The Person and the Challenges Volume 15 (2025) Number 2, pp. 193–211
ISSN 2083-8018 (print) • ISSN 2391-6559 (online)
Creative Commons Attribution 4.0 International (CC BY 4.0)

Anna Seredyńska
https://orcid.org/0000-0002-0483-6281

Ignatianum University in Cracow
https://ror.org/009j14p05

Students' spiritual resources and their emotional, social and cognitive functioning

https://doi.org/10.15633/pch.15210

Abstract

The concept of spirituality is understood in modern society in many different ways. Therefore, the study of its connection with other spheres of human functioning can be complicated. However, when a holistic understanding of spirituality is taken as the starting point, it is assumed that it has connections with other spheres of human life. The first part of the article is a short collection of definitions of spirituality and definitions of emotional, social and cognitive functioning. In the second part of the article, research on a group of 38 students of pedagogy was described. The results of the research showed the relationships between spiritual and emotional, social and cognitive functioning. The research was carried out using the diagnostic survey method with the use of questionnaires. They allowed us to see in a new way how complex the mutual relations between various spheres of human life are. They also made it possible to see that every person, regardless of their personality traits, has the possibility of spiritual development.

Keywords

spirituality, emotional functioning, social functioning, cognitive functioning, spiritual development

1. Introduction

In contemporary society, the concept of spirituality is understood in many different ways. Undoubtedly, its understanding affects the way in which a person's spiritual resources are defined. Generally, the definition that will be adopted in this article treats spirituality in a holistic way, i.e., as encompassing the entirety of a person's physical and psychological life. Only such understanding of spirituality allows us to assume that there are links between a person's life, spiritual resources, and functioning in the emotional, social and cognitive spheres. In the first part of this article, a range of definitions of spirituality and its resources as well as definitions of selected aspects of emotional, social and cognitive functioning will be briefly presented in the context of selected tools used in exploring these spheres. In the second part, the results of the study of the relationships between the students' sphere of spiritual resources and their emotional, social and cognitive functioning will be described.

2. Spirituality and its understanding

In psychology, spirituality is understood in different ways. Sometimes, it is defined as the area in human existence where the ordinary, the everyday and the material meet with values and the sacred.[1] Magdalena Kapała quotes Bill Jernigan's definition of spirituality in which it is treated as a construct that is centred around patterns of values, senses and relationships that make life valuable and death meaningful. According to Don Elkins, who is also mentioned by Kapała, spirituality is linked to a way of being that stems from a person's awareness of the transcendent dimension which is linked to values and references to the Absolute. Maria Straś-Romanowska defines spirituality as the acceptance of universal and timeless values that give meaning to human life and the implementation of these values in a person's life.[2] Glennon Doyle, Ian Mitroff, Michael Denton and Ivan Goldberg argue that spirituality is related to the search for existential meaning

[1] M. Kapała, *Duchowość jako niedoceniany aspekt psyche. Propozycja nowego ujęcia duchowości w psychologii – kategoria wrażliwości duchowej*, "Annales Universitatis Mariae Curie-Skłodowska. Sectio J" 30 (2017) nr 1, pp. 7–37.

[2] M. Straś-Romanowska, *Rozwój człowieka a rozwój osobowy*, "Studia Psychologica" 3 (2002), pp. 91–104.

and universal truths.[3] Marek Jarosz observes that the concept of spirituality, which has developed in modernity, is a construct that challenges the institutional dimension of religion.[4] He also describes two ways of understanding spirituality: either as superior or subordinate to religiosity. Both Marek Jarosz and Wojciech Zyzak advocate a holistic understanding of spirituality,[5] which is based on an integral anthropology in which a person is treated as a spiritual and corporeal unity.

Spirituality is perceived in a similar way by Wiesław Matys and Rafał Bartczuk, the authors of the *Scale of Bonds with God* [Skala Więzi z Bogiem].[6] They have used the conceptualisation of religiosity in terms of attachment theory created by John Bowlby as the theoretical basis of their scale and included the following bonding components in it:

1. The tendency to maintain close contact with the object of attachment.
2. Using the object of attachment as a safe haven in times of illness, danger, etc.
3. Treating the object of attachment as a secure base for trusting exploration of the environment.

Using this understanding of attachment in their scale, they identified two poles for understanding spirituality in the context of a person's relationship with God: trust and anxiety.

In his *Inventory of Emotions Towards God*, Stefan Huber recognises several dimensions related to religiosity, which he treats as a manifestation of a person's spiritual life.[7] These dimensions are: intellect, ideology, public practice, private practice, and experience. Studying emotions towards God—which can be both positive and negative emotions, such as anger, fear and guilt—is linked to analyses of how a person experiences God.

---

[3] M. Kapała, *Duchowość jako niedoceniany aspekt psyche*, pp. 7–37.

[4] M. Jarosz, *Pojęcie duchowości w psychologii*, w: *Studia z psychologii w KUL*, vol. 16, eds. O. Gorbaniuk, B. Kostrubiec-Wojtachnio, Wydawnictwo KUL, Lublin 2010, pp. 9–22.

[5] W. Zyzak, *Zdrowie człowieka w kontekście chrześcijańskiej duchowości holistycznej*, "Psychoonkologia" 22 (2018) no. 1, pp. 34–40.

[6] W. Matys, R. P. Bartczuk, *Kwestionariusz Więzi z Bogiem*, in: M. Jarosz, *Psychologiczny pomiar religijności*, Towarzystwo Naukowe KUL, Lublin 2011, pp. 131–151.

[7] B. Zarzycka, M. Jarosz, R. Bartczuk, *Polska adaptacja Skali Emocji względem Boga S. Hubera*, in: M. Jarosz, *Psychologiczny pomiar religijności*, pp. 264–291.

Dirk Hutsebaut attempts to approach spirituality more broadly in the context of a person's relationship with God.[8] He has developed the *Scale of Religious Relationships*, which contains the following subscales: dependence, autonomy, rebelliousness, identification, co-humanitarianism, an ethical norm, acceptance of beliefs, centrality of religion and a fear of uncertainty.

Such a holistic understanding of spirituality affects people's functioning, including in their emotional, social and cognitive spheres.

3. The emotional, social and cognitive spheres in a person's functioning

One of the ways in which the development of a person's emotional sphere can be described is to understand it in terms of emotional intelligence. Anna Matczak and Aleksandra Jaworowska define emotional intelligence as a set of abilities that allow a person to use emotions in solving problems, especially those that arise in social situations.[9] Emotional intelligence consists of a set of abilities that help to process emotional information. Daniel Goleman lists the following manifestations of emotional intelligence: self-awareness, which determines a person's knowledge of their sensations, preferences and abilities; self-regulation, which means controlling one's emotions; motivating oneself to act through the constructive use of emotions; empathy, i.e., the ability to recognise other people's mental states and needs; and social skills related to arousing emotions in others.[10] Peter Salovey and John Mayer identify four groups of abilities that make up emotional intelligence[11]: the ability to perceive and express emotions, the ability to use emotions to facilitate thinking, the ability to understand and analyse emotions and the ability to control and regulate emotions.

The emotional sphere can also be described by means of a variable that is related to the level of anxiety. Charles Spielberger describes two types of anxiety: trait anxiety, which is linked to a person's personality, and state anxiety,

[8] J. Śliwak, R. Bartczuk, *Skala relacji religijnych – Przeżywane Relacje do Boga D. Hutsebauta*, in: M. Jarosz, *Psychologiczny pomiar religijności*, pp. 171–200.

[9] A. Matczak, A. Jaworowska, *Kwestionariusz inteligencji emocjonalnej*, Pracownia testów Psychologicznych PTP, Warszawa 2008.

[10] D. Goleman, *Inteligencja emocjonalna*, trans. A. Jankowski, Media Rodzina, Poznań 1997, p. 358.

[11] A. Matczak, A. Jaworowska, *Kwestionariusz inteligencji emocjonalnej*.

which is connected with specific situations that affect a person.[12] The former type is more useful in studying the emotional sphere.

The social sphere and its development are very strongly related to the emotional sphere and emotional intelligence. According to Anna Matczak, social competence is a set of complex skills that impact a person's effectiveness in coping with certain types of social situations.[13] People acquire such skills through social training. Anna Matczak distinguishes three groups of social competences: those that affect the effectiveness of a person's behaviours in intimate situations; in situations of social exposure; and in situations which require assertiveness.

The spheres of emotional and social functioning are also linked to cognitive functioning, which can be understood in many ways. Cognitive functions include perception, concentration, memory, imagination, thinking and problem solving,[14] thus cognitive functioning can be characterised by a wide variety of diverse concepts. As the questionnaire used in the study described in this article contains questions regarding thinking, attention and concentration, only these cognitive functions will be defined below. According to the authors of the *d2-R Test*, concentration is the ability to respond to simple stimuli, which is measured by the speed of reaction and the number of errors.[15]

Thinking and creativity are also associated with cognitive development. In the *KANH Questionnaire*, creativity is defined as nonconformist thinking, i.e., such thinking that does not yield to social pressure, and heuristic thinking, i.e., thinking that is open and oriented to various solutions.[16] The opposite of creative thinking is algorithmic thinking, i.e., thinking that recognises only one algorithm of action, and conformist thinking, which involves adjusting one's views, values, and attitudes to match the expectations of the group.

---

[12] K. Wrześniewski, T. J. Sosnowski, D. Fecenec, *Inwentarz stanu i cechy lęku STAI. Polska adaptacja STAI*, Pracownia testów Psychologicznych PTP, Warszawa 2011.

[13] A. Matczak, *Kwestionariