



Personality determinants, love attitudes and self-efficacy in people using dating sites

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Abstract: The Internet can provide an alternative space to the real world. Among these opportunities is making new acquaintances with the intention of creating a romantic relationship via portals designed for this purpose. With the growing popularity of dating sites, it was decided to study the relationship between personality determinants (independent and interdependent self-construal, communion and agency), love attitudes, attachment styles and self-efficacy in a group of people using dating sites. The study included 350 respondents. Dating site users comprised 39% of the sample (135 respondents), whereas non-users accounted for 61% of the sample (215 respondents). The following tools were used in the study: Self-Construal Scale (SCS), Self-Description Questionnaire 30, The Love Attitudes Scale: Short Form (LAS: SF), Attachment Styles Questionnaire (KSP) and General Self-Efficacy Scale (GSES). The results of the correlation analyses conducted for the entire study sample showed the existence of relationships between independent self-construal, agency, communion, Ludus love attitude, Mania love attitude, secure attachment style, anxiety-ambivalent attachment style and avoidant attachment style and self-efficacy, while the linear regression analysis showed the significance of independent self-construal, agency, Ludus love attitude and anxiety-ambivalent attachment style for self-efficacy. By comparing the obtained correlation and regression results, intergroup differences were shown for the variables studied. Differences in the correlations of the independent variables with the dependent variable between the control group and the research group are found for the relationships of communion and avoidant attachment style. In the experimental group, higher correlation coefficients were observed for the relationship with self-efficacy for the independent self-construal and communion. The level of explanation of the dependent variable by the independent variables is 43% for non-users of dating sites, while it is 36% for users of dating sites. In the experimental group, the predictors were statistically significant in explaining the variance of the dependent variable: independent self-construal, agency, communion, Ludus love style, Agape love style, anxiety-ambivalent attachment style. In the control group: agency and anxiety-ambivalent attachment style. The results of the Mann-Whitney U test showed statistically significant differences between the groups with high median differences observed for anxiety-ambivalent attachment style and avoidant attachment style.

Keywords: self-efficacy, self-construal, agency and communion, love types, attachment styles, dating sites

Introduction

The turn of the 20th and the 21st centuries has been a time of great technological change. One of the constituent factors of this phenomenon was the development of the Internet – a global computer network connecting users from all over the world (Bryła et al., 2009). Rapid development of the Internet as a source of information has, in a very short time, allowed to conceive not only new ways of accessing knowledge and the latest news from around the world, but also ways of communication between users. The changes brought about with the emergence of the Internet have also entered people's social lives (Oronowicz & Jaśkowiak, 2015). It has become easier not only to communicate with others, but also to get to know

them better; with the development of the Internet, the first online dating portals started to emerge, soon followed by dating apps.

Making new acquaintances via the Internet and dating portals and apps is a specific way of establishing relationships, as one can, at least to some extent, remain anonymous. This encourages shy people into meeting new people (Kacprzak & Leppert, 2013). Also, the undetermined response time to messages can facilitate conversation. Ben-Ze'ev (2005) points out however, that getting to know others and having conversations via the Internet may at the same time be associated with less misgivings about ending a friendship abruptly. In contrast, rejection by new

online acquaintances can take a much less noticeable form as it can be explained by circumstances beyond the person's control, whereas negative feelings can be alleviated by continuing to look for a partner.

Although the topic of alternative methods of making new acquaintances has been present in the scientific literature, both psychology and other fields of science are only just exploring and identifying this area, as well as the traits and tendencies displayed by people using dating sites and apps. This paper and the research presented herein will focus on personality determinants of people using dating sites, their attachment styles, love attitudes and displayed self-efficacy.

1. Theoretical introduction

1.1. Self-construal

In consideration of a number of self-concept theories (Epstein, 1973; Markus, 1977; Rogers, 1981; Trzebinski, 1992; Wyer, 2007, after: Pilarska, 2012; Tanaka, 2023), it is possible to consider the self as a system formed on the basis of an individual's awareness of his or her own values, goals, beliefs about his or her traits, abilities or preferences, as well as on the self-evaluation occurring with the previously mentioned components.

Self-construal is a culturally determined concept centred on the way one perceives oneself in relation to other people (Markus & Kitayama, 1991). More precisely, it is defined as a way of understanding the self in relation to one's relationships with others and perceiving oneself as independent of others or interdependent with others, depending on the social context (Pilarska, 2012). According to Markus and Kitayama (1991), the distinction between construal of the self as independent and construal of the self as interdependent should be considered as relative rather than absolute. Hence, it should be assumed that an individual has both an interdependent and an independent self, and it is culture that can strongly influence the development of either of them, leading to differences in the characteristics, motives and relationships represented by the individuals (Każmierczak, 2012).

1.2. Agency and communion

Although it seems impossible to completely describe and systematise the possibilities of perceiving the world, David Bakan described two main modalities of human existence in his theory on communion and agency (Wojciszke & Cieślak, 2014; Diehl et al., 2004). Bakan believed that each person is capable of pursuing his or her own goals, calling this agency, and of actively participating in social life, calling this communion (Wojciszke & Cieślak, 2014). Although Bakan's construct was purely theoretical, his theory was developed and empirical research was conducted, with the contribution by Vicki Helgesons who recognised communion and agency as personality traits (Wojciszke & Cieślak, 2014; Abele, 2022; Hauke & Abele, 2020). Agency is responsible for the individual's focus on themselves and realisation of chosen goals. It is associated with a highly developed sense of autonomy, a highly developed desire for self-actualisation and a clear focus on ability, skill and efficacy in achieving goals (Hofstede, 1983, Schwartz & Bilsky, 1990, Reeder & Brewer, 1997, Wojciszke, 2005 after: Abele & Wojciszke, 2014; Markus & Kitayama, 1991). The components of agency include, among others, the ability to maintain self-control and the ability to be assertive (Helgeson, 1994; Wojciszke & Cieślak, 2014; Hauke & Abele, 2020). As mentioned above, communion focuses on relationships with other people and on engaging in activities with them (Wojciszke & Cieślak, 2014). Burda and colleagues (1984, after Helgeson, 1994), in their research findings, presented communion as a trait that may project a tendency to show more mobilisation in offering social support than in agency, which is related to the assumptions developed by Bakan and Helgeson, i.e. the focus on relationships and their quality, and a resource that provides benefits for both the person manifesting it and others (Wojciszke & Cieślak, 2014).

1.3. Attachment styles

The beginnings of psychological investigation of attachment are attributed to John Bowlby; he defined attachment as an enduring psychological bond occurring between human beings (Bowlby, 1969). Another definition of attachment found in the scientific literature is a long-term emotional connection with a specific person (Schaffer, 2018, Momeni et al., 2022; Walker et al., 2022). Publications by Mary Ainsworth (1972, 1982, 1989) also make a significant contribution to the development of a scientific approach to the nature of attachment. She followed on Bowlby's thought, and in her own work, included the following definitions to approximate the issue of dependence between people: emotional bonds, attachment, and attachment gestures (Bee, 2004; Granqvist & Duschinsky, 2021). Although attachment theory originally referred to early childhood, it is also helpful in explaining social behaviour in the context of close relationships that can be established throughout an individual's life (Plopa, 2019). Among the major assumptions of attachment theory is a thesis that while attachment-related behaviour is particularly noticeable and intense during the initial developmental periods, it can be observed throughout a person's lifetime (Marchwicki, 2004). Mary Ainsworth (1978), inspired by Bowlby's attachment theory and based on her long-term research, distinguished three attachment styles. They are the secure style, the anxious-ambivalent style and the avoidant style.

Children with secure attachment style place trust in the attachment figure (Müller, 2013). They rely on sensing their availability and showing warmth, sensitivity and closeness in circumstances that may threaten their sense of balance and comfort. In adulthood, securely attached people are able to form trusting, lasting relationships in which they share their feelings with their partners. Individuals with secure attachment style are more willing to explore their close environment and relationships, they tend to be open, cooperative, and show more trust in therapists and their suggestions (Levy et al., 2010; Amani & Khosroshahi, 2021).

An anxious-ambivalent style emerges when a child feels insecure about the availability of the attachment figure (Plopa, 2019). This style is characterised by

high levels of anxiety, lower feelings of security, restlessness, insecurity, lower self-esteem and fear of separation. These individuals crave emotional closeness but at the same time worry that others do not want to be close with them; people with an anxious-ambivalent pattern of attachment show a tendency to form dependent relationships that in effect exacerbate their anxiety (Kobak & Sceery, 1988; Erkan et al., 2023). The perception and description of relationships also takes a specific form: research (Collins & Read, 1990; Feeney & Noller, 1990; Peitromonaco & Carnelley, 1994 after: Mikulincer & Orbach, 1995) has shown that individuals with this attachment style describe their romantic relationships in a more passionate and emotional way.

An avoidant style develops when a child experiences the unavailability of his or her attachment figure, particularly unavailability at the times of danger or heightened need for closeness (Plopa, 2019). Similar to the anxious-ambivalent attachment style, individuals with an avoidant attachment style are more anxious and hostile than individuals with a secure attachment style (Kobak & Sceery, 1988). The avoidant style is characterised by a tendency to avoid closer relationships in order to escape hurt, trust and communication problems, and a desire for self-efficacy and independence (Müller, 2013; Simpson, 1990; Liberska & Suwalska, 2011; Wardecker, 2020).

1.4. Love in psychology

Specialists in many fields have been interested in defining and describing the essence of love. Psychological theories of love conceptualise it in multiple ways (Janeczek, 2023). Maria Ryś (2016) points out that love has been increasingly perceived not only as a feeling, but also as a relationship and an attitude, or more precisely "*an active, positive attitude towards the other person*" (Ryś, 2016, p. 58). There may then be a desire to affirm the existence of the person one loves.

