



The relationship between childbearing motives and the sense of meaning in life and well-being. The moderating role of centrality of religiosity¹

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Abstract: In the contemporary world, one may notice that people tend to postpone their decision on having a child. A question arises what really motivates people to become a parent and increase their satisfaction with life. An attempt was made to assess the relation between childbearing motives and the sense of meaning in life and well-being as well as the potential influence of religiosity on them. The dissertation discussed the theoretical aspects of childbearing motives, the meaning in life, religiosity, well-being and their interconnectedness in the previous research. The study involved 248 respondents at the age from 19 to 63. Three research hypotheses were made: H1. Positive childbearing motives have a positive correlation with the sense of meaning in life and well-being; H2. Centrality of religiosity serves a moderating role in the relation between positive childbearing motives and the sense of meaning in life and well-being, and H3. Negative childbearing motives do not have a major correlation with the sense of meaning in life and well-being. The first and third hypotheses were partially confirmed. People characterized by positive childbearing motives felt a higher sense of meaning while centrality of religiosity served a moderating role in the relation in question. The second hypothesis was proved. The study suggests that religiosity can serve as the resource thanks to which people are able to give meaning to parenthood. The dissertation indicated the directions of further research and practical implications.

Keywords: centrality of religiosity, eudaimonic well-being, childbearing motives, meaning in life.

Introduction

In various cultures, parenthood is often associated with fulfilment and purpose. Most people seem to be of the opinion that having offspring involves experiencing mattering and sense of meaning. Everyday intuitions find are confirmed by scientific literature (Morse & Steger, 2019). Experiencing the meaning of life helps parents maintain their mental health (Nelson et al., 2014). However, do people who assign positive values to parenthood are prone to declare such type of experience more often? Do negative reactions to the aspects of being a parent might serve as a predictor of lower sense of meaning?

For this matter, one should take religiosity into consideration since it is a strong determinant of the fertility rate (Okun, 2017). It also supports the feeling of meaning in life (Abu-Hilal et al., 2017). High religiosity might intensify the relationship between childbearing motives and experiencing purpose, mattering or comprehension. However, it is worthwhile to consider the sense of meaning from a broader perspective – the one of well-being – in order to verify the relations between valuing parenthood and its potential consequences in a more complete way.

¹ Article in polish language: https://www.stowarzyszeniefidesetratio.pl/fer/60P_Pyrz.pdf

1. Theoretical basis for own research

1.1. Childbearing motives vs. sense of meaning and well-being

Childbearing motives refer to the response in form of reactions to the challenges and consequences arising from being a parent. The said reactions can be positive or negative. The dominant form is determined by both individual experiences gained in the course of life as well as biological factors (Miller, 2011). Positive or negative motives can be of significant meaning in the context of how procreation and the willingness or unwillingness to have children are perceived. It influences the behaviors that lead to reproduction or its avoidance (Huczevska et al., 2023). With regard to childbearing motives, one should take into consideration the TDIB model (Traits-Desires-Intentions-Behaviour) (Varas & Borsa, 2022). Its first component is constituted by traits. Traits should be understood as predisposition to certain behavior. The next component is wants which refer to the set plans and objectives which determine the direction of efforts. The next component, intentions, results from wants. However, they also incorporate an element of reflection over the possibilities of an individual and the potential barriers. Behaviors form the final stage in this model and they can emerge in favorable conditions (Mynarska & Rytel, 2014).

According to Viktor Frankl, the sense of meaning in life can be understood as the process of “continuous becoming and improving one’s existence” (Frankl, 2019; Szykuła, 2022, p. 239). The sense of meaning in life is perceived as a subjective perception of various components of human life in order to give meaning to one’s own experiences (Steger, 2012). The current research regarding the sense of meaning in life has evolved into conceptualizing this variable in three aspects: comprehension, purpose and mattering (George & Park, 2016; King & Hicks, 2021). Comprehension refers to the perception of one’s own experiences as forming one complete and coherent whole. In most general terms, it refers to interpreting and systemizing everyday experience of an individual. The purpose is often connected with one’s values and motivation that play a key role in the performance and realization of the

intended course of action. Mattering is associated with one’s perception of their own existence as meaningful in the world (George & Park, 2016; King & Hicks, 2021).

Well-being is a complex construct and the attempts to define it date dozens of years back. Researchers often use various terms interchangeably: well-being, joy, happiness, subjective well-being or life satisfaction (Hills & Argyle, 2002; Ilska & Kołodziej-Zaleska, 2018). When a person defines their life in this way, it might indicate a subjective feeling that the life of an individual is as it should be in the sense of personal satisfaction and no need of changing it (Trzebińska, 2008). It is necessary to highlight two main perspectives of well-being: hedonistic and eudaimonic (Józefczyk, 2023). The former should be understood as the pursuit for satisfaction with life by delivering positive affection and, at the same time, reducing sensations that do contribute to subjective feeling of pleasure and content. The latter is characterized by the feeling of happiness in the context of inner fulfillment. In this sense, a particular person strives for self-realization through own work and effort. The eudaimonic perspective can be compared to the process of discovering and realizing of one’s potential (Niemiec, 2023; Richter & Hunecke, 2021). On the other hand, Ryff (1989) also draws attention to the sense of meaning in life and the above-mentioned self-realization. Following the tradition of eudaimonic well-being developed on the grounds of Aristotle’s philosophy, Ryff (1989) distinguishes its six components: self-acceptance that refers to accepting oneself taking into consideration one’s strengths and weaknesses; positive relations with other people as the ability to establish close and long-term relationships; autonomy which is understood as the ability to cope with various everyday life situations while following internally accepted norms and rules; environmental mastery that refers to adequate coping with and participation in the external environment; purpose in life as the ability to pursue own goals that might lead to perceiving life as meaningful and finding meaning in life; personal growth as the proper management of own resources and potential and the effort to broaden one’s competencies (Karaś & Ciecuch, 2017; Ilska & Kołodziej-Zaleska, 2018).

According to research, there is a relation between the sense of meaning in life and well-being. People who are characterized by a high level of sense of meaning in life also exhibit a high level of subjective well-being (Wang et al., 2021). A positive relation between the sense of meaning in life and well-being is also indicated in the research by Santos (2012). The feeling of meaning in life creates adequate conditions for the happiness and well-being (Lent, 2004) as well as exhibits a positive association with life satisfaction (Galang et al., 2011). The feeling of meaning in life should be distinguished from the well-being defined by Ryff (1989). Both notions were developed on the grounds of eudaimonic traditions. From a psychological perspective, however, they should be treated as separate variables.

