740/PP/118006>
- Rogers, C.B., Martz, D.M., Webb, R.M., Galloway, A.T. (2017). Everyone else is doing it (I think): The power of perception in fat talk. *Body Image*, 20, 116-119. <https://doi.org/10.1016/j.bodyim.2017.01.004>
- Słowińska, A. (2019). Skala Samooceny Ciała dla Adolescentów i Dorosłych (BESAA) – polska adaptacja metody. *Polish Journal of Applied Psychology*, 17(1), 21-31.
- Suchańska, A. (1998). *Przejawy i uwarunkowania psychologiczne pośredniej autodestruktywności*. Wydawnictwo UAM.
- Suchańska, A., Wycisk, J. (1998). Pośrednia autodestruktywność i jej związki z poczuciem wewnętrznej spójności. *Czasopismo Psychologiczne*, 4(2), 128-135.
- Teleon, A., Włoszczak-Szubda, A. (2019). Zdrowie psychiczne dzieci i młodzieży w Polsce a rola rodziny. *Medycyna Ogólna i Nauki o Zdrowiu*, 25(1), 6-11. <https://doi.org/10.26444/monz/103096>
- Tsirigotis, K. (2021). Emotional Intelligence, indirect self-destructiveness and gender. *Psychiatria & Psychologia Kliniczna*, 21(3), 219-225. <https://doi.org/10.15557/PIPK.2021.0024>
- Turner, S. (1996). *The Body and Society: Explorations in Social Theory*. Sage.
- Ziółkowska, B., Łoboda, D., Dąbrowska A., Szrajda, J. (2024). Family Fat Talk Questionnaire – adaptacja polska. *Psychiatria Polska*, 339, 1-14. <https://doi.org/10.12740/PP/OnlineFirst/175149>



# The integral development of the student as a support to the family in the process of formation: A case study of the Association of Friends of Catholic Schools<sup>1</sup>

<https://doi.org/10.34766/s1matf59>

Maria Chodkiewicz<sup>a</sup>, Jolanta Kraśniewska<sup>b</sup>, Krzysztof Kraśniewski<sup>c</sup>

<sup>a</sup> Maria Chodkiewicz, <https://orcid.org/0009-0000-5010-6418>, Association of the Friends of Catholic Schools

<sup>b</sup> Jolanta Kraśniewska, <https://orcid.org/0000-0003-4955-7371>, The Pontifical University of John Paul II in Kraków, Poland

<sup>c</sup> Krzysztof Kraśniewski, <https://orcid.org/0009-0002-2001-5069>, Association of the Friends of Catholic Schools

**Abstract:** Formation, embedded in the very essence of human existence, is a dynamic and complex process that has long been the subject of philosophical and pedagogical reflection. Contemporary socio-cultural transformations and the growing challenges of modern civilization point to the need for a renewed examination of the aims and structure of formation. This article explores the notion of integral formation, understood as the comprehensive development of the human person in the fullness of their physical and psychological being – intellectual, emotional, social, spiritual, and religious. Such a holistic approach to human formation appears to offer an appropriate response to contemporary phenomena that contribute to the disintegration of both the individual and the community, such as individualism, consumerism, and the erosion of social bonds. A special role in the process of integral formation is attributed to the family and the school – particularly the Catholic school – which, through the affirmation of attitudes grounded in human dignity, community orientation, and axiological engagement based on Karol Wojtyła's concept of adequate anthropology, supports the multifaceted development of students. A practical model of integral formation is presented through the case of the Association of Friends of Catholic Schools (SPSK), illustrating specific didactic and formative solutions aimed at the integral development of students and the building of a value-based community.

**Key words:** formation, integral development, values, school, student

## Introduction

Formation is a phenomenon embedded in the very essence of human existence and the dynamics of civilization development, which has been expressed throughout the history and culture of individual peoples and nations (cf. Geneja-Pietrzak, 2019; Olbrycht, 2012; Parzyszek et al., 2024). Diverse perspectives on the issue of human formation, especially in the context of philosophy, which has always been the foundation of any pedagogy, were clearly revealed over the centuries. The claim of G. Gutek (2023), who worked on the anthropological basis of pedagogy and education, clearly emphasizes that what is the anthropological vision, so shall be the pedagogy.

Social and cultural transformations contribute to the growing need for a profound reflection on the concept

of formation, its foundation, essence, and governing principles. In the face of the numerous modern concepts of formation, it emerges as a task that is not only complex and extensive but also extremely urgent. The complexity of the surrounding reality may result in the loss of the fundamental goal of education: the formation of the human person in their integrity, especially in the religious and spiritual dimensions. Even though there are many entities involved in the process of education, the primary responsibility for carrying it out remains with the parents and the family. This also entails the right to choose such educational institutions where the process of education is certain to be aligned with their adopted religious and moral rules (Kongregacja do spraw Wychowania Katolickiego, 2009, p. 497).

1 Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_chod.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_chod.pdf)

The concept of integral student development encompasses both physical and mental dimensions: intellectual, emotional, social, spiritual, and religious. It emphasizes the importance of cultivating such traits as dignity, rationality, freedom, responsibility, creativity, and the capacity to transcend one's limitations. It is achieved through educational methods that support self-awareness, problem-solving, and active participation in cultural life.

Integral upbringing, from early childhood, fosters a profound understanding of the value of the human person, the meaning of life, and the duties that arise from the fact of "being" human (cf., Buk-Cegiełka, 2020; Łobacz, 2019). Addressing the issue of the meaning of life has become particularly relevant in relation to the contemporary adolescent crisis. In this respect, logoprevention – preventive actions rooted in V.E. Frankl's logotherapy and existential analysis (2009) – acquires special significance in the upbringing of the younger generation (cf. Hornik, 2024; Ruczaj, 2020; Szczukiewicz, & Solecki, 2023; Szykuła, 2022). Value-oriented education, understood as the support of learners in actualizing their own well-ordered hierarchy of values, which leads to integral development and the fulfillment of human potential, is founded on axiological activity. This activity is expressed through processes of recognizing, evaluating, accepting, experiencing, clarifying, and actualizing values, both individually and socially. This process is closely related to the formation of stable attitudes and intrinsic motivation, which promote conscious participation in social and cultural life (Chałas, 2018).

The core curriculum of early childhood education and the organization of educational process should provide a framework conducive to the implementation of integral education. Such a framework should enable the harmonious development of the child across all important dimensions: psychophysical, social, cultural, and spiritual.

Spiritual development, understood in both a naturalistic and religious perspective – especially with regard to the Christian tradition – constitutes a key element of integral growth. It pertains to fundamental existential categories, such as the meaning of life, ultimate values, moral excellence,

and sanctity. Within this context, early childhood education is a foundational stage in the formation of personal maturity, which is intrinsically linked to both spiritual and religious maturity (Maj, 2019).

The contemporary culture, characterized by the escalation of individualism, consumerism, and the erosion of social bonds, presents a serious challenge for actualizing the ideals of integral and personalistic education. The emphasis on individual achievements at the expense of common good, along with the spread of hedonism and materialism, leads to the weakening of spiritual and ethical foundations of education (Rostańska, 2016). Moreover, the process of negating the significance of traditional values and the growing social isolation hamper the formation of stable interpersonal relationships, which presents a threat to personality development grounded in personalistic values (Król, 2017). Therefore, there is an urgent need for renewing educational frameworks by creating environments conducive to both the building of personal relationships and the affirmation of human dignity and common good (Verhoef, Badley, 2021). Teachers, who are chief animators of the education process, should embody personalistic principles, provide a model of involvement and social responsibility, and inspire students to creatively and consciously participate in community life (Rumayor et al., 2022).

The aim of this article is to analyze the determinants conducive to integral student development and to identify opportunities for implementing this process in practice as a form of support to the family in the upbringing of children, in particular with regard to the educational, social and cultural environment. The article illustrates a practical dimension of the concept of integral education, grounded in Christian personalism, implemented in the schools of the Association of Friends of Catholic Schools (Pol. Stowarzyszenie Przyjaciół Szkół Katolickich, SPSK). The specific teaching and educational solutions presented in the article support the harmonious development of students – on the grounds of the theoretical assumptions discussed above – in the intellectual, emotional, moral, and spiritual areas.



## **1. Determinants of integral development of the person**

Integral education, being the response to the contemporary educational and social challenges, requires a sound theoretical foundation to enable its conscious and effective implementation in pedagogical practice. Today, the subject of integral development seems to be less noticeable, not only in the space of education and upbringing but also in the field of culture as such. This does not mean that the modern man has no need of developing to the extent of his human potential. Over the centuries – especially in the context of philosophy, which has always been the foundation of any pedagogy – there were diverse perspectives on this problem. In order to adequately understand the meaning and significance of this approach, it is necessary to refer to the key anthropological, axiological, and pedagogical assumptions, which are the foundations of integral education. Thus, G. Gutek (2023), who worked on the anthropological basis of pedagogy and education, was right in his claim, clearly stressing that what is the anthropological vision, so shall be the pedagogy.

The experience of the schools that implement the assumptions of personalistic pedagogy shows that omitting objective educational principles is not merely uncondusive to development but also leads to chaos and the weakening of the creative potential of the learner. Upbringing, understood as supporting the young person in his integral development, is a significant duty of adults: both teachers and parents (Śliwerski, Szkudlarek, 2009).

The need to protect children from the predominant axiological relativism is being expressed with increasing clarity in the educational and parental circles. There is a growing desire to find the truth about man and to reflect on both the very essence of his identity and the directions of development that upbringing should define. This leads to the emergence of the fundamental question: who is man and how – through education – he can increasingly become himself (Kraśniewska, 2021).

### **1.1. Family as the first educational environment**

Beyond any doubt, the first educational environment is family. Despite numerous crises and dynamic and deep socio-cultural transformations, it remains the elementary and primary educational environment in the child's life, playing a crucial role in the shaping of its emotions and social attitudes, and in the process of internalizing the system of values, norms, and behavioral patterns.

The pedagogy of family takes into consideration a number of key aspects of the family's right to educate. This right, which stems directly from the act of procreation and the unique relationships of love between parents and children, is inalienable and primary with regard to other educational institutions (Matyjas, 2020).

In a well functioning family, the foundation of the system and the most important relationship in its structure is marriage (Braun-Galkowska, 2002, p. 11-17). This relation is of particular importance, since it determines the functioning of the whole family system. The happiness felt by the spouses is reflected in the activities of the entire family, in the extent of the sense of security and general satisfaction, and in the fulfillment of needs. The style of interaction between parents transfers to their relationships with children. It also becomes the model of interpersonal behavior for the latter (Świętochowski, 2014, p. 31-32). In a proper family, its members are connected to one another but also have their own distinctiveness. The rights and feelings of each person are recognized and respected. Everyone cares for both the development of each family member and the discovery of their individual talents and skills. Parents are able to cooperate. They both hold power and can be relied on (Ryś, 2020).

One of the basic conditions of correct human development is the fulfillment of his psychosocial needs, such as the need for security, love, affection, kindness, and contact, as well as the needs to be recognized, successful, and to act unhindered.

The need for emotional contact is important at all stages of human development, even though it is particularly strongly expressed in childhood and youth. The parents' attitude of acceptance of the child

contributes to fulfilling this need. They show the child their interest, care, and most of all love, which the child wants to reciprocate. This relationship is therefore bilateral. By experiencing benevolent feelings from its parents, the child feels secure and finds its place in the family. The need for security – based on emotional contact and expressed by the child's trust – is also being fulfilled this way.

Fulfilling the need of emotional contact stimulates achieving development milestones and determines healthy personality development. Its fulfilment in childhood results in both the acceptance of oneself and others and the capacity and ability to make interpersonal contacts (Ryś, 2002, 2020). If the child's first experiences in contacts with significant persons are a source of positive emotions, the child will strive to maintain them. Therefore, those early family contacts define interpersonal references in the person's future life (Ryś, Krasowska, Witerek, 2021). The proper fulfilment of the needs for love, acceptance, and respect leads to the formation of a healthy sense of the child's own self, self-confidence, and the belief in its own strengths (Ryś, 2013). According to V. Satir (2000, p. 32), persons with a healthy sense of their own selves are characterized by love, responsibility, belief in their own strengths, integrity, compassion, and honesty.

The process of formation in the family is bi-directional and involves both conscious and unintended actions. It begins already in the prenatal period, which emphasizes the importance of the early stages of the child's life. Upbringing in a family takes place both in its planned, intentional form, and through every-day life situations, which – though not always intended to be educational – play a crucial formative role. Both the deliberate and the spontaneous form create an integral, indivisible whole, although unintentional parenting often predominates in the practice of families (Osewska, 2014, p. 125-139; Szymczyk, 2010, p. 71-83).

Being the first to introduce the child to the world of social culture, the family exerts a fundamental influence on the child's personal and social development. Other social groups and educational institutions – such as schools, peer groups, social organizations, and religious communities – play a supporting and supplementary role with regard to the fundamental influence of the family (Strużyńska, 2020).

The role of family in the formation of attitudes is crucial. Already in the early childhood in the family, a person gains the skills needed in everyday life, learns to distinguish between good and evil and to postpone gratification, and notices sex-related differences. The formation of attitudes towards social and moral norms also starts during development. The internalization of the normative system begins, along with the search for answers to the questions of the aim and meaning of life, and the meaning of human relationships and specific values. The quest for answers in that area, combined with making decisions that confirm or negate certain values, lead to and increasingly conscious formation of the hierarchy of values that will become the basis for many decisions and attitudes in life (cf., e.g., Póltawska, 2011; Ryś, Tataj-Puzyna, 2021).

A well functioning family, which is a community of love and solidarity, transmits cultural, ethical, social, spiritual, and religious values necessary for human development. Children learn both values and the world of culture in the family. They learn to act for the sake of others and to fulfil the needs of other humans (cf., e.g., Mudyń, 2013; Płopa, 2008; Walęcka-Matyja, 2022).

The family is also the first school of moral and religious development. Observing the attitudes of the mother and father towards each other, others, life, illness, suffering, and death forms the child's "moral backbone". Such ethical models often become deeply ingrained guidelines for life. The attitudes of respect for the dignity of oneself and another person, for one's own and another person's work, effort, and hardship are formed in the family. It is there that the person learns to both share responsibilities and take the rights and the good of other people into account (cf., e.g., Ryś, 2020).

The family's influence does not end when the child becomes independent or creates his or her own family. It remains active and significant throughout the individual's life. This is because family life is a permanent existential context for humans, which affects their functioning at various stages of development (Rusiak, 2014; Sozańska, 2014).

## **1.2. School environment**

Besides the family environment, school plays a key role in the child's overall development with regard to education, socialization, formation, and value shaping. In pedagogical literature school is shown as an educational system observed from various perspectives: functional, structural, cultural, organizational, and anthropological. Each of these approaches emphasizes different aspects of its functioning: from fulfilling the students' needs to upholding the social order, to supporting the everyday co-creation of educational reality. Education and cooperation in formal and informal groups are, among many other factors, inherent in the process that allows young people to realize their dreams and passions, to develop themselves and their potential. The task of school, as an institutionalized educational environment, is to support the formation of the hierarchy of values, to develop social competences, and to integrate educational and formational activities (Stepulak, 2017, p. 34-36).

In spite of its potentially key role in the educational system, contemporary school often does not pursue its functions to the fullest, particularly in the area of formation and both culture-making and axiological activities. Observable dysfunctions include the lingering emotional distance between teachers and students, disturbed social relationships in the school environment, the lack of sufficient and healthy cooperation between school and the parents, and the institutional limitations that hamper carrying out effective educational activities. An accompanying problem is the lack of sufficient connection between curriculum contents and the actual formative needs of students. Curricula often focus on the transmission of theoretical knowledge, neglecting the formation of attitudes, values, and social competences. The excessive focus on achieving educational goals in separation from formative goals weakens the function of school as an environment conducive to integral student development. School very often creates an illusion of certainty by providing scientific knowledge – seen as irrefutable and as a sure way to success – which may lead to frustration, in particular among well-ed-

ucated unemployed young people (Buk-Cegiełka, 2019; Musiał, 2019, 2024, also cf. Molenda, 2010; Nowak-Dziemianowicz, 2015).

The contemporary approach to education also stresses the necessity of educating teachers in line with the so-called good practice principles, including a high degree of professionalism, updated subject matter knowledge, creative thinking, and the ability to adapt to changing teaching conditions. The key role of a teacher is to develop the critical thinking ability in students, which requires a flexibility in the working style – from an authoritarian to a liberal approach – adequately to the didactic context and the individual needs of learners. This process should take into account the activity, self-evaluation, aspirations, sense of empowerment, and socialization level of the student. In order for the educational system in Poland to conform to good practice, it is necessary to involve – in an integrated and conscious way – all entities taking part in the process of education, including educational institutions, teaching staff, students, and their parents (Stepulak, 2017, p. 34-36).

According to the core curriculum in force since 1999 (Journal of Laws 1999, No. 14, item 129), the educational activities of school are based on the integration of three equal components: education, provision of skills, and formation. These components are the fundamental goals in the work of an educator and pedagogue, requiring mutual coordination and balance. Formation cannot be considered as a marginal task, instead it should exist in a close synergy with the remaining areas of didactic activity. The complementarity of these three functions determines the quality and integrity of educational process (Stepulak, 2017).

Integral student development is also significantly influenced by psychological and social factors, such as intrinsic motivation, emotional intelligence, and support from effective teachers and peers. These factors support the cognitive, social, and mental development of children, directly contributing to their academic achievements and general well-being (Vitoria et al., 2024). Therefore, integral education becomes not just the means of development of an individual but also a basis for constructing a society founded on personal and communal values. Assuming

that intellectual abilities are not the only wealth of a person, the school community should affirm overall student development, respecting his dignity and potential in its fullness. The core mission of school is to prepare the younger generations to take over the responsibility for the future and to provide them with the ability to share their talents for the benefit of the social community.

In order to effectively carry out its functions with regard to the broadly understood social environment, school should be perceived as a community of people driven by wisdom, who instruct students in the spirit of wisdom. Wisdom is the foundation of the community's permanence and spiritual development, enabling it to be, simultaneously, creatively rooted in tradition and co-created in modern times. Only under the conditions of correctly understood community it is possible to fully involve school in the formation of students both at the individual and the social level (Chalas, 2018). For school to effectively carry out its formative functions, it has to be redefined as the institution that teaches not only what the world is but also how to live with others in that world: in the spirit of values, responsibility, and communal orientation.

## 2. The role of the Catholic Church in the process of human formation

The teaching of the Catholic Church on formation in the first community – the family – emphasizes the key role played by the formative relationship between parents and children. Children, through their love, respect, and obedience to parents, make their special and irreplaceable contribution to building a genuinely human and Christian family (Gaudium et Spes, No. 48).

In his encyclical *Humanae Vitae*, Paul VI articulates the fundamental significance of the role of parents in the process of formation. As givers of life, they have both the fullest right and the duty to bring up their children, being their first and most significant educators. The Pope points out that once this task is neglected, it is difficult to repair by other

institutions. Parents are the ones responsible for creating the homelike atmosphere based on love and respect for God and people, which favors the overall personal and social development of children (Pawel VI, 1968, No. 25). In this context, the family is described as “the first school of those social virtues which every society needs” (Jan Pawel II, 1981).

In the teachings of Vatican Council II, each family member, according to their own vocation, shares in the gradual work of building a community of people. This transforms the family into the space where the full human potential can develop. This process is based on mutual love and grace shown – especially to children, elderly people, and the sick – through every-day service and unanimous sharing of goods (Gaudium et Spes, No. 52).

John Paul II – called the “Family Pope – taught that formation is an interpersonal reality, a relationship between people: “*education [is] (...) a reciprocal ‘offering’ on the part of both parents: together they communicate their own mature humanity to the newborn child, who gives them in turn the newness and freshness of the humanity which it has brought into the world*”. The Pope also stressed that “[p]arents are the first and most important educators of their own children (...)”. All other participants of education act, in a way, on behalf of the parents, under their consent, and even, to some extent, at their discretion (Jan Pawel II, 1994a, No. 16). Formation is a process culminating at the stage when, having achieved a degree of mental and physical maturity, the young person begins “educating himself on his own”. Over the years, this self-formation will surpass his formation so far. The young person encounters new people, environments, teachers, and schoolmates, who affect him in a formative way, positively or negatively. In spite of that, education in the family never strays far from its existential roots, even when the young person sets out on his own path (ibidem).

In his adhortation *Familiaris Consortio*, John Paul II indicates that the Christian family is the first and most important community responsible for communicating the Gospel to the human person undergoing the constant process of development. The family's task is to accompany him in maturing into the full human potential and Christian ma-

turity, realized through progressive education and catechesis (Jan Paweł II, 1981, No. 2). The Pope also stresses that the right and duty to educate children stems from the original vocation of married couples to take part in God's creative activity. By giving life to a new person by love and for love, parents simultaneously obligate themselves to support his or her development to live a fully human life (Jan Paweł II, 1981, No. 36).

According to the teachings of the *Catechism of the Catholic Church* (KKK, 1994), the first responsibility of Christian parents, ensuing from their role as givers of life, is the education of children. The family should be the space where a child gradually develops moral virtues and gains the skills necessary to attain true freedom, such as self-mastery, self-denial, and sound judgment (KKK, 1994, No. 2223). In early childhood, parents express their love by caring for the child's development, both in the material and spiritual dimensions, through their every-day presence, attention, and fulfilment of needs (KKK, 1994, No. 2228). Then, in adolescence, it is increasingly important to support the child in shaping a mature understanding of freedom and responsible use of reason (KKK, 1994, No. 2228). Young people should learn to make decisions and discharge their responsibilities in life, in the spirit of trust towards their parents, gladly accepting their advice and experience (KKK, 1994, No. 2230).

The contemporary challenges, brought by the subsequent decade of the twenty-first century, clearly indicate the need to intensify activities aimed at the development of integral education, especially in Catholic schools. As stressed by John Paul II (1994b), the Catholic Church must not limit itself merely to the intellectual formation of the younger generation but should become involved in its full integral formation encompassing all aspects of human beings.

## **2.1. 2.1 The model of personalistic education**

In the course of history, numerous and diverse pedagogical concepts arose. Each of them strove to express its own understanding of education in an anthropological, cultural, or axiological context. Personalism, which occupies a special place among those approaches, emphasizes the dignity of a human person as the foundation of education. Many outstanding representatives of Polish pedagogical thought can be found in this current, such as Czesław Bartnik (1995) and Wincenty Granat (2006), whose academic contributions are a valuable source of inspiration for teachers and educators. Among personalists, it was John Paul II who articulated one of the most profound and also most precise definitions of education, combining philosophical reflection with pastoral and pedagogical experience. His take on education as the process that leads the person to the fullness of humanity, freedom, and responsibility remains a current and important point of reference for modern personalistic pedagogy (as cited in: Starnawski, 2020).