Among the important concepts for the effort to understand love is Robert Sternberg's Triangular Theory of Love. In his multifaceted view of love, Sternberg described the occurrence of three

components: intimacy, passion and commitment, which can occur in relationships of different nature, in different combinations (creating distinct love types) and at different intensities (Olesiński, 2013).

The concept of love central to the present study is the typology of love styles by John Lee (1973) distinguishing six types of love developed under the guidance of competent judges on the basis of sound descriptions and structured in a way that excluded the possibility of assigning more than one love type (they were mutually exclusive), while at the same time exhausting the literature used (Lee, 1977). Typification criteria included: “*physical symptoms associated with experiencing love (loss of appetite, sleep disturbance), physical attraction (sexual attraction), emotional pain, compulsive attention, willingness to humiliate or change to please the partner, jealousy, deliberate manipulative behaviour, need for familiarity and other criteria*” (Lee, 1973:232). Lee using the data he collected and compiled, divided the love styles into primary (primary) and secondary (derivative) ones. Primary love types are those occurring singly, while secondary love types are a combination of primary types. Primary types include Storge, Eros, Ludus, while secondary types include Agape, Pragma and Mania (Janeczek & Lesiewicz, 2020).

Storge – it is a type of love based on a slowly developing attachment, gradual getting to know each other and hope for a long-term commitment (Lee, 1977). The love relationship proceeds in a balanced, friendly, cordial atmosphere, with the conviction of being friends even in the face of the most unfortunate events (Jankowska, 2010). Physical intimacy is not important, this type of love focuses on nurturing the reciprocity of the relationship and a commitment to the relationship and the other person; honesty, empathy and being a devoted friend are important (Jankowska, 2010).

Eros – this type of love is largely associated with corporeality: the person seeks to create a relationship with a partner who reflects the type of beauty they desire (Lee, 1977). There is a belief in love at first sight, individuals representing Eros love believe that it is a guarantee to create an ideal relationship with a permanent and unchanging feeling (Jankowska, 2010). Partners strive to find

commonalities between each other, to become more like each other, while at the same time wanting to spend as much time together as possible. Mutual sexual attraction is very strong and the decision to have sexual intercourse is made very early on. Lovers want to give each other as much pleasure as possible, not only in the erotic sphere.

Ludus – the name derives from the works of Ovid; the Ludus type represents attitudes in which love is treated as a game. It looks in vain for jealousy, and relationships are usually short-lived (Lee, 1977). Although close physical contact, sexual intercourse plays an important role, it is only to satisfy one’s own needs for pleasure (Jankowska, 2010). Ludic lovers desire to dominate over their partners, they want to show their superiority and advantage over their lover.

Agape – it is a combination of Eros and Storge types; it is referred to as altruistic, self-sacrificing love. Love is treated as an obligation, there is no expectation of reciprocity from the partner – the person is focused on helping and caring for the well-being of the other person and being actively involved in creating a bond (Lee, 1977; Jankowska, 2010).

Pragma – it is a combination of Ludus and Storge types, otherwise known as practical love. Partners calculate the profits and losses that can be achieved by engaging in a relationship, love is treated as a kind of investment (Jankowska, 2010). Among the characteristics determining the choice of a partner are education, financial status or sharing a particular religion, and a relationship can only be formed when the partner meets specific requirements (Lee, 1977; Jankowska, 2010).

Mania – it is a combination of Eros and Ludus love; it is an intense, obsessive form of affection. It often involves jealousy and a need for constant reassurance about being loved (Lee, 1977). It is assumed that the intensity and obsessiveness have their genesis in the fear of losing the partner. Relationships of manic lovers are based on fears and anxieties that stand in the way to creating a deeper bond, so that all the effort is focused on behaviours designed to keep the partner, rather than on the process of creating a stable, healthy relationship (Jankowska, 2010).

1.5. Self-efficacy

The concept of self-efficacy was originally proposed in the works by Albert Bandura (Zulkosky, 2009; Shu, 2022). It first appeared in his Social Learning Theory which assumes that patterns of behaviour emerge from observing other people's responses to specific behaviours and facing their consequences (Bandura, 1977; Płaczkiwicz, 2016; Wojciszke, 2004). In his theory, Bandura (1977) described the mechanisms that determine the emergence of new modes of behaviour, their changes or disappearance, with behaviour explained as the interaction of personal and environmental factors (Płaczkiwicz, 2016).

In the scientific literature, self-efficacy is conceptualised as a person's belief in their own abilities and capabilities to act in order to reach a specific goal regardless of obstacles that arise (Rodek, 2020; Warner and Schwarzer, 2020). According to Bandura (1989, p. 1175), self-efficacy is also referred to as "an important set of determinants of human motivation, affect and action." It should be mentioned, that the above definitions have been based on research findings demonstrating the impact of self-efficacy on thinking, behaviour and motivation (Bandura, 1995, after: Zulkosky, 2009).

Self-efficacy develops over the course of a person's lifespan (Bandura, 2007). It is assumed that the process of developing the perception of self-efficacy depends on direct experience and observation of others (Łodygowska, 2018). Direct experience is a type of learning that leads to the acquisition of knowledge not only about the world, but also about oneself as a result of having to face the consequences of one's actions and choices (Bandura, 2007).

1.6. Specificity of the study group

The history of courtship using media available in a given historical period dates back to the 18th century (Cocks, 2015). However, this way of getting to know others did not inspire much trust in the community. In his historical analysis based on the material from the UK, Cocks (2009) reports that it was not until the late 1960s that matrimonial ads

gradually stopped to be perceived as advertisements published by women offering sexual services for money and by homosexuals.

Ways of making acquaintances have evolved with advances in technology – in the 1980s, videotapes were a means of getting to know someone (Toma, 2015). However, the number of people using the aforementioned means of meeting potential partners was never as high as the number of users of online dating sites. A study conducted in 2010 in the United States reported that 22% of the relationships entered into between 2007 and 2009 were made via the Internet (Rosenfeld & Thomas, 2010 after Toma, 2015).

Over the years, the level of stigma and trust in alternative ways of meeting potential partners have undergone many changes. Data obtained in 2003 (Harmon, 2003 after Oronowicz & Jaśkowiak, 2015) when confronted with research findings reported in 2015 not only point to an increased presence of the topic of online dating services in the mass media (and in the public awareness), but also to a definitely growing number of their users (Madden & Lenhart, 2006; Smith & Duggan, 2013; Oronowicz & Jaśkowiak, 2015).

Although the topic of alternative ways of making new acquaintances is not new to researchers, it is important to emphasise the developing nature of psychological findings regarding traits and tendencies displayed by people using dating sites. However, the review of the available literature and research to date may indicate that there is a relationship between experiencing anxiety, having depressive symptoms, fear of rejection and fear of attachment (but not in an avoidant way), and being a dating site user (Toma, 2022). Also, neuroticism, sexual permissiveness, sensation-seeking and openness to others may be factors that increase a person's willingness to reach for dating sites (Zorita et al., 2021). Furthermore, the results of the study conducted by Cacioppo and his research team (2013) showed that marriages contracted by people who met online showed lower divorce rates and higher levels of marital satisfaction than those of people who met traditionally.

2. Method

2.1. Aim and specific design of the study

The aim of the present study is to investigate the relationships between communion and agency, the interdependent and independent self-construal, love types, attachment styles and self-efficacy in a group of people using dating sites. The present study is a response of sorts to the results of the previous analysis of learning resources related to the psychology of love, and research conducted on a group of dating site users. As they point to a high need to further the research on the above-mentioned scope, it should be emphasised that a small number of studies related to love is available in the Polish scientific literature, which were conducted using psychological tools designed in accordance with modern psychometrics or adapted to Polish conditions.

Based on the analysis of learning resources, i.e. theoretical issues and resources related to the research conducted so far, the following research questions were formulated:

1. Are there any relationships between self-construal, communion and agency, attachment styles, love types and self-efficacy in people using dating sites?
2. Are there any differences in the relationship between self-construal, communion and agency, attachment styles, love types and self-efficacy in the group of people who use dating sites and in the group of people who do not use them?
3. Is self-construal, communion and agency, attachment style and love type relevant in explaining one's self-efficacy?
4. Are there any differences in the level of explaining general self-efficacy by self-construal, communion and agency, attachment styles and love types in the groups of dating site users and non-users ?
5. Can attachment styles mediate the relationship between love types and general self-efficacy?
6. Are there differences in the examined variables: self-construal, communion and agency, attachment styles, love types and self-efficacy between the groups of dating site users and non-users?
7. Is the level of self-efficacy in the group of dating site users higher than in the group of non-users?
8. Is the level of communion in the group of dating site users higher than in the group of non-users?
9. Is the level of interdependent self-construal in the group of dating site users higher than in the group of non-users?

The research questions outlined above formed the basis for putting forward the following hypotheses:

- H1: There are relationships between self-construal, communion and agency, attachment styles, love types and self-efficacy in people using dating sites.
- H1a: There are differences in the relationship between self-construal, communion and agency, attachment styles, love types and self-efficacy in the group of people who use dating sites and in the group of people who do not use them.
- H2: Self-construal, communion and agency, attachment styles and love types are important in explaining self-efficacy.
- H2a: There are differences in the level of explaining general self-efficacy by self-construal, communion and agency, attachment styles and love types between the groups of dating site users and non-users.
- H3: Attachment styles play a mediating role in the relationship between love types and general self-efficacy.
- H4: There are statistically significant differences in the examined variables: self-construal, communion and agency, attachment styles, love types and self-efficacy between the groups of dating site users and non-users .
- H4a: The level of self-efficacy in the group of people using dating sites is higher than in the group of non-users.
- H4b: The level of communion in the group of people using dating sites is higher than in the group of non-users.
- H4c: The level of interdependent self-construal in the group of people using dating sites is higher than in the group of non-users.