The relations between childbearing motives and the sense of meaning seem to be rooted in the people's tendency of giving meaning to their own role as a parent. Persons who decide to have offspring mention an increase in the meaning in life and the importance of their relationship with their child. It should also be highlighted that parents find their personal meaning in life by surrounding their child with love (Brooks, 2008). Research indicates that people who find the meaning in life through parenthood also feel greater well-being (Nelson et al., 2013; To, 2015). Parents experience a higher sense of meaning and well-being than people without offspring (Nelson et al., 2014). Thus, researchers indicate that finding meaning in parenthood influences the general feeling of meaning in life. People who are parents and spend time with their children see more meaning in their own life than non-parents (Baumeister et al., 2013) and also notice more significant and satisfying moments in everyday life and more often think about the meaning in life as such (Nelson et al., 2013). On the other hand, more frequent thinking about the meaning in life among parents might serve as the indicator of willingness to give meaning to the challenges related to parenthood (Morse & Steger, 2019). Among factors that might lead to higher feeling of meaning in life through parenthood one may mention active care over a child (Palkovitz, 2002), inner motivation to serve the role of a parent and self-development (To, 2015), as well as noticing a purpose in parenthood that is personally important and desirable (Grolnick & Apostoleris, 2002).

Well-being and the sense of satisfaction with life favor the willingness to procreate (Mencarini et al., 2018)—people who feel subjective satisfaction with their own life have a positive opinion on parenthood. The latter increases the sense of meaning, happiness, well-being and purpose, which is less experienced by non-parents. Parents feel a higher level of happiness when they spend time with their children in comparison to other everyday activities (Nelson et al., 2013). Parenthood can lead to a higher feeling of well-being, which manifests through the presence of goals that need to be realized, establishing new relations or through satisfaction with serving diversified social roles (Nelson et al., 2014). People who give a crucial meaning to parenthood and consider it as a value in itself want to invest their own resources in self-development in this aspect (To, 2015). On the other hand, thanks to self-development people perceive their life as meaningful (Baumann & Ruch, 2022). Individuals who revealed more plans regarding parenthood in the future exhibited a higher level of well-being than people whose plans were focused on other matters (Dunlop et al., 2017). However, in a situation when people decide to have a child in order to fulfil social and cultural requirements and not perceive parenthood as a personally meaningful value, they might feel a lower level of well-being (To, 2015). In such a situation, the pursuit for parenthood might become an attempt to comply with external expectations (Nachoum et al., 2021). Parenthood might also be connected with lower well-being when it is perceived as detrimental to or preventing from fulfilling other important goals (Nelson & Lyubomirsky, 2015). People might find giving meaning to parenthood difficult when they want to have children but encounter obstacles related to fertility and birth (Morse & Steger, 2019).

1.2. The meaning-generative role of religiosity

According to Huber (2003) religiosity refers to five dimensions: intellectual, ideological, public practice, private practice, and religious experience. The intellectual dimension involves knowledge in one's own religion and the frequency at which one has reflec-

tions about it. Ideology stands for beliefs concerning the existence of a transcendental reality. Public practice determines the belonging to communities and participation in religious practices. The aspect of private practice mainly refers to individual prayer and meditation. Religious experience involves the conviction of a relationship with the Absolute which influences the emotions experienced by a particular person (Huber & Huber, 2012). Such a definition of religiosity serves as the basis for the concept of personal system of religious constructs. Centrality of religiosity will be related to its autonomous functioning among other constructs and the existence of inner religious motivation (Zarzycka, 2007).

Many researchers note a positive relationship between the feeling of meaning in life and religiosity, regardless of the respondents' age (Krause & Hayward, 2012; Krok, 2015a; Martos et al., 2010; Newton & McIntosh, 2013; Park & Yoo, 2016).

A religious value system and the ideology related to it can be helpful in giving meaning to one's own existence, which is also comprised of difficult experience. In light of research, religiosity is seen as a property associated with a better understanding of one's experience (Krok, 2015b; Park, 2013). The realization of key human values might be connected with the sense of purpose of own existence (Frankl, 2017). In this context, the purpose is related to the conviction that a person must fulfil an extraordinary and unique type of task in life. Fulfilment, on the other hand, refers to being "oriented at something or someone, being devoted to work that one is dedicated to, devoted to a beloved one or God that we serve. (Frankl, 1984, p. 147-148). In such a situation, religiosity becomes a crucial predictor of the feeling of purpose in life (Engel et al., 2024), among others, through the willingness to establish good relationships. It is connected with the morality promoted by religious systems and the intent to follow it (Galbraith et al., 2019). According to other research, religion gives meaning to human life. Thus, believers, when compared to other people, are convinced about their uniqueness and meaningfulness (Prinzig et al., 2023).

Studies reveal that satisfaction with life is higher when the individual feels a meaning in life (Huda et al., 2023). Research on religiosity might find an

explanation to such results. In the study conducted by Grouden & Jose (2014), various sources of meaning – such as family and interpersonal relationships – had an impact on well-being and their positive influence was explained by religiosity. Conclusions from that studies indicate the protective role of religiosity in the perspective of events which might potentially disrupt emotional balance (Rodzeń et al., 2021). Spiritual beliefs might also have a positive relation to satisfaction with interpersonal relationships. Research in this scope indicate that spirituality of spouses interceded between satisfaction with marriage and satisfaction with life. Spiritual beliefs help spouses create an emotional bond that helps them cope with stressful situations, allowing them to preserve satisfaction with marriage (Kasapoğlu & Yabanigül, 2018).

1.3. Childbearing motives vs. religiosity

Religiosity in the context of childbearing motives has been the subject of extensive research. It refers both to attitudes towards parenthood as well as the desires and the specificity of parenthood as such. According to studies, personal religiosity is positively related to satisfaction with parenthood. Moreover, people who perceive parenthood as a very important aspect of life report a higher satisfaction as a parent. The quality of the regulating relationship between religiosity and family life greatly depends on the level of religiosity. The latter has a comprehensive impact on the family (Borowska, 2016; Nelson & Uecker, 2018). An increase in religiosity connected with age proves to be mediated by parenthood. Thus, childbearing motives might have something to do with religiosity (Kerry et al., 2023).

It should also be highlighted that religious couples more often become parents and religiosity serves an important role in making the decision to have children. It might be related to the motivation to convey family traditions or be an expression of religious feelings (Bein et al., 2023; Kuhnt & Trapper, 2016; Pezeshki et al., 2005; Rosina & Testa, 2009).

Religiosity has a positive correlation with the fertility rate and involvement in traditional gender roles (Guetto et al., 2015). What is more, it has a positive connection with fertility and intentions regarding procreation while women who stated that religion had a very important

role in their life exhibited the tendency to give birth to more children than other women (Cranney, 2015; Hayford & Morgan, 2008). It was also proved that more religious people see more advantages in having children. In case of women, religiosity determines the influence of perceived costs on procreative intentions. It means that the more religious a woman is, the lower will be the influence of perceived costs and the higher the perception of advantages associated with procreation (Bein et al., 2021). In the case of women in a relationship with a man and higher religiosity, the intention to give birth to a child was higher than in the case of other respondents (Lachowska et al., 2017).

2. Own research

2.1. Methodology of own research

The subject of this research is to analyze the relation between positive and negative childbearing motives and the sense of meaning in life and well-being according to C. Ryff (2014). Both of the two last variables fall within the tradition of eudaimonic well-being. The literature suggests that the centrality of religiosity level may serve the role of the intervening variable. Hence its assumed moderating nature. Religiosity intensifies experiencing meaning in life as well as is related to a positive of procreation.

The objective of own research was to determine the relationship between childbearing motives and the sense of meaning and well-being as well as to determine the role that centrality of religiosity serves in it.

The following hypotheses were made:

- H1. Positive childbearing motives have a positive correlation with the sense of meaning and well-being.
- H2. Centrality of religiosity serves a moderating role in the relation between positive childbearing motives and the sense of meaning and well-being.
- H3. Negative childbearing motives do not exhibit a significant correlation with the sense of meaning and well-being (people who do not

find a purpose and mattering in parenthood can use other sources of meaning e.g., self-acceptance, growth that also contribute to the declared level of well-being) (Heintzelman et al., 2020). The study used four research tools:

1. *The Childbearing Questionnaire – Short Measure (CBQ-SF)* by I. Huczewska, J. Leśniak, M. Mynarska and W.B. Miller (2022). The tool constitutes an abridged version of the Polish adaptation of *The Childbearing Questionnaire (CBQ-PL)* (Mynarska & Rytel, 2014). It is used to measure the predisposition of positive and negative reaction to various aspects of parenthood. It is comprised of 32 questions. The tool is composed of two parts and questions regarding desires and intentions:
 - a. Positive childbearing motivation scale – with 15 positive consequences of having offspring. The respondents use a 4-grade scale to give answers to questions on how much they desire a specific consequence (1 – “No desire”, 5 – “Very high desire”). The result of the positive childbearing motivation scale is used to measure the positive reaction to manifestations of parenthood presented in the following sub-scales: happiness connected with pregnancy, childbirth and infancy, traditional parenthood, satisfaction with childcare, feeling of closeness and being needed, instrumental values. The reliability of the positive childbearing motivation scale in the presented study (Cronbach’s α) is 0.94 (example of an item: “Cuddling a newborn child. How much desired?”);
 - b. Negative childbearing motivation scale – consists of 12 negative consequences of having children. Replies provided on a 4-level scale reflect the degree of lack of desire of a specific consequence. The negative childbearing motivation scale measures the tendency to negatively react to manifestations of parenthood on the following sub-scales: discomfort caused by pregnancy and birth, worries and concerns associated with parenthood, negative aspects related to childcare, stress for the couple. In this research, the Cronbach’s α for

- the negative childbearing motivation scale is 0.90 (“Worrying about the health and safety of my child. How much undesired?”)
- c. Desire and intention – the last part of the tool is comprised of 5 questions. The first three questions refer to the willingness to have children while the two last – to plans to have a child in the upcoming 3 years. Respondents reply on a scale from 0 – “Not at all” to 10 – “As much as possible”, “Definitely yes”, “I am most certain”. In this study, the Cronbach’s α for desire = 0.96, while for intention – 0.94 (desire: “How important is having a child/children to you?”, intention: “In your opinion, how probable it is that you will have a child in the next three years?”).

The tool has a separate version for men and women.

2. S. Huber’s (2003) *Centrality of Religiosity Scale (C-15)* in the Polish adaptation by B. Zarzycka (2007, 2011). The tool is comprised of 15 questions graded on a 5-level Likert scale – from 1 – “no at all” to 5 – “very” (in 2 questions, the respondents use a 7-level scale, from “never” to “several times a week” and “several times a day”) constituting the measure of centrality of religious constructs in personality. It comprises of five dimensions:
 - a. Intellect – which refers to the intellectual involvement in religious content (“How often do you think about religious matters?”);
 - b. Ideology – which measures the level of conviction of the existence of “a transcendental reality and intensity of the open approach towards various forms of transcendence” (Zarzycka, 2007, p. 141) (“How strong is your conviction that God exists?”);
 - c. Private practice – used to measure the frequency and significance of referring to a greater reality (“How important is personal prayer to you?”);
 - d. Religious experience – refers to the degree to which transcendence becomes a part of the respondents’ everyday experience (“How often do you experience situations in which you feel God’s presence?”);

- e. Public practice – which constitutes the measure of frequency and meaning of participation in religious service (“How important is participation in religious service to you?”).

The Cronbach’s α of the general result in the current study was 0.97.

3. George’s and Park’s (2016) *Multidimensional Existential Meaning Scale (MEMS)* in the Polish adaptation by Gerymski and Krok (2020). The tool consists of 9 items valued on a 7-level Likert scale (1 – “completely disagree”, 7 – “completely agree”). It constitutes the measure of feeling of meaning in life presented in three dimensions:
 - a. Comprehension – constitutes the measure of the degree in which an individual experiences consistency and coherence in their life (“I am able to give meaning to the things that happen in my life”);
 - b. Purpose – refers to the devotion to fulfilment of life goals (“I have specific goals in my life that motivate me to action”)
 - c. Mattering – used to measure the intensity of the conviction of the worth of one’s own life to the world (“I am convinced that my life is meaningful”).

The reliability of the tool determined with the Cronbach’s α in the presented study was 0.91.

4. C. Ryff’s (1989) *Psychological Well-Being Scales* in the Polish adaptation by D. Karaś and J. Ciecichu (2017). The tool measures the subjectively perceived well-being understood through eudaimonic traditions that was presented in six categories:
 - a. Self-acceptance – as the measure of a balanced approach towards own strengths and weaknesses (“When I look at the history of my life, I am satisfied with how it turned out.”);
 - b. Positive relations with others – this refers to the ability to establish strong and trusting bonds (“People think that I am a person who is willing to help and dedicate time to others.”);

- c. Autonomy – it measures the degree of independence from external expectations and the subjective feeling of freedom (“When assessing myself, I take into account what I find to be important and not what others consider as important.”);
- d. Environmental mastery – the measure related to the sense of agency and control (“Generally speaking, I feel responsible for what happens in my life.”);
- e. Purpose in life – refers to having an important goal that serves as the source of meaning (“I am not a person who wanders through life aimlessly.”);
- f. Personal growth – it measures the capability to self-improve and gain qualifications (“For me, life is a continuous process of learning, changes and development.”).

The full version of the tool comprises of 84 items. However, the presented study utilized its short measure containing 18 items valued on a 6-level Likert scale (from 1 – “I completely disagree” to 6 – “I completely agree”. Due to low reliability indicator of the scales of the tool in the short measure, individual indicators of well-being were not taken into account. The reliability of the tool assessed with the use of the Cronbach’s α was 0.83.

2.2. Characteristics of the analyzed group

The surveys were conducted in the period from February to May 2024. Data was collected with the so-called snowball method with the use of an online form. Most people who received the form were students. The study involved 248 respondents (N = 248). 59.7% of respondents were female, 40.3%–male. Respondents were people aged between 19 and 63 ($M = 26$; $SD = 7.08$; $Me = 24$). 76.2% of the respondents were inhabitants of cities, 23.8% lived in rural areas. 85.5% of the respondents did not have children, 14.5%–were parents.

3. Results of own research

The data analysis was carried out with the use of a Jamovi package (version 2.4.11). First, the descriptive statistics were calculated and the normality of variable distribution was checked. Their reliability coefficients were also calculated. When the test statistic probability level was <0.05 , the results were deemed as statistically significant. The result of the above-mentioned analyses has been presented in Table 1.

The distribution of variables deviated from the normal distribution, which is indicated by the statistically significant result of the Shapiro-Wilk test.

Table 1. Descriptive statistics, Shapiro-Wilk test, variable reliability coefficient (Cronbach’s α)

| | POS | NEG | DES | INT | CR | MEMS | PWBS |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 39.6 | 33.2 | 17.8 | 5.88 | 37.9 | 45.6 | 79.1 |
| Median | 41.0 | 33.5 | 19.0 | 4.00 | 37.0 | 46.0 | 79.0 |
| Standard deviation | 11.8 | 8.94 | 9.57 | 6.37 | 17.0 | 11.3 | 11.7 |
| Minimum | 15 | 12 | 0 | 0 | 15 | 12 | 56 |
| Maximum | 60 | 48 | 30 | 20 | 75 | 63 | 106 |
| Skewness | -0.420 | -0.225 | -0.435 | 0.843 | 0.355 | -0.277 | 0.0860 |
| Kurtosis | -0.691 | -0.444 | -0.966 | -0.534 | -0.954 | -0.585 | -0.933 |
| Shapiro-Wilk | 0.961 | 0.975 | 0.922 | 0.841 | 0.942 | 0.972 | 0.976 |
| p value of the Shapiro-Wilk test | <.001 | <.001 | <.001 | <.001 | <.001 | <.001 | <.001 |
| Cronbach’s α | 0.94 | 0.90 | 0.96 | 0.94 | 0.97 | 0.91 | 0.83 |

POS – positive childbearing motivation scale; NEG – negative childbearing motivation scale; DES – desire; INT - intentions (CBQ-SF scales); CR – Centrality of Religiosity Scale; MEMS – Multidimensional Existential Meaning Scale; PWBS – Psychological Well-Being Scales

Table 2. The matrix of r-Pearson correlation

| | POS | NEG | DES | INT | CR | MEMS | PWBS |
|------|------------|------------|-----------|----------|----------|-----------|------|
| POS | — | | | | | | |
| NEG | -0.336 *** | — | | | | | |
| DES | 0.774 *** | -0.436 *** | — | | | | |
| INT | 0.422 *** | -0.309 *** | 0.506 *** | — | | | |
| CR | 0.378 *** | -0.304 *** | 0.369 *** | 0.195 ** | — | | |
| MEMS | 0.161 * | -0.158 * | 0.253 *** | 0.064 | 0.187 ** | — | |
| PWBS | -0.009 | -0.111 | 0.157 * | -0.010 | -0.004 | 0.668 *** | — |

* p < .05; ** p < .01; *** p < .001

However, the value of kurtosis and skewness did not exceed the absolute value of 2, which means that the distribution of results does not differ greatly from the average. Consequently, a decision was made to apply parametric statistical tests. In order to analyze the correlation, the r-Pearson was utilized. The correlation matrix has been presented in Table 2.

The next stage involved the analysis of moderation. It was carried out with the use of the bootstrapping method (bootstrapping sample = 1000).

The first step involved an analysis of the interaction between positive childbearing motives and the feeling of meaning at various centrality of religiosity levels. The analysis of moderation proved that positive childbearing motives in an interaction with centrality of religiosity (POS*CR) exhibit a level of sense of meaning with statistical significance (p = 0.004). No statistical significance was proved in the case of an inverse relationship (p = 0.189). The results of the statistical analysis have been presented in Table 3.

The average and high centrality of religiosity levels are moderated by the level of sense of meaning in the interaction with positive childbearing motives at level of statistical significance (respectively p = 0.020 and p < 0.001). Low centrality of religiosity level changes the dependency direction between positive childbearing motives and the sense of meaning. However, the said result cannot be considered as statistically significant (p = 0.822). The said relationships have been presented in Figure 1 and Table 4.

The analysis of moderation proved that positive childbearing motives in an interaction with centrality of religiosity exhibit statistically significant well-being (p = 0.001). In this case, an inverse relationship (ef-

Table 3. Analysis of moderation; the interaction between positive childbearing motives and the sense of meaning, taking into account centrality of religiosity

| | Estimate | SE | Z | p |
|----------|----------|---------|------|-------|
| POS | 0.1700 | 0.07310 | 2.33 | 0.020 |
| CR | 0.0570 | 0.04831 | 1.18 | 0.238 |
| POS * CR | 0.0112 | 0.00393 | 2.85 | 0.004 |

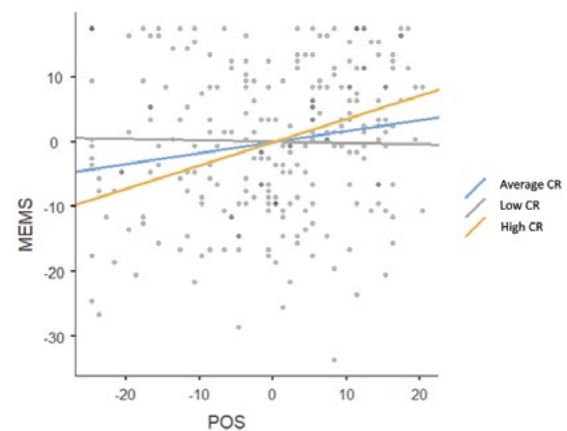


Figure 1. Analysis of moderation – the effect of positive childbearing motives on the sense of meaning at various levels of religiosity