In its theoretical dimension, John Paul II's concept of pedagogy of person is rooted in the personalistic philosophy he pursued, which draws upon Thomism and phenomenology<sup>2</sup> (Wojtyła, 2021).<sup>3</sup> As a person, by getting to know himself, the human experiences his own worth in the dialogue with himself, other persons, and God. The person has the capacity to love, is free in his or her choices, and is recognized as a person under the law (Rynio, 2004). Equipped with conscience, the person is open to moral values, norms, and obligations. He is able to self-actualize morally in relation to the Absolute. He is fully capable of "being himself". He achieves it in the socio-cultural dimension through dialogue, work, and sharing in the common good (ibidem).

2 For St. Thomas, the person is the most perfect expression of being. Aquinas adopts the concept of anthropological hylemorphism, defining the person as that which is the most perfect in all nature (*persona significat id quod est perfectissimum in tota rerum natura*). He also stressed that the human is a unity, a comprehensive being (Stokłosa, 2001).

3 Wojtyła's work has its sources in two great philosophical traditions. One of them is Thomism, the other is phenomenology. Human experience was Wojtyła's starting point, as he wrote at the very beginning of *Person and Act*: "this study came from the need to objectivize that great cognitive process which at its origin may be defined as the experience of man". For Wojtyła, Thomism provided human person with stability and invariability. Therefore, it is entitled to fundamental dignity and transcendence. Whereas the phenomenological method was able to add value to human experiences and feelings, which were dynamic in nature (ibidem).

In his teaching, John Paul II (1994) describes the phenomenon of “integral education” which aims at “being human” in all dimensions: personal, ethical, social, cultural, and religious. Since man, according to the Pope, is responsible in his conscience for the shape of his life, he should first fully enter the process of education, then “self-education”. The formation of conscience, mentioned in the Catechism of the Catholic church, is therefore important (KKK, 1994, No. 1774f).

According to Wojtyła (1969), man is “entrusted to himself”. He has, therefore, a moral responsibility to systematically “cultivate” his nature (*bios*), develop his cognitive abilities (*logos*), and deepen his moral actions (*ethos*) by opening himself to universal spiritual values: truth, good, and beauty. The mystery of the human person should manifest in a healthy personality. The ideal of mature personality is a man who was called and entrusted to himself. It is a person who constantly improves himself internally to live with dignity and enjoy his freedom responsibly. He is to build the civilization of life, truth, and love with his life, being a selfless gift to others. This is because man should constantly transcend himself, and the measure of his development is infinity (cf. Rynio, 2004).

A special importance in the process of education should be given to the concept of “adequate anthropology”, which constitutes a philosophical approach to the human person suggested by Karol Wojtyła, a philosopher from Krakow and the author of the fundamental work *Person and Act* (Wojtyła, 1969). This approach assumes that man is not merely a biological or psychological existential fact but a person whose essential dimension is “becoming” by free and deliberate acts. Unlike other beings of nature, man is not only subject to the processes of development but also takes an active part in shaping those processes. He is the subject of his own personal and moral maturing. The transcendence of person in action is thus accompanied by the experience of agency (Wojtyła, 2021).

Wojtyła’s adequate anthropology thus highlights the central role of man as a self-determining being who enters into a relationships with moral good and evil through acts of free will. The person’s reality is inextricably linked to ethical reality: the human person constitutes himself in relation to the moral values he actualizes in action. Man becomes who he is through what he does, and in this sense his development is internal, volitional, and personal. It is impossible to reflect upon this concept in isolation from the Christian foundation of Wojtyła’s thoughts, deeply rooted in Catholic theology. Nonetheless, this relationship does not limit its universality. To the contrary, it emphasizes the transcendental dimension of the human person and his dignity, which remains crucial in both the anthropological and pedagogical reflection (Wojtyła, 2021; c.f. Mruszczyk, 2010).

The integral development capacity of the student’s person became an inspiration for lay people to seek the model of school in which education and formation could be implemented based on the anthropology rooted in Christian personalism.

### 3. The Association of Friends of Catholic Schools and its pedagogical vision in the education of children and youth

The entry into force of the Law of Associations (Journal of Laws 1989, No. 20, item 104) allowed various groups and communities to establish educational organizations to further educational goals as the governing authorities of schools and pre-schools.<sup>4</sup> The Act on the Educational System (Journal of Laws 2024, items 750, 854, 1473, 1933) then enabled the activities of public schools and pre-schools, funded through educational subsidies and governed by non-local government entities.<sup>5</sup> The Association of Friends of Catholic Schools, founded at that time, adopted the integral

4 In January 1991 the Association of Friends of Catholic Schools (Pol. Stowarzyszenie Przyjaciół Szkół Katolickich) based in Częstochowa was incorporated by the court. The Association was the first Catholic educational organisation established after the fall of the communist system. It became legally possible to found a school only after the Act on the Educational System entered into force in September 1991.

5 The Association of Friends of Catholic Schools established at that time constantly develops its activities. Currently, in 2025, it runs 122 schools and pre-schools in 10 provinces.

development of a person as its mission. The foundation of the integral human development in schools run by the Association is Christian personalism, and the chief operating principle is to respect the primacy of person over action. At school, the formation of the person is implemented through the principle of subsidiarity<sup>6</sup> (Dobek, 2008). Subsidiarity – the entirety of actions for the benefit of the social environment – is in line with the position of the Catholic Church, according to which parents should have as much power and responsibility as possible with regard to educating their children (Jan Paweł II, 1994b).

In their basic assumption and educational goals, parents should take into account the development of the entire person of their charges. This mission can be supplemented, in particular, by the Catholic school that fulfils the mission of the Catholic Church to be present in education – in line with the teachings of the Vatican Council, in the light of the constitution *Lumen Gentium* (Sobór Watykański II, 1964). *Gaudium et spes* (Sobór Watykański II, 1965b) embeds itself in the broader reality of Christian education, thoroughly described in the conciliar declaration *Gravissimum educationis* (Sobór Watykański II, 1965a).

School should strive to attain spiritual goals and a truly humanistic formation through the service of the teachers who profess their faith. In particular, Catholic school should form the transcendental nature of the human person, shape mature consciences, and aim at preparing learners to face the challenges of modernity with due regard to personal dignity and subjectivity in social life. Catholic school strives to assist students in shaping their lives in truth and justice, so that they may attain the maturity in faith (Płaziński, 2019). What is important in integral education is the primacy of the person over an object, ethics over technology, being over having, and mercy over justice. John Paul II also points it out, after his great predecessor Paul VI, demonstrating the importance and primacy of ethics over technology, which rests in the primacy of the person over things, as well as that of spirit over matter. It requires that teachers, and even students, should possess a certain philosophical and theological

knowledge, in the key of the encyclicals *Redemptor hominis* (1979) and *Fides et ratio* (1998). This is because the practice of education and formation demands a foundation, or a concrete theoretical basis, as it has been explored many times (cf. Gutek, 2003).

### **3.1. Educational activities of the Association of Friends of Catholic Schools in practice**

The key role in the activities of the Association of Friends of Catholic Schools (SPSK) is played by the integral and personalistic vision of the human person rooted in the anthropology of Karol Wojtyła – John Paul II – and other representatives of Polish Christian personalism. Unlike other currents of personalism, this vision derives its identity from the revealed truth about the man and his vocation to sanctity, which is expressed in both the documents of the Magisterium of the Church and current scientific approaches (cf. Geneja-Pietrzak, 2019; Michalski, 2021; Mruszczyk, 2010; Wojtyła, 2021).

Integral anthropology, on which the pedagogical approach of the Association is founded, is not limited to the philosophical or psychological perspective – even though both are important and complementary to each other – it also includes a theological dimension, rooted in the Revelation and the teachings of the Catholic Church. This synthesis enables it to show man as a corporeal and spiritual being endowed with dignity and vocation to live in a community, and to actualize the full human potential. This concept also results in a specific vision of marriage and family, presented to students in the spirit of the teachings found, among other things, in the *Catechism of the Catholic Church* (cf. KKK 2201-2233).

Based on the above assumptions, the Association implements a personalistic model of education, expressed more tangibly in the statutes of educational institutions and in the educational and didactic practice. The aim of this model is to support integral student development in the corporeal, mental, social, cultural, moral, and spiritual dimensions, under a strict cooperation between teachers, students, and parents.

6 Subsidiarity (from Lat. *subsidiū* ‘aid, support, reserve forces’) – a principle saying that each level of government should carry out only those responsibilities which cannot be effectively fulfilled by a lower level or by individuals acting within the society.

The structure of the integral view of education comprises five main formational planes, which permeate one another and combine to make a cohesive concept of formation of a human person, namely: (1) physical formation, (2) social formation, (3) cultural formation, (4) moral formation, and (5) spiritual formation.

### 3.1.1. Physical formation plane

The physical formation plane is actualized in the educational activities of SPSK in a number of ways. By instilling in students the awareness that life and physical health are valuable gifts conferred to us by God. By caring for the life and physical health of oneself and others, taking into account not only one's own needs but those of others and the common good. And by the physical formation aimed at integral development, including care for the physical development of students. Sports activities and competitions organized by the school are meant to awaken in students the need for physical activity and healthy sports rivalry to ensure their harmonious development. The foundations of the physical formation of man can be found in the personalistic anthropological concept of St. John Paul II. In his teachings the Pope consistently presented sports as not only a form of physical activity but also as an integral element of the development of the human person, which included the ontological, anthropological, axiological, theological, and ethical dimensions. From this perspective sports appear as the space where the vocation to the full human potential is actualized by the harmonious formation of body and spirit. The reflection of John Paul II – rooted in the teachings of Vatican Council II and enhanced by personal sports-related and spiritual experiences – elevates physical culture to the rank of a spiritual and existential value and places it in the context of integral education (cf. Dziubiński, 2017; Kowalczyk, 2010; Seul, 2017; Szymczyk, 2012).

The Pope's catecheses on the theology of body provide an important point of reference for the Christian anthropology of sport, which introduces the human body into the sphere of ultimate Christian values, the sphere of sacrum. The Pope underlined the unity of body and spirit and pointed out that sports – when practiced with respect to the rules and the person's dignity – may contribute to building the society that values meetings over conflicts, honest competition over fierce confrontation. John Paul II warned against the dehumanization of sports. He saw sports as a tool for building a community based on solidarity and dialogue, where sport rivalry replaces social conflicts. An honest competition becomes a sign of respect for the dignity of the human person and common good. When sport is abstracted from personalistic values, it loses its educational and ethical dimension, while man is no longer the subject of sport but means to an end (cf. Seul, 2017). In 2004, in order to institutionally emphasize the importance of sport in the Church's pastoral mission, the Pope established a department of sports in the Vatican. The statement published at the time stated that "sport is a new field of Church activity, a part of the culture, and an indispensable component of human development in the service of peace and brotherhood" (Oroń, 2024).

In John Paul II's opinion, physical exercise, including sports, strengthens not only physical abilities in children and youth, but also intellectual and spiritual ones. Practicing sports may help uncover each child's potential. Sport is an opportunity to work on one's development with the support of parents, educators, and coaches. It is a certain struggle directed at the exercise of attention and the training of will and patience<sup>7</sup>. This purpose is served, among other things, by football events, in which all students of the schools ran by the Association of Friends of Catholic Schools can participate. The scope of the play-offs, which includes students from many

7 During his pilgrimage to the homeland, in Elbląg on 6 June 1999, the Pope addressed sportsmen saying: "Every kind of sport carries an opulent wealth of values, which always need to be brought into awareness in order to be made real. The exercise of attention, the shaping of will, perseverance, responsibility, enduring hardships, and being faithful to one's obligations – these are all a sportsman's virtues. I encourage you, young sportsmen, to live according to your values, that in your lives you always be righteous, honest, and balanced people, the people who engender trust and hope". See also: <https://www.kurier-ilawski.pl/opinie/Rochowicz-Sport-i-wartosci-w-zyciu-Karola-Wojtyly-/5499> (access: 8.01.2025).



schools of the Association, is an added value. Moreover, under such a notion of sports, SPSK organizes bike trips, among other things, and all kinds of outdoor games.<sup>8</sup>

### **3.1.2. Social formation plane**

The social formation plane is present in the educational activities of SPSK in the formation of the social maturity of learners and in the shaping of the attitude of respect towards all people. The learning of respect for the dignity of each person is achieved by teaching sensitivity to the needs of neighbors and responsibility for oneself and others. The work on students' autonomy in the strife for good is accentuated, along with the formation for true love understood as service for the sake of others. Cooperation with the family as the primary educator of its children is important, together with their family home as the place of formation of the foundational virtues of the social plane. In the spirit of love and responsibility, the school institution directs its educational activities to the formation of obedient attitudes towards parents and the people in power. The period of school education is for students the time of gradually discovering and internalizing the value of common good, represented by such fundamental communities of social life as family, class at school, nation (Motherland), and the Church community.

During the almost twenty-seven years of his pontificate, John Paul II made the question of the dignity of the human person one of the main axes of his teaching, which was particularly clear in his encyclical *Evangelium Vitae* (1995). The Pope incessantly accentuated the fundamental significance of Christianity as the carrier of anthropological values, indicating the transcendental dimension of human existence and the intrinsic value of humanity. In this context he called upon the faithful to unite around the person of Christ, who does not only endow man with a Christian dignity through his presence and actions but also confirms his genuine humanity. John Paul II emphasized that only by living in an authentic relationship with the Creator an

individual can become fully aware of his uniqueness and the dignity resulting from it, and actualize his humanity in the attitude of service to another human as well. By referring to the Dogmatic Constitution *Lumen gentium* (1964) as well as other documents of the Vatican Council II, the Pope showed that the sharing by the faithful in the royal mission of Christ allows them to discover and actualize the dignity ensuing from God's vocation, described as "kingship". This dignity is manifested as the readiness to serve others as Christ himself did (cf. Sadowski, 2010, p. 269-342). In this regard the Pope's teaching is one of the key curriculum components of the school entrusted with changing the world "from the inside", i.e., with educating people in the spirit of the Gospel. A Catholic school actively participates in the spiritual development of its students by creating room for becoming creatively rooted in tradition, including taking part in the celebrations related to the patron of the school. It is worth noting that bestowing a saint's name on a school is an opportunity for cooperation between the school, local authorities, and the local parish. A special accent in the naming of the school and consecration of its standard is the presence of the bishop of the diocese where the school is located, which underscores the uniqueness of the moment even more for the children, their parents, and the entire local community.

### **3.1.3. Cultural formation plane**

The cultural formation plane is implemented in the educational activities of SPSK through the shaping of intellectual development and experiencing the world of culture by students. The care for intellectual development means transferring reliable knowledge and providing students with skills to deliberately take actions requiring consistent intellectual effort. It also means developing both creative abilities and analytic and synthetic thinking. Above all, however, it means making students more sensitive to truth, good, and beauty. Culture constitutes a dynamic and intrinsic aspect of the process of human formation, in which

<sup>8</sup> One such example is the yearly Blessed Stefan Cardinal Wyszyński Trek, taking place in Bachledówka, in a place related to the sojourns of Primate Wyszyński as well as Karol Wojtyła. The main goal of the trek is the instilling of the values formed by the Primate of the Millennium with regard to the active style of life, reinforcement of peer bonds, and integration of participants.

love and work are assigned particular importance. The education carried out within culture and through culture aims to furnish the human with the system of symbols, norms, behavioral patterns, and values, which allow him to consciously participate in social and spiritual life. In the *Pastoral Constitution on the Church in the Modern World, Gaudium et Spes* (1965b), the Fathers of the Vatican Council II stressed the “great importance” of literature and art in human life. This document unambiguously shows culture as an important dimension of human existence, one that expresses and deepens the meaning of humanity.

In his *Letter to Artists* (1999), John Paul II stated: “all men and women are entrusted with the task of crafting their own life: in a certain sense, they are to make of it a work of art, a masterpiece” (No. 2). The Pope, who himself was a poet and an actor, often emphasized the importance of artistic creation and the role played by artists in the society. In his view artists – similar to scientists, technicians, teacher, and parents – serve an important educational function because they support the development of man and society through their creations. The art of education, as the Pope indicates, is a special form of artistic activity, which requires both intuition and devotion to values. He believed that the “creative intuition” of an artist, which allows him to encounter the mystery of reality by experiencing the beauty of the world, was a crucial component of creation. In this sense, art can support the mission of the Church and serve as the *praeparatio evangelica* – preparation for the Gospel – both for the artist himself and the entire culture (ibidem).

Therefore, integral education implemented in Catholic schools does not merely encompass the transfer of knowledge but also the all-round development of student’s abilities – particularly those most useful in his future professional career. The formation of aesthetic and social sensitivity, openness to transcendence, and systematic religious education, rooted in the critical reflection on culture, play an important role in this context. The educational curriculum of SPSK schools assumes that the students’ contact with art

should show its ethical dimension. The discovery of the moral meaning of culture by young people may lead to the deepening of their spiritual lives and to attaining moral freedom, which is only possible by orienting oneself to absolute values. This is why diverse forms of contact with culture and art are accentuated in working with children and youth as both recipients and creators. The activities of school theatrical groups, choirs, music bands, art groups, school newspapers, and artistic circles and workshops are subjects of educational care. The schools ran by SPSK make great effort to provide students with access to genuine forms of art and culture, both within and outside the school. Students also have the opportunity to learn the importance of culture by direct contact with it and reflection upon its value and message.<sup>9</sup>

#### 3.1.4. Moral formation plane

The moral formation plane is realized in the educational activities of SPSK by developing the ability to distinguish between good and evil: between actions conducive to human development and those which affect him in a harmful way. It is aided by discovering the reality of conscience and its dependence on God, by shaping conscience, and by learning to analyze one’s own behavior according to the Decalogue and Blessings. It is also important to awaken the cognitive curiosity aimed at seeking truth, goodness, and beauty, as well as inculcate moral and ethical values in the attitudes of students, so that they may implement them in their every-day lives. An individual approach to each student is an important responsibility of the Association’s schools, so that education and upbringing may be a unique path in the journey of his development. For that reason the educational and formational program “Persona” was prepared. It is based on the assumptions of tutoring but focuses on both the educational and personal development of students. In this program, the student has the option of choosing the teacher with whom he will be working individually on his development. To aid students in this respect, “Indexes of Personal Development”

9 In the Association’s schools, there are acting workshops and theatrical events. There, children and youth are sensitised to the cultural values found in classical literature through such activities as “Literature with the spirit” conducted by professional actors.

were created as a kind of notebooks for working on oneself. What is crucially important for carrying out the “Persona” program is the constant training and workshop-based formation for teachers, the so-called promoters, who accompany and support students in working on their development.

The problem of conscience is central to the moral teachings of John Paul II, as one of the key themes of his anthropological and ethical reflection. This problem was particularly broadly developed in the encyclical *Veritatis splendor* (1993), where the Pope presents conscience in its inseparable relationship with truth and freedom. This document is a response to the moral crisis of today – derived from the deeper crisis of conscience – expressed, e.g., by the relativism of norms and the loss of the ability to distinguish good and evil (cf. Pokrywka, 2001). John Paul II emphasizes that, in order to correctly serve its function, conscience has to be constantly formed in truth. It is the result of its internal structure: conscience is not a fully matured and reliable instance but rather an ability in need of shaping (Jan Paweł II, 1993, No. 62). For this reason one should take into account the possibility that incorrect moral judgments can be made due to the influence of external factors, such as social environment, culture, or media disinformation. The human right to act in line with his conscience must be understood in parallel to his duty to shape that conscience in relation to the objective truth. While the formation of conscience is a responsibility of all humans, it pertains especially to young people, for whom it is an indispensable component of their self-education (ibidem, No. 63-66). Since moral maturation takes place in specific social circumstances, the responsibility for that process rests not only with the individual but also with the family, school, religious community, and the representatives of the world of culture, science, politics, and media (Jan Paweł II, 1993, No. 87-89).

As the work in this area is particularly important, the Association first and foremost relies on the teaching of the Church, in particular the teaching of John Paul II who emphasized multiple times – among other things in his encyclical *Evangelium vitae* (1995) – the incessant and urgent necessity to constantly rediscover the human and moral val-

ues which belong to the very essence and nature of man. This, according to the Pope, is discovering the truth about the man, his uniqueness, and dignity. He stressed that “no individual, no majority and no State can ever create, modify or destroy [these fundamental values], but must only acknowledge, respect and promote” (Jan Paweł II, 1995, No. 71).

During the summer breaks, original programs “In search of identity – on the trail of one’s own heart” are being organized (Kraśniewski, 2016). The activities are focused on discovering, experiencing, and rebuilding the vision of one’s own self with respect to the male and female identity as a boy or a girl. The program is a series of workshops divided into four parts: I. Training of intellect – “know yourself”; II. Training of will – “where my lusts rule, I, unfortunately, don’t”; III. Training of heart – “the heart has its reasons unknown to reason”; IV. Training of relationships – “no man is an island, entire unto himself”.

### **3.1.5. Spiritual formation plane**

The spiritual formation of students in schools run by SPSK involves a multi-dimensional process of shaping the human being in his relation to God, himself, and other people. The key elements of this formation are the discovering of faith as a gift received in the Sacrament of Baptism, which is the foundation of Christian identity, and the interpreting of the events of one’s own life in the light of this faith. The experience of God as the loving Father whose unconditional love for all humans becomes the fount of hope and the foundation for giving witness to Christian love. It is the education to live in faith as a dynamic, personal relationship with the living God and to actively participate in the sacramental life of the Church community. It also means accompanying the student in discovering the depths of his own heart as the center of the human person and the place of meeting the Transcendent. This is a work on developing one’s ability to build genuine and stable interpersonal relationships and personal relations with God. It is also an education oriented towards love, understood as a selfless gift of oneself in the spirit of Christian personalistic anthropology. The important event which deepens the spiritual lives of the students of

schools run by SPSK is the pilgrimage of the relics of Blessed Carlo Acutis. His testimony of life in faith and the Eucharist and the evangelization over the Internet show the way of living to the young people. The visitation of the relics taking place in each SPSK school provides each student with the opportunity to meet Blessed Carlo in person. This formation, related to the integrity of the human person and to his religious and spiritual dimensions in particular, is an important component of overall development. It relates to such fundamental existential categories as the meaning of life, hierarchy of values, and the quest for moral excellence and sanctity. The spiritual dimension – fundamental for the development of the human person – is directed to fulfil the vocation of man to the fullness of life, which, as John Paul II emphasized, “far exceeds the dimensions of his earthly existence, because it consists in sharing the very life of God” (1995, No. 2).

What distinguishes the schools run by SPSK is the attention the Association pays to the integral development of teachers. It may be said to be a *sine qua non* condition, without which there is no integral development of students. To implement integral student development in this way, the teacher has to be a master, an authority, and a witness of faith. The teacher who works on developing his own person will have the ability to assist students in their journeys of personal development. It is also through the witness of life of teachers, who act as both educators and spiritual guides, that the school carries out its formational goals aimed towards the spiritual development of students and a genuinely personalistic vision of education. The spiritual formation and professional background of teachers, which combines interdisciplinary knowledge, ethics, creative thinking,

and a flexible didactic approach, are achieved through participation in numerous trainings, formational meetings, and philosophical workshops. Consequently, the teachers improve their pedagogical and therapeutic competences, including the use of logotherapy and logoprevention (Frankl, 2024).

## Summary

In the context of the contemporary socio-cultural transformations and the growing civilizational challenges, the need to review the concept of integral education becomes increasingly pronounced. In family environments, as well as in the circles of educators and pedagogues, there is a noticeable growing determination in counteracting the relativistic trends in education, while simultaneously striving to discover and display the truth about man. The danger of over-accentuating the axiom of freedom in the modern model of education, without taking responsibility into account, not only constitutes a shift in perspective but also becomes a distortion, which is destructive to man through a false image of himself. In this context, the educational activities of the Association of Friends of Catholic Schools – whose educational model is rooted in the teachings of the Catholic Church and reinforced by the cooperation with the family and the active involvement of the entire school community – is a significant example of implementing the concept of integral education, clearly inspired by the personalistic anthropology of John Paul II. This program is a suggested answer to the crisis of identity of education in the world of today and an example of a cohesive and axiologically driven concept of formation of the younger generation.

## Bibliography

Bartnik, Cz. (2005). *Personalizm*. Kraków: Oficyna Wydawnicza Czas.  
Braun-Gałkowska, M. (2002). Psychoprofilaktyka życia rodzinnego, *Kwartalnik Naukowy Małżeństwo i Rodzina*, 2, 11-17.  
Buk-Cegiełka, M.S. (2020). Przymioty osoby ludzkiej – implikacje dla edukacji wczesnoszkolnej. *Lubelski Rocznik Pedagogiczny*, 39(3), 11-22. <https://doi.org/10.17951/LRP.2020.39.3.11-22>

Buk-Cegiełka, M. (2019). Specyfika współpracy szkoły z rodzicami dzieci na pierwszym etapie edukacyjnym: Szanse – trudności – potrzeby. *Studia Paedagogica Ignatiana*, 22(1), 37-50. (From:) <https://apcz.umk.pl/SPI/article/view/SPI.2019.1.002/17698> (access: 8.06.2025)  
Cichosz, W. (2000). Wychowanie w szkole katolickiej. (In:) A. Sowiński, A. Dwyer (eds.), *Czy szkoła katolicka może ulegać postmodernizmowi?*, 97-107, Szczecin: Centrum Edukacyjne Archidiecezji Szczecińsko-Kamieńskiej.

- Chalas, K. (2018). Edukacja aksjologiczna i wychowanie ku wartościom podstawą budowania szkoły jako wspólnoty życia, pracy i służby, *Prima Educatione*, 2. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Dobek, A. (2008). Zasada pomocniczości w orzecznictwie Trybunału Konstytucyjnego. (In:) M. Sadowski, P. Szymaniec (eds.), *Państwo i zadania*, 2, 155-168. Wrocław: Wrocławskie Studia Erazmańskie.
- Dziubiński, Z. (2017). *Sport w perspektywie św. Jana Pawła II i św. Jana Bosko*. Warszawa: Akademia Wychowania Fizycznego Józefa Piłsudskiego w Warszawie, Salezjańska Organizacja Sportowa Rzeczypospolitej Polskiej.
- Frankl, V.E. (2009). *Człowiek w poszukiwaniu sensu*. Warszawa: Wydawnictwo Czarna Owca.
- Frankl, V.E. (2024). *Psychotherapia na co dzień*. Warszawa: Wydawnictwo Naukowe PWN.
- Geneja-Pietrzak, B.E. (2019). Personalistyczne ujęcie w wychowaniu „kładką” ku budowie kultury opartej na wartościach. *Studia Paedagogica Ignatiana*, 22(2), 217. <https://doi.org/10.12775/SPI.2019.010>
- Granat, W. (2006). *Osoba ludzka. Próba definicji*. Lublin: Wydawnictwo KUL.
- Gutek, G.L. (2003). *Filozoficzne i ideologiczne podstawy edukacji*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Hornik, P. (2024). Duchowość w logoterapii i analizie egzystencjalnej Viktora Emila Frankla. *Kwartalnik Naukowy Fides et Ratio*, 60(4), 119-131. <https://doi.org/10.34766/fer.v60i4.1326>
- Jan Paweł II. (1981). *Familiaris consortio: Adhortacja apostolska o zadaniach rodzin chrześcijańskiej w świecie współczesnym*. Watykan: Libreria Editrice Vaticana.
- Jan Paweł II. (1994a). *List do Rodzin Ojca Świętego Jana Pawła II z 2 II 1994 r.* „Gratissimum sane”.
- Jan Paweł II. (1994b) Przemówienie do uczestników XIV Światowego Kongresu Szkół Katolickich, Rzym, 5 maja 1994. (In:) J. Poniewierski (ed.), *Służyć wzrastaniu w prawdzie i miłości*, 315-318. Kraków 2009: Wydawnictwo AA.
- Jan Paweł II. (1979). Encyklika Jana Pawła II Redemptor hominis z 4 marca 1979 r. (In:) *Encykliki Ojca Świętego Jana Pawła II*. Kraków 2003.
- Jan Paweł II. (1993). *Veritatis splendor: Encyklika o niektórych podstawowych problemach nauczania moralnego Kościoła*. Watykan: Libreria Editrice Vaticana.
- Jan Paweł II. (1995). Encyklika Jana Pawła II Evangelium vitae – o wartości i nienaruszalności życia ludzkiego z 25 marca 1995 r. (In:) *Encykliki Ojca Świętego Jana Pawła II*. Kraków 2003.
- Jan Paweł II. (1998). Encyklika Jana Pawła II Fides et ratio z 14 września 1998 r., (In:) *Encykliki Ojca Świętego Jana Pawła II*. Kraków 2003.
- Jan Paweł II. (1999). *List do artystów*. Wrocław: Wydawnictwo TUM.
- Katechizm Kościoła Katolickiego. (1994). Poznań: Wydawnictwo Pallotinum.
- Kongregacja do Spraw Wychowania Katolickiego. (2009). List okólny do przewodniczących Konferencji Episkopatów na temat nauczania religii w szkole. (In:) J. Poniewierski (ed.), *Służyć wzrastaniu w prawdzie i miłości*, 495-505. Kraków: Wydawnictwo AA.
- Kowalczyk, S. (2010). *Elementy filozofii i teologii sportu*. Lublin: Wydawnictwo KUL.
- Kraśniewska, J. (2021). Re-personalizacja podstawą resocjalizacji. (In:) B. Majerek, A. Domagała-Kręcioch (eds.), *Kategorie (nie) obecne w edukacji. Wychowanie – kształcenie – rozwój*, 47-59. Kraków: Oficyna Wydawnicza „Impuls”.
- Kraśniewska, J. (2016). W stronę męskiej tożsamości. *Kwartalnik Naukowy Fides et Ratio*, 2(26), 21-33. (From:) <https://fidesetratio.com.pl/ojs/index.php/FetR/article/view/723>
- Król, J. (2017). The present situation and the idea of personalistic education. *Roczniki Teologiczne*, 61(10), 21-34.
- Łobacz, M. (2019). Istota wychowania integralnego w osobowym rozwoju człowieka. *Roczniki Pedagogiczne*, 11(1), 51-62. <https://doi.org/10.18290/rped.2019.11.1-4>
- Maj, A. (2019). Duchowość w integralnej edukacji wczesnoszkolnej. *Roczniki Pedagogiczne* 12(2), 49-60.
- Matyjas, B. (2020). Pedagogika rodziny. Aktualna problematyka i nowe obszary badawcze. *Studia z Teorii Wychowania*, 2(31), 81-98. <https://doi.org/10.5604/01.3001.0014.3650>
- Molenda, M. (2010). Problemy współczesnej edukacji (z doświadczeń nauczyciela kształcenia zintegrowanego). *Studia Pedagogiczne. Problemy Społeczne, Edukacyjne i Artystyczne*. 19, 187-196. (From:) [https://bazhum.muzhp.pl/media/texts/studia-pedagogiczne-problemy-spoeczne-edukacyjne-i-artystyczne/2010-tom-19/studia\\_pedagogiczne\\_problemy\\_spoeczne\\_edukacyjne\\_i\\_artystyczne-r2010-t19-s187-196.pdf](https://bazhum.muzhp.pl/media/texts/studia-pedagogiczne-problemy-spoeczne-edukacyjne-i-artystyczne/2010-tom-19/studia_pedagogiczne_problemy_spoeczne_edukacyjne_i_artystyczne-r2010-t19-s187-196.pdf) (dostęp 03.03.2025).
- Mudyń, K. (2013). Jawne i niejawne wartości rodziców a wartości ich dorosłych dzieci. (In:) K. Mudyń (ed.), *W poszukiwaniu międzypokoleniowej transmisji wzorców zachowań, postaw i wartości*, 85-124. Kraków: Wydawnictwo Adam Marszałek.
- Musiak, E. (2019). Współpraca rodziców i nauczycieli czynnikiem warunkującym efektywność pracy szkoły (ze szczególnym uwzględnieniem edukacji wczesnoszkolnej) – perspektywa teoretyczna. *Wychowanie w Rodzinie*, 21(2), 257-271. <https://doi.org/10.34616/www.2019.2.257.271>
- Musiak, E. (2024). Współpraca szkoły z rodzicami jako obszar (nie)skuteczności pedagogicznej – wyobrażenia studentów przygotowujących się do roli zawodowej nauczycieli edukacji przedszkolnej i wczesnoszkolnej. Raport z badań wstępnych. *Wychowanie w Rodzinie*, 2. <https://doi.org/0000-0001-7710-2265>
- Mruszczyk, M. (2010). *Człowiek w „antropologii adekwatnej” Karola Wojtyły*. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Niewęglowski, J. (2005). Kościół i wychowanie: zarys problematyki. *Seminare. Poszukiwania Naukowe*, 21, 453-460.
- Nowak-Dziemianowicz, M. (2015). Polska szkoła i polski nauczyciel w procesie zmiany. Problemy i możliwości. *Przegląd Badań Edukacyjnych*, 2(19), 97. <https://doi.org/10.12775/PBE.2014.024>
- Olbrycht, K. (2012). Wychowanie do wartości – w centrum aksjologicznych dylematów współczesnej edukacji. *Paedagogia Christiana*, 29(1), 89-104. <https://doi.org/10.12775/PCh.2012.005>
- Oroń, M. (2024). Jan Paweł II – Papież kibic i miłośnik sportu. *Watican News*. (From:) <https://www.vaticannews.va/pl/watykan/news/2024-07/jan-pawel-ii-papiez-kibic-i-milosnik-sportu.html> (access: 03.03.2025).
- Osewska, E. (2014). Wspólnota rodzinna w służbie wychowania, *Family Forum*, 4, 125-139.
- Pius XI. (1929). *Divini illius Magistri. O chrześcijańskim wychowaniu*. (From:) <https://www.ekai.pl/dokumenty/encyklika-divini-illius-magistri/> (dotęp: 5.01.2025).
- Podstawy programowe kształcenia ogólnego, Dz. U. 1999, nr 14, poz. 129. (From:) <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19990140129>
- Parzysz, M., Gruca-Miąsik, U., Osewska, E., & Stala, J. (2024). The Basic Principles of Personalistic Pedagogy According to Joseph Ratzinger/Benedict XVI. *The Person and the Challenges. The Journal of Theology, Education, Canon Law and Social Studies Inspired by Pope John Paul II*, 14(2), 147-162. <https://doi.org/10.15633/pch.14210>
- Płopa, M. (2008). *Psychologia rodziny. Teoria i badania*. Kraków: Wyd. Impuls.
- Płaziński, A. (2019). Rola szkoły katolickiej wobec wyzwania społeczeństwa ponowoczesnego. *Chrysrtian Theology and Religion*, 18(10), 147-156.
- Pokrywka, M. (2001). Wezwanie do formacji sumienia w świetle nauczania Jana Pawła II, *Roczniki Teologiczne*, 3(48), 53-68.



- Półtawska, W. (2011). Wychowanie seksualne częścią wychowania człowieka. (In:) F. Adamski (ed.), *Wychowanie osobowe*, 182-196, Kraków: Petrus.
- Paweł VI. (1968). *Humanae vitae: Encyklika o zasadach przekazywania życia ludzkiego*. Acta Apostolicae Sedis, 60, 481-503.
- Rochowicz, F. (2019). Sport i wartości w życiu Karola Wojtyły. *Kurier Regionu Ławskiego*. (From:) <https://www.kurier-ilawski.pl/opinie/Rochowicz-Sport-i-wartosci-w-zyciu-Karola-Wojtyly/5499> (access: 8.01.2025).
- Rostańska, E. (2016). Wspólne dobro jako edukacyjna treść i działanie w kontekście encykliki Laudato si'. (In:) M. Borda, R. Ceglarek (eds.), *Wybrane zagadnienia edukacji ekologicznej. Refleksje wokół encykliki Laudato Si*, 99-114. Kraków: Wydawnictwo Instytutu Teologicznego Księży Misjonarzy w Krakowie.
- Rozporządzenie Ministra Edukacji Narodowej z dnia 15 lutego 1999 r. w sprawie podstawy programowej kształcenia ogólnego. (Dz. U. 1999, nr 14, poz. 129). (From:) <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU19990140129>
- Rumayor, M., Rodriguez-Pazos, G., & Fernández-Castiella, J. (2022). The Christian Personalism Inherited in Newman's Educational Approach. *Religious Education*, 118(1), 69-81. <https://doi.org/10.1080/00344087.2022.2135266>
- Rusiak, D. (2014). Postawy rodzicielskie rodziców a kształtowanie się tożsamości osób w okresie wczesnej dojrzałości. (In:) E. Topolowska, E. Skimina, S. Skrzek (eds.), *Młoda Psychologia*, Tom II. Warszawa: Wydawnictwo Stowarzyszenia Filomatów.
- Ruczaj, J. (2020). Logoterapia w kontekście suicydologii: wykorzystanie logoteorii w wyjaśnianiu i prewencji samobójstw, cz. 1. *Kwartalnik Naukowy Fides et Ratio*, 44(4), 322-333. <https://doi.org/10.34766/fetr.v44i4.420>
- Rynio, A. (2004). *Integralne wychowanie w myśli Jana Pawła II*. Lublin: Wydawnictwo KUL.
- Ryś, M. (2001). *Systemy rodzinne. Metody badań struktury rodziny pochodzenia i rodziny własnej*. Warszawa: Centrum Metodyczne Pomocy Psychologiczno-Pedagogicznej.
- Ryś, M. (2013). Doświadczane skutki wzrastania w rodzinie z problemem alkoholowym. Poczucie własnej wartości i relacje interpersonalne z najbliższymi u Dorosłych Dzieci Alkoholików – badania własne. (In:) W. Poleszak (ed.), *Oblicza uzależnień. Terapia jako przywracanie wolności*, 97-134, Lublin: Wydawnictwo Naukowe Innovatio Press.
- Ryś, M. (2020). *Poczucie własnej wartości i odporność psychiczna osób wzrastających w różnych systemach rodzinnych*. Warszawa: Wydawnictwa Naukowe UKSW.
- Ryś, M., Krasowska, Z., Witek, N. (2021). The feeling of being loved and the language of communication of young adults, Attachment styles in children. Attachment Styles in the Family of Origin (ASFO). *Kwartalnik Naukowy Fides et Ratio*, 46(2), 222-260. <https://doi.org/10.34766/fetr.v46i2.844>
- Ryś, M., Tataj-Puzyna, U. (2021). Życie i miłość są silniejsze od śmierci. Znaczenie postawy szacunku wobec życia w budowaniu cywilizacji miłości. (In:) E. Domagała-Zyśk, A. Borowicz, R. Kołodziejczyk, K. Martynowska (eds.) *Oblicza życia*, 196-216. Lublin: Wydawnictwo Naukowe KUL.
- Satir, V. (2000). *Rodzina. Tu powstaje człowiek*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne
- Starnawski, W. (2020) *Pedagogia osoby Jana Pawła II. Interpretacja egzystencjalna*. Warszawa: Wydawnictwo Naukowe UKSW.
- Sadowski, M. (2010). Godność człowieka i dobro wspólne w papieskim nauczaniu społecznym (1878-2005). *Prawnicza i Ekonomiczna Biblioteka Cyfrowa*. Wrocław.
- Seul, A. (2017). Antropologiczno-kulturowy wymiar sportu w nauczaniu Jana Pawła II. *Zeszyty Naukowe Uniwersytetu Zielonogórskiego: Seria Scripta Humana*, 8, 213-229.
- Sobór Watykański II. (1964). Konstytucja dogmatyczna o Kościele „Lumen gentium”, 21 listopada 1964. (In:) *Sobór Watykański II. Konstytucje, dekryty, deklaracje*. Poznań 2002: Pallottinum.
- Sobór Watykański II. (1965a). Deklaracja o wychowaniu chrześcijańskim „Gravissimum educationis”, 28 października 1965. (In:) *Sobór Watykański II. Konstytucje, dekryty, deklaracje*, Poznań 2002: Pallottinum.
- Sobór Watykański II. (1965b). Konstytucja duszpasterska o Kościele w świecie współczesnym „Gaudium et spes”, 7 grudnia 1965. (In:) *Sobór Watykański II. Konstytucje, dekryty, deklaracje*, Poznań 2002: Pallottinum.
- Sozańska, E. (2014). Rodzina jako środowisko wychowania w wartościach. *Łódzkie Studia Teologiczne*, 23(3), 39-51.
- Stepulak, M.Z. (2017). Specyfika życia szkolnego: szansa rozwojowa czy zagrożenie dla wszechstronnego rozwoju ucznia. (In:) Z.B. Gaś (ed.), *Profilaktyka szkolna wobec wyzwań współczesności – koncepcje, badania, propozycje rozwiązań*, 33-43, Lublin: Innovatio Press Wydawnictwo Naukowe Wyższej Szkoły Ekonomii i Innowacji w Lublinie.
- Stokłosa, T. (2001). Koncepcja osoby w filozofii Tomasza z Akwinu. *Studia Philosophiae Christianae*, 37(1), 126-143.
- Strużyńska, A. (2020). Rodzina jako podstawowe środowisko wychowawcze. (In:) J. Zimny (red.), *Rodzina naturalna, duchowa, społeczna*, 188-198, Wrocław: Akademia Wojsk Lądowych.
- Szczukiewicz, P., & Solecki, R. (2023). Logoprophyllaxis in the face of crisis of adolescence. *Quarterly Journal Fides et Ratio*, 56(4), 120-127. <https://doi.org/10.34766/fetr.v56i4.1252>
- Szykuła, R. (2022). *Logoterapia i analiza egzystencjalna. Teoria i praktyka*. Warszawa: Eneteia Wydawnictwo szkolenia
- Szymczyk, L. (2010). Rodzina jako wartość w wychowaniu dzieci w wieku przedszkolnym. (In:) M.E. Ruszel (ed.), *Rodzina, Wartości, Przemiany*, 71-83. Fundacja Uniwersytecka w Stalowej Woli.
- Szymczyk, J. (2012). Elementy kultury i sportu z perspektywy aksjologii. W kręgu myśli Stanisława Kowalczyka. *Roczniki Nauk Społecznych*, 40(1), 81-106.
- Śliwerski, B., Szkudlarek, T. (2009). *Wyzwania pedagogiki krytycznej i antypedagogiki*. Kraków: Oficyna Wydawnicza „Impuls”.
- Świętochowski, W. (2014). Rodzina w ujęciu systemowym. (In:) I. Janicka, H. Liberska (eds.), *Psychologia rodziny*, 21-46, Warszawa: Wydawnictwo Naukowe PWN.
- Ustawa o stowarzyszeniach z dnia 7 kwietnia 1989 r. (Dz. U. 1989 Nr 20 poz. 104). (From:) <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=wdu19890200104>
- Ustawa o systemie oświaty z dnia 7 września 1991 r. (Dz. U. z 2024 r. poz. 750, 854, 1473 i 1933). (From:) <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20240000750>
- Walecka-Matya, K.K. (2022). Family, material and worldview values and the process of intergenerational transmission. *Quarterly Journal Fides et Ratio*, 49(1), 53-66. <https://doi.org/10.34766/fetr.v49i1.1046>
- Wojtyła, K. (1969). *Osoba i czyn*. Kraków: Polskie Towarzystwo Teologiczne.
- Wojtyła, K. (2021). *Osoba i czyn*. Wyd. 3. Lublin: Towarzystwo Naukowe Katolickiego Uniwersytetu Lubelskiego.
- Vitoria, L., Ramli, M., Johar, R., & Mawarpury, M. (2024). Key Influences on Students' Academic Success: Insights from Scholarly Research. *Journal of Educational Management and Learning*, 2(1), 9-19. <https://doi.org/10.60084/jeml.v2i1.164>
- Verhoeff, M., & Badley, K. (2021). Reimagining character formation in the Christian university in challenging times. *International Journal of Christianity & Education*, 25(3), 265-276. <https://doi.org/10.1177/20569971211008947>




# Specialist support centres for victims of domestic violence in the legal and organisational structure of the support system for individuals and families in crisis<sup>1</sup>

<https://doi.org/10.34766/6k3x4a80>

Beata Krajewska<sup>a</sup> 

<sup>a</sup> Beata Krajewska, <https://orcid.org/0000-0001-7671-258X>,

Faculty of Pedagogical Sciences, Institute of Pedagogy, Cardinal Stefan Wyszyński University in Warsaw

 Corresponding author: [b.krajewska@uksw.edu.pl](mailto:b.krajewska@uksw.edu.pl)

**Abstract:** The article describes specialised centres for individuals experiencing domestic violence. The starting point of deliberations undertaken is describing the term of violence, its forms and changes regarding legal regulations concerning counteracting said problem. Next, means of aid were demonstrated to an individual afflicted by domestic violence, as well as tasks of the specialised centres for individuals experiencing domestic violence, entities running these as well as other entities providing shelter to individuals experiencing domestic violence and solutions aimed at aiding them. The purpose of this article is demonstrating the role, tasks and position in the system regarding specialised support centres for individuals experiencing domestic violence. The following research problem has been engaged: what spot in the system of aid to individuals experiencing domestic violence leading to crises is occupied by specialised support centres for individuals experiencing domestic violence, what tasks are they assigned, what is the standard of basic services provided? Analytical and synthetic method of reviewing literary and legal sources has been used. Important tasks assigned to specialised centres for individuals experiencing domestic violence and their spot in the support system after introducing changes to legal regulations concerning these should be familiar to society at large and be a valid research subject. A perpetual necessity of educational influence occurs for the reason of building and broadening awareness of the scope of family and individual support in crisis caused by domestic violence.