2.2. The sample

Three hundred and fifty (350) individuals took part in the survey. 21% of the sample were male (75), 79% of the sample were female (275). The mean age of respondents was 24 years ($SD = 5.64$). Dating site users accounted for 39% of the sample (135 people), whereas non-users for 61% of the sample (215 people).

2.3. Procedure and materials

In order to verify the hypotheses, five psychological tools were used in the study:

The Self-Construal Scale adapted by Aleksandra Pilarska (2011) is a tool comprised of two subscales measuring independent self-construal and interdependent self-construal. Each subscale contains nine items; responses are given on a seven-point rating scale, where 1 means – strongly disagree and 7 means – strongly agree.

The Self-Report Questionnaire 30 (Wojciszke, 2010) is a tool consisting of two subscales measuring community orientation and agency orientation, each subscale containing 15 questions. The overall score of a subscale is equal to the average score of the 15 items assigned to it. Responses are given on a seven-point scale, where 1 means – definitely not, while 7 means – definitely yes.

The Love Attitudes Scale: Short Form, adapted by Piotr Janeczek (2023), is a 24-item tool that includes six subscales measuring the following love types: Eros, Ludus, Storge, Pragma, Mania, Agape. Each subscale consists of four items. Responses are given on a five-point scale, where 1 means – strongly agree and 7 means – strongly disagree.

The Attachment Styles Questionnaire (Plopa, 2005) is an instrument encompassing three subscales measuring the following attachment styles: secure attachment style, anxious-ambivalent attachment style and avoidant attachment style. Each subscale consists of eight items. Responses are given using a seven-point scale, where 1 means – strongly disagree and 7 means – strongly agree.

The General Self-Efficacy Scale adapted by Zygryd Juczyński (2000) is a 10-item psychological tool measuring the perception of self-efficacy based on

the concept developed by Albert Bandura. Questions are answered using a four-point scale, where 1 means no and 4 means yes. The overall self-efficacy index is the sum of answers to all questions.

Respondents took part in the study personally and voluntarily. They were provided with a questionnaire developed via the Google Forms platform with specific components put in the following order: a description of the study, a space to give informed consent for participation in the study, metric questions, the Attachment Styles Questionnaire, the Love Attitudes Scale: Short Form, the General Self-Efficacy Scale, the Self-Construal Scale, the Self-Report Questionnaire 30 and a thank-you note for participation in the study. A link to the study and a description of the study were posted in the social media in groups specially designed for this purpose. At the beginning of the study, the respondents were informed about the aim of the study, the procedure (including the expected duration), anonymous character and the possibility to withdraw from the study at any time. Giving of informed consent was a prerequisite to participation in the study. In the absence of the consent, the person was transferred to a thank-you page and the study did not continue.

The necessary statistical analyses were performed using IBM SPSS version 26 and Jamovi version 2.3.21. IBM SPSS version 26 was used for descriptive statistics, Pearson correlation analyses and linear regression analyses. The Jamovi programme was used to perform mediation analysis (here, using the jAMM macro module) and to perform the non-parametric Mann-Whitney U test.

3. Results

3.1. Descriptive statistics

The first step was to perform descriptive statistics for the study variables in each group (see: Table 1.). A Shapiro-Wilk test was performed, the results of which were statistically significant for most of the variables in each group, allowing to reject the null hypothesis assuming the normality of the distribution of the groups. The results that were not statis-

tically significant in the control group (non-users) are: independent self-construal, interdependent self-construal, and agency. The results that were not statistically significant in the group of people using dating websites are: independent self-construal, interdependent self-construal, agency, Eros love type, avoidant attachment style.

3.2. Correlations

The next step in testing the hypotheses put forward in this study was to conduct a correlation analysis using Pearson's *r* method on the entire sample (350 people), (see: Table 2.).

The results of the correlation analysis for the subscales of the Self-Construal Scale, the subscales of the Self-Report Questionnaire 30, love types, the subscales of the Attachment Styles Questionnaire and general self-efficacy conducted for all respondents, presented in Table 2., show positive and statistically significant relationships between: independent self-construal and agency, independent self-construal and communion, independent self-construal and secure attachment style, independent self-construal and general self-efficacy, interdependent self-construal and communion, interdependent self-construal and Mania love type, interdependent self-construal and Agape love type, interdependent self-construal and anxious-ambivalent attachment style, interdependent self-construal and avoidant attachment style, agency orientation and communion orientation, agency orientation and Pragma love type, agency and secure attachment style, agency and general self-efficacy, communion and Agape love type, communion and secure attachment style, communion and general self-efficacy, Eros love type and Agape love type, Eros love type and secure attachment style, Ludus love type and Pragma love type, Ludus love type and Mania love type, Ludus love type and avoidant attachment style, Ludus love type and general self-efficacy, Storge love type and Agape love type, Pragma love type and Mania love type, Pragma love type and anxious-ambivalent attachment style, Pragma love type and avoidant attachment style, Mania love type and Agape love type, Mania love type and anxious-ambivalent attachment style, Mania love type

and avoidant attachment style, Agape love type and secure attachment style, Agape love type and anxious-ambivalent attachment style, secure attachment style and general self-efficacy, anxious-ambivalent attachment style and avoidant attachment style.

The results of the correlation analysis for the subscales of the Self-Construal Scale, the subscales of the Self-Report Questionnaire 30, the love types, the subscales of the Attachment Styles Questionnaire and general self-efficacy conducted among all respondents, presented in Table 2., show negative and statistically significant relationships between: independent self-construal and Agape love type, independent self-construal and anxious-ambivalent pattern of attachment, independent self-construal and avoidant pattern of attachment, interdependent self-construal and agency, interdependent self-construal and Eros love type, interdependent self-construal and secure attachment style, agency and Agape love type, agency and anxious-ambivalent attachment style, agency and avoidant attachment style, communion and Ludus love type, communion and avoidant attachment style, Eros love type and Ludus love type, Eros love type and Pragma love type, Eros love type and anxious-ambivalent attachment style, Eros love type and avoidant attachment style, Ludus love type and secure attachment style, Pragma love type and secure attachment style, Mania love type and general self-efficacy, secure attachment style and anxious-ambivalent attachment style, secure attachment style and avoidant attachment style, anxious-ambivalent attachment style and general self-efficacy, avoidant attachment style and general self-efficacy.

The next step in the process of testing the hypotheses was to conduct a correlation analysis and calculate Pearson's *r* in the group of non-users (215 people), (see: Table 3.).

The results of the correlation analysis for the subscales of the Self-Construal Scale, the subscales of the Self-Report Questionnaire 30, love types, the subscales of the Attachment Styles Questionnaire and general self-efficacy conducted in the group of non-users, presented in Table 3., show positive and statistically significant relationships between: independent self-construal and agency, independent self-construal and secure attachment style, independent self-construal

Table 1. Descriptive statistics for the study variables in the treatment and control groups

	Dating portal	Independent Self- Construal	Interdependent Self-Construal	Agency orientation	Communion orientation	Eros	Ludus	Storge	Pragma	Mania	Agape	Secure attachment style	Anxious-ambivalent attachment style	Avoidant attachment style	Generalized self-efficacy
Mean	Yes	44.4	40.8	4.9	5.7	13.3	10.0	12.2	10.3	11.7	12.0	40.9	33.5	24.5	30.0
	No	42.9	40.0	4.8	5.6	15.5	9.2	12.7	9.5	11.0	13.0	44.7	27.9	19.0	29.4
Median	Yes	44.0	41.0	4.8	5.9	13.0	9.0	12.0	10.0	12.0	12.0	41.0	34.0	25.0	30.0
	No	42.0	40.0	4.7	5.7	16.0	8.0	13.0	9.0	11.0	13.0	46.0	27.0	17.0	29.0
Standard deviation	Yes	7.8	7.7	1.0	0.8	3.6	3.8	4.0	4.2	4.0	4.2	8.2	11.5	8.1	5.5
	No	7.9	7.5	1.0	0.8	3.8	3.6	4.2	3.9	3.6	4.0	9.1	10.7	9.1	5.5
Variance	Yes	60.1	59.3	1.0	0.7	12.8	14.5	15.7	17.3	16.2	17.5	67.5	133.0	65.5	30.0
	No	63.0	56.6	0.9	0.6	14.7	12.8	17.2	15.4	13.1	15.8	83.4	115.0	82.5	29.8
Minimum	Yes	22.0	15.0	2.7	2.8	4.0	4.0	4.0	4.0	4.0	4.0	17.0	10.0	8.0	18.0
	No	18.0	17.0	1.5	2.9	4.0	4.0	4.0	4.0	4.0	4.0	17.0	8.0	8.0	11.0
Maximum	Yes	63.0	59.0	7.0	7.0	20.0	20.0	20.0	20.0	20.0	20.0	56.0	55.0	43.0	40.0
	No	60.0	62.0	7.0	7.0	20.0	19.0	20.0	20.0	20.0	20.0	56.0	53.0	48.0	40.0
Skewness	Yes	0.0	-0.4	0.1	-0.9	-0.1	0.5	0.1	0.3	0.2	0.1	-0.5	-0.2	0.0	0.0
	No	0.0	-0.2	-0.3	-0.5	-0.9	0.7	-0.2	0.4	0.1	-0.2	-0.8	0.3	0.7	-0.3
Standard error of skewness	Yes	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	No	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Kurtosis	Yes	-0.3	0.9	-0.7	0.6	-0.4	-0.5	-0.6	-0.8	-0.6	-0.8	0.1	-0.8	-0.7	-0.8
	No	-0.2	0.2	0.5	0.4	0.4	-0.3	-0.5	-0.5	-0.5	-0.6	0.0	-0.7	-0.1	0.8
Standard error of kurtosis	Yes	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	No	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Shapiro- Wilk W	Yes	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	No	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.9	1.0	0.9	1.0
The p-value of the Shapiro- Wilk test	Yes	0.6	0.1	0.1	<.001	0.1	<.001	0.0	<.001	0.0	0.0	0.0	0.0	0.1	0.0
	No	0.1	0.1	0.1	<.001	<.001	<.001	<.001	<.001	0.0	<.001	<.001	0.0	<.001	<.001

and general self-efficacy, interdependent self-construal and communion, interdependent self-construal and Mania love type, interdependent self-construal and Agape love type, interdependent self-construal and anxious-ambivalent attachment style, interdependent self-construal and avoidant attachment style, agency and community orientation, agency and secure attachment style, agency and general self-efficacy, Eros love type and Storge love type, Eros love type and Agape love type, Eros love type and secure attachment style, Ludus love type and Pragma love type, Ludus love type

and Mania love type, Ludus love type and avoidant attachment style, Pragma love type and Mania love type, Pragma love type and avoidant attachment style, Mania love type and Agape love type, Mania love type and anxious-ambivalent attachment style, Agape love type and secure attachment style, anxious-ambivalent attachment style and avoidant attachment style.