Table 4. The effect of positive childbearing motives on the sense of meaning at various centrality of religiosity levels

| | Estimate | SE | Z | p |
|----------------|----------|--------|--------|--------|
| Average CR | 0.1700 | 0.0730 | 2.328 | 0.020 |
| Low CR (-1SD) | -0.0204 | 0.0906 | -0.225 | 0.822 |
| High CR (+1SD) | 0.3604 | 0.1065 | 3.383 | < .001 |

Table 5. Analysis of moderation; the interaction between positive childbearing motives and well-being, taking into account centrality of religiosity

| | Estimate | SE | Z | p |
|----------|----------|---------|-------|-------|
| POS | 0.0854 | 0.07524 | 1.13 | 0.256 |
| CR | -0.0555 | 0.05171 | -1.07 | 0.283 |
| POS * CR | 0.0153 | 0.00400 | 3.83 | <.001 |

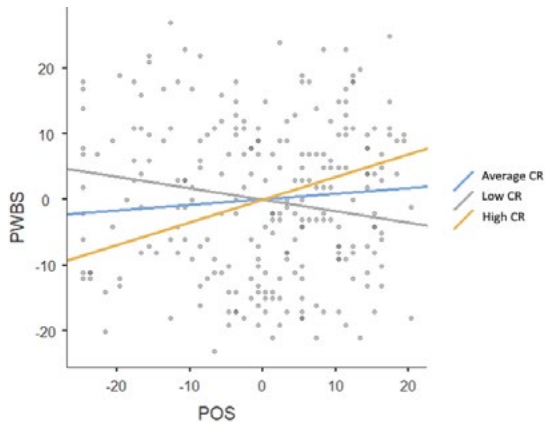


Figure 2. Analysis of moderation – the effect of positive childbearing motives on well-being at various levels of religiosity

Table 6. The effect of positive childbearing motives on well-being at various centrality of religiosity levels

| | Estimate | SE | Z | p |
|----------------|----------|--------|-------|-------|
| Average CR | 0.0854 | 0.0753 | 1.13 | 0.257 |
| Low CR (-1SD) | -0.1751 | 0.0829 | -2.11 | 0.035 |
| High CR (+1SD) | 0.3459 | 0.1159 | 2.98 | 0.003 |

fect of well-being on positive childbearing motives) also demonstrated statistical significance ($p = 0.013$) (Table 5).

Low and high centrality of religiosity levels moderate the level of well-being when positive childbearing motives serve as the predictor. The level of centrality of religiosity modifies the direction of the analyzed dependency (in the case of low CR--0.18; high - 0.34). It means that in the interaction of positive childbearing motives and centrality of religiosity, taking into account the low level of the

Table 7. Analysis of moderation; the interaction between negative childbearing motives and well-being, taking into account centrality of religiosity

| | Estimate | SE | Z | p |
|----------|----------|---------|--------|-------|
| NEG | -0.1817 | 0.08826 | -2.059 | 0.039 |
| CR | -0.0501 | 0.05024 | -0.998 | 0.318 |
| NEG * CR | -0.0103 | 0.00426 | -2.407 | 0.016 |

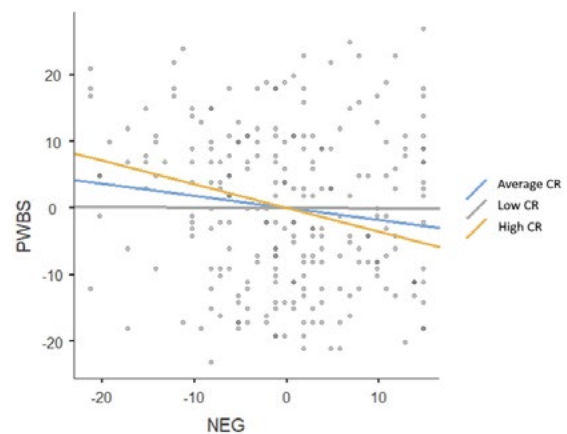


Figure 3. Analysis of moderation – the effect of negative childbearing motives on well-being at various levels of religiosity

Table 8. The effect of negative childbearing motives on well-being at various centrality of religiosity levels

| | Estimate | SE | Z | p |
|----------------|----------|--------|---------|-------|
| Average CR | -0.18174 | 0.0880 | -2.0654 | 0.039 |
| Low CR (-1SD) | -0.00716 | 0.1141 | -0.0628 | 0.950 |
| High CR (+1SD) | -0.35632 | 0.1127 | -3.1619 | 0.002 |

latter decreases the level of the well-being felt. The discussed dependency has been depicted in Figure 2. and Table 6.

Further analyses of moderation (Table 7.) proved the moderating role of centrality of religiosity in the correlation between childbearing motives and well-being ($p = 0.016$). The inverse relationship was not statistically significant ($p = 0.271$).

An average and a high centrality of religiosity level significantly moderates the dependency between negative childbearing motives and well-be-

ing ($p = 0.039$ and 0.002). However, the direction remains unchanged. The said dependency has been presented in Figure 3. and Table 8.

4. Discussion on results

Three hypotheses were made in the study described above. H1 was partially confirmed (Table 2.) – people characterized by positive childbearing motives declare a higher sense of meaning (0.161 ; $p < 0.05$). However, no statistically significant correlation between positive childbearing motives and well-being were identified (-0.009 ; $p > 0.05$). Parenthood can be the source of meaning. On the other hand – a higher level of declared well-being favors behaviors connected with procreation. The second hypothesis was proved – centrality of religiosity serves a moderating role in the relation between positive childbearing motives and the sense of meaning and well-being. People characterized by higher religiosity, who declare higher childbearing motives, experience a higher sense of meaning (Table 4). This also refers to the generally defined well-being (Table 6). In this case, people with a lower religiosity level and characterized by positive childbearing motives also experienced a lower level of sense of meaning ($p = 0.035$). It should be highlighted that in the case of an inverse relationship (where childbearing motives serve as a dependent variable), the relationship is also of statistical significance. It might suggest that the interaction between childbearing motives and well-being is multi-directional but religiosity still serves a key role regardless of that fact.

The dissertation also proved the moderating role of centrality of religiosity in the relationship between negative childbearing motives and well-being. People with a higher level of religiosity and characterized by negative childbearing motives experienced a lower well-being than persons with an average centrality of religiosity level (Table 8.).

Previous research on motivation to have offspring and on sense of meaning or generally defined well-being seemed to exhibit an unambiguous connection (Dunlop et al., 2017; Mynarska & Rytel, 2020; Borowska, 2016; Nelson & Uecker,

2018; Nelson et al., 2013). The same conclusion can be drawn from our study which proves this relationship.

Our study complements the said literature, indicating the important issue that facilitates the process of giving meaning. This refers to religiosity that is unambiguously related to the feeling of meaning in life (Krause & Hayward, 2012; Krok, 2015a; Krok, 2015b; Martos et al., 2010; Newton & McIntosh, 2013; Park & Yoo, 2016; Park, 2013; Prinzig et al., 2023). In our study, we highlight the fact that positive childbearing motives are in an important relation with the feeling of meaning in life. This relationship is justified in broad literature. However, one should draw attention to the moderating effect of religiosity because it seems to constitute an important variable that explains this relationship. It can be stated that religiosity, in the context of motivation to be a parent, provides major tools that allow coping with stress and adding meaning and importance to parenthood – such as tradition, willingness to live according to principles of faith, feeling of being appointed to serve a specific role (Bein et al., 2023; Handerson et al., 2016; Kuhnt & Trapper, 2016; Pezeshki et al., 2005; Rosina & Testa, 2009).

The negative correlation between negative childbearing motives and sense of meaning (-0.158 ; $p < 0.05$) also seems of key importance. No significant correlation between negative childbearing motives and well-being were identified (-0.111 ; $p > 0.05$). Thus, hypothesis 3 was partially confirmed. Previous research regarding motivation to become a parent indicated that the willingness to procreate appeared when people experienced satisfaction with life (Mencarini et al., 2018). Such results suggest that it is necessary to pay particular attention in psychological practice to people who have negative opinions on parenthood. This also refers to people declaring a low level of religiosity and who, at the same time, refer positively to the aspects of parenthood – they may feel that parenthood is not connected with any advantages (Bein et al., 2021). In their case, psychological aid would be concentrated on the attempt to give meaning to parenthood and finding purpose in it – in order to intensify the feeling of meaning in life. This study did not prove an important moderating effect of

low-level religiosity. However, future research may focus on this aspect e.g., through a different method of operationalization of religiosity.

The study presented above constitutes a contribution to the research on the role of religiosity in the feeling of meaning in life and well-being. It includes the aspect of parenthood in it, indicating religiosity as a resource. Further research could be concentrated on factors protecting well-being in the

case of people characterized by low religiosity who want to have offspring and with a positive opinion on parenthood. Focusing on people with high level of religiosity and a negative opinion on parenthood also seems crucial from the perspective of research and aid practice (Table 8. – such people experience a lower level of well-being). In this case, the V.E. Frankl's (2009) logotherapeutic practice concentrated on the meaning might prove to be helpful.

Bibliography

- Abu-Hilal, M., Al-Bahrani, M., & Alzedgali, M. (2017). Can religiosity boost meaning in life and suppress stress for Muslim college students? *Mental Health Religion & Culture*, 20. <https://doi.org/10.1080/13674676.2017.1324835>
- Baumann, D., Ruch, W. (2022). Measuring What Counts in Life: The Development and Initial Validation of the Fulfilled Life Scale (FLS). *Frontiers in Psychology*, 12, 1-19. <https://doi.org/10.3389/fpsyg.2021.795931>
- Baumeister, R.F., Vohs, K.D., Aaker, J.L., Garbinsky, E.N. (2013). Some key differences between a happy life and a meaningful life. *The Journal of Positive Psychology*, 8(6), 505-516. <https://doi.org/10.1080/17439760.2013.830764>
- Bein, C., Mynarska, M., Gauthier, A.H. (2021). Do costs and benefits of children matter for religious people? Perceived consequences of parenthood and fertility intentions in Poland. *Journal of Biosocial Science*, 53(3), 419-435. <https://doi.org/10.1017/S0021932020000280>
- Bein, C., Passet-Wittig, J., Bujard M., Gauthier, A.H. (2023). Religiosity and trajectories of lifetime fertility intentions – Evidence from a German panel study. *Advances in Life Course Research*, 58, 1-37. <https://doi.org/10.1016/j.alcr.2023.100578>
- Borowska, M. (2016). Religijność a osobnicza perspektywa względem doświadczeń w rodzinie – ujęcie psychologiczne. *Praca socjalna w teorii i działaniu*, 2, 323-334. <http://doi.org/10.15633/9788374385091.23>
- Brooks, A.C. (2008). *Gross National Happiness: Why Happiness Matters for America – and How We Can Get More of It*. New York: Basic Books.
- Cranney, S. (2015). The Association Between Belief in God and Fertility Desires in Slovenia and the Czech Republic. *Perspectives on Sexual and Reproductive Health*, 47(2), 83-89. <https://doi.org/10.1363/47e2915>
- Dunlop, W.L., Walker, L.J., Hanley, G.E., Harake, N. (2017). The Psychosocial Construction of Parenting: An Examination of Parenting Goals and Narratives in Relation to Well-Being. *Journal of Happiness Studies*, 18(6), 1729-1745. <https://doi.org/10.1007/s10902-016-9796-z>
- Engel, D., Penthin, M., Pirner, M.L., Riegel, U. (2024). *Religion as a Resource? The Impact of Religiosity on the Sense of Purpose in Life of Young Muslim Refugees in Germany*. <https://doi.org/10.31219/osf.io/rmbfc>
- Frankl, V.E. (1984). *Homo patiens*. Warszawa: Instytut Wydawniczy „Pax”.
- Frankl, V.E. (2009). *Człowiek w poszukiwaniu sensu*. Warszawa: Wyd. Czarna Owca.
- Frankl, V.E. (2017). *Lekarz i dusza. Wprowadzenie do logoterapii i analizy egzystencjalnej*. Warszawa: Wyd. Czarna Owca.
- Frankl, V.E. (2019). *Bóg ukryty. W poszukiwaniu ostatecznego sensu*. Warszawa: Czarna Owca.
- Galang, M.J., Magno, C., Paterno, V., Roldan, A. (2011). Meaning in Life, Flow, and Subjective Well-Being: A perspective on Filipino High School Students. *Philippine Journal of Counseling Psychology*, 13(1), 29-45.
- Galbraith, Q., Callister, A., & Kelley, H. (2019). Constructing Meaning through Connection: Religious Perspectives on the Purpose of Life. *International Journal of Religion and Spirituality in Society*, 9(3), 15-31. <https://doi.org/10.18848/2154-8633/CGP/v09i03/15-31>
- George, L.S., Park, C.L. (2016). Meaning in Life as Comprehension, Purpose, and Mattering: Toward Integration and New Research Questions. *Review of General Psychology*, 20(3), 205-220. <http://dx.doi.org/10.1037/gpr0000077>
- Gerymski, R., Krok, D. (2020). A Polish Adaptation of the Multidimensional Existential Meaning Scale: Internal Structure, Reliability, and Validity. *Roczniki Psychologiczne*, 23(2), 173-190. <https://doi.org/10.18290/rpsych20232-4>
- Grolnick, W.S., Apostoleris, N.H. (2002). What makes parents controlling? (In:) E.L. Deci, R.M. Ryan (eds.), *Handbook of self-determination research*, 161-181, New York: University of Rochester Press.
- Grouden, M.E., Jose, P.E. (2014). How do sources of meaning in life vary according to demographic factors? *New Zealand Journal of Psychology*, 43(3), 29-38.
- Guetto, R., Luijckx, R., Scherer, S. (2015). Religiosity, gender attitudes and women's labour market participation and fertility decisions in Europe. *Acta Sociologica*, 58(2), 155-172. <https://doi.org/10.1177/0001699315573335>
- Hayford, S.R., Morgan, S.P. (2008). Religiosity and fertility in the United States: The role of fertility intentions. *Social Forces*, 86(3), 1163-1188. <https://doi.org/10.1353/sof.0.0000>
- Heintzelman, S.J., Mohideen, F., Oishi, S., King, L.A. (2020). Lay beliefs about meaning in life: Examinations across targets, time, and countries. *Journal of Research in Personality*, 88, Article 104003. <https://doi.org/10.1016/j.jrp.2020.104003>
- Hills, P., Argyle, M. (2002). The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences*, 33(7), 1071-1082. [https://doi.org/10.1016/S0191-8869\(01\)00213-6](https://doi.org/10.1016/S0191-8869(01)00213-6)
- Huber, S. (2003). *Zentralität und Inhalt. Ein neues multidimensionales Messmodell der Religiosität*. Opladen: Leske + Budrich.
- Huber, S., Huber, O.W. (2012). The Centrality of Religiosity Scale (CRS). *Religions*, 3(3), 710-724. <https://doi.org/10.3390/rel3030710>