**Keywords:** violence, means of aid to individuals afflicted by domestic violence, tasks of specialised centres for individuals experiencing domestic violence, crisis intervention centres, homes for mothers with minor children and pregnant women

## Introduction

Violence in families takes on various forms, causes and aftermath. Regardless of details, interpersonal relations or consequences it is a manifestation of a crisis that demands intervention. One of its components is support for individuals experiencing violence. Said support encompasses complex activities of various public and private institutions. They together form specialised system of support based on specific solutions regulated by law.

Fundamental significance is ascribed to regulations of the Act dated 29 July, 2005 regarding counteracting domestic violence (Journal of Laws 2021, Item 1249 with later amendments). Originally the bill was titled “on counteracting domestic

violence”. However, with the Act dated 9 March 2023 concerning amending the act on counteracting domestic violence and various other acts (Journal of Laws 2023, Item 535) its title as well as terminology were altered, changing “violence in families” to “domestic violence”, said change becoming law on the 22 July, 2023. As indicated in governmental substantiation of said amendment, “previous title of the bill stigmatised families and indicated that they are the only environment where acts of violence occur. Violent behaviour can occur also between former spouses not being legally related as well as among people living in informal relationships”.<sup>2</sup>

1 Article in Polish language: [https://stowarzyszeniefidesetratio.pl/fer/62P\\_kraj.pdf](https://stowarzyszeniefidesetratio.pl/fer/62P_kraj.pdf)

2 <https://www.sejm.gov.pl/Sejm9.nsf/druk.xsp?nr=2799>

The term “violence in families” or “intra-family violence” has been used for years to describe actions and omissions occurring in various interpersonal relations. More than two decades ago it was indicated that it encompasses all forms of violence in situations in which perpetrators and victims are in a relationship of some kind or have been in the past. It is to be seen as all active and passive forms of maltreatment of family members that threaten individuals’ personal freedom and cause them mental or physical harm, contrary to social standards of familial relations. Its forms are physical, mental, sexual and neglect (Jarosz 1999, pp. 220-221). The term “violence in families” has been established in social discourse and scientific studies. As an example one can give a statement that family violence is any such behaviour directed towards a relative. Family violence is typified as follows: it is intentional; directed towards controlling and subordinating victims; occurs in conditions of power imbalance, since perpetrators have physical, mental or economic advantage over victims; leads to violating the basic rights and freedoms of victims; entails suffering and pain while endangering life and limb of victims severely (Kanios 2016, p. 79).

Putting into question the substantive legitimacy of the change from “family violence” to “domestic violence”, as well as its significance for the effectiveness of counteracting violence, but without going into details related to it, it is worth perceiving it as an incentive to look at the newly shaped or newly defined anti-violence solutions. Among them, an important spot is occupied by an instrument to support people and families experiencing violence from their relatives and other household members. The purpose of this text is therefore to indicate changes in the legal regulations regarding domestic violence, in particular the role and tasks of specialist support centres for individuals experiencing domestic violence. They are situated as entities that particularly support people and families experiencing domestic violence, although they are not the only ones in this traumatic experience. The structure of the text is based on the adopted research problem: what spot in the support system for people experiencing domestic violence do specialist support centres for people experiencing domestic violence occupy, what tasks are assigned to

them, what is the standard of basic services provided by them? The starting point is to define the concept of violence, its forms, changes in the legal regulations concerning this problem. Then, the forms of assistance to a person affected by domestic violence, the tasks of specialist support centres for people experiencing domestic violence, the entities running them, as well as other entities providing shelter to people experiencing domestic violence and solutions aimed at supporting them were indicated.

According to Article 3 Section 1 of the Act, a person affected by domestic violence is provided with free assistance, in particular in the form of: 1) medical, psychological, legal, social, professional and family counselling; 2) crisis intervention and support; 3) protection against further harm by preventing the person using domestic violence from using a shared flat with the person suffering from domestic violence and prohibiting contacting and approaching the person suffering from domestic violence; 4) providing a person suffering from domestic violence with a safe shelter in a specialist support centre for individuals suffering from domestic violence; 5) medical examination in order to determine the causes and type of bodily injuries related to the use of domestic violence and to issue a medical certificate in this regard; 6) provide assistance to a person suffering from domestic violence who does not have a legal title to a flat occupied jointly with an individual using domestic violence in obtaining a flat. Thus, it is a whole set of support activities of a counselling nature, separating victims and perpetrators of domestic violence, documenting the injuries suffered and providing assistance in obtaining housing. They have a different scope and importance for the safety of people and families experiencing domestic violence, including their protection from perpetrators.

## **1. Tasks of the centres and people providing support in them**

Before the act was changed, these centres were called “specialist support centres for victims of violence in families”. The change of their name to “specialist support centres for people experiencing domestic violence” is related to the aforementioned change in



the nomenclature of the entire bill from “violence in families” to “domestic violence”, and also from the departure from the use of the term “victim of violence” in favour of the term “person experiencing violence”. This should be associated with the conviction that the term “victim” unnecessarily stigmatises, strengthens victimisation and hinders support for people experiencing domestic violence. However, it is impossible not to notice that the term “victim” sounds stronger, and thus more clearly places the individual in the spot where they actually are after experiencing domestic violence, while the term “experiencing violence” seems to blur its negative connotation.

From the beginning of their existence, these entities were perceived as much-needed support institutions for both the family and the child, performing various functions, in particular care, compensatory and counselling, and thus falling within the circle of pedagogical entities, as well as social work institutions. At the same time, attention was drawn to a certain excessiveness of their name in connection with their description as “specialist”, which did not add anything substantive and still does not add anything because each entity of this type is specialised, proposing to define them as “support centres for victims of violence in families”. (Krajewska 2012, pp. 65-66). This postulate remains valid, therefore it is possible to propose, in accordance with the current conceptual apparatus, the name of these entities as “support centres for people experiencing domestic violence”, and even better as “support centres for individuals suffering from domestic violence”. “Suffering” in this respect seems to correspond to the actual state of affairs, because “experiencing” is rather associated with positive experiences, which do not include experiencing domestic violence.

Article 4, Section 1 of the Act concerns specialist support centres for individuals suffering domestic violence. According to it, such people are provided with shelter in such a centre offering at least basic services in the field of intervention, therapeutic and supportive services and living needs, which are aimed at ensuring the safety of such individuals, as well as providing assistance and support in accordance with their needs, adjusted to their life situation.

Section 2 of this article states that the assistance and support in question are provided by specialists in the field of counteracting domestic violence, who guarantee high-quality services, employed in a specialist support centre for people experiencing domestic violence, including psychologists, educators, social workers, lawyers and therapists. Therefore, the subjective and objective scope of the support provided in such centres is wide. This is to result in its best possible dimension adjusted to the individual situation of each individual and each family experiencing domestic violence.

Article 5 of the Act provides that the minister competent for social security issues shall define, by way of a regulation, the standard of basic services provided by specialist support centres for people suffering from domestic violence, as well as the qualification requirements for individuals employed in specialist support centres for people suffering from domestic violence, taking into account the need to adjust the scope of assistance to the situation and needs of individuals experiencing domestic violence, as well as the effectiveness of services provided by specialist support centres for people experiencing domestic violence. As of June 22, 2023, the content of the relevant provision was amended in connection with the latest revision of the Act, and based on this, the Minister responsible for social security issued a new regulation.

This is the Regulation of the Minister of Family and Social Policy of June 20, 2023, concerning the standard of basic services provided by specialist support centres for victims of domestic violence and the qualification requirements for staff employed in these centres (Journal of Laws of 2023, Item 1158).

This regulation defines the standard for basic services delivered by specialist support centres for individuals experiencing domestic violence. In the scope of intervention, it includes providing shelter to the victim and their children for a period of up to three months, with the possibility of extension in cases justified by the situation of the victim—particularly when necessary to ensure their safety. It also includes protection of the victim from the perpetrator, immediate and comprehensive assistance (including psychological and legal support), and urgent access to medical assistance where the victim’s health condition requires it. Moreover, it involves assessing the situation

of the victim and evaluating the risk to their safety or that of the children in their care. In the therapeutic and supportive dimension, the standard covers preparing a diagnosis of the victim's situation and that of their children staying in the centre. It also includes providing specialist counselling-particularly legal, psychological, social, and medical-organizing support groups and therapeutic groups for victims of domestic violence, and offering individual therapy aimed at both supporting the victim and helping them acquire skills to protect themselves from the perpetrator. Furthermore, the standard guarantees access to medical assistance, assessment of the children's situation based on a family environmental interview, and the provision of parenting consultations by specialists employed in the centre. As for material and living needs, the standard includes round-the-clock temporary accommodation for up to thirty individuals, with the possibility of exceeding this number depending on the centre's capacity and following approval by the governing authority. It requires the provision of sleeping rooms for a maximum of five people, with consideration for the family circumstances of the victim; a communal dayroom with a play area for children and space for studying; a shared bathroom suitable for both adults and children for no more than five users; at least one laundry and drying room; and a shared kitchen or kitchenette with food preparation stations (one per ten residents), each equipped with a stove, sink, refrigerator, kitchen furniture, and cooking and dining utensils. The standard also includes rooms for storing baby strollers (where feasible), private consultation rooms for individual work with victims, and the provision of food, clothing, footwear, personal hygiene products, and cleaning supplies.

As part of the amendment, Article 6a was added, according to which the persons managing specialist support centres for individuals suffering from domestic violence are required to have a specialisation in the field of social assistance organisation and at least 3 years of work experience in institutions or facilities that carry out tasks for counteracting domestic violence, or at least 3 years of work experience work experience in social assistance, including at least one-year work experience in institutions or facilities that carry out tasks to counteract domestic violence.

## **2. Entities operating the centres, providing room in them and their actual functioning**

It is the responsibility of counties to create and run specialist support centres for people suffering from domestic violence. These are tasks in the field of government administration. This is stated in Art. 6 sec. 4 point 1 of the Act. However, pursuant to par. 3 point 3 of this article, providing places in such centres for people experiencing violence is also the task of counties, but it is their own task.

However, few counties fulfil these tasks, especially when it comes to creating such support centres. According to their official list, in 2022 there were only 37 such entities. Considering that there are 308 counties in Poland and 65 cities with county rights, such a centre functions only in every tenth county. This is a very poor result.

The specialist support centres for victims of domestic violence, divided by voivodeships and cities, are presented in Table 1.

Such centres operate in towns of various sizes, both larger and smaller ones. They are most often run by counties, sometimes by county family support centres, two of them by associations and one by Caritas. Actual access to them by people suffering from domestic violence may be limited due to the distance of their place of residence from the seat of the centre and the related communication difficulties. Therefore, it is necessary to postulate the development of such places of support, which requires the will of county that have not undertaken to create them so far, in which financial resources may be one of the obstacles. Undoubtedly, this state of affairs is strongly influenced by the fact that the creation of such centres is not obligatory. Therefore, it is necessary to consider changing the regulations towards the obligatory nature of such a task on the part of counties. It could alternatively be formed in the form of creating such a centre in each county or by concluding an agreement by neighbouring counties on joint creation of such a centre.

Table 1. The specialist support centres for victims of domestic violence in Poland

voivodeship	city
dolnośląskie Lower Silesian Voivodeship	Wrocław Wałbrzych
kujawsko-pomorskie Kuyavian-Pomeranian Voivodeship	Inowrocław Tuchola Włocławek
lubelskie Lublin Voivodeship	Lublin Tyszowce
lubuskie Lubusz Voivodeship	Gorzów Wielkopolski
łódzkie Łódź Voivodeship	Łódź
małopolskie Lesser Poland Voivodeship	Kraków Tarnów Zakopane
mazowieckie Masovian Voivodeship	Warszawa Mława Piastów
opolskie Opole Voivodeship	Opole Kędzierzyn-Koźle
podkarpackie Subcarpathian Voivodeship	Gorzyce Nowa Sarzyna Krasieczyn Lesko
podlaskie Podlasie Voivodeship	Suwałki Kolno
pomorskie Pomeranian Voivodeship	Gdynia Rusocin
śląskie Silesian Voivodeship	Wodzisław Śląski Świętochłowice Chorzów
świętokrzyskie Świętokrzyskie Voivodeship	Kielce
warmińsko-mazurskie Warmian-Masurian Voivodeship	Elbląg Olsztyn Olecko
wielkopolskie Greater Poland Voivodeship	Zduny Piła Poznań
zachodniopomorskie West Pomeranian Voivodeship	Świnoujście Białogard

Source: <https://www.gov.pl/web/rodzina/baza-kontaktowa-specjalistyczne-osrodki-wsparcia-dla-ofiar-przemocy>.

### 3. Other entities providing shelter to people experiencing domestic violence and other solutions to support them

Specialised support centres for people experiencing domestic violence are not the only entities where such people can receive shelter and other types of support. In addition to them, there are other such places, which are even more and, consequently, access to which is wider.

These are primarily crisis intervention centres. They also operate on the basis of the Act of 29 July 2005 on counteracting domestic violence. Its Article 6 Section 3 Point 4 states that it is counties' own task to provide places for people suffering from domestic violence. The provisions of the Act of 12 March 2004 on social assistance (i.e. Journal of Laws of 2023, Item 901) are also important for their existence, which in Article 6 Point 5 lists these centres among organisational units of social assistance. Its Article 19 Point 12 provides that running them is a task specific to counties.

For the victims of domestic violence, which are most often women and children, the precedent goal of their functioning is to provide them with extensive help, their support towards regaining a sense of security and making decisions related to the reorganisation of their life situation, but also taking care of children who can rest from chaos and constant fear and experience relationships based on respect and trust (Rzesoś 2006, p. 182). Their feature is that people who are in a crisis situation can use their support immediately, i.e. without the need to carry out the procedure. Moreover, every person and every family is entitled to it, regardless of income, which is a criterion sometimes required for other social assistance benefits (Krajewska 2018, p. 62, 65).

Pursuant to the Act of 12 March 2004 on social assistance, there are also homes for mothers with minor children and pregnant women. According to its Article 47 Section 4 mothers with minor children and pregnant women experiencing domestic violence or in another crisis situation can find shelter and support in homes for mothers with minor children and pregnant women as part of crisis intervention.

Fathers with minor children or other persons with legal custody of children may also be admitted to these homes. The details of their operation are regulated by the regulations issued on the basis of the delegation contained in sec. 5 of this article, the Regulation of the Minister of Family and Social Policy of 17 January 2022 on homes for mothers with minor children and pregnant women (Journal of Laws of 2022, Item 159).

They are commonly referred to as single mothers' homes, and they play a very important role in the child and family support system. The stay in them is only temporary and applies to extreme situations when a woman expecting a child or being the mother of a minor child or children cannot count on the help of her relatives. The reasons for this are complex and often overlap (Krajewska 2023, p. 271). One of them may be domestic violence, of which a woman is a victim and often her children or a child are also victims.

It should not be the case that people experiencing violence always have to run away from home. It is the perpetrator who should leave, which is the purpose of specific legal regulations, thanks to which victims of domestic violence are going to be safe in their home without the need to seek shelter outside it.

Based on Article. 15aa Section 1 of the Act of 6 April 1990 on the Police (i.e. Journal of Laws of 2023, Item 171 with later amendments), in regard to an individual engaging in domestic violence posing risk to life and limb to the victim, a police officer has the right to issue an order to immediately leave the jointly occupied apartment and its immediate surroundings and a ban on approaching the jointly occupied apartment and its immediate surroundings. The injunction and ban expire after 14 days from their issue, unless the court issues a provision extending them, according to Article 15ak Section 1 of said legal act.

Based on Article. 11a Section 1 of the Act of 29 July 2005 on Counteracting Domestic Violence, if a person using domestic violence who is cohabiting makes cohabitation particularly onerous with their behaviour involving the use of domestic violence, a person experiencing this violence may demand that a civil court oblige them to leave

together occupied apartment and its immediate surroundings or forbid approaching the dwelling and its immediate surroundings.

A criminal court may order the perpetrator of domestic violence to temporarily leave the premises occupied jointly with the injured party or with the injured parties. Such a possibility exists pursuant to Article 41a §1 of the Act of June 6, 1997 of the Penal Code (Journal of Laws of 2022, Item 1138 with later amendments). This applies to a person convicted of a violent crime against close relatives.

It is not known to what extent these solutions are consistent with each other and to what extent people experiencing violence are informed about them. Meanwhile, there should be coordination of solutions and institutions aimed at providing assistance to individuals and families in situations of experiencing domestic violence. The need of jointly removing this crisis by individualising the problem and using institutional support and help from other people in solving it (Mazur 2002, p. 144).

## Summary

Violence is a phenomenon that, according to some researchers, occurs widely in our society. It is present in everyday life, in the workplace, in schools, in mass media, and within the family. In analyses of this issue, one can even find the assertion that it has become a norm of social relations (Kawula, Brągiel, Janke, 2005, p. 286). Violence in general, and family violence in particular – or, as the current legislator terms it, domestic violence – is nonetheless a pathology, a deviation from the norm, which should be based on healthy interpersonal relationships free from violence.

What is particularly distressing and raises many concerns is the situation in which the home becomes the most dangerous place in the modern world. This dimension and meaning of violence is highlighted by A. Giddens, who notes that statistically, a person regardless of age or gender is more likely to suffer a physical attack at home than on the street at night (Giddens, 2006, p. 214).

A home that harms ceases to be a safe place-one that a person wants to return to and feel comfortable in. Therefore, if someone must flee from such a home and seek shelter elsewhere, one of the places offering protection is a specialist support centre for victims of domestic violence.

The objective of this study has been achieved, as it outlines the changes in legal regulations regarding domestic violence, with particular emphasis on the role and tasks of specialist support centres for victims. It presents their place in the support system for individuals experiencing domestic violence, the responsibilities assigned to them, and the standard of basic services they pro-

vide within the scope of intervention, therapeutic and supportive functions, as well as in terms of meeting material needs. A practical exemplification of the theory concerning specialist support centres for victims of domestic violence is the indication of the towns and localities where such centres operate, places where victims can find real help and support. These centres are a part of the broader system of support for individuals and families in crisis, a system that requires continuous improvement, as unfortunately, many individuals and families affected by various negative experiences, including intra-family violence, are in need of such assistance.

## Bibliography

- Giddens, A. (2006). *Socjologia*. Warszawa: Wydawnictwo Naukowe PWN.
- Jaroszyński, E. (1999). Przemoc wewnątrzrodzinna. (In:) D. Lalak, T. Pilch (eds.), *Elementarne pojęcia pedagogiki społecznej i pracy socjalnej*, 220-221, Warszawa: Wydawnictwo Akademickie Żak.
- Kanios, A. (2016). *Praca socjalna z rodziną problemową. Perspektywa metodyczna*. Kraków: Wydawnictwo Impuls.
- Kawula, S., Brągiel, J., Janke, A.W. (2005). *Pedagogika rodziny. Obszary i panorama problematyki*. Toruń: Wydawnictwo Adam Marszałek.
- Krajewska, B. (2018). *Między pomocą społeczną, wsparciem a pieczęcią zastępczą. Założenia i rzeczywistość wybranych instytucji*. Gdańsk: Wydawnictwo Naukowe Katedra.
- Krajewska, B. (2023). Prawo kobiet w trudnej sytuacji życiowej do schronienia oraz wsparcia w domach dla matek z małoletnimi dziećmi i kobiet w ciąży. (In:) D. Jaroszyńska-Choraś, A. Kilińska-Pękacz, A. Wedel-Domaradzka (eds.), *Kobieta i prawo*, 255-273, Warszawa: Wydawnictwo Difin.
- Krajewska, B. (2012). Specjalistyczne ośrodki wsparcia dla ofiar przemocy w rodzinie. *Praca Socjalna*, 6, 53-66.
- Mazur, J. (2002). *Przemoc w rodzinie. Teoria i rzeczywistość*. Warszawa: Wydawnictwo Akademickie Żak.
- Ministerstwo Rodziny, Pracy i Polityki Społecznej (2022). *Baza kontaktowa – specjalistyczne ośrodki wsparcia dla ofiar przemocy w rodzinie*. (From:) <https://www.gov.pl/web/rodzina/baza-kontaktowa-specjalistyczne-osrodki-wsparcia-dla-ofiar-przemocy> (access: 10.12.2024).
- Rozporządzenie Ministra Rodziny i Polityki Społecznej z dnia 17 stycznia 2022 r. w sprawie domów dla matek z małoletnimi dziećmi i kobiet w ciąży (Dz. U. z 2022 r. poz. 159). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20220000150>
- Rozporządzenie Ministra Rodziny i Polityki Społecznej z dnia 20 czerwca 2023 r. w sprawie standardu podstawowych usług świadczonych przez specjalistyczne ośrodki wsparcia dla osób doznających przemocy domowej oraz wymagań kwalifikacyjnych wobec osób zatrudnionych w tych ośrodkach (Dz. U. z 2023 r. poz. 1158). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20230001158>
- Rządowy projekt ustawy o zmianie ustawy o przeciwdziałaniu przemocy w rodzinie oraz niektórych innych ustaw. (2022). <https://www.sejm.gov.pl/Sejm9.nsf/druk.xsp?nr=2799> (access: 18.12.2024)
- Rzeszoł, K. (2006). Interwencja w kryzysie – z doświadczeń ośrodka interwencji kryzysowej dla ofiar przemocy. (In:) Ł. Kaczmarek, A. Słysz, E. Soroko (red.) *Od systemu terapeutycznego do interwencji*, 163-183, Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza w Poznaniu.
- Ustawa z dnia 6 kwietnia 1990 r. o Policji (t.j. Dz. U. z 2023 r. poz. 171 z późn. zm.). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20230000171>
- Ustawa z dnia 6 czerwca 1997 r. Kodeks karny (t.j. Dz. U. z 2022 r. poz. 1138 z późn. zm.). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20220001138>
- Ustawa z dnia 12 marca 2004 r. o pomocy społecznej (t.j. Dz. U. z 2023 r. poz. 901). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20230000901>
- Ustawa z dnia 29 lipca 2005 r. o przeciwdziałaniu przemocy domowej (t.j. Dz. U. z 2021 r. poz. 1249 z późn. zm.). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20210001249>
- Ustawa z dnia 9 marca 2023 r. o zmianie ustawy o przeciwdziałaniu przemocy w rodzinie oraz niektórych innych ustaw (Dz. U. z 2023 r. poz. 535). <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20230000535>



# Specificity of euphemistic lexis in media discourse on the example of Russian press from 2017-2021

<https://doi.org/10.34766/ekbyjv70>

Olga Iakovleva<sup>a</sup> ✉

<sup>a</sup> Olga Iakovleva, <https://orcid.org/0000-0001-5124-6412>,

Department of Applied Linguistics, Institute of Linguistics and Literary Studies, Maria Curie-Skłodowska University in Lublin, Poland

✉ Corresponding author: [olga.iakovleva@mail.umcs.pl](mailto:olga.iakovleva@mail.umcs.pl)

**Abstract:** In this article the issue of euphemistic lexicon used in Russian periodicals of the early 21st century is investigated. The purpose of the study is to analyse the functional features of euphemisms, the specifics of their use in media discourse, and to determine their role in the manipulation of public opinion. The material of the study consisted of texts in modern Russian socio-political periodicals. Examples of euphemistic units from the newspaper sub-corpus of the National Corpus of the Russian Language are used as illustrative material. The manipulative potential of euphemisms is manifested in masking the true meaning of the message by creating a neutral or positive connotation, distorting the real scale of events or phenomena. Publicistic discourse is a source of information for a wide audience, which strengthens the influential role of euphemistic lexicon. The central focus of the study is to identify priority topics belonging to the socio-political sphere that are subject to euphemisation in the modern Russian press. There is an indication of an increase in the number of euphemisms related to socially significant topics and spheres of human activity in the journalistic discourse. The characteristic feature of this group is its close connection with socio-cultural processes. The repeated use of euphemism weakens its key function and stimulates the formation of new euphemistic units. The use of some euphemisms in publicistic discourse is dictated by the norms of political correctness in modern communication. The results of the study presented in the article indicate a fairly wide use of euphemisms in the language of the modern Russian press.