The results of the correlation analysis between the subscales of the Self-Construal Scale, subscales of the Self-Report Questionnaire 30, love types, subscales of the Attachment Styles Questionnaire and general

Table 2. r-Pearson correlation coefficients for the studied variables in the sample, n = 350

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Independent Self-Construal	1	.03	.562**	.122*	.081	.009	-.04	.064	-.09	-.115*	.184**	-.154**	-.111*	.434**
Interdependent Self-Construal		1	-.171**	.437**	-.127*	.088	.054	.004	.176**	.201**	-.114*	.267**	.184**	-.062
Agency orientation			1	.218**	.082	.002	-.007	.185**	-.089	-.134*	.154**	-.197**	-.121*	.590**
Communion orientation				1	.097	-.128*	.074	-.01	.07	.151**	.187**	.101	-.124*	.160**
Eros					1	-.414**	.178**	-.156**	-.058	.394**	.473**	-.155**	-.499**	.05
Ludus						1	-.095	.230**	.217**	-.062	-.229**	.052	.253**	.112*
Storge							1	.061	-.058	.149**	.09	-.018	-.074	-.017
Pragma								1	.177**	-.065	-.113*	.174**	.219**	.075
Mania									1	.362**	-.037	.520**	.191**	-.114*
Agape										1	.170**	.167**	-.133*	-.054
Secure attachment style											1	-.270**	-.793**	.110*
Anxious-ambivalent attachment style												1	.487**	-.268**
Avoidant attachment style													1	-.109*
General Self-efficacy														1

** . Correlation significant at the 0.01 level (two-tailed)

* . Correlation significant at the 0.05 level (two-tailed)

self-efficacy conducted in the group of non-users, presented in Table 3., show negative and statistically significant relationships between: independent self-construal and Love Mania style, independent self-construal and anxious-ambivalent attachment style, independent self-construal and avoidant attachment style, interdependent self-construal and agency, interdependent self-construal and the Eros love type, interdependent self-construal and the secure attachment style, the agency and the anxious-ambivalent attachment style, the agency and the avoidant attachment style, the Eros love type and the Ludus love type, Eros love type and Pragma love type, Eros love type and anxious-ambivalent attachment style, Eros love type and avoidant attachment style, Ludus love type and secure attachment style, Storge love type and Mania love type, Agape love type and avoidant attachment style, secure attachment style and anxious-ambivalent attachment style, secure attachment style and avoidant attachment style, anxious-ambivalent attachment style and general self-efficacy.

The next step in the process of testing the hypotheses was to conduct correlation analysis in the group of non-users (135 people), (see: Table 4.).

The results of the correlation analysis for the subscales of the Self-Construal Scale, the subscales of the Self-Report Questionnaire 30, the love types, the subscales of the Attachment Styles Questionnaire and general self-efficacy conducted in the group of people using dating websites, presented in Table 4., show positive and statistically significant relationships between: independent self-construal and agency, independent self-construal and Eros love type, independent self-construal and secure attachment style, independent self-construal and general self-efficacy, interdependent self-construal and communion, interdependent self-construal and Storge love type, interdependent self-construal and Mania love type, interdependent self-construal and the Agape love type, interdependent self-construal and the anxious-ambivalent attachment style, agency and communion, agency and the Pragma love type, agency and general self-efficacy, communion and the Eros love type, communion and the Agape love type, communion and secure attachment style, communion and general self-efficacy, Eros love type and Pragma love type, Eros love type and secure attachment style, Ludus love

Table 3. r-Pearson correlation coefficients for the studied variables in the group of people who do not use dating websites, n = 215

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Independent Self-Construal	1	.004	.530**	.098	.059	.001	-.022	.055	-.138*	-.075	.206**	-.222**	-.162*	.433**
Interdependent Self-Construal		1	-.209**	.433**	-.240**	.117	-.028	.005	.159*	.156*	-.247**	.262**	.273**	-.092
Agency orientation			1	.219**	.12	-.055	.041	.117	-.096	-.062	.220**	-.254**	-.205**	.642**
Communion orientation				1	.008	-.086	.02	-.046	.059	.131	.071	.055	-.079	.115
Eros					1	-.455**	.176**	-.214**	-.108	.428**	.499**	-.146*	-.512**	.01
Ludus						1	-.099	.270**	.313**	-.019	-.219**	.041	.249**	.069
Storge							1	.012	-.156*	.073	.067	-.126	-.069	.018
Pragma								1	.185**	-.13	-.089	.083	.236**	.068
Mania									1	.347**	-.017	.410**	.112	-.099
Agape										1	.178**	.079	-.193**	-.088
Secure attachment style											1	-.383**	-.830**	.098
Anxious-ambivalent attachment style												1	.512**	-.291**
Avoidant attachment style													1	-.105
General Self-efficacy														1

** . Correlation significant at the 0.01 level (two-tailed)

* . Correlation significant at the 0.05 level (two-tailed)

type and avoidant attachment style, Storge love type and Agape love type, Storge love type and anxious-ambivalent attachment style, Pragma love type and anxious-ambivalent attachment style, Mania love type and Agape love type, Mania love type and anxious-ambivalent attachment style, Mania love type and avoidant attachment style, Agape love type and anxious-ambivalent attachment style, anxious-ambivalent attachment style and avoidant attachment style.

The results of the correlation analysis for the subscales of the Self-Construal Scale, the subscales of the Self-Report Questionnaire 30, the love types, the subscales of the Attachment Styles Questionnaire and the general self-efficacy conducted in the group of non-users, presented in Table 4., show negative and statistically significant relationships between: agency and Agape love type, agency and anxious-ambivalent attachment style, communion and Ludus love type, communion and avoidant attachment style, Eros love type and Ludus love type, Eros love type and avoidant attachment style, Ludus love type and secure attachment style, secure

attachment style and avoidant attachment style, ambivalent attachment style and general self-efficacy, avoidant attachment style and general self-efficacy.

3.3. Linear regression analyses

The next stage of the procedure was to conduct a linear regression analysis for self-efficacy as the dependent variable and the independent self-construal and the interdependent self-construal, communion and agency, love types and attachment styles as predictors for the study sample (see: Table 5.), in the non-dating group (see: Table 6.) and in the dating group (see: Table 7.).

A linear regression analysis was performed for general self-efficacy as the dependent variable in the study sample (see: Table 5.).

An input method was used in the calculations. In the first step, the subscales of the Self-Construal Scale, i.e. independent self-construal and interdependent self-construal, were entered as predictors. In the second step, the subscales of the Self-Report Questionnaire 30, i.e. communion and agency, were

Table 4. r-Pearson correlation coefficients for the studied variables in the group of people using dating websites, n = 135

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Independent Self-Construal	1	.058	.604**	.148	.207*	-.004	-.055	.056	-.044	-.151	.212*	-.125	-.117	.429**
Interdependent Self-Construal		1	-.128	.440**	.085	.032	.197*	-.009	.192*	.288**	.139	.265**	.011	-.024
Agency orientation			1	.210*	.095	.059	-.067	.264**	-.102	-.216*	.103	-.183*	-.068	.508**
Communion orientation				1	.283**	-.201*	.164	.027	.074	.198*	.415**	.142	-.255**	.222**
Eros					1	-.317**	.152	-.006	.084	.296**	.336**	-.016	-.346**	.163
Ludus						1	-.073	.151	.068	-.091	-.202*	.006	.205*	.165
Storge							1	.156	.104	.253**	.102	.189*	-.038	-.066
Pragma								1	.147	.057	-.107	.258**	.142	.074
Mania									1	.422**	-.018	.654**	.269**	-.15
Agape										1	.101	.383**	.053	.014
Secure attachment style											1	.012	-.691**	.169
Anxious-ambivalent attachment style												1	.350**	-.286**
Avoidant attachment style													1	-.174*
General Self-efficacy														1

** . Correlation significant at the .01 level (two-tailed)

* . Correlation significant at the .05 level (two-tailed)

entered. In the third step, love types were introduced, i.e. Eros, Ludus, Storge, Pragma, Mania, Agape. In the fourth step, attachment styles were introduced, i.e. secure attachment style, anxious-ambivalent attachment style, avoidant attachment style.

Linear regression analysis showed that the first model was a good fit to the data and statistically significant and accounted for 19% of the variance of general self-efficacy. The analysis showed that independent self-construal was the most significant for and statistically significant in explaining general self-efficacy in the first model. The second model, in which agency and communion are introduced, was a good fit to the data and accounted for 36% of the variance of general self-efficacy. The analysis showed that independent self-construal and agency were the most significant for and statistically significant in explaining general self-efficacy in the second model. The third model, in which love types were introduced, was a good fit to the data and accounted for 38% of the variance of general self-efficacy. The analysis showed that independent self-construal, agency, Ludus love type and Mania love type are the

most significant for and statistically significant in explaining general self-efficacy in the third model. The fourth model, which introduced attachment styles, was a good fit to the data and explained for 39% of the variance of general self-efficacy. The analysis showed that the largest and statistically significant explanations of generalised self-efficacy in the fourth model are independent self-construal, agency, Ludus love type and anxious-ambivalent attachment style .

The next step was to conduct a linear regression analysis for general self-efficacy as the dependent variable in the group of non-users (see: Table 6.). An input method was used in the calculations. In the first step, the subscales of the Self-Construal Scale, i.e. the independent self-construal and interdependent self-construal, were entered as predictors. In the second step, the subscales of the Self-Report Questionnaire 30, i.e. communion and agency, were entered. In the third step, love types were introduced, i.e. Eros, Ludus, Storge, Pragma, Mania, Agape. In the fourth step, attachment styles were introduced, i.e. secure attachment style, anxious-ambivalent attachment style, avoidant attachment style.

Table 5. Linear regression coefficients for self-efficacy as a dependent variable in the study sample, n = 350

Step	Variable	B	SE	β	t	p	R ²	ΔR^2	F
1	Independent Self-Construal	0.302	0.033	0.436	9.045	0	.194	.189	(2. 347) = 41.743 p = .000
	Interdependent Self-Construal	-0.054	0.035	-0.075	-1.559	0.12			
2	Independent Self-Construal	0.103	0.037	0.149	2.822	0.005	.364	.357	(4. 345) = 49.390 p = .000
	Interdependent Self-Construal	0.004	0.037	0.005	0.107	0.915			
	Agency orientation	2.773	0.312	0.5	8.888	0			
	Communion orientation	0.214	0.356	0.03	0.6	0.549			
3	Independent Self-Construal	0.099	0.037	0.143	2.711	0.007	.392	.374	(10. 339) = 21.817 p = .000
	Interdependent Self-Construal	-0.007	0.038	-0.009	-0.174	0.862			
	Agency orientation	2.763	0.316	0.499	8.756	0			
	Communion orientation	0.387	0.362	0.055	1.069	0.286			
	Eros	0.032	0.076	0.023	0.426	0.67			
	Ludus	0.24	0.073	0.162	3.306	0.001			
	Storge	-0.019	0.059	-0.014	-0.315	0.753			
	Pragma	-0.047	0.062	-0.035	-0.761	0.447			
	Mania	-0.16	0.07	-0.111	-2.283	0.023			
	Agape	0.086	0.071	0.064	1.208	0.228			
4	Independent Self-Construal	0.095	0.037	0.137	2.598	0.01	.410	.387	(13. 336) = 17.935 p = .000
	Interdependent Self-Construal	0.005	0.038	0.007	0.14	0.889			
	Agency orientation	2.637	0.315	0.476	8.376	0			
	Communion orientation	0.492	0.367	0.07	1.343	0.18			
	Eros	0.03	0.081	0.021	0.368	0.713			
	Ludus	0.201	0.073	0.136	2.766	0.006			
	Storge	-0.018	0.058	-0.014	-0.316	0.752			
	Pragma	-0.026	0.062	-0.019	-0.413	0.68			
	Mania	-0.042	0.079	-0.029	-0.528	0.598			
	Agape	0.085	0.071	0.064	1.205	0.229			
	Secure attachment style	0.002	0.045	0.003	0.044	0.965			
	Anxious-ambivalent attachment style	-0.089	0.028	-0.186	-3.15	0.002			
	Avoidant attachment style	0.035	0.049	0.058	0.71	0.478			

Linear regression analysis showed that the first model used was a good fit to the data, statistically significant and explained for 19% of the variance of general self-efficacy. The analysis showed that independent self-construal was the most significant for and statistically significant in explaining general self-efficacy in the first model. The second model, in which agency and communion were introduced, was a good fit to the data and accounted for 42% of the variance of general self-efficacy. The analysis showed that independent self-construal and agency were the most significant for and statistically significant

in explaining generalised self-efficacy in the second model. The third model, in which love types were introduced, was a good fit to the data and accounted for 41% of the variance of generalised self-efficacy. The analysis showed that independent self-construal, agency and Ludus love type were the most significant for and statistically significant in explaining general self-efficacy in the third model. The fourth model, in which attachment styles were introduced, was a good fit to the data and accounted for 43% of the variance of general self-efficacy. The analysis showed that agency and anxious-ambivalent attachment

Table 6. Linear regression coefficients for self-efficacy as a dependent variable in the group of people not using dating websites, n = 215

Step	Variable	B	SE	β	t	p	R ²	ΔR^2	F
1	Independent Self-Construal	0.298	0.042	0.434	7.045	0	.197	.189	(2. 212) = 25.923 p = .000
	Interdependent Self-Construal	-0.068	0.045	-0.093	-1.519	0.13			
2	Independent Self-Construal	0.082	0.043	0.119	1.905	0.058	.427	.416	(4. 210) = 39.170 p = .000
	Interdependent Self-Construal	0.041	0.045	0.057	0.906	0.366			
	Agency orientation	3.431	0.386	0.603	8.879	0			
	Communion orientation	-0.391	0.453	-0.054	-0.863	0.389			
3	Independent Self-Construal	0.075	0.044	0.108	1.705	0.09	.441	.414	(10. 204) = 16.126 p = .000
	Interdependent Self-Construal	0.034	0.048	0.047	0.699	0.486			
	Agency orientation	3.456	0.392	0.607	8.826	0			
	Communion orientation	-0.25	0.461	-0.034	-0.542	0.589			
	Eros	-0.011	0.103	-0.008	-0.104	0.917			
	Ludus	0.178	0.097	0.117	1.834	0.068			
	Storge	0.006	0.071	0.005	0.089	0.929			
	Pragma	-0.053	0.079	-0.038	-0.679	0.498			
	Mania	-0.078	0.094	-0.052	-0.829	0.408			
Agape	-0.037	0.094	-0.027	-0.396	0.692				
4	Independent Self-Construal	0.072	0.044	0.104	1.634	0.104	.461	.427	(13. 201) = 13.248 p = .000
	Interdependent Self-Construal	0.042	0.049	0.058	0.857	0.393			
	Agency orientation	3.333	0.39	0.585	8.542	0			
	Communion orientation	-0.155	0.463	-0.021	-0.334	0.739			
	Eros	0.042	0.111	0.029	0.375	0.708			
	Ludus	0.133	0.097	0.087	1.362	0.175			
	Storge	-0.008	0.071	-0.006	-0.119	0.905			
	Pragma	-0.054	0.08	-0.039	-0.674	0.501			
	Mania	0.044	0.103	0.029	0.424	0.672			
Agape	-0.055	0.093	-0.04	-0.595	0.553				
	Secure attachment style	-0.03	0.059	-0.049	-0.503	0.616			
	Anxious-ambivalent attachment style	-0.096	0.036	-0.189	-2.666	0.008			
	Avoidant attachment style	0.037	0.065	0.061	0.567	0.571			

style were the most significant for and statistically significant in explaining general self-efficacy in the fourth model.

The next step was to conduct a linear regression analysis for general self-efficacy as the dependent variable in the group of people using dating sites (see: Table 7.).

An input method was used in the calculations. In the first step, the subscales of the Self-Construal Scale, i.e. the independent self-construal and interdependent self-construal, were entered as predictors.

In the second step, the subscales of the Self-Report Questionnaire 30, i.e. communion and agency, were entered. In the third step, love types were introduced, i.e. Eros, Ludus, Storge, Pragma, Mania, Agape. In the fourth step, attachment styles were introduced, i.e. secure attachment style, anxious-ambivalent attachment style, avoidant attachment style.

Linear regression analysis showed that the first model used was a good fit to the data, statistically significant and explained for 17% of the variance of general self-efficacy. The analysis showed that

the independent self-construal was the most significant for and statistically significant in explaining general self-efficacy in the first model. The second model, in which agency and communion were introduced, was a good fit to the data and explained for 28% of the variance of general self-efficacy. The analysis showed that independent self-construal and agency were the most significant for and statistically significant in explaining general self-efficacy in the second model. The third model, in which love types were introduced, was a good fit to the data and explained for 34% of the variance of generalised self-efficacy. The analysis showed that independent self-construal, agency, communion, Ludus love type, Mania love type and Agape love type were the most significant for and statistically significant in explaining general self-efficacy in the third model. The fourth model, in which attachment styles were introduced, was a good fit to the data and explained for 36% of the variance of generalised self-efficacy. The analysis showed that independent self-construal, agency, communion, Ludus love type, Agape love type and anxious-ambivalent attachment style were the most significant for and statistically significant in explaining general self-efficacy in the fourth model.

3.4. Mediation analysis

The next step in the process of testing the hypotheses was to perform a mediation analysis for the relationship between love types and self-efficacy, with attachment styles as mediators (see: Figure 1. and Table 8.).

Mediation analysis showed a total indirect effect of Eros love type on general self-efficacy through anxious-ambivalent attachment style ($p = 0.005$), Ludus love type on generalised self-efficacy through anxious-ambivalent attachment style ($p = 0.012$), and Mania love type on general self-efficacy through anxious-ambivalent attachment style ($p < .001$). The analysis showed that Eros love type enhances secure attachment style ($p < .001$), Eros love type enhances anxious-ambivalent attachment style ($p < .001$), anxious-ambivalent attachment style enhances general self-efficacy ($p < .001$), Eros love type

enhances avoidant attachment style ($p < .001$), Ludus love type enhances anxious-ambivalent attachment style ($p = 0.002$), Pragma love type enhances anxious-ambivalent attachment style ($p = 0.049$), Pragma love type enhances avoidant attachment style ($p = 0.011$), Mania love type enhances anxious-ambivalent attachment style ($p < .001$), Mania love type enhances avoidant attachment style ($p = 0.007$). Mediation analyses showed that the total indirect effect of Eros love type on general self-efficacy through anxious-ambivalent style of attachment was significant ($p = 0.005$). The total effect of Eros love type related to generalised self-efficacy ($B = 0.21$; $p = 0.018$) was reduced to insignificant after introduction of the mediators (direct effect $B = 1.3$; $p = 0.195$). Mediation analyses showed that the total indirect effect of Mania love type on general self-efficacy through anxious-ambivalent style of attachment was significant ($p < .001$). The total effect of Mania love type related to general self-efficacy ($B = -2.48$; $p = 0.013$) was reduced to insignificant after introduction of the mediators (direct effect $B = -0.31$; $p = 0.752$).