- Huczewska, I., Leśniak, J., Mynarska, M., Miller, W.B. (2023). A Short Measure of Childbearing Motivations: Development and Psychometric Evaluation in Polish Samples of Adults and Adolescents. *Journal of Child and Family Studies*, 32(6), 1823-1838. <https://doi.org/10.1007/s10826-022-02497-6>
- Huda, N.U., Lala, B., Suneel, I. (2023). Meaning in Life and Life Satisfaction among University Students. *Journal of Professional and Applied Psychology*, 4(2), 181-189. <https://doi.org/10.52053/jpap.v4i2.164>
- Ilska, M., Kołodziej-Zaleska, A. (2018). Dobrostan hedonistyczny i eudajmonistyczny w sytuacjach kryzysów normatywnych i nienormatywnych. *Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie*, 123, 155-184.
- Józefczyk, A. (2023). Hedonic and eudaimonic well-being: integration of the perspectives as a direction for further research. *Polskie Forum Psychologiczne*, 28(1), 5-18. <https://doi.org/10.34767/PFP.2023.01.01>
- Karaś, D., Ciecuch, J. (2017). Polska Adaptacja Kwestionariusza Dobrostanu Caroll Ryff. *Roczniki Psychologiczne*, 20(4), 815-835. <https://doi.org/10.18290/rpsych.2017.20.4-4pl>
- Kasapoğlu, F., Yabanigül, A. (2018). Marital Satisfaction and Life Satisfaction: The Mediating Effect of Spirituality. *Spiritual Psychology and Counseling*, 3(2), 177-195. <https://doi.org/10.37898/spc.2018.3.2.0048>
- Kerry, N., Prokosch M.L., Murray D.R. (2023). The Holy Father (and Mother)? Multiple Tests of the Hypothesis That Parenthood and Parental Care Motivation Lead to Greater Religiosity. *Personality and Social Psychology Bulletin*, 49(5), 709-726. <https://doi.org/10.1177/01461672221076919>
- King, L.A., Hicks, J.A. (2021). The Science of Meaning in Life. *Annual Review of Psychology*, 72, 561-584. <https://doi.org/10.1146/annurev-psych-072420-122921>
- Krause, N., Hayward, R.D. (2012). Religion, Meaning in Life, and Change in Physical Functioning During Late Adulthood. *Journal of Adult Development* 19(3), 158-169. <https://doi.org/10.1007/s10804-012-9143-5>
- Krok, D. (2015)a. Striving for Significance: The Relationships Between Religiousness, Spirituality, and Meaning in Life. *Implicit Religion*, 18(2), 233-257. <https://doi.org/10.1558/imre.v18i2.20446>
- Krok, D. (2015)b. The Role of Meaning in Life Within the Relations of Religious Coping and Psychological Well-Being. *Journal of Religion and Health*, 54(6), 2292-308. <https://doi.org/10.1007/s10943-014-9983-3>
- Kuhnt, A.K., Trappe, H. (2016). Channels of social influence on the realization of short-term fertility intentions in Germany. *Advances in Life Course Research*, 27(1), 16-29. <https://doi.org/10.1016/j.alcr.2015.10.002>
- Lachowska, B., Matuszewska, A., Lachowski, S. (2017). System wartości kobiet a ich postawy wobec macierzyństwa. *Kwartalnik Naukowy Fides et Ratio*, 29(1), 67-79.
- Lent, R.W. (2004). Toward a Unifying Theoretical and Practical Perspective on Well-Being and Psychosocial Adjustment. *Journal of Counseling Psychology*, 51(4), 482-509. <https://doi.org/10.1037/0022-0167.51.4.482>
- Martos, T., Thege, B.K., Steger, M.F. (2010). It's not only what you hold, it's how you hold it: Dimensions of religiosity and meaning in life. *Personality and Individual Differences*, 49(8), 863-868. <https://doi.org/10.1016/j.paid.2010.07.017>
- Mencarini, L., Vignoli, D., Zeydanli, T., Kim, J. (2018). Life satisfaction favors reproduction. The universal positive effect of life satisfaction on childbearing in contemporary low fertility countries. *PLoS One*, 13(12), 1-19. <https://doi.org/10.1371/journal.pone.0206202>
- Miller, W.B. (2011). Differences between fertility desires and intentions: implications for theory, research and policy. *Vienna Yearbook of Population Research*, 9, 75-98.
- Morse, J.L., Steger, M.F. (2019). Giving Birth to Meaning: Understanding Parenthood Through the Psychology of Meaning in Life. (In:) O. Taubman-Ben-Ari (ed.), *Pathways and Barriers to Parenthood. Existential Concerns Regarding Fertility, Pregnancy, and Early Parenthood*, 1-17, New York: Springer. https://doi.org/10.1007/978-3-030-24864-2_1
- Mynarska, M., Rytel, J. (2014). Pomiar motywacji do posiadania dzieci wśród osób bezdzietnych. Polska adaptacja Kwestionariusza Motywów Rodzicielskich. *Polskie Forum Psychologiczne*, 19(4), 522-543.
- Mynarska, M., Rytel, J. (2020). Fertility Desires of Childless Poles: Which Childbearing Motives Matter for Men and Women?, *Journal of Family Issues*, 41(1), 7-32. <https://doi.org/10.1177/0192513X19868257>
- Nachoum, R., Moed, A., Madjar, N., Kanat-Maymon, Y. (2021). Prenatal childbearing motivations, parenting styles, and child adjustment: A longitudinal study. *Journal of Family Psychology*, 35(6), 715-724. <https://doi.org/10.1037/fam0000826>
- Nelson, J.J., Uecker, J.E. (2018). Are Religious Parents More Satisfied Parents? Individual- and Couple-Level Religious Correlates of Parenting Satisfaction. *Journal of Family Issues*, 39(7), 1770-1796. <https://doi.org/10.1177/0192513X17728983>
- Nelson, S.K., Kushlev, K., English, T., Dunn, E.W., Lyubomirsky, S. (2013). In Defense of Parenthood: Children Are Associated With More Joy Than Misery. *Psychological Science*, 24(1), 3-10. <https://doi.org/10.1177/0956797612447798>
- Nelson, S.K., Kushlev, K., Lyubomirsky, S. (2014). The pains and pleasures of parenting: When, why, and how is parenthood associated with more or less well-being? *Psychological Bulletin*, 140(3), 846-895. <https://doi.org/10.1037/a0035444>
- Nelson, S.K., Lyubomirsky, S. (2015). Juggling family and career: Parents' pathways to a balanced and happy life. (In:) R.J. Burke, K.M. Page, C.L. Cooper (eds.), *Flourishing in life, work and careers: Individual wellbeing and career experiences*, 100-118, Cheltenham: Edward Elgar Publishing. <https://doi.org/10.4337/9781783474103.00015>
- Newton, T., McIntosh, D.N. (2013). Unique Contributions of Religion to Meaning. (In:) J. Hicks, C. Routledge (eds.), *The Experience of Meaning in Life*. Dordrecht: Springer. https://doi.org/10.1007/978-94-007-6527-6_20
- Niemiec, C.P. (2023). Eudaimonic Well-Being. (In:) F. Maggino (ed.), *Encyclopedia of Quality of Life and Well-Being Research*, 2212-2214, New York: Springer International Publishing. https://doi.org/10.1007/978-3-031-17299-1_929
- Okun, B.S. (2017). Religiosity and Fertility: Jews in Israel. *European Journal of Population*, 33(4), 475-507. <https://doi.org/10.1007/s10680-016-9409-x>
- Palkovitz, R. (2002). Involved fathering and child development: Advancing our understanding of good fathering. (In:) C.S. Tamis-LeMonda, N. Cabrera (eds.), *Handbook of father involvement: Multidisciplinary perspectives*, 119-140, New York: Lawrence Erlbaum Associates.
- Park, C.J., Yoo, S-K. (2016). Meaning in life and its relationships with intrinsic religiosity, deliberate rumination, and emotional regulation. *Asian Journal of Social Psychology*, 19(4), 325-335. <https://doi.org/10.1111/ajsp.12151>
- Park, C.L. (2013). Religion and meaning. (In:) R.F. Paloutzian, C.L. Park (eds.), *Handbook of the psychology of religion and spirituality*, 357-378 New York: The Guilford Press.
- Pezeshki, M.Z., Zeighami, B., Miller, W.B. (2005). Measuring the childbearing motivation of couples referred to the Shiraz Health Center for premarital examination. *Journal of Biosocial Science*, 37, 37-53.
- Richter, N., Hunecke, M. (2021). The mindful hedonist? Relationships between well-being orientations, mindfulness and well-being experiences. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 22(7), 3111-3135. <https://doi.org/10.1007/s10902-021-00358-5>