**Keywords:** euphemism, manipulation, political correctness, publicist discourse

## Introduction

In the language of modern Russian mass media, there is an active growth of euphemistic vocabulary. Words and expressions that serve to soften concepts and phenomena that can cause a negative reaction in the reader are widely used. Euphemistic substitutions make it possible to shift the connotative emphasis, levelling the negative judgment, and veiling the true meaning of what is referred to. The masking function of euphemisms, especially demanded in journalistic discourse, is a manifestation of their manipulative potential. The euphemism as a tool of manipulation influences the reader and the formation of their individual perception of the world. The use of euphemisms in newspapers and magazines is also dictated by the requirements of political correctness, the desire to avoid conflicts and failures in communication. The relevance of studying the characteristics of euphemistic lexicon functioning in the Russian press is explained by the

rapidly increasing role of the influencing function in modern newspaper journalism. The aim of the article is to analyse the functional features of euphemisms, to identify their role in the implementation of manipulative influence on public opinion, as well as to determine the topics of priority and social importance that are most often subject to euphemisation.

## 1. The manipulative potential of euphemisms

Since the euphemism is a multidimensional linguistic phenomenon, it is considered through the lens of lexicology, stylistics, sociolinguistics, and psycholinguistics. The study of euphemistic units in the aspect of speech pragmatics is especially relevant in modern linguistics because this approach makes it

possible to consider not only the linguistic nature of euphemisms but also the extra-linguistic factors that influence the emergence of euphemisms, as well as their interpretation. A considerable body of research has been devoted to the study of euphemisms in a pragmatic way (Allan, Burrige, 1991, 2006; Baskova, 2006; Bushueva, 2005; Bonhomme, 2014; Casas Gómez, 2012; Drozdova, 2016; Giezek, 2002; Kovshova, 2007; Lakoff, 1995; Latypova; Nikitina, 2011; Pohorila, 2022; Roscan, 2017; Todosienko 2019; Yakushkina, 2009). The pragmatic approach, in particular, explores issues related to the manipulative impact of euphemisms.

The main characteristic of manipulation is considered to be the hidden nature of the influence exerted. The object of manipulation should not notice this influence. According to the researcher A.M. Katsev (1988), "the ability of euphemisms to manipulate the recipient is determined by some factors: 1. Firstly, euphemisms conceal the true nature of a phenomenon by creating a neutral or positive connotation; 2. Secondly, the recipient usually does not have time to extract euphemisms from the context and comprehend them, as the abundance of information in modern society makes it difficult to navigate the linguistic material and evaluate it critically; 3. Thirdly, to categorise a word as a euphemism, the tabooed denotation behind the word must be identified, otherwise the euphemism will not be "recognised"; 4. Fourthly, not many recipients are familiar with this linguistic phenomenon; without knowing the essence of the phenomenon, it is impossible to understand how manipulative influence is carried out" (ibidem, p. 47).

Other researchers also draw attention to the difficulty of identification of the masked denotation by the recipient (Kateneva, 2013; Shapovalova, 2018). Baskova explains the manipulative effect of euphemisms in terms of two mechanisms: "the associative mechanism diverts the recipient's attention from the tabooed concept, changing the emotional sentiment of the message, and the "buffer" mechanism creates an intermediate link between the unmentionable word and consciousness" (Baskova, 2006). According to several researchers, manipulation through euphemisms is a means of referential manipulation

associated with the distortion of the image of the denotation when describing reality. A euphemism hides the essence of the phenomenon by creating a neutral or positive connotation, allowing to divert the attention of the recipient from one characteristic of the denotation to another (Beliaeva, Kulikova, 2009; Ignateva, Builova, 2017; Vildanova, 2015).

The high manipulative potential of euphemisms is especially noticeable in mass media discourse. The mass media play an important role in shaping the media image of the world, as they not only inform the recipient about real events and phenomena but also interpret and form opinions about them. Dobrosklonskaia rightly points out the decisive importance of the influencing function of mass media: "The way media operate implies not only – nor even primarily – a reflection of the surrounding reality, but, more importantly, its interpretation, commentary, and evaluation, which contribute to the creation of a particular ideological background" (Dobrosklonskaia, 2009, p. 85). The way of presenting information largely depends on the editorial policy, the specific characteristics of a particular publication, and the personal position of the author. In situations where an overt statement is not possible or desirable, the journalist resorts to implicit ways of expressing information. One of the most effective linguistic means of creating implicitness is using euphemisms. Euphemistic substitutions allow to soften, and veil the essence of phenomena or events that can cause a negative reaction in the recipient.

Euphemisms are effective in modern political communication, having become firmly embedded in the speech of politicians and officials. Political euphemisms appearing in media texts can be effectively used in creating the public image of a politician, discrediting the opponent's activities, shaping political views and positions of citizens, etc. Euphemisms used in political communication allow to veil the negative aspects of reality and its processes. The aggravation of the political situation and serious socio-economic problems promote the use of euphemistic substitutions in mass media texts. The frequent use of euphemisms in journalistic discourse is also explained by the requirements of political correctness, the desire to avoid conflicts and



failures in communication. Mass media texts are of a public nature and addressed to a mass audience. Therefore, the coverage of controversial issues, and public problems related, in particular, to various types of social discrimination, is associated with the search and selection of linguistic means capable of mitigating negative evaluation. Euphemisms are an effective means of applying politically correct vocabulary because “the tighter the social control of the communicative situation and the speaker’s self-control of his own speech, the more likely the appearance of euphemisms” (Krysin, 2008, p. 33). The aggravation of the political situation, serious socio-economic problems cause an active increase of euphemisation in media texts.

## 2. Material and methods

The demand for euphemisms in the discourse of mass media is caused by the fact that, in addition to other functions, they are an instrument of manipulative influence on the mass audience. Euphemisms are most developed in the discourse of socially important topics, topical issues of political and economic aspects of the state functioning. The necessity of using euphemisms in mass media is caused by the desire to veil negative phenomena from the sphere of economy, certain actions of authorities, relations between states. The use of euphemisms in the political sphere is nowadays often dictated by the rules of political correctness. In this connection, the role of masking function of euphemisms in mass media is increasing, based, in particular, on the idea of careful expression of thoughts in the conditions of political tension in the world. In addition, manipulation is quite often used in political communication to realise the political interests of individual leaders and political parties. In modern Russian media texts, euphemisation is also subjected to topics related to the coverage of emergency situations, natural disasters, etc. Intensification of the processes of euphemisation of the above-mentioned topics in mass media discourse has aroused our research interest in this problem. Therefore, the analysis of euphemistic units is based on the material of newspaper texts of socio-political topics.

The material of the study consisted of texts in modern Russian socio-political periodicals. Both electronic versions of print publications as well as texts from online-only media outlets from the 5 years (2017-2021) were used: „Izvestiia”, „RIA Novosti”, „Parlamentskaia Gazeta”, „Vedomosti”, „RBK”, „Kommersant”, „Komsomolskaia Pravda”, „Vest.ru”, „Moskovskii Komsomolets”, „Novaya gazeta”, „Novye izvestiia”, „Pravda”, „lenta.ru”, „gazeta.ru”, „NEWSru.com”, „Bizness Online”. The article deals with word and phrase-level euphemisms. These periodicals publish information on topical issues of social, political and cultural life in Russia and abroad.

The choice of material was based on the authority and popularity of these publications. The above-mentioned national media are distributed throughout the Russian Federation and play an important role in the information space. Since printed periodicals are gradually losing their leadership in the speed of information delivery, modern users increasingly prefer online versions of printed newspapers or online publications. The publications we have chosen have a large audience reach, as evidenced, for example, traffic on the publication’s website per month: „RBK” – 127 million visitors, „lenta.ru” – 103 million visitors, „RIA Novosti” – 95 million visitors, „Komsomolskaia pravda” – 87 million visitors, „gazeta.ru” – 51 million visitors, „Moskovskii komsomolets” – 41 million visitors, „Kommersant” – 33 million visitors, „NEWSru.com” – 27 million visitors, „Izvestiia” 21 million visitors, „Vedomosti” – 11 million visitors (data for December 2024). Many publications, whose texts were used as illustrative material in our article, are among the most quoted periodicals. According to Medialogy, in April 2025, the top 10 most quoted Russian newspapers according to the citation index (the citation index is an indicator of the quality of media content distribution) included: „Izvestiia” – 2 435,70; „Kommersant” – 2 014,73; „Vedomosti” – 768,34; „Komsomolskaia pravda” – 507,01; „Moskovskii komsomolets” – 311,26; „Parlamentskaia gazeta” – 301,86.

Examples of euphemistic units from the newspaper sub-corpus of the National Corpus of the Russian Language (NCRL) are used as illustrative material. NCRL is an information and reference system based



on a collection of Russian texts in electronic form, equipped with an automated search system. The system contains more than two billion words, provides a representative sample and allows the application of statistical methods to analyse the result.

The newspaper corpus was established in 2010, and its resources cover press texts since 1983 and are enriched annually. It is the largest sub-corpus of the NCRL in terms of volume and consists of national and regional media. The newspaper sub-corpus (national media) has a volume of 815,141,029 million words and 2,728,688 texts.<sup>1</sup> The newspaper sub-corpus provides representative data illustrating the use of particular word forms. The corpus can search for exact word forms, lemmas and collocations.

Nowadays, the use of language corpora plays a leading role in most linguistic research, and corpus-based linguistics is rapidly developing on the basis of corpora. A linguistic corpus is understood as “a unified, structured and labelled array of linguistic (speech) data in electronic form, intended for certain philological and, more generally, humanitarian research” (Zakharov, 2003, p. 52). A national corpus is characterised by a balanced composition of texts. This means that the corpus contains, as far as possible, all types of written and spoken texts represented in a given language (fiction of different genres, journalistic, educational, scientific, business, colloquial, dialectal, etc.), and that all these texts are included in the corpus as far as possible in proportion to their share in the language of the corresponding period.<sup>2</sup> The language corpus, as an array of texts of different genres and styles, reflecting the current state of the language, allows us to trace the picture of word usage dynamics. The national corpus of the Russian language is a representative and statistically objective tool for tracking the frequency of word usage. Most major languages of the world already have their national corpora. The British National Corpus (BNC), in particular, is a recognised model, and many other modern corpora are oriented towards it. The Czech National Corpus (Český Národní Korpus, ČNK) and the National Corpus of Polish (Narodowy Ko-

rpus Języka Polskiego, NKJP) stand out among the corpora of Slavic languages. A detailed overview of Slavic corpora is presented in Reznikova’s study (Reznikova, 2009). Such linguists as Atkins (Atkins, Clear and Olster, 1993), Baranov (2003), Biber (Biber, Conrad, Reppen, 2011), Leech (1992), McEnery (McEnery, Hardie, 2012), Meyer (2002), Plungian (2008), Sinclair (1991), Zasina (2018) and many others have made great contributions to the formation of corpus linguistics. The importance of corpus-oriented research is also evidenced by regular conferences, monographs, special issues of scientific journals entirely devoted to the problems of corpus linguistics (Charciarek, 2022; Plungyan, 2019). The methodological apparatus of corpus linguistics allows using quantitative indicators in the field of foreign language teaching (Ivanova, Kulagina, 2020; Sibirtseva, 2013), translation (Kurenko, 2017; Potapov, 2022), mass-media language research (Komarova, 2020), language history (Kochetova, 2020), dialectology (Zyuzkova, 2020), lexicography (Grabowski, 2011).

The following methods were used in the research: selection of lexical material, descriptive method, lexicographic analysis, semantic analysis of the word, contextual analysis and quantitative method.

### 3. Results

The study revealed that euphemisms in mass media discourse are actively used in the texts of newspaper publications on economic and socio-political topics. Table 1. presents the number of samples of euphemistic units in the newspaper corpus (national media) on the basis of the NCRL data.

The NCRL service allows us to trace the chronological distribution of euphemistic units, the dynamics of increasing and decreasing frequency of use. For example, the dynamics of the use of the word combination pension reform within the given time boundaries from 2010 to 2021 in the mass media language demonstrates a significant increase in use in 2015 and 2018 (Figure 1.).

1 From: <https://ruscorpora.ru/en/search?search=CgQyAggD>, (access: June 16, 2025)

2 From: <https://ruscorpora.ru/en/page/terms>, (access: June 16, 2025)

Table 1. The use of the selected euphemisms in 2017 – 2021 according to the NCRL

euphemism	number of examples	euphemism	number of examples
tension in the labour market	36	unfriendly step	289
release	37	unfriendly countries	51
pension reform	1096	air support	79
negative growth	17	preventive strike	188
price liberalisation	40	power vertical	132
liquidity efflux	21	forceful methods	440
blast	911	disarm	63
thermal point	40	two hundred	4
symmetrical response	145	waterlogging	270
mirror measures	291	hard landing	427

Source: compiled by the author.



Figure 1. Graph of the frequency of the use of the phrase “pension reform” according to the newspaper sub-corpus of the NCRL, 2010-2021. Compiled by the author from data search on: <https://ruscorpora.ru/s/82EZL>. Below the graph is a heat scale showing the number of texts in which examples of gas blast are found. The darker the colour on the scale, the higher the index.

The automatically generated graph of word usage frequency correlates with the fundamentally important changes in the Russian pension legislation in this period. The vertical axis of the graph shows the relative frequency of use of a given lexical unit (in ipm—items per million). The statistical data of the newspaper sub-corpus also provide information about the periodicals in which the word or combination of words appears more often. The largest number of references to the pension reform is found in the newspapers „Kommersant”

(20.88%) and „Vedomosti” (14.26%, Table 2.), which are among the most authoritative business media in Russia.

The main attention of these newspapers is paid to the analysis of the situation in various branches of economy, news of social and political life, analytical materials are accompanied by comments of experts. The situation with the euphemism unfriendly countries is an illustrative example of the increased frequency of use of euphemistic units caused by social factors. This notion appeared in response to restric-

Table 2. Frequency of the use of the phrase “pension reform” in Russian newspapers according to the newspaper sub-corpus of the NCRL, 2010-2021. Compiled by the author from data search on: <https://ruscorpora.ru/s/9rgZZ>

№	Newspaper	Texts	Contexts	IPM	№	Newspaper	Texts	Contexts	IPM
1	Kommersant	675	1263 (20.88%)	15.56	19	Novaya gazeta	29	54 (0.89%)	7.9
2	Vedomosti	496	863 (14.26%)	18.77	20	Nezavisimaya gazeta (prilozhenie «NG-Politekonomiya»)	15	24 (0.4%)	18.06
3	Izvestiya	334	542 (8.96%)	7.39	21	RBK	10	10 (0.17%)	2.58
4	RIA Novosti	231	429 (7.09%)	7.96	22	Rossiyskie vesti	6	9 (0.15%)	15.44
5	Parlamentskaya gazeta	263	371 (6.13%)	9.99	23	Nezavisimaya gazeta (prilozhenie «Krug zhizni»)	5	8 (0.13%)	7.7
6	Vesti.ru	224	365 (6.03%)	4.89	24	Sankt-Peterburgskie vedomosti	3	5 (0.08%)	3.27
7	Lenta.ru	223	355 (5.87%)	4.96	25	Mariya Selivanova	1	2 (0.03%)	1,018.85
8	Trud-7	217	320 (5.29%)	7.16	26	Nezavisimaya gazeta (prilozhenie «Sodruzhestvo-NG»)	1	1 (0.02%)	1.2
9	Komsomolskaya pravda	213	302 (4.99%)	5.29	27	Nezavisimaya gazeta (prilozhenie «Nezavisimoe voennoe obozrenie»)	1	1 (0.02%)	0.28
10	lenta.ru	165	213 (3.52%)	3.84	28	Nezavisimaya gazeta (prilozhenie «NG-Regiony»)	1	1 (0.02%)	0.65
11	RBK Daily	108	211 (3.49%)	8.13	29	Nezavisimaya gazeta (prilozhenie «Ex Libris NG»)	1	1 (0.02%)	0.24
12	NEWSru.com	60	186 (3.07%)	24.99	30	Sovetskiy sport	1	1 (0.02%)	0.04
13	Moskovskiy komsomolets	78	106 (1.75%)	10.94					
14	Nezavisimaya gazeta	53	100 (1.65%)	3.01					
15	Argumenty i fakty	64	83 (1.37%)	2.18					
16	gazeta.ru	65	79 (1.31%)	6.67					
17	Novyy region 2	52	73 (1.21%)	4.03					
18	RBK Deyli	53	72 (1.19%)	7.64					

IPM – items per million

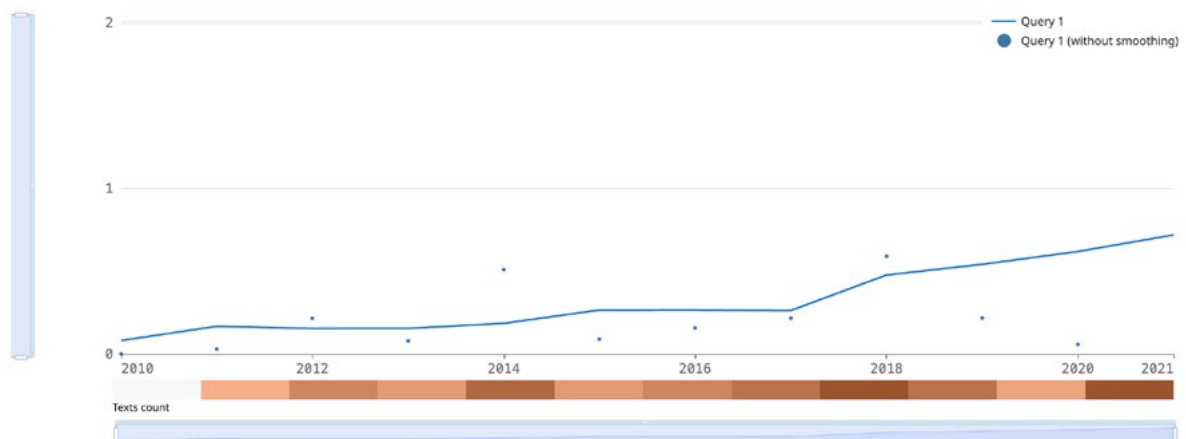


Figure 2. Graph of the frequency of the use of the phrase “unfriendly countries” according to the newspaper sub-corpus of the NCRL, 2010-2021. Compiled by the author from data search on: <https://ruscorpora.ru/s/jR8rl>

tive political and economic measures introduced by states and international organizations against Russia. The presented graph (Figure 2.) clearly shows an increase in the frequency of the lexical unit in 2014 and 2018, when the concept of unfriendly countries appeared in the Russian legislation. The frequency of use of the euphemism unfriendly countries correlates with the time of aggravation of Russia's relations with Western countries and is caused by political trends.

#### 4. Discussion

Euphemistic vocabulary is an integral part of journalistic discourse, as it allows us to avoid the direct naming of realities and phenomena that can cause negative emotions in the mass audience. Based on analysing the material of socio-political periodicals, several thematic groups were singled out, in which an increase of euphemistic substitutions was observed. At the same time, the typical topics subject to euphemisation, such as physiological processes and conditions, sexuality, human body and its parts, illness and death, etc., remained out of our focus. Euphemisms are actively used in the socio-economic sphere described in the modern Russian press. Euphemistic substitutions allow to smooth out the negative aspects of the described processes and phenomena, such as falling incomes of the population, increase in the retirement age, demographic problems, etc. A serious problem in the labour sphere is unemployment, which officials choose to refer to as tension in the labour market: "The member of parliament noted that the decision of the Cabinet will reduce *tension in the labour market* [*напряженность на рынке труда*], as currently the number of the officially registered unemployed has sharply increased" ["Парламентарий отметил, что решение кабинета позволит снизить *напряжённость на рынке труда*, так как сейчас резко выросло количество официально зарегистрированных безработных"] (Parlamentskaia gazeta, 03.07.2020); "*Tension in the labour market* has increased, Deputy Prime Minister, Minister of Family, Labour and Social Protection Lenara Ivanova said at a working meeting in the government yesterday" ["*Напряженность на рынке*

*труда* выросла, сообщила вчера на оперативном совещании в правительстве вице-премьер, министр семьи, труда и соцзащиты Ленара Иванова"] (Kommersant, 27.05.2020). Tension in the labour market is perceived as some kind of strain and does not carry a negative connotation like the word unemployment. This euphemistic substitution allows to disguise of the true essence of the problem denoted, reducing its significance.