3.5. Mann-Whitney U test

The next step in the process of testing the hypotheses was to conduct a non-parametric rank-sum test to compare with each other the differences for the study in the group of dating site users and the control group (see: Table 9.).

Analysis using the Mann-Whitney U test showed statistically significant differences between individuals using dating sites and the non-users for independent self-construal (higher level in the group of dating site users), Eros love type (higher level in the control group), Ludus love type (higher level in the group of dating site users), Pragma love type (higher level in the group of dating site users), Mania love type (higher level in the group of dating site users), Agape love type (higher level in the control group), secure attachment style (higher level in the control group), anxious-ambivalent attachment style (higher level in the group of dating site users) and avoidant attachment style (higher level in the group of dating site users).

Table 7. Linear regression coefficients for self-efficacy as a dependent variable in the group of people using dating websites, n = 135

Step	Variable	B	SE	β	t	p	R ²	Δ R ²	F
1	Independent Self-Construal	0.305	0.056	0.432	5.487	0	.186	.174	(2. 132) = 15.098 p = .000
	Interdependent Self-Construal	-0.035	0.056	-0.049	-0.619	0.537			
2	Independent Self-Construal	0.14	0.066	0.198	2.11	0.037	.296	.275	(4. 130) = 13.694 p = .000
	Interdependent Self-Construal	-0.037	0.061	-0.052	-0.605	0.546			
	Agency orientation	1.886	0.526	0.352	3.589	0			
	Communion orientation	0.938	0.572	0.141	1.64	0.103			
3	Independent Self-Construal	0.144	0.066	0.203	2.189	0.03	.392	.343	(10. 124) = 7.991 p = .000
	Interdependent Self-Construal	-0.064	0.061	-0.089	-1.042	0.3			
	Agency orientation	1.866	0.537	0.348	3.478	0.001			
	Communion orientation	1.1	0.58	0.166	1.896	0.06			
	Eros	0.137	0.125	0.09	1.102	0.273			
	Ludus	0.351	0.111	0.244	3.174	0.002			
	Storge	-0.086	0.103	-0.062	-0.834	0.406			
	Pragma	-0.057	0.101	-0.043	-0.565	0.573			
Mania	-0.274	0.107	-0.201	-2.552	0.012				
Agape	0.276	0.114	0.211	2.432	0.016				
4	Independent Self-Construal	0.138	0.066	0.196	2.107	0.037	.426	.364	(13. 121) = 6.896 p = .000
	Interdependent Self-Construal	-0.047	0.06	-0.066	-0.777	0.439			
	Agency orientation	1.658	0.537	0.31	3.087	0.003			
	Communion orientation	1.141	0.606	0.172	1.882	0.062			
	Eros	0.072	0.129	0.047	0.559	0.577			
	Ludus	0.327	0.11	0.227	2.982	0.003			
	Storge	-0.07	0.102	-0.051	-0.688	0.493			
	Pragma	0.024	0.104	0.018	0.233	0.816			
Mania	-0.072	0.131	-0.053	-0.548	0.585				
Agape	0.302	0.112	0.231	2.69	0.008				
	Secure attachment style	0.041	0.074	0.062	0.561	0.576			
	Anxious-ambivalent attachment style	-0.128	0.051	-0.268	-2.485	0.014			
	Avoidant attachment style	0.012	0.077	0.018	0.159	0.874			

4. Discussion

The aim of the present study was to test the existence of relationships between personality determinants (independent self-construal, interdependent self-construal, communion and agency), love attitudes, attachment styles and self-efficacy. To test the hypotheses, a number of statistical analyses were conducted, the results of which are presented and discussed below. The psychology of love is a sub-discipline with a scarce body of empirical knowledge. Also, the study group,

i.e. people using dating sites, comprises a population that has never been researched before. Hence, due to the exploratory nature of this study and its conclusions it may serve as the point of departure for future research in this area.

Hypothesis H1 assumed that there would be statistically significant relationships between self-construal, communion and agency, attachment styles, love types and self-efficacy in people using dating sites. It was partially supported. Among the variables that did not show statistically significant correlations

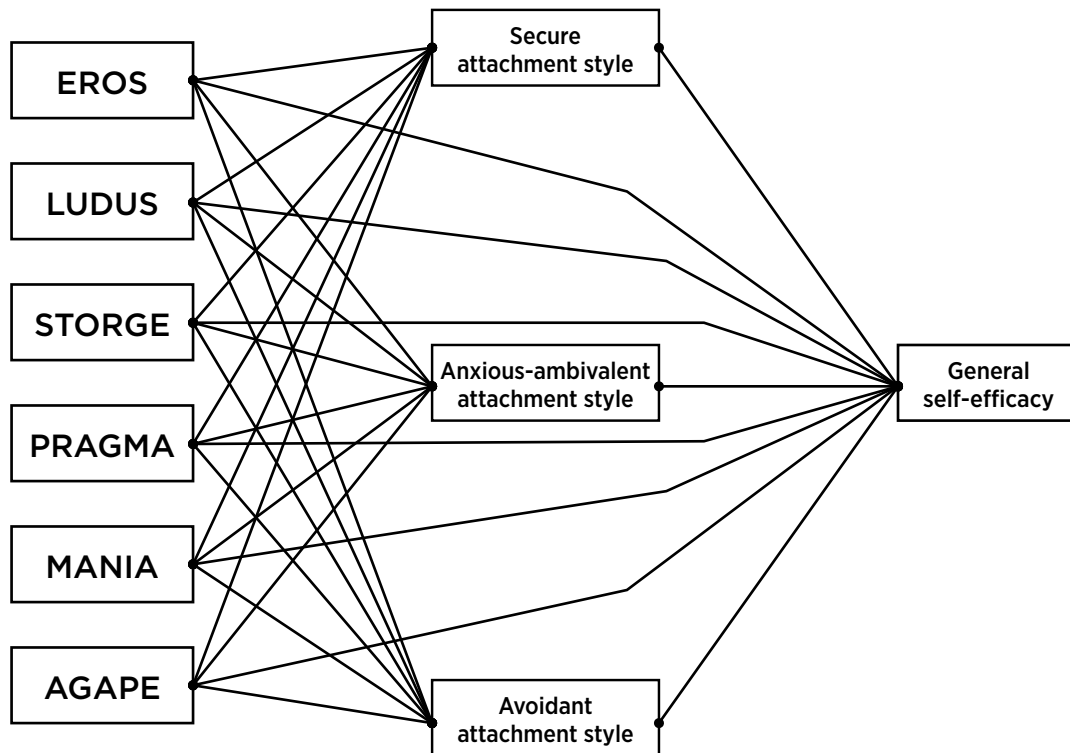


Figure 1. A proposed model for explaining self-efficacy by love styles with attachment styles as mediators.

with self-efficacy in the sample are interdependent self-construal, Eros love type, Storge love type, Pragma love type and Agape love type. Significant relationships between the independent variables and the dependent variable were also shown by correlation analyses in the group of dating site users and the control group, however much fewer.

The obtained results of the correlation analysis regarding the relationship between self-construal and self-efficacy are in line with the results obtained in the study by Suryaningrum (2017) which found a strong relationship between self-efficacy with independent self-construal. Suryaningrum draws attention to the occurrence of freedom of expression and success and achievement orientation in the independent self-construal, which, as a result, may determine beliefs related to coping in specific situations or in the light of specific challenges (Suryaningrum, 2017). He also highlighted the applicability of the referenced research in all cultural settings. The results obtained in the conducted correlation analysis of the relationship between love types and attachment styles were confirmed in other studies conducted

to that date (Heaven et al., 2004, Levy & Davis, 1988). They further showed that, in the context of a romantic relationship, secure attachment style was able to predict positive relationship characteristics, while anxious-ambivalent and avoidant attachment styles predicted negative characteristics. Conclusions of the study by Suryaningrum, are confirmed by the results obtained in the present research where the relationship between specific attachment styles and the respective love types was observed. The Ludus attitude where love is treated as a game and usually involves short-lasting relationships, showed positive and statistically significant correlations with the avoidant attachment style, and negative and statistically significant correlations with the secure attachment style. The Pragma love type involving behaviours focused on calculating the gains and losses that may occur as a result of engaging in a relationship, showed positive and statistically significant correlations with the anxious-ambivalent and avoidant attachment styles, and negative and statistically significant correlations with the secure attachment style. Mania love type related to obsessiveness, intensity and

Table 8. Results of mediation analysis for self-efficacy as a dependent variable, love styles as predictors, and attachment styles as mediators