- Rodzeń, W., Kiliak, M.M., Malinowska, A., Kroplewski, Z., Szcześniak, M. (2021). The Loss of Self-Dignity and Anger among Polish Young Adults: The Moderating Role of Religiosity. *Religions*, 12(4), 1-7. <https://doi.org/10.3390/rel12040284>
- Rosina, A., Testa, M.R. (2009). Couples' first child intentions and disagreement: An analysis of the Italian case. *European Journal of Population/Revue Européenne de Démographie*, 25(4), 487. <https://doi.org/10.1007/s10680-009-9188-8>
- Ryff, C.D. (2014). Psychological Well-Being Revisited: Advances in the Science and Practice of Eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10-28. <https://doi.org/10.1159/000353263>
- Ryff, C.D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Santos, M.C. (2012). Meaning in life and subjective well-being: is a satisfying life meaningful? *Researchers World-Journal of Arts Sciences and Commerce*, 3(4), 32-40.
- Steger, M.F. (2012). Experiencing meaning in life: optimal functioning at the nexus of spirituality, psychopathology, and well-being. *The Human Quest for Meaning: Theories, Research and Applications*, 165-184.
- Szykuła, R. (2022). *Logoterapia i analiza egzystencjalna. Teoria i praktyka*. Warszawa: Eneteia.
- To, S.M. (2015). Development and Validation of a Quantitative Measure for Chinese Sources of Parental Meaning, *Journal of Child and Family Studies*, 24, 3580-3594. <https://doi.org/10.1007/s10826-015-0168-9>
- Trzebińska, E. (2008). Lepsze zdrowie dzięki większemu szczęściu. (In:) I. Heszen, J. Życińska (eds.), *Psychologia zdrowia: w poszukiwaniu pozytywnych inspiracji*, 25-39, Warszawa: Academica.
- Varas, V.V., Borsa, J.C. (2022). Warren Miller and the T-D-I-B reproductive decision-making model: A theoretical review. *Revista Psicologia em Pesquisa*, 16(1), 1-22. <https://doi.org/10.34019/1982-1247.2022.v16.31757>
- Wang, X., Zhang, J., Wu, S., Xiao, W., Wang, Z., Li, F., Liu, X., Miao, D. (2021). Effects of meaning in life on subjective well-being: The mediating role of self-efficacy. *Social Behavior and Personality: An International Journal*, 49(4), 1-11.
- Zarzycka, B. (2007). Skala Centralności Religijności Stefana Hubera. *Roczniki Psychologiczne*, 10(1), 133-157.
- Zarzycka, B. (2011). Polska Adaptacja Skali Centralności Religijności S. Hubera. (In:) M. Jarosz (ed.), *Psychologiczny pomiar religijności*, 231-261, Lublin: Towarzystwo Naukowe KUL.