Euphemisms avoid direct reference to denote a difficult economic situation. For example, in one of the newspaper articles of the mainstream media, the fact of mass dismissal of workers is described as a release: "In most cases, the employer does not carry out the intended *release* (*высвобождение*) of employees completely, or withdraws the notice of release from the employment service altogether" ["Отметим, в большинстве случаев работодатель не проводит предполагаемое *высвобождение* работников в полном объеме или совсем отзывает уведомление о *высвобождении* из органов службы занятости"] (RBK, 29.03.2019). Let us turn to the dictionary definition of the verb to *release*: 1. Remove, pull out of sth, free from sth constricting, obstructing movement. 2. To free from sth and direct for another use, implementation (Kuznetsov, 2002, p. 181). The euphemism release masks the true meaning of the denotation, and changes its connotative meaning, as it is associated with the words liberate, freedom, which carry a positive sentiment. On the pages of newspapers, information about job cuts is also presented using the euphemism *optimisation* [*оптимизация*]: "Gyms have seen a sharp increase in spending because of the pandemic, says Olga Kiseleva, president of the Association of Fitness Industry Operators: "There has been an *optimisation* of staff in the industry [...]" ["В отрасли прошла *оптимизация* количества персонала [...]" (Kommersant, 14.08.2020). According to Kuznetsov's dictionary, optimisation is the choice of the best (optimal) variant from a set of possible variants or increasing the intensity of something in order to achieve high results (Kuznetsov, 2002, p. 721); from the Latin *optimus* – the best. A word with a positive evaluative component acts as a euphemism naming a negative social phenomenon, which causes a contradiction at

the semantic level. The word *optimisation* in some contexts has come to mean: to reduce something or make someone redundant. This is the meaning in which the word is widely used in journalistic discourse when it comes to optimisation of medicine (reduction of the number of medical institutions), science and education (reduction of funding, number of schools, etc.): “The health system was not prepared for a pandemic because *optimisation* led to doctors being laid off, hospitals being downsized; all that had to be re-created in a state of emergency” [„Система здравоохранения не была готова к пандемии, потому что *оптимизация* привела к увольнению врачей, к сокращению больниц, и нужно было заново в экстренном режиме все это создать”] (Kommersant, 20.07.2020). Health care and education are among the most important elements of the social sphere. This explains the frequent mentions of the word *optimisation*, which has acquired a negative connotation. As a result, the euphemistic function is erased, as the euphemism ceases to veil the negative aspects of the phenomenon. As an illustration, here are a few examples of newspaper headlines: “Russian medicine: ‘*optimisation*’ or a step into the future?” [„Российская медицина: «оптимизация» или шаг в будущее?”] (Komsomolskaia pravda, 12.03.2019); “Perhaps the problem would have remained at the regional level and the empty surgical wards would have been closed under the guise of *optimisation*” [„Возможно, проблема так и осталась бы на региональном уровне, а опустевшие хирургические отделения, не исключено, просто закрыли бы под видом *оптимизации*”] (Vedomosti, 28.08.2019).

According to researcher A.D. Vasiliev, such euphemisms as *optimisation*, *reform* and some others, despite their proximity to individual-contextual substitutions of one word for another, are not occasional: “Their use has a systematic, massive and purposeful character” (Vasilev, 2010, p. 147). Indeed, authors of media texts often use the euphemisms *optimisation*, *reform* when referring to negative phenomena. For example, the phrase *pension reform* [пенсионная реформа] is used in press materials concerning the government’s initiative to raise the retirement age: “Experts are confident that the *pension reform* and tax changes have had a key

impact on the expectations of Russians” [„Эксперты уверены, что ключевым образом на ожидания россиян повлияли пенсионная *реформа* и налоговые изменения”] (Izvestiia, 11.06.2019). However, the euphemism *pension changes* [изменения] is also used alongside this euphemistic expression: “First Deputy Prime Minister and Russian Finance Minister Anton Siluanov called the reaction of Russians to the *pension changes* unexpected, and also noted that these *changes* were necessary to improve the quality of life of pensioners” [„Первый вице-премьер, министр финансов России Антон Силуанов назвал реакцию россиян на пенсионные *изменения* неожиданной, а также отметил, что данные изменения были необходимы для улучшения качества жизни пенсионеров”] (Izvestiia, 15.01.2019). In the second example, the neutral word *change* replaced the word *reform*, which may cause negative associations in the recipient. This substitution is explained by the fact that in the mass consciousness, the word *reforms* has acquired a negative meaning: a difficult period in the country in the late '80s – early '90s (*perestroika*), as well as other reform initiatives in recent history which mostly led to the worsening of the situation of citizens. The pension reform announced in 2018 involves raising the retirement age, which has caused public discontent and strong criticism of the reform. Initially, a *reform* denominated a progressive change, usually for the better, but under the influence of extra-linguistic factors, a negative connotation of the word was formed. The change in the pragmatics of this word is evidenced by the contexts of its use in mass media: “The word ‘*reform*’ is already in the general subconsciousness, causing one to bristle...” [«Слово ‘реформа’ уже в подкорке, заставляет шерсть становиться дыбом...»] (Bizness Online, 2018).

Although traditionally euphemisms are regarded as a type of synonyms (Arapova 1998; Kviatkovskii, 1966; Galperin, 1981; Katsev, 1988), it is difficult to disagree with the researcher Shmelev, who argued that euphemistic substitutions are caused “not by the proximity of the meanings of words, but precisely by the essential differences in their semantic content” (Shmelev, 2003, p. 145). Another researcher of the

semantic peculiarities of euphemisms, Sammani, notes that the search for a new form of denotation is carried out with the purpose of ennobling the meaning (Sammani, 2014, p. 648). Sometimes the denotation is acquired from the opposite, i.e. convergence of opposite concepts. The above examples confirm this idea since these euphemistic substitutions are based not on similarity, but on the difference in the meaning of the euphemism and the original denotation. In addition, a denotation with a negative meaning can be replaced by a denotation directly opposite in meaning, e.g. *peacekeeping mission* [миротворческая миссия] instead of *military operations* [боевые действия]. The root of the word *peace* contains the seme 'absence of war', the euphemistic expression *peacekeeping mission* contains a meaning diametrically opposite to the meaning of the word *war* (война). This constitutes an effective manipulation technique that masks the true state of affairs. In this sense, the euphemistic substitutions that appeared in media discourse during the pandemic (COVID-19) are particularly revealing: *vacation* [каникулы], *long weekends* [длинные выходные], *non-working days* [нерабочие дни] (instead of *quarantine* [карантин], *self-isolation* [самоизоляция]). The words *vacation* and *weekend* do not have a negative connotation, on the contrary, they evoke positive emotions.

An interesting situation has developed with the term *negative growth* [отрицательный рост], which regularly appears in media texts. Negative growth rate is a term generally applicable in economics and statistics, used to describe a situation when indicators of economic or social development are declining compared to previous periods. The term is used to convey information about negative changes in a particular factor. Journalists, quoting statements by officials of economic ministries, used this term in their publications, which contributed to its transfer from the sphere of professional jargon into the media discourse: "In April-May 2020, *negative growth* affected many sectors" [„В апреле-мае 2020 года отрицательный рост отразился на многих секторах"] (RIA Novosti, 06.07.2020). The expression *negative growth* is used instead of the more understandable and familiar for the mass audience economic recession, decline, and the

focus of reader's attention is shifted to the word *growth*, which allows to reduce the intensity of negative evaluation. Terms that are often used as economic euphemisms include: *price liberalisation* [либерализация цен] instead of *uncontrolled price increases*, [неконтролируемый рост цен]; *liquidity efflux* [отток ликвидности] instead of *banking crisis* [банковский кризис]; *restructuring* [реструктуризация] instead of *reduction* [сокращение]; *recession* [рецессия] instead of *economic decline* [экономический спад], etc. Texts overloaded with terms obscuring the meaning of the wording, may not be fully understood by a wide audience.

An active increase of euphemistic substitutions is observed in media texts reporting on various emergencies, catastrophes and natural disasters. The mass media regularly publish official comments by experts from the emergency services on the tragic events that take place. Professional vocabulary from the speech of employees of the relevant departments seeps into newspaper and journalistic materials. For example, the technical term *blast* [хлопок] is used in newspaper headlines often in place of the word *explosion* [взрыв]. The term itself is found in job descriptions and specialist literature (Instruction on investigation and accounting of fires at power facilities, 2002): "*Blast* (outburst) – the rapid combustion of a flammable mixture, not accompanied by the formation of compressed gases capable of destroying structures or installations" [„Вспышка (хлопок) – быстрое сгорание горючей смеси, не сопровождающееся образованием сжатых газов, способных разрушать конструкции или установки"]. According to the same manual, an *explosion* is "a rapid exothermic chemical transformation of an explosive medium accompanied by the release of energy and the formation of compressed gases capable of producing the destruction of structures or installations" [„быстрое экзотермическое химическое превращение взрывоопасной среды, сопровождающееся выделением энергии и образованием сжатых газов, способных производить разрушение конструкций или установок"]. As the definitions suggest, the main difference between *blast* and *explosion* is the lack of significant destruction. However, a *blast* instead of an *explosion* appears

in news reports, even when serious destruction and casualties are involved: “Last Sunday in a two-storey house in the village of Voznesenka a *blast* occurred, as a result of which the ceiling collapsed, and a person died” [„Напомним, в минувшее воскресенье в двухэтажном доме в селе Вознесенка произошел хлопок, в результате которого обрушилось перекрытие, погиб человек”] (Vesti.ru, 14.09.2020). The use of the term *blast* when describing domestic gas leakage incidents is intended to disguise the true state of affairs, to prevent the spread of panic. It is also important that the word *explosion* is firmly associated in the mass consciousness with terrorism. This is explained by a series of terrorist attacks in the recent history of Russia, when there were bombings of residential buildings, explosions in the underground, etc. Therefore, when analysing euphemisms, it is also necessary to take into account the socio-cultural context. The active growth in the use of the word combination gas blast in the Russian press in recent years is well illustrated by the graph obtained in the newspaper sub-corpus of the NCRL (Figure 3). This graph shows the frequency of occurrence of the mentioned word combination in the newspaper sub-corpus from 2010 to 2021. The graph is constructed taking into account data from 2010, which allows us to track changes (noticeable growth) in the frequency of use of this word over ten years.

Similarly, in order to reduce the real scale of the emergency situation, the euphemistic substitution of the word *ignition* [возгорание] instead of *fire* [пожар] is used in newspaper articles. The website of one of the specialised research and production companies (Technologies and systems of fire safety, n.d.), which designs and manufactures fire extinguishing systems, provides an explanation of the words *ignition* and *fire*: “*Ignition* is the initiation of the process of combustion of materials by an external source of ignition. [...] A *fire* is an uncontrolled combustion process outside of a designated area. The process is accompanied by the destruction of inventory and endangering public health and safety” (Technologies and systems of fire safety). Attention is drawn to the fact that the fire can die out on its own during the ignition phase. That is, a *fire* is an *ignition* that is out of control and requires action by firefighting professionals. The analysis of publications showed that the term *ignition* is also used in cases where a large fire is involved: “The *ignition* occurred over an area of 5,000 square meters. 73 specialists and 24 units of equipment were sent to the site to extinguish the *ignition*” [„Возгорание произошло на площади в 5000 кв. м. На место тушения направили 73 человека и 24 единицы техники”] (Vedomosti, 21.12.2021). In the above example, the euphemism was used to substitute notions in order to soften the negative effect of the word *fire*.

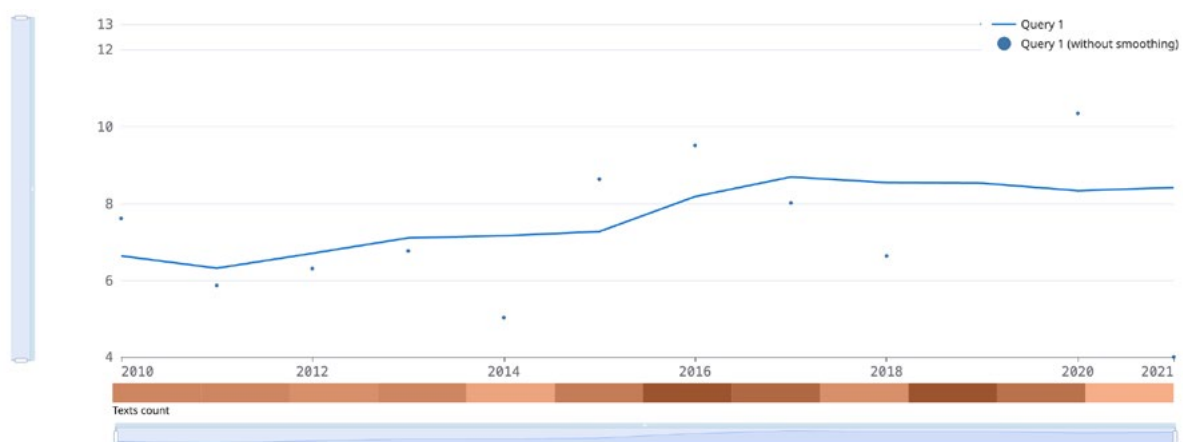


Figure 3. Graph of the frequency of the use of the word “blast” according to the newspaper sub-corpus of the NCRL, 2010-2021. Compiled by the author from data search on: <https://ruscorpora.ru/s/kR7vE>.



The euphemism *waterlogging* [подтопление], which is used in place of the word *flooding* [наводнение], is intended to diminish the scale of the disaster. Information posted on the official website of the department (Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters, n.d.) designates *waterlogging* as an increase in the level of groundwater, leading to disruption of economic activities in the affected area and changes in the structure and functions of natural biogeocenoses. *Flood* – inundation of a territory with water, which is a type of natural disaster; it can occur due to a rise in water levels rising during high water or freshets, ice jams, ice blockages, as a result of a surge in the river mouth, as well as in case of failure of hydraulic structures (Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters, n.d.). Despite the serious consequences and loss of life caused by the flooding, media texts refer to such instances as *waterlogging*: “The death toll from *waterlogging* in the Irkutsk region has risen to 23 people, with eight more individuals missing” [„Число погибших в результате подтопления в Иркутской области возросло до 23 человек, еще восемь числятся пропавшими без вести”] (RBC, 08.06.2019). Replacing the word *flooding*, which has a strong negative connotation, with the term *waterlogging* provides a reduction in the intensity of negative evaluation. In addition to euphemisms, such words and expressions as *high water* [наводок], *big water* [большая вода] are used as substitutes in media discourse. Avoiding direct naming allows the true meaning of the information to be hidden. The masking function of euphemisms is closely related to the manipulating function because by using specific linguistic means, the author of the text forms the recipient’s perception of a given phenomenon or event. In order to downplay the scale of the disaster, to mislead about the real state of affairs, newspapers use euphemisms such as *smoke accumulation* [задымление]; *thermal point* [термоточка] instead of *fire*; *hard landing* [жесткая посадка] instead of *plane crash*, *crash landing* [авиакатастрофа, крушение самолета]. This set of euphemisms is designed to soften the perception of the real state of affairs, to

create a less dangerous, less frightening picture. Cautious wording creates a certain soothing tone, thus influencing the perception of the mental image in the mass audience.

A third large thematic group, identified based on the analysis of newspaper publications, is related to the field of politics – domestic and foreign policy, military actions, actions of the authorities, etc. The language of diplomacy is characterised by the frequent use of euphemisms necessary to soften direct statements and maintain a respectful tone in international relations. This sphere of communication implies the use of restrained phrases, careful formulations, adherence to the principles of political correctness and official speech etiquette. As Krysin rightly points out, “the communicative tasks that diplomats and politicians have to deal with cannot be solved using only direct nominations, without insinuations, innuendos, understatements, camouflage, i.e. without everything that euphemisms are designed to express” (Krysin, 1994). Euphemistic substitutions give politicians the opportunity to issue a serious warning to a foreign country. Thus, a euphemism *symmetrical response* [симметричный ответ] implies a wide range of commensurate responses that are not explicitly indicated but can be speculated by the recipient: “Moscow warns the European Union against imposing new sanctions against Russia, they will inevitably be followed by a *symmetrical response*, Russian Foreign Ministry spokeswoman Maria Zakharova said” [„Москва предостерегает Евросоюз от введения новых санкций против России, на них неотвратимо последует симметричный ответ, заявила официальный представитель российского МИД Мария Захарова”] (Parlamentskaia gazeta, 11.02.2021). This euphemism has a rich synonymy: *adequate / mirror / proportionate response* [адекватный / зеркальный / пропорциональный ответ]. The euphemisms *mirror / adequate measures* [зеркальные / адекватные меры] are used with a similar meaning in media discourse: “Russia will take *mirror measures* after US sanctions against the Nord Stream-2 gas pipeline” [„Россия предпримет зеркальные меры после американских санкций против газопровода Северный поток-2”] (Lenta.ru, 26.12.2019);



“On 15 February, Russian Deputy Prime Minister Yuri Borisov said that if the United States withdraws from the treaty on the elimination of intermediate-range and shorter-range missiles (INF Treaty), Russia will take *adequate measures* in response to any threats from the United States” [„15 февраля вице-премьер России Юрий Борисов заявил, что в случае выхода Соединенных Штатов из договора о ликвидации ракет средней и меньшей дальности (ДРСМД) Россия будет принимать *адекватные меры* в ответ на любые угрозы со стороны США”] (Izvestiia, 16.02.2019). These euphemistic substitutions allow to convey a message that will be unambiguously deciphered by the recipient without resorting to direct threats and aggressive statements.

In diplomatic speech, euphemistic expressions are used to express dissatisfaction with the actions of the authorities of a foreign state (reduction in the number of ambassadors, imposition of sanctions) in a softened form. The euphemism *unfriendly /unamiable step* [недружественный / недружелюбный шаг] is used for such a purpose, for example: “The Czech side acted dishonestly and unworthily by taking this *unfriendly step*” [(„Чешская сторона поступила не порядочно и недостойно, пойдя на этот *недружественный шаг*”] (Izvestiia, 05.06.2020). A synonymous expression *unfriendly actions* [недружественные действия] is used in the following example: “All sanctions imposed by the Russian Federation are responses to *unfriendly actions* of other states, which manifest themselves through the measures taken” [„Все санкции РФ – это ответы на *недружественные действия* других государств, которые проявляются через санкционные решения”] (Izvestiia, 19.05.2020). It should be noted that in the Russian media discourse of recent years the expression *unfriendly countries* is actively used, which was connected with the list of foreign states and territories “committing unfriendly actions” against the Russian Federation, its citizens or legal entities: “*Unfriendly countries* are mobilising social media to pressure Russia” [„Недружественные страны привлекают соцсети для воздействия на Россию”] (Moskovskii komsomolets, 18.02.2019).

In media texts, information is presented in such a way as to avoid direct nomination of frightening phenomena, events. Thus, the word *war* [война], which has a sharply negative connotation, associated in the mass consciousness with the death of large numbers of people and large-scale destruction, will be replaced by the expression *armed conflict* [вооруженный конфликт] or *military operation* [военная операция]: “There has been an ongoing *armed conflict* in Syria since March 2011” [“С марта 2011 года в Сирии продолжается *вооруженный конфликт*”] (Izvestiia, 31.12.2020). As a result of euphemistic substitution, the emphasis is shifted to neutral keywords – *conflict*, *operation*, which allows to reduce the negative reaction of the audience. Euphemisms carry semantic ambiguity, thus improving the negative character of the denotation: *air support* [поддержка с воздуха] instead of *bombing* [бомбардировка]; *line of contact* [линия соприкосновения] instead of *war front* [фронт]; *preventive strike* [превентивный удар] instead of *attack*, *military invasion* [атака, военное нападение]. Euphemisms help to disguise or soften the unsavoury aspects of warfare and everything related to it.

The names of forms of government and the structure of the state apparatus are subject to euphemisation. For example, referring to centralised state administration in which lower levels are unconditionally subordinate to the upper ones, the euphemistic expression *power vertical* [вертикаль власти] is used: “The contractor agreed with the acting governor of Khabarovsk Krai, Mikhail Degtyarev, who said it was necessary to attract money to the region and strengthen the *power vertical*” [„Исполнительница согласилась с врио губернатора Хабаровского края Михаилом Дегтяревым, который заявил о необходимости привлекать в регион деньги и укреплять *вертикаль власти*”] (Lenta.ru, 22.07.2020). Euphemistic substitutions are used when referring to the actions of various power structures. For example, when reference is made to repressive actions of the authorities, the euphemism *to detain* [задержать] (meaning to *arrest* – *арестовать*) is used: “Dudnikov had already been *detained* in October 2020 when he stood up for a child who was going to be *detained*” [„Дудникова уже задерживали в октябре 2020 года,

когда он вступился за ребенка, которого хотели *задержать*”] (NEWSru.com, 29.05.2021). Another example is *forceful measures /methods* (used to mean *military action* in this context): “The new version of the National Security Strategy enshrines Russia’s actions to stop unfriendly and threatening steps, including the imposition of sanctions and *forceful methods*, the Security Council secretary said” [„В новой редакции Стратегии национальной безопасности закреплены действия России для пресечения недружественных и угрожающих шагов, в том числе введение санкций и *силовые методы*, заявил секретарь Совбеза”] (RBK, 31.05.2021).

Over time, euphemisms may cease to fulfil a mitigating function, as their denotative component becomes contaminated (Vildanova, 2015; Nikitina, 2009), and the linguistic element begins to denote the negative notion it used to mask. The connection of euphemisms with various external and internal factors, the dynamic nature of euphemisms is noted by many researchers (Arsenteva, 2012; Sammani, 2014; Moskvina, 2010; Kovshova, 2007). For example, the euphemism *killer* [киллер] instead of *murderer* [убийца] or *the highest punitive sanction* [высшая мера наказания] is a euphemism adopted in Soviet and Russian legal practice to denote the *death penalty*. The euphemism *liquidate* [ликвидировать] meaning to *kill, destroy* [убить, уничтожить] now has synonyms such as *neutralise, disarm* [нейтрализовать, обезвредить]: “As a result of the special operation, 24 members of this group were *disarmed*, another 35 were detained and the hostages were released, the agency reported” [„В результате спецоперации были *обезврежены* 24 члена этой группы, еще 35 задержаны, а заложники были освобождены, заключили в ведомстве”] (gazeta.ru, 20.05.2019). The literal meaning of the word *disarm* is to deprive of the ability to cause harm, to render harmless. The negative meaning of the denotation is replaced by a lexeme that evokes associations with something useful, stopping harm. The manipulative impact of euphemisms is manifested in reducing the intensity of the negative attribute by shifting connotative accents.

The term *two hundred* [двухсотый], also *cargo 200* [груз 200], derived from the military lexicon, used to name human losses in military operations,

is increasingly common in journalistic discourse: “For some reason, I remembered the voice. It sounded like a terrible triumph of a wife and mother, hoping that her male relatives were no longer targets, but could send a sufficient number of enemies to the “*two hundred*” themselves [„Почему-то запомнился голос. В нем звучало страшное торжество жены и матери, надеющейся, что ее родные мужчины теперь больше не мишени, но сами могут отправить к «*двухсотым*» достаточное число врагов,] (Novaya gazeta, 24.08.2017). This designation of a fallen soldier dehumanises the person, hiding the real tragedy behind a number. A significant part of political euphemisms are words having diffusing properties. For example, the word *special* [специальный] is part of some euphemisms: *special contingent* [спецконтингент], meaning *prisoners* [заключенные]; *special operation* [спецоперация] instead of *military invasion* [военное вторжение]; *special measures* [спецмеры] instead of *torture* of arrested persons [пытки арестованных], etc. In the camouflaging function words with generalised meaning are used: *incident* [инцидент], *action* [акция], *event* [событие]: “Guilty of organising a public event”, Svetov wrote on his Twitter, explaining that the court considered one of his tweets on January 23 to be a call for an unsanctioned *action*. On this day a rally was held in support of Alexei Navalny, founder of the Anti-Corruption Foundation (FBK; recognised by the Justice Ministry as a non-profit NGO)” [„Винновен в организации публичного мероприятия», – написал Светов в своем Twitter, пояснив, что суд счел призывом к несанкционированной *акции* один из его твитов 23 января, когда проходила акция в поддержку основателя Фонда борьбы с коррупцией (ФБК; признан Минюстом НКО-иноагентом) Алексея Навального”] (Vedomosti, 26.04.2021). In the above example, the euphemism *action* is used instead of *opposition rally*.