Type	Effect	B	SE	95% C.I.		β	z	p
				L	U			
Indirect	LAS_EROS \Rightarrow KSP_BEZ \Rightarrow GSES	0.093	0.057	-0.019	0.205	0.066	1.634	0.102
	LAS_EROS \Rightarrow KSP_AMB \Rightarrow GSES	0.083	0.030	0.025	0.141	0.059	2.808	0.005
	LAS_EROS \Rightarrow KSP_UNI \Rightarrow GSES	-0.090	0.066	-0.220	0.040	-0.064	-1.351	0.177
	LAS_LUDUS \Rightarrow KSP_BEZ \Rightarrow GSES	-0.007	0.012	-0.031	0.017	-0.005	-0.568	0.570
	LAS_LUDUS \Rightarrow KSP_AMB \Rightarrow GSES	0.068	0.027	0.015	0.121	0.046	2.518	0.012
	LAS_LUDUS \Rightarrow KSP_UNI \Rightarrow GSES	-0.000	0.010	-0.020	0.020	-0.000	-0.031	0.975
	LAS_STORAGE \Rightarrow KSP_BEZ \Rightarrow GSES	0.002	0.009	-0.016	0.021	0.002	0.229	0.819
	LAS_STORAGE \Rightarrow KSP_AMB \Rightarrow GSES	-0.007	0.018	-0.042	0.028	-0.005	-0.410	0.682
	LAS_STORAGE \Rightarrow KSP_UNI \Rightarrow GSES	0.002	0.008	-0.015	0.018	0.001	0.216	0.829
	LAS_PRAGMA \Rightarrow KSP_BEZ \Rightarrow GSES	-0.007	0.011	-0.028	0.013	-0.005	-0.696	0.486
	LAS_PRAGMA \Rightarrow KSP_AMB \Rightarrow GSES	-0.036	0.020	-0.076	0.004	-0.027	-1.786	0.074
	LAS_PRAGMA \Rightarrow KSP_UNI \Rightarrow GSES	0.022	0.018	-0.014	0.057	0.016	1.205	0.228
	LAS_MANIA \Rightarrow KSP_BEZ \Rightarrow GSES	0.003	0.011	-0.019	0.025	0.002	0.228	0.820
	LAS_MANIA \Rightarrow KSP_AMB \Rightarrow GSES	-0.213	0.055	-0.320	-0.106	-0.148	-3.898	<.001
	LAS_MANIA \Rightarrow KSP_UNI \Rightarrow GSES	0.027	0.022	-0.016	0.070	0.019	1.220	0.223
	LAS_AGAPE \Rightarrow KSP_BEZ \Rightarrow GSES	-0.004	0.011	-0.026	0.018	-0.003	-0.371	0.710
	LAS_AGAPE \Rightarrow KSP_AMB \Rightarrow GSES	-0.022	0.022	-0.064	0.020	-0.017	-1.023	0.306
LAS_AGAPE \Rightarrow KSP_UNI \Rightarrow GSES	0.002	0.010	-0.017	0.021	0.002	0.204	0.839	
Component	LAS_EROS \Rightarrow KSP_BEZ	1.062	0.132	0.803	1.322	0.461	8.026	<.001
	KSP_BEZ \Rightarrow GSES	0.088	0.053	-0.015	0.191	0.144	1.669	0.095
	LAS_EROS \Rightarrow KSP_AMB	-0.593	0.158	-0.902	-0.283	-0.203	-3.753	<.001
	KSP_AMB \Rightarrow GSES	-0.140	0.033	-0.205	-0.075	-0.291	-4.232	<.001
	LAS_EROS \Rightarrow KSP_UNI	-1.121	0.129	-1.374	-0.869	-0.479	-8.708	<.001
	KSP_UNI \Rightarrow GSES	0.080	0.059	-0.035	0.195	0.133	1.367	0.172
	LAS_LUDUS \Rightarrow KSP_BEZ	-0.079	0.130	-0.334	0.177	-0.032	-0.604	0.546
	LAS_LUDUS \Rightarrow KSP_AMB	-0.487	0.156	-0.792	-0.182	-0.158	-3.132	0.002
	LAS_LUDUS \Rightarrow KSP_UNI	-0.004	0.127	-0.253	0.245	-0.002	-0.031	0.975
	LAS_STORAGE \Rightarrow KSP_BEZ	0.025	0.107	-0.184	0.234	0.011	0.231	0.817
	LAS_STORAGE \Rightarrow KSP_AMB	0.052	0.127	-0.197	0.302	0.019	0.412	0.680
	LAS_STORAGE \Rightarrow KSP_UNI	0.023	0.104	-0.181	0.226	0.010	0.219	0.827
	LAS_PRAGMA \Rightarrow KSP_BEZ	-0.084	0.110	-0.300	0.131	-0.038	-0.766	0.444
	LAS_PRAGMA \Rightarrow KSP_AMB	0.259	0.131	0.001	0.516	0.092	1.971	0.049
	LAS_PRAGMA \Rightarrow KSP_UNI	0.273	0.107	0.063	0.483	0.121	2.549	0.011
	LAS_MANIA \Rightarrow KSP_BEZ	0.029	0.127	-0.220	0.278	0.012	0.230	0.818
	LAS_MANIA \Rightarrow KSP_AMB	1.518	0.152	1.221	1.815	0.507	10.014	<.001
	LAS_MANIA \Rightarrow KSP_UNI	0.334	0.124	0.091	0.576	0.139	2.699	0.007
	LAS_AGAPE \Rightarrow KSP_BEZ	-0.048	0.125	-0.293	0.198	-0.022	-0.381	0.703
	LAS_AGAPE \Rightarrow KSP_AMB	0.158	0.150	-0.135	0.451	0.057	1.055	0.292
LAS_AGAPE \Rightarrow KSP_UNI	0.025	0.122	-0.214	0.264	0.011	0.206	0.837	

Type	Effect	B	SE	95% C.I.		β	z	p
				L	U			
Direct	LAS_EROS \Rightarrow GSES	0.124	0.096	-0.064	0.312	0.088	1.295	0.195
	LAS_LUDUS \Rightarrow GSES	0.208	0.087	0.039	0.378	0.141	2.404	0.016
	LAS_STORGE \Rightarrow GSES	-0.042	0.070	-0.179	0.094	-0.032	-0.607	0.544
	LAS_PRAGMA \Rightarrow GSES	0.134	0.073	-0.009	0.277	0.099	1.836	0.066
	LAS_MANIA \Rightarrow GSES	-0.030	0.095	-0.216	0.156	-0.021	-0.316	0.752
	LAS_AGAPE \Rightarrow GSES	-0.026	0.082	-0.186	0.135	-0.019	-0.313	0.754
Total	LAS_EROS \Rightarrow GSES	0.211	0.089	0.036	0.386	0.150	2.360	0.018
	LAS_LUDUS \Rightarrow GSES	0.269	0.088	0.097	0.442	0.182	3.062	0.002
	LAS_STORGE \Rightarrow GSES	-0.046	0.072	-0.187	0.095	-0.034	-0.635	0.526
	LAS_PRAGMA \Rightarrow GSES	0.112	0.074	-0.034	0.258	0.083	1.508	0.132
	LAS_MANIA \Rightarrow GSES	-0.213	0.086	-0.381	-0.045	-0.148	-2.489	0.013
	LAS_AGAPE \Rightarrow GSES	-0.050	0.085	-0.216	0.116	-0.037	-0.591	0.555

jealousy showed positive and statistically significant correlations with anxious-ambivalent and avoidant love types. The Eros love type (belief in love at first sight, desire to provide as much pleasure as possible to each other, not only bodily pleasure), the Storge love type (based on slowly developing attachment

and friendship) and the Agape type (altruistic love) showed positive correlations with the secure attachment style. Furthermore, the results obtained in the present study are in line with those obtained by Kale (2020). Indeed, they draw attention to the possibility of a negative effect of anxious-ambivalent attachment

Table 9. Results of the analysis using the non-parametric Mann-Whitney U test

Variable	People using dating sites (n = 135)				Control group (n = 215)				U	p	r
	M	Mdn	SD	SE	M	Mdn	SD	SE			
Independent Self-Construal	44.39	44	7.75	0.67	42.85	42	7.93	0.54	12977	0.095	0.106
Interdependent Self-Construal	40.81	41	7.7	0.66	40.03	40	7.26	0.51	13657	0.353	0.059
Agency orientation	4.92	4.8	1.02	0.09	4.75	4.73	0.96	0.07	13354	0.208	0.080
Communion orientation	5.7	5.87	0.82	0.071	5.62	5.67	0.75	0.051	13150	0.139	0.094
Eros	13.26	13	3.58	0.308	15.47	16	3.83	0.26	9295	<.001	0.360
Ludus	10	9	3.8	0.328	9.17	8	3.58	0.244	12664	0.044	0.127
Storge	12.21	12	3.96	0.341	12.73	13	4.15	0.283	13234	0.164	0.088
Pragma	10.27	10	4.16	0.358	9.46	9	3.92	0.267	12907	0.08	0.111
Mania	11.73	12	4.02	0.346	10.97	11	3.62	0.247	12998	0.099	0.104
Agape	11.97	12	4.18	0.36	13.03	13	3.98	0.271	12263	0.014	0.155
Secure attachment style	40.94	41	8.22	0.707	44.65	46	9.13	0.623	10492	<.001	0.277
Anxious-ambivalent attachment style	33.48	34	11.51	0.991	27.92	27	10.73	0.732	10445	<.001	0.280
Avoidant attachment style	24.49	25	8.1	0.697	19.04	17	9.08	0.619	9145	<.001	0.370
General self-efficacy	30.07	30	5.48	0.471	29.43	29	5.46	0.372	13879	0.491	0.044

style and avoidant attachment style on self-efficacy. This can have a significant impact on the establishment and progression of relationships, due to the fact that individuals with anxious-ambivalent style may have limited coping skills in social situations. Also, individuals with avoidant attachment style may manifest problems in establishing relationships with others (Kale, 2020).

Hypothesis H1a assumed the existence of differences in the relationships between the independent variables and the dependent variable in the groups of dating site users and non-users. This hypothesis was supported. The differences occur in the case of the relationship between communion and self-efficacy – no such relationship occurs in the group of non-users, while a positive correlation occurs in the group of dating site users. The situation is similar in the case of the relationship between avoidant attachment style and self-efficacy – it does not occur in the group of non-users, while a negative correlation can be observed in the group of people using dating sites. The difference in Pearson correlation coefficients between the study group and the control group should also be highlighted. In the group of people using dating sites, higher coefficients were observed for the relationship between self-efficacy and independent self-construal and communion.

Hypothesis H2 assuming that self-efficacy will be explained by self-construal, communion and agency, attachment styles and love types was partially supported. In the study sample, in the final step of the analysis in which all variables were entered, the independent self-construal, agency, Ludus love type and anxious-ambivalent attachment style were found significant in explaining self-efficacy.

Hypothesis H2a assumed the existence of differences in the level of explaining general self-efficacy by the interdependent and independent self-construal, communion and agency, attachment styles and love types in the groups of users and non-users of dating sites; this hypothesis was supported. The dependent variable was explained by the independent variables in 43% in case non-users, while in 36% in case of users of dating sites. For non-users, the following predictors were statistically significant in explaining the variance of the dependent variable: agency and

anxious-ambivalent attachment style. In the group of people using dating sites, the following predictors were statistically significant for explaining the variance of the dependent variable: the independent self-construal, agency, communion, Ludus love type, Agape love type, and anxious-ambivalent attachment style.

When analysing the obtained results, it is important to note the high level of explanation of self-efficacy by independent and interdependent self-construal, communion and agency, love types and attachment styles. It was 39% for the total sample, 43% for the control group and 36% in the study group. This represents an important step towards a closer understanding of the relationships occurring between self-efficacy and independent variables building the model presented in the study. Self-efficacy is conceptualised as the expected result of actions taken by a person, taking into account previous experiences, which may explain the relationships shown in this study – among the statistically significant predictors in the presented model there were variables focusing on personal skills, experience or effectiveness in achieving goals (Markus & Kitayama, 1991; Oleś, 2003; Pilarska, 2012). Thus, there is room for further research to broaden empirical knowledge on the interdependencies between the aforementioned statistically significant predictors, i.e. self-construal, communion and agency, and self-efficacy.

Hypothesis H3 assumed that attachment styles will play a mediating role in the relationship between love types and self-efficacy. This hypothesis was partially supported – the conducted analysis showed the presence of the mediating effect. It was observed in the case of the Eros love type related to self-efficacy when the anxious-ambivalent attachment style was included as a mediator. A mediating effect was also observed for the Mania love type related to self-efficacy after the inclusion of the mediator – anxious-ambivalent attachment style. Among the hypotheses put forward in this study was the assumption of a mediating role of attachment styles in the relationship between love types and self-efficacy. However, it was shown that, of the three attachment styles, only the anxious-ambivalent style played a mediating role in the relationship between love types and self-efficacy. The mediating role of

the anxious-ambivalent attachment style was related to two out of five love types, i.e. the Eros love type and the Mania love type. Although the literature review failed to indicate any model conceived by the researchers with the variables used in the present study, it is important to mention the results of studies reporting on the important role of attachment styles in self-perception (Wu, 2009 after Berger, 2001; Dozier & Lee, 1995; Kobak & Sceery, 1988). It has been observed that distorted self-image may be associated with an avoidant attachment style, similar to that of an anxious-ambivalent style. Distress may also be regarded as a distortion – people with an avoidant attachment style tend to deny it, whereas in the case of an anxious-ambivalent attachment style, there is a tendency to reinforce it, which can have a significant impact on presented love attitudes and the way one behaves in relation to another person.

Hypothesis H4 assumed the presence of statistically significant intergroup differences for the study variables – this was partially supported. The non-parametric Mann-Whitney U test showed significant differences for independent self-construal, Eros love type, Ludus love type, Pragma love type, Mania love type, Agape love type, secure attachment style, anxious-ambivalent and avoidant attachment styles. The analysis also showed that the levels of independent self-construal (median difference of 2), Ludus love type (median difference of 1), Pragma love type (median difference of 1), Mania love type (median difference of 1), anxious-ambivalent attachment style (median difference of 7) and avoidant attachment style (median difference of 8) were higher in the group of people using dating sites. What is more, lower levels of Eros love type (median difference of 3), Agape love type (median difference of 1) and secure attachment style (median difference of 5) were observed in the dating site group.

Hypothesis H4a assuming higher levels of self-efficacy in the group of people using dating sites was not supported due to the lack of statistically significant differences between the study group and the control group for the mentioned variable.

Hypothesis H4b assuming a higher level of community orientation in the group of people using dating sites was not supported due to the lack of

statistically significant differences between the study group and the control group for the mentioned variable.

Hypothesis H4c assuming higher levels of interdependent self-construal in the group of people using dating sites was not supported due to the lack of statistically significant differences between the study group and the control group for the mentioned variable.

5. Limitations of the study

This study has some limitations. First, the responses were obtained via an online questionnaire on the Google Forms platform. Online surveys run the risk of recruiting mainly volunteers or obtaining multiple responses from one and the same respondent. What is more, respondents may experience concentration problems, as the researcher has no control over the distractors, and it is impossible to dispel any doubts or give appropriate instructions should the respondent need it (Maçik, 2005). Despite the above-mentioned possible distractions, the increasing popularity of remote data collection should be emphasised, as it allows, among other things, to reach a much larger number of respondents than the paper-based methods. Furthermore, any potential problems with respondents' concentration and answering questions in a sincere manner may have been caused by the length of the survey – the respondents answered questions from as many as five psychological tools, in addition to the metric questions. Among the limitations of the survey, age of the respondents should also be taken into account, as their mean age corresponds to the period of young adulthood. The predominance of women among the respondents is also noteworthy. In light of the developmental nature of the scientific resources in the field of the psychology of love and cognition via the Internet, the body of empirical knowledge in the aforementioned sub-discipline may also be a limitation of sorts, as the hypotheses presented in this study were not based on the research results obtained by the researchers to date. Nonetheless, the hypotheses put forward by the author are empirically verifiable and can thus form the basis for future research.

6. Practical implications of the study

By laying the groundwork for further research into the psychology of love and the problematic use of dating sites, this thesis may inspire future empirical knowledge of possible relationships between the variables selected and described in this thesis.

Psychologists are professionals expected to maintain the highest level of public confidence. In their work, they explore the world of their clients, often touching on intimate or difficult topics centred on emotions, attitudes, behaviours or feelings, which is connected with high expectations towards him/her (Panas, 2012). These include sound knowledge, competence in diagnosis and therapy, and continuous professional development. In light of the exploratory nature of the present study, the drawn conclusions may come as a potential source of empirical knowledge that may be relevant in the context of assistance or therapeutic activities carried out by a psychologist.

When discussing practical implications of the present study, attention should also be paid to the myths and stereotypes present in society about people using dating sites. Among the numerous definitions of a stereotype, it is described as *an opinion adopted by a given person or a group, usually containing a false, unverified and simplified judgement* (Biron, 1966 after: Grabowska, 2000). In view of the aforesaid definition, attention should be paid to the need to broaden the empirical knowledge in the field addressed by this study, to be able to provide a reliable source of information about the study group.

7. Perspective for future research

Problems with grasping the essence of love have been highlighted in the body of this paper a number of times. Psychology of love is a sub-discipline of psychology, which despite some established theories explaining and describing it, still lacks the empirical knowledge in this area acquired in Polish conditions. Also, people using dating portals comprise a group whose characteristics have not been explored to date, and further research in this area is necessary. Hence,

the obtained results may serve as the groundwork for future research on the relationship between personality determinants, love types, attachment styles and self-efficacy in the context of dating website use. In order to further explore this area in future research, it is advisable to include other variables that may mediate or may be mediators in the relationship between love types and self-efficacy. Data such as the number of respondent's relationships, their duration or the purpose of creating an account on a dating site are also worth including in future research. Technological change at the turn of the 20th and 21st centuries represented a revolution with regard to alternative ways of meeting new people. Instant messaging, proliferation of various types of websites and, finally, dating sites is an important outcome enabling one to make new acquaintances. Given the pace of social change, it is advisable for researchers to make further attempts to gain a deeper insight into the psychological characteristics of people using dating sites and the very dating sites. It may also prove valuable to adopt an interdisciplinary approach to the aforementioned phenomenon and the study group.

Summary

The aim of the present study was to investigate the relationship between communion and agency, interdependent and independent self-construal, love types, attachment styles and self-efficacy in a group of people using dating sites. It responds to the need for research in the psychology of love and research conducted in a group of people using dating sites. It also provides grounds for further research in this area, whereas the obtained results and drawn up conclusions provide a foundation for replication studies and further empirical verification.

The statistical analyses used in the present study partially supported the hypothesis assuming the existence of relationships between the study variables. – The results of the correlation analysis may point to a link between self-construal, communion and agency, love types and attachment styles and self-efficacy. Also, the results of the linear regression analysis highlight the variables that are significant in

explaining self-efficacy, while confirming the presence of the relationships shown in the correlation analysis. The hypothesis assuming a mediating role of attachment styles in the relationship between love types and general self-efficacy was also partially supported, showing a mediating role for anxiety-ambivalent style relating to two out of five love types. However, the analysis with the Mann-Whitney U test showed no statistically significant differences between the group of dating site users and the group of non-users.

Self-efficacy construed as a belief in one's own abilities and capabilities to undertake specific actions in order to achieve one's goals, in the light of the obtained survey results, makes it possible to perceive the independent variables as important components likely to affect one's self-efficacy. Moreover, the results highlight the important role of the variables based on personal skills, experiences and the individual's focus on him/herself and the pursuit of his/her goals in the perception of self-efficacy.

The present study focused not so much on love *per se* but on determinants of self-efficacy in people who open themselves to a potential romantic relationship using dating sites. Dating sites are an increasingly important part of the world of the 21st century. In 2015, dating apps were used by one in seven Poles, while data from 2023 states that one in three Polish citizens use dating sites (DigitalCare, 2023; Oronowicz-Jaśkowiak & Oronowicz-Jaśkowiak, 2015). In light of the growing scale of the phenomenon of making new acquaintances via the Internet, it seems necessary to learn more about its psychological aspects. It is also necessary to mention the myths and stereotypes that have arisen over time about people using dating portals and people who fail to use them. They should be refuted by scientific research, which in a reliable and unbiased manner would find out more about and be able to describe the group of people using dating sites.

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