## Conclusion

To sum up, there is an ongoing process of formation of euphemisms, which are widely spread in the modern Russian press. Euphemistic substitutions are used as a way of indirectly softening denotations, allowing

to shift the connotative accent, neutralise or reduce the degree of expression of negative attributes, veil the true meaning of the denoted. Socio-political and economic phenomena, emergencies and natural disasters are topics which are most susceptible to euphemisation in the journalistic discourse. The study revealed that lexicon from the professional jargon actively penetrates into the media texts from official comments of departments and speeches of officials. The terms used as euphemisms, due to their specificity, may not be understood by the mass audience, can obscure the essence of what is denoted, as well as distort the true scope of events or phenomena. Camouflaging of meaning is also achieved by using

words with broad or diffusing meanings, as well as loanwords. Due to the associativity mechanism, euphemisms divert the recipient's attention from the object or action that can cause a negative reaction. Euphemisms have a high manipulative effect, as they allow to hide the true essence of the phenomenon, to present information in the appropriate light. The use of euphemistic vocabulary in socio-political periodicals is dictated by the desire to hide the severity of social problems, to create a more favourable image of the world via influencing the system of evaluation and the formation of public opinion. When analysing euphemistic units, it is also necessary to take into account the socio-cultural background.

## Bibliography

- Allan, K., Burridge, K. (1991). *Euphemism and dysphemism: Language used as shield and weapon*. New York: Oxford University Press.
- Allan, K., Burridge, K. (2006). *Forbidden words. Taboo and the censoring of language*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/CBO9780511617881>
- Arapova, N.S. (1998). Evfemizmy. (In:) V.N. Yarceva (ed.), *Iazykoznanie. Bolshoi entsiklopedicheskii slovar*, 590. Moskva: Bolshaia Rossiiskaia entsiklopediia.
- Arsenteva, Yu.S. (2012). *Frazeologizmy-evfemizmy v angliiskom i russkom iazykakh*: avtoreferat dissertatsii kandidata filologicheskikh nauk. Kazan. (Doctoral dissertation, Kazan (Volga Region) Federal University, Kazan, Russia). (From:) <https://www.dissercat.com/content/frazeologizmy-evfemizmy-v-angliiskom-i-russkom-azykakh>
- Atkins, S., Clear, J., Olster, N. (1992). Corpus Design Criteria. *Literary and Linguistic Computing*, 7(1), 1-16. <https://doi.org/10.1093/lc/7.1.1>
- Baranov, A.N. (2003). *Vvedenie v prikladnyu lingvistiku: uchebnoe posobie*. Moskva: Editorial URSS.
- Baskova, Yu. S. (2006). *Evfemizmy kak sredstvo manipulirovaniia v iazyke SMI: na materiale russkogo i angliiskogo iazykov*: dissertatsiia kandidata filologicheskikh nauk. Krasnodar. (Doctoral dissertation, Kuban State University, Krasnodar, Russia). (From:) [https://new-disser.ru/\\_avtoreferats/01003302606.pdf](https://new-disser.ru/_avtoreferats/01003302606.pdf)
- Beliaeva, I.V. & Kulikova, E.G. (2009). Manipulativnoe iskazhenie: lingvisticheskii smysl evfemizmov. *Vestnik Cheliabinskogo Gosudarstvennogo Universiteta*, 22(160), 15-20.
- Biber, D., Conrad S., Reppen R. (2011). *Corpus Linguistics: Investigating language structure and use*. Cambridge University Press.
- Business Online. (2018). *Slovo «reforma» uzhe v podkorke, zastavlyaet sherst' stanovit'sya dybom...* (From:) <https://www.business-gazeta.ru/article/389416> (access: February 15, 2025).
- Bonhomme, M. (2014). *Pragmatique des figures du discours*. Paris: Bibliothèque de grammaire et de linguistique.
- Bushueva, T.S. (2005). *Pragmaticheskii aspekt evfemizmov i disfemizmov v sovremennom angliiskom iazyke*: dissertatsiia kandidata filologicheskikh nauk. Moskva. (Doctoral dissertation, Moscow Pedagogical State University, Moscow, Russia). (From:) [https://new-disser.ru/\\_avtoreferats/01002747960.pdf](https://new-disser.ru/_avtoreferats/01002747960.pdf)
- Charciarek, A. (ed.) (2022). *Przegląd Rusycystyczny*, 1(177). Katowice.
- Dobrosklonskaia, T.G. (2009). Lingvisticheskie sposoby vyrazheniia ideologicheskoi modalnosti v mediatekstakh. *Vestnik Moskovskogo Universiteta. Seriya 19. Lingvistika i Mezhkulturnaia Kommunikatsiia*, 2, 85-94.
- Drozdova, D.R. (2016). *Fenomen iazykovogo manipulirovaniia v akademicheskoi diskurse*: dissertatsiia kandidata filologicheskikh nauk. Majkop. (Doctoral dissertation, Adyghe State University, Majkop, Russia). (From:) [https://rusneb.ru/catalog/000199\\_000009\\_006653107/?ysclid=mc9nhd78dg519668558](https://rusneb.ru/catalog/000199_000009_006653107/?ysclid=mc9nhd78dg519668558)
- Galperin, I.R. (1981). *Stilistika angliiskogo iazyka*. Moskva: Librom.
- Giezek, U. (2002). Euphemisms and euphemization from the perspective of cognitive linguistics. *Acta Universitatis Wratislaviensis. Anglica Wratislaviensis*, 39, 117-127.
- Gómez, C. (2012). The expressive creativity of euphemism and dysphemism. *Lexis*, 7, 43-64. <https://doi.org/10.4000/lexis.349>
- Grabowski, Ł. (2011). Korpusy dwu- i wielojęzyczne w służbie tłumacza, leksykografa i badacza. (In:) W. Chlebda (ed.), *Na tropach tłumaczeń. W poszukiwaniu odpowiedników przekładowych*, 89-112. Opole: Wydawnictwo Uniwersytetu Opolskiego.
- Ignateva, I.B. & Builova, Yu.L. (2017). Stertye evfemizmy v politicheskom diskurse: lingvokognitivnye i perevolcheskii aspekty. (In:) D.N. Novikov (ed.), *Magia INNO: Novye izmereniia v lingvistike i lingvodidaktike*, 1, 422-427. Moskva: Moskovskii Gosudarstvennyi Institut Mezhnunarodnykh Otnoshenii. <https://open.mgimo.ru/handle/123456789/2998>
- Instruction on investigation and accounting of fires at power facilities*. (2002). (From:) [https://www.rosteplo.ru/Npb\\_files/npb\\_shablon.php?id=2190](https://www.rosteplo.ru/Npb_files/npb_shablon.php?id=2190) (access: February 15, 2025).

- Ivanova, V.I., Kulagina, T.I. (2022). Ispolzovanie lingvisticheskikh korpusov tekstov dlya formirovaniya inoyazychnoy uchebno-poznavatel'noy kompetentsii. *Vestnik Permskogo natsional'nogo issledovatel'skogo politekhnicheskogo universiteta. Problemy Yazykoznaniya i Pedagogiki*, 3, 142-151. <https://doi.org/10.15593/2224-9389/2022.3.12>
- Kateneva, I.G. (2013). Manipulativnyi potentsial evfemizmov i disfemizmov na stranitsakh sovremennykh periodicheskikh izdaniy. *Vestnik Novosibirskogo Gosudarstvennogo Universiteta. Seriya: Istoriia, Filologiya*, 12(6), 105-110.
- Katsev, A.M. (1988). *Yazykovoe tabu i evfemiia*. Leningrad: Izdatel'stvo Leningradskii Gosudarstvennyi Pedagogicheskii Institut imeni A.I. Gertsena.
- Komarova, Ye.V. (2020). Representation of the image of a migrant in modern media (on the example of media texts in Great Britain). *Philological Sciences at Moscow State Institute of International Relations*, 1(21), 12-20. <https://doi.org/10.24833/2410-2423-2020-1-21-12-20>
- Kochetova, L.A. (2020). *Historical and discursive corpus studies. Language and culture in the era of globalization*. St. Petersburg State University of Economics.
- Kovshova, M.L. (2007). *Semantika i pragmatika evfemizmov*. Moskva: Gnozis.
- Krysin, L.P. (1994). Evfemizmy v sovremennoy russkoy rechi. *Rusistika*, 1-2, 28-49.
- Krysin, L.P. (2008). *Slovo v sovremennykh tekstakh i slovaryah: Ocherki o russkoy leksike i leksikografii*. Moskva: Yazyki slavyanskikh kultur.
- Kurenko, K.N. (2017). Korpusnaya lingvistika v perevodovedenii. *Inostrannye Yazyki: Lingvisticheskie i Metodicheskie Aspekty*, 37, 318-323.
- Kuznetsov, S.A. (2002). *Bolshoy tolkovyy slovar russkogo yazyka*. Sankt-Peterburg: Norint.
- Kviatkovskii, A.P. (1966). *Poeticheskii slovar*. Moskva: Sovetskaia entsiklopediia.
- Lakoff, R.T. (1995). Conversational Implicature. (In:) J. Benjamins (ed.), *Handbook of Pragmatics*, 1-24. John Benjamins Publishing Company. <https://doi.org/10.1075/hop.1.con10>
- Latypova, Yu.A., Todosienko, Z.V. (2019). Manipulyativnyy potentsial evfemizmov (na materiale publitsisticheskikh tekstov). *Kazanskaia Nauka*, 12, 77-79.
- Leech, G. (1992). Corpora and theories of linguistic performance. (In:) J. Svartvik (ed.), *Directions in Corpus linguistics. Proceedings of Nobel Symposium 82* (Stockholm, 4-8 August, 1991), 105-122. Berlin; New York: Mouton de Gruyter.
- McEnery, T., Hardie, A. (2012). *Corpus Linguistics: Method, Theory and Practice*. Cambridge.
- Meyer, C. (2002). *English Corpus Linguistics: An Introduction*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511606311>
- Ministry of the Russian Federation for Civil Defence. (n.d.). *Emergencies and Elimination of Consequences of Natural Disasters. Terms*. (From:) <https://mchs.gov.ru/ministerstvo/o-ministerstve/terminy-mchs-rossii/term/1689> (access: February 10, 2025).
- Moskvin, V.P. (2010). *Evfemizmy v leksicheskoy sisteme sovremennogo russkogo yazyka*. Moskva: URSS.
- Nikitina, I.N. (2009). *Evfemiya v zarubezhnoy i otechestvennoy lingvistike: istoriya voprosa i perspektiva issledovaniya*. (From:) <https://cyberleninka.ru/article/n/evfemiya-v-zarubezhnoy-i-otechestvennoy-lingvistike-istoriya-voprosa-i-perspektiva-issledovaniya> (access: December 17, 2024).
- Nikitina, I.N. (2011). *Sotsialnye evfemizmy v sovremennykh russkom i angliiskom iazykakh*. (From:) <https://cyberleninka.ru/article/n/sotsialnye-evfemizmy-v-sovremennykh-russkom-i-angliiskom-azykakh> (access: September 26, 2024).
- Pohorila A. (2022). The functioning of euphemisms in the english media discourse. *Transcarpathian Philological Studies*, 2(21), 100-103. <https://doi.org/10.32782/tps2663-4880/2022.21.2.20>
- Plungyan, V.P. (2008). Korpus kak instrument i kak ideologiya: o nekotorykh urokakh sovremennoy korpusnoy lingvistiki. *Russkij Yazyk v Nauchnom Osveshchenii*, 2(16), 7-20.
- Plungyan, V.P. (Ed.) (2019). *Natsionalnyy korpus russkogo yazyka: issledovaniya i razrabotki (sbornik statej)*. Moskva: Institut Russkogo Yazyka.
- Potapov, V.V. (2022). Lingvokognitivnyy podhod k sozdaniyu avtomatizirovannoy sistemy perevoda na osnove spetsializirovannykh parallelnykh terminologicheskikh baz danyh. *Socialnye i gumanitarnye nauki. Otechestvennaya i zarubezhnaya literatura. Ser. 6, Yazykoznanie: Referativnyy Zhurnal*, 2, 35-40. <https://doi.org/10.31249/ling/2022.02.01>
- Reznikova, T.I. (2008). *Korpusa slavyanskikh yazykov v internete: obzor resursov*. Die Welt der Slaven.
- Roscan, A. (2017). Hiding behind nice words: the use of euphemisms in mass-media discourse. (In:) I. Boldea (ed.), *literature, discourses and the power of multicultural dialogue. Section: Communication, journalism, education, psychology and sociology*, 180-185. Tirgu Mures: Arhipelag XXI Press.
- Sammani, M.X. (2014). Semanticheskie osobennosti evfemizmov v russkom yazyke. *Molodoj Uchenyj*, 6(65), 643-649.
- Shapovalova, M.A. (2018). *Funktsionalno-semanticheskaya kharakteristika evfemizmov v sovremennykh frantsuzskikh sredstvakh massovoi informatsii: vypusknaia kvalifikatsionnaya rabota*. Belgorod. (Master's thesis, Belgorod State University, Belgorod, Russia). (From:) [http://dspace.bsuedu.ru/bitstream/123456789/32841/1/Shapovalova\\_Funktsionalno\\_18.pdf](http://dspace.bsuedu.ru/bitstream/123456789/32841/1/Shapovalova_Funktsionalno_18.pdf)
- Shmelev, D.N. (2003). *Ocherki po semasiologii russkogo yazyka*. Moskva: Editorial URSS.
- Sibirceva, V. (2013). Tekhnologiya ispolzovaniya parallelnogo podkorpusa Nacionalnogo korpusa russkogo yazyka i kollekcij tekstov v obuchenii inostrannym yazykam. *Rocznik Instytutu Polsko-Rosyjskiego*, 2(5), 98-110.
- Sinclair, J. (1991). *Corpus, Concordance, Collocation*. Oxford University Press.
- Technologies and systems of fire safety. (n.d.) (From:) <https://nimbus-spb.ru/stati/vozhgoranie/> (access: February 10, 2025).
- Vasilev, A.D. (2010). Manipulyativnaya evfemizatsiya kak atribut diskursa SMI. *Vestnik Krasnoyarskogo Gosudarstvennogo Pedagogicheskogo Universiteta im. V.P. Astafeva*, 1, 141-148.
- Vildanova, G.A. (2015). *Evfemiya i princip vezhlivosti v sovremennom angliiskom yazyke: gendernyy aspekt: monografiya*. Moskva, Berlin: Direkt-Media.
- Yakushkina, K.V. (2009). *Leksiko-grammaticheskie sredstva evfemii v yazyke gazet Ispanii: dissertatsiya kandidata filologicheskix nauk*. Sankt-Peterburg. (Doctoral dissertation, Saint-Petersburg University, Saint-Petersburg, Russia). (From:) <https://www.dissercat.com/content/leksiko-grammaticheskie-sredstva-evfemii-v-yazyke-gazet-ispanii>
- Zaharov, V. P. (2003). Poiskovyie sistemy Interneta kak instrument lingvisticheskikh issledovaniy. (In:) V. Solov'ev (ed.), *Russkij Yazyk v Internetе*, 48-59. Kazan.
- Zasina, A. (2018). Językoznawstwo korpusowe. Empiryczne podejście w badaniach humanistycznych. *Dziennikarstwo i Media*, 9, 169-178. <https://doi.org/10.19195/2082-8322.9.13>
- Zyuzkova, N.A. (2020). Corpus study of the dialect word. *Actual Problems of Linguistics and Literary Criticism*, 20, 77-78.



# Education and school in the era of AI. Educationist's dilemmas

<https://doi.org/10.34766/zhbcs981>

Krzysztof Łuszczek<sup>a</sup> ✉

<sup>a</sup> Krzysztof Łuszczek, <https://orcid.org/0000-0003-1862-5028>, Institute of Pedagogy, University of Szczecin, Poland

✉ Corresponding author: [krzysztof.luszczek@usz.edu.pl](mailto:krzysztof.luszczek@usz.edu.pl)

**Abstract:** For at least several decades, the school environment has been under strong pressure from technology. New ICT tools bring educational hopes, but they also raise many doubts. This paper concerns the presence of Artificial Intelligence (AI) in the teaching-learning process. AI in education (AIED) provides enormous opportunities for individualising the teaching-learning process, adapting the entire process to the schoolchild's capabilities and motivation level. It also allows for more effective education management. It can predict trends, but also profile the education path of individual schoolchildren based on previous educational achievements. It also allows for support for teachers, especially in those aspects of education that can be standardised in some respects (e.g. assessment). However, the presence of AI in the education system brings specific challenges and difficulties that demand taking action so as not to squander the educational opportunities associated with new technologies. Firstly, Artificial Intelligence collects huge amounts of data in its activities, including sensitive data related to children's privacy. It is necessary to take care of their protection so that they are not used to the detriment of children or processed for commercial purposes. The presence of AI in schools also requires a redefinition of the role of the teacher. Undoubtedly, the emphasis in their work will have to be distributed differently and their position defined more precisely. To a large extent, this is related to another threat, which may be deficits in interpersonal communication. Until now, the teaching-learning process was based on interpersonal relations between the teacher and schoolchildren and was strongly vectored. The message had a specific direction. In the case of AI, interpersonal communication disappears and the message becomes more spontaneous and interactive. It is difficult to determine today whether AI will bring only benefits or whether the threats will outweigh them. The example of smartphones shows that not every new technology has a positive impact on the development and level of education of children. It seems that due to the dynamic development of AI models and their commonness as general-purpose technologies, we will not wait longer than a decade to make a substantive evaluation of the presence of AI in the education system.

**Keywords:** education, AI, new technologies in education, ethics

## Introduction

Every new communication technology that appeared in the 20th century brought with it certain educational hopes. In many cases, this was one of the basic goals that were set for it. Even when they were not directly related to the education system, the media were a tool for "enlightenment". The very way the media operated assumed the implementation of an educational function. For many decades, this reflected the functioning of television, which was focused on transmitting messages, clearly vectored and strongly hierarchical (Casetti, Odin, 1994). The next breakthrough was the popularisation of the computer network and websites, which were to constitute a kind of information highway and build a true knowledge society. However, it was

Artificial Intelligence that brought a real revolution in terms of both the reach and the speed of change. For ChatGPT, two months after its launch were enough to reach 100 million users (Lichfield, 2023). According to data from the report *The Dawn of the AI Era*, 51 percent surveyed American teenagers use models such as ChatGPT or Google Gemini. Almost half of them use AI to help with homework assigned at school (Madden et al., 2024).

It should be emphasised that artificial intelligence (AI), like other new technologies, was originally associated with great expectations in the field of education. Consequently, researchers working on the fundamental aspects of AI have often emphasised its educational potential (Lee, 2019; Lennox, 2020; Lee, Qiufan,



2022; Suleyman, Bhaskar, 2023). Nevertheless, two dominant currents are emerging in the research that deals intensively with AI applications in education.

The first focuses on the possibilities arising from the personalisation of the learning process, which offers an opportunity to optimise the teaching process (Chen et al., 2022; Gillani et al., 2023; Mittal et al., 2024). In addition, selected AI models can serve as a tool to support the development of teachers' communicative competence by providing training material (Song et al., 2022; Tubino, Adachi, 2022).

The second major research stream focuses on analysing the risks inherent in the implementation of AI in education. Indeed, the process of using AI-based systems involves the collection of significant amounts of sensitive data (Huang, 2023; Nemorin, 2022). This raises questions about the role of the teacher in an automated educational process and the future and nature of human interaction (Carter, 2022; Davis, 2023; Kim, 2023). The implementation of AI in the education sector therefore generates a growing number of ethical dilemmas that require in-depth analysis and the development of an appropriate regulatory framework (Carter, 2022; Fombona et al., 2025).

## 1. Uneven development

In January 2025, China surprised the world with a new, open AI model – DeepSeek. The model was surprising for at least two reasons. First, it was equal to such models such as those created, for example, by OpenAI, and second, the costs of its creation were disproportionately lower. This caused scare and even panic among both AI specialists and investors. The Chinese also made their model available for research and as a basis for construction and development, so they released it as an “open road” (open weight), (Gibney, 2025).

The race of various corporations creating AI models has accelerated quite recently. For ordinary AI users, this became noticeable in the early 2020s, when ChatGPT became popular in its subsequent versions (Marr, 2023). However, the history of Artificial Intelligence is much longer. For various reasons, it remained locked in scientific laboratories and the minds of transhumanists for decades.

John McCarthy, a professor at the Massachusetts Institute of Technology and Stanford University, is considered the father of Artificial Intelligence. In 1956, he organised a summer research project for computer scientists, the main topic of which was neural networks. In the invitation to cooperate, McCarthy included a new term “Artificial Intelligence” (AI), which was supposed to be a magnet for cooperation. However, after a few weeks of work, it turned out that there was far too little time to recreate the architecture of the human brain in a computer. The work was stopped, but the term “Artificial Intelligence” remained (Roberts, 2016).

After this first meeting in the mid-1950s, Artificial Intelligence hid in computer laboratories. There came something that Suleyman and Bhaskar called the “winter of Artificial Intelligence” (Suleyman, Bhaskar, 2023). This period lasted a very long time, until the end of the 20th century. In 1997, a computer created by IBM, Deep Blue, defeated chess grandmaster Garry Kasparov. Artificial Intelligence attracted attention at that time, but its wide application and potential economic benefits were still not seen (Greenemeier, 2017). Another breakthrough came 20 years later. The next computer, called AlphaGo, created by DeepMind, defeated the Chinese Go champion Ke Jie in May 2017. It seemed impossible, but the machine managed to beat the Chinese champion (Lee, 2019). It was already a time when people began to notice the potential applications of Artificial Intelligence on a huge scale and, equally importantly, the economic benefits that its use could bring.

In parallel with technological development, there was reflection on copying human intelligence or combining it with machine intelligence. The Transhumanist Declaration states that the future of humanity will be marked by strong pressure from science and technology due to the still untapped potential of humans (Sandberg, 2013). To understand transhumanism, one must consider its dual nature. Bostrom distinguishes two main aspects of this concept. The first, the theoretical aspect, involves the interdisciplinary exploration of the consequences, promises and potential dangers of using science and technology to overcome fundamental human limitations. It is therefore an area of academic reflection in which

the future of humanity is analysed in the context of technological progress. The second, the practical aspect, refers to transhumanism as an intellectual and cultural movement that actively advocates the possibility and necessity of a fundamental change in human existence (Bostrom, 2005). More believes that transhumanism is moving us towards a posthuman state. In his view, transhumanism has many elements in common with humanism, such as a respect for reason and science, an emphasis on progress and an appreciation of the role of humans. However, it differs from traditional humanism in expecting, even postulating radical changes in human nature and the possibilities available to it, offered by the dynamic development of various fields of science and technology (More, 1999).

Transhumanists are characterised by great optimism, even “technological romanticism” when it comes to the development of technology. This applies not only to aspects such as social robotics or affective computing, which would influence the development of a special relationship with machines, but also to a significant expansion of human biological capabilities. The development of robotics is to be a condition for improving the quality of human life (Bostrom, 2005; Minsky, 2006; Moravec, 2009).

The artificial intelligence market in education is showing significant and accelerated growth, although exact valuations and forecasts vary according to market analyses. For example, Business Research Insights has valued the market at USD 2.46 billion in 2024 and forecasts that it will reach USD 28.22 billion by 2032 (Business Research Insights, 2025). On the other hand, Consainsights offers a much higher base valuation of USD 23 billion in 2024, with this expected to rise to USD 95.20 billion by 2033 (Consainsights, 2025). Other forecasts estimate that the market for AI in education will reach USD 9.3 bn by 2034. In 2024, North America generated a 38,7 % share of the global AIED market. More than 50% of children use AI for homework and 60% of teachers say they incorporate AI into their daily practices for education (Shinde, 2025). The 2023 UNESCO report indicated that 63% of educational institutions worldwide have implemented some form of AI. However, indicators are globally mixed. For example,

by 2023 47% of academic institutions in developed countries have implemented AI-based tools, in stark contrast to 8% of low-income countries (Lee, 2025; Li, Tolosa, Rivas-Echeverria, Marquez, 2025).

Since J. McCarthy's pioneering attempts to conceptualise artificial intelligence, numerous research efforts have focused on its definition and algorithmic description. However, due to the dynamic development and heterogeneity of this field, it is still difficult to formulate a single, generally recognised definition. The literature therefore favours the identification of key properties of AI systems rather than striving for a strict definition. The fundamental characteristics of AI systems include their autonomous learning and knowledge acquisition capabilities. Human intervention in this process manifests itself primarily in the provision of training data and the configuration of model parameters. Another important characteristic of AI systems is their ability to adapt to previously unknown operating conditions and to make decisions and act autonomously in new, unforeseen contexts (Kurp, 2023).

## **2. Areas of application of artificial intelligence in education**

Basically, they can be reduced to three ones:

- personalisation of the teaching-learning process;
- support for teachers and tutoring;
- effective management of education.

Artificial Intelligence is gaining importance in education due to its potential to support teaching in various contexts. AI in education (AIED) allows the adaptation of the teaching process to the individual needs of the schoolchild, which allows for more effective lessons, adapts the teaching-learning process to the individual needs of schoolchildren, offering personalised educational paths (Fundació Bofill, 2022; Mittal et al., 2024). Educational Artificial Intelligence (AIED) is the process of integrating and applying Artificial Intelligence (AI) technologies in educational environments, mainly in classrooms but also in other learning contexts, to enrich the teaching

and learning experience. AIED is not just a minor addition to the teaching and learning process but represents a significant change. It brings both opportunities and challenges that education systems around the world will face in the near future (Vieriu, Petera, 2025).

AIED can support schoolchildren with special educational needs by offering them personalised tools and educational materials. AIED systems can help identify schoolchildren at risk in real time, which allows for quick intervention. They can do this both when children learn individually and in class teams (Chen et al., 2022).

AI algorithms enable effective assessment of complex skills and knowledge, supporting diagnostic processes. AI helps in grading written work, improving pronunciation, learning languages and developing reading skills. AIED can support creativity and innovation by generating music, images or texts. AIED platforms allow for the creation of personalised educational materials, which supports an individual approach to the teaching-learning process (Fundació Bofill, 2022).

AIED can support teachers in many different ways. A chatbot was used to train teachers to help them cope with difficult situations in class. Teachers working with an “unkind” chatbot had the opportunity to verify their level of effectiveness in dealing with difficult situations. Simulations with chatbots with different attitudes (including “unkind” one) allowed teachers to practice interacting with difficult schoolchildren in a safe environment, which is difficult to achieve in real conditions (Song et al., 2022).

AIED systems can significantly reduce the time that teachers have to spend on repetitive and standardised activities such as assessment. Teachers can not only save time, but also increase the precision of assessment. The same systems can help schoolchildren to self-assess in real time (European Commission, 2023).

Another way of involving AIED in the teaching-learning process is through intelligent tutoring systems. They adapt to the level of knowledge and skills of the schoolchild, offering personalised learning paths. The intelligent tutoring system offers what seems to be one of the most successful applications of AI in education, namely personalised learning

paths. It can easily identify knowledge gaps and provide feedback. It also adapts tasks to the level and motivation of schoolchildren, and can become an intelligent and polite tutor (Gillani et al., 2023).

Generative models in education can take the form of not only applications or appropriate software, but also educational robots. Educational robotics assumes that the development of knowledge and skills takes place through interaction with robots. Children can transform abstract concepts into concrete objects. This type of education, with developed elements of manipulation and interaction, is particularly effective in preschool age and in teaching STEM subjects (science, technology, engineering, math) (Chen, et al., 2023; Tubino, Adachi, 2022).

AIED can play a role in planning schoolchildren’s educational future. This applies to both everyday educational practice and broader life perspectives. A chatbot can remind about daily school duties. In terms of broader planning, AIED can help determine the appropriate educational path by proposing schools that match the schoolchild’s level of knowledge, interests and motivations. Applications prepared by schools or universities will guide the schoolchild through administrative processes related to education (Gillani et al., 2023).

AIED also offers a number of opportunities to improve education management, from the class level, through the school to larger systems. AIED models can predict changes in demand for schools and adapt educational policies to them. In the school itself, they can automate tasks such as creating schedules, assigning rooms or organising exams. Reducing the administrative burden on teachers allows them to focus on teaching and interacting with schoolchildren (Fundació Bofill, 2022; Gillani et al. 2023).

The implementation of artificial intelligence (AI) models in the education system, through both formal institutional structures and informal channels, has brought with it a number of positive experiences, but should not obscure fundamental questions and concerns about the dynamic development of these systems. According to the thesis of Suleyman and Bhaskar (2023), technology is inherently a form of power characterised by an asymmetrical distribution of potential. Consequently, in the field of education,



a disruption of the balance between technological progress and the primacy of humanistic values can lead to negative effects on social stability and undermine the prospects for future sustainable global human development.

### **3. Between technology and the humanities**

AIED was originally intended to support teachers. However, the focus of AIED technology has begun to shift from a teacher's assistant to an autonomous collaborator of the schoolchild. As a result, questions have arisen as to whether implementing AI in education is really appropriate and whether any new technology is suitable for use in the teaching-learning process (Homes et al, 2023).

The problems with AI in education can be reduced to three areas:

- privacy and protection of personal data;
- the role of the teacher in the new system;
- deficits in interpersonal communication.

In order to function effectively, AI systems require access to large sets of data, including personal data. Collecting and analysing this data raises concerns about its security. Problems with data can be very different, ranging from simple data leakage, through its deliberate collection for commercial purposes, loss of control over data, to the lack of appropriate regulations (Huang, 2023). There is a great risk that implementing AI in education will involve a fight between corporate interests in the perspective of expected profits. Hence, there is a justified concern whether this will not happen at the expense of the well-being of schoolchildren (Nemorin, 2022). Therefore, it is important that the processes related to AIED are transparent and understandable to all interested parties. Children in particular require special care, for whom these processes may be too abstract. It is difficult for a child to understand how the system makes decisions and what factors influence its results.

The problem of violation of personal rights concerns not only personal data, but also monitoring schoolchildren's emotions and behaviours. The possibility of obtaining various data additionally complicates the introduction of appropriate security and protection mechanisms. All the more so because the reality of AI changes dynamically, practically from week to week. Educational planning takes place over longer periods of time. Protecting schoolchildren's privacy and data in the AI era requires a multidimensional approach, including legal regulations, ethics, education and self-regulation of the IT industry (Hung, 2023).

The position of a teacher in a school full of various AIED proposals is becoming a serious challenge. Teachers do not have to be convinced of new technologies in education. A similar problem concerned, for example, the Internet or distance learning. In the case of the latter, huge progress was made under the pressure of the global COVID-19 pandemic. But at the same time, the imperfections of such solutions have been revealed, for example in the sphere of interpersonal communication. Teachers are also concerned about whether schoolchildren will have enough discipline to learn independently using technology, whether they will not be encouraged to cheat and plagiarise. Learning based on AIED therefore requires an appropriate level of schoolchildren's motivation. There is also a fear that the implementation of AI may deepen inequalities if not all schools and schoolchildren have equal access to technology. As with any technology, there will be technical problems, as well as difficulties related to learning how to use new systems by teachers and schoolchildren (MacKenzie, 2024). A number of ready-made tools are being created that help teachers use AI to organise work in the classroom and design individual lesson units (e.g. *to teach*). However, too far-reaching automation of the teaching-learning process can lead to a decrease in schoolchildren's engagement and the loss of important social and emotional aspects of education. There are also concerns that AI will also affect children's rights, especially the right to education, dignity, autonomy and privacy (Fundació Bofill, 2022).

Kim (2023) sees three possibilities for shaping the relationship between AI and teachers:

- teachers as passive recipients of AI;
- teachers as active users of AI;
- teachers and AI as constructive partners.

In the third case, i.e. Teacher-AI Collaboration (TAC), it is clear that the issue of using AI in education is no longer just a matter of technology, but also of far-reaching changes in the approach to education itself. Teachers are on a certain continuum between passively accepting solutions and actively participating in the process of integrating AI with the teaching-learning process.

A teacher in the education system is not only an animator of the teaching-learning process, but also a partner in the social development of the schoolchild. Technology has always tended to limit the time devoted to interpersonal relationships. Using voice in communication with technology and, on the other hand, simulating emotions through it can further deepen such tendencies. Saturating the child's environment with AI models can cause serious deficits in interpersonal communication and make it difficult to develop communication skills typical of humans. Although AI allows for individualisation of the teaching-learning process, we are not dealing here with contact with another human being but with a machine. Contact with a human teacher naturally introduces elements of interpersonal communication and creativity (Lee, Qiufan, 2022). AI can significantly help schoolchildren in learning, but it is the teacher who is essential in shaping communication skills and relationships. Perhaps with the increasing presence of AI in schools, the center of gravity of the teacher's work will shift in this direction. In the environment created by AI in schools, interpersonal relationships will become more important than ever before (Davis, 2023). It seems crucial to implement AI in a responsible and ethical manner, taking into account the rights and needs of all interested parties. It is also important to remember that technology is just a tool and the key to success is how people use it appropriately (Carter, 2022; Fombona, et al., 2025).

## Conclusion

The rapid development of AI requires an equally rapid response from the education system. This is largely because AIED reaches schools in multiple directions. Teachers are beginning to be interested in the possibilities it offers in terms of constructing the teaching-learning process, and the education management system sees AI as a chance to increase the efficiency of its activities. Here, however, the use of algorithms will largely depend on convincing leaders managing education at the school level and teachers themselves (Marrone, et al., 2024). The least predictable thing is the way in which schoolchildren will use AI. The first data show that in addition to the many positive effects of using AI in education, dangerous trends will appear that will be difficult to control. Teachers mention here, among others, the use of AI by schoolchildren to do homework, help with exams, or use for translations in foreign language lessons (Hamilton, Swanston, 2024).

The school environment is increasingly under AI pressure, just as it once was (and probably still is) with smartphones. But smartphones are a good example that technology does not always serve the developmental well-being of children and improve the level of education. Recent studies have clearly shown a negative correlation between the presence of a smartphone in school and the level of education (Ana et al., 2024; Teivainen, 2024). It is predicted that artificial intelligence will not lead to the abolition of teachers in the coming years, but will rather help to redefine their role in the teaching process. It will be possible to relieve teachers of repetitive and administrative tasks so that they can focus on designing advanced learning activities that stimulate students' creativity and provide social-emotional support. The role of the teacher will continue to be critical in modelling and promoting the principles of responsible and ethical use of algorithms in education. AIED's algorithms offer the potential for an accelerated shift in the educational process towards greater individualisation and adaptation to the different needs and abilities of students. In this context, there is a direct interaction between the experiences of

students, teachers and the AIED algorithms, the operation of which can be calibrated according to the specific educational establishment or stage of education. However, it should be emphasised that the implementation of AI-based solutions generates significant challenges, including significant costs, the need to provide adequate technological

infrastructure and the need to systematically and comprehensively prepare teaching staff for their new roles in technologically advanced educational environments. The potential for overcoming such barriers is illustrated by the lessons learned from the remote learning period implemented in response to the COVID-19 pandemic.

## Bibliography

- Bostrom, N. (2005). A History of Transhumanist Thought. *Journal of Evolution and Technology*, 14, 1-25. (From:) <https://nickbostrom.com/papers/a-history-of-transhumanist-thought> (access: 26.02.2025).
- Carter, A. (2022). The Moral Dimension of AI-Assisted Decision-Making: Some Practical Perspectives from the Front Lines. *Daedalus*, 151(2), 299-308. (From:) <https://www.jstor.org/stable/48662043> (access: 15.02.2025).
- Casetti, F., Odin, R. (1994). Od paleo- do neo-telewizji. W perspektywie semiopragmatyki. (In:) A. Gwóźdź (ed.) *Po kinie?...*, 117-136. Kraków: Universitas.
- Chen, X., Zou, D., Xie, H., Cheng, G., Liu, C. (2022). Two decades of Artificial Intelligence in education. *Educational Technology & Society*, 25(1), 28-47. (From:) <https://www.jstor.org/stable/10.2307/48647028> (access: 12.12.2024).
- Chen, Y., Tu, Y. F., Zhang, X., Hwang, G. J. (2024). Young children's conceptions of robot programming learning. *Educational Technology & Society*, 27(4), 69-89. (From:) <https://www.jstor.org/stable/10.2307/48791544> (access: 04.12.2024).
- Consainsights. (2025). *AI in education statistics market size, share, industry trends and forecast to 2033*. (From:) <https://www.consainsights.com/reports/ai-in-education-statistics-market> (access: 28.05.2025).
- Davis, V. (2023). *Navigating the AI landscape in education: Balancing technology with personal touch*. (From:) <https://www.coolcatteacher.com/ai-classroom-personal-touch-human-relationships-interactions> (access: 24.02.2025).
- European Commission. (2023). *How can artificial intelligence assist teachers with formative and summative assessment?* (From:) <https://school-education.ec.europa.eu/en/discover/news/how-can-artificial-intelligence-assist-assessment> (access: 05.02.2025).
- Faguy, A., Blasey, L., Morris, R. (2024). US states want to ban phones in schools. It might be a challenge. *BBC*, June 22. (From:) <https://www.bbc.com/news/articles/ce99443qwen0> (access: 26.02.2024).
- Fombona, J., Sáez-López, J. M. Sánchez Castro, S. (2025). Artificial intelligence and robotics in education: Advances, challenges, and future perspectives. *Social Sciences & Humanities Open*, 11(1), 101533. <https://doi.org/10.1016/j.ssoho.2025.101533>.
- Fundació Bofill. (2022). *Algorithms put to the test: Why AI in education?* Barcelona: Fundació Jaume Bofill.
- Gibney, E. (2025). China's cheap, open AI model DeepSeek thrills scientists. *Nature*, 638, 13-14. <https://doi.org/10.1038/d41586-025-00229-6>
- Gillani, N., Eynon, R., Chiabaut, C., Finkel K. (2023). Unpacking the "Black Box" of AI in Education. *Educational Technology & Society*, 26(1), 99-111. (From:) <https://www.jstor.org/stable/10.2307/48707970> (access: 01.03.2025).
- Greenemeier, L. (2017). 20 Years after Deep Blue: How AI has advanced since conquering chess. *Scientific American*, June 2. (From:) <https://www.scientificamerican.com/article/20-years-after-deep-blue-how-ai-has-advanced-since-conquering-chess> (access: 03.02.2025).
- Hamilton, I., Swanston, B. (2024). Artificial Intelligence In education: Teachers' opinions on AI in the classroom. *Forbes*, June 6. (From:) <https://www.forbes.com/advisor/education/it-and-tech/artificial-intelligence-in-school> (access: 26.02.2025).
- Holmes, W., Bialik, M., Fadel, Ch. (2023). Artificial intelligence in education. (In:) Ch. Stükelberger, P. Duggal, (eds.), *Data ethics: building trust: How digital technologies can serve humanity*, 621-654. Geneva: Globethics. <https://doi.org/10.58863/20.500.12424/4276068>
- Huang, L. (2023). Ethics of artificial intelligence in education: Student privacy and data protection. *Science Insights Education Frontiers*, 16(2), 2577-2587. <https://doi.org/10.15354/sief.23.re202>.
- Kim, J. (2023). Leading teachers' perspective on teacher-AI collaboration in education. *Education and Information Technologies*, 29(7). <https://doi.org/10.1007/s10639-023-12109-5>.
- Kurp, F. (2023). *Sztuczna Inteligencja od podstaw*. Gliwice: Helion.
- Lee, K. F. (2019). *Inteligencja sztuczna, rewolucja prawdziwa. Chiny, USA i przyszłość świata*. Poznań: Media Rodzina.
- Lee, K. F., Qiufan, Ch. (2022). *Sztuczna inteligencja. 2041*. Poznań: Media Rodzina.
- Lee, S. (2025). *5 AI trends reshaping education: Data & applications*. (From) <https://www.numberanalytics.com/blog/5-ai-trends-reshaping-education> (access: 29.05.2025).
- Lennox, J. C. (2020). *2084: Artificial Intelligence and the future of humanity*. Grand Rapids: Zondervan.
- Li Y., Tolosa L., Rivas-Echeverria F., Marquez R. (2025). *Integrating AI in education: Navigating UNESCO global guidelines, emerging trends, and its intersection with sustainable development goals*. <https://doi.org/10.26434/chemrxiv-2025-wz4n9>
- Lichfield, G. (2023). The 'Manhattan Project' theory of generative AI. *Wired*, April 6. (From:) <https://www.wired.com/story/how-to-make-sense-of-the-generative-ai-explosion> (access: 29.01.2025).
- MacKenzie, P. (2024). How AI is changing the role of teachers in education. *Forbes*, October 2. (From:) <https://www.forbes.com/councils/forbestechcouncil/2024/10/02/how-ai-is-changing-the-role-of-teachers-in-education> (access: 10.02.2025).
- Madden, M., Calvin, A., Hasse, A., & Lenhart, A. (2024). *The dawn of the AI era: Teens, parents, and the adoption of generative AI at home and school*. San Francisco, CA: Common Sense.

- Marr, B. (2023). A short history of ChatGPT: How we got to where we are today. *Forbes*, May 19. (From:) <https://www.forbes.com/sites/bernardmarr/2023/05/19/a-short-history-of-chatgpt-how-we-got-to-where-we-are-today/> (access: 31.01.2025).
- Marrone, R., Fowler, S., Bathakur, A., Dawson, S., Siemens, G., & Singh, C. (2024). Perceptions and perspectives of Australian school leaders on the integration of artificial intelligence in schools. *School Leadership & Management*, 45(1), 30-52. <https://doi.org/10.1080/13632434.2024.2425019>
- Minsky, M. (2006). *The emotion machine. Commonsense thinking, Artificial Intelligence, and the future of the human mind*. New York: Simon&Schuster.
- Mittal, U., Sai, S., Chamola, V., Sangwan, D. (2024). A comprehensive review on generative AI for education. *IEEE Access*, 12, 142733-142759. <https://doi.org/10.1109/ACCESS.2024.3468368>.
- Moravec, H. (2009). Rise of the Robots – The future of artificial intelligence. *Scientific American*, March 23. (From:) <https://www.scientificamerican.com/article/rise-of-the-robots> (access: 05.02.2025).
- More, M. (1990). *Transhumanism: towards a futurist philosophy*. (From:) <https://www.ildodopensiero.it/wp-content/uploads/2019/03/max-more-transhumanism-towards-a-futurist-philosophy.pdf> (access: 26.05.2025).
- Nemorin, S., Vlachidis, A., Ayerakwa, H. M., & Andriotis, P. (2022). AI hyped? A horizon scan of discourse on artificial intelligence in education (AIED) and development. *Learning, Media and Technology*, 48(1), 38-51. <https://doi.org/10.1080/017439884.2022.2095568>
- Roberts, J. (2016). *Thinking machines: The search for artificial intelligence*. (From:) <https://web.archive.org/web/20180819152455/https://www.sciencehistory.org/distillations/magazine/thinking-machines-the-search-for-artificial-intelligence> (access: 03.02.2025).
- Sandberg, A. (2013). Transhumanist declaration (2012). (In:) M. More, N. Vita-More, (eds.), *The transhumanist reader: Classical and contemporary essays on the science, technology, and philosophy of the human future*, 54-55. New York: John Wiley & Son. <https://doi.org/10.1002/9781118555927.ch4>
- Shinde, Y. (2025). Predictive AI in education market grows 13,2% year over year. (From:) <https://scoop.market.us/predictive-ai-in-education-market-news/> (access: 29.05.2025).
- Song, D., Oh, E. Y., Hong, H. (2022). The impact of teaching simulation using student chatbots with different attitudes on preservice teachers' efficacy. *Educational Technology & Society*, 25(3), 46-59. (From:) <https://www.jstor.org/stable/48673723> (access: 03.03.2025).
- Suleyman, M., Bhaskar, M. (2023). *The coming wave: technology, power, and the twenty-first century's greatest dilemma*. New York: Crown.
- Teivainen, A. (2024). Helsinki adopts tougher rules on smartphone use in schools. *Helsinki Times*, August 8. (From:) <https://www.helsinkitimes.fi/finland/finland-news/domestic/25487-helsinki-adopts-tougher-rules-on-smartphone-use-in-schools.html> (access: 26.02.2025).
- Tubino, L., Adachi, C. (2022). *Developing feedback literacy capabilities through an AI-automated feedback tool*. ASCI-LITE Publications. <https://doi.org/10.14742/apubs.2022.39>
- Vieriu, A. M., Petrea, G. (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences*, 15(3). <https://doi.org/10.3390/educsci15030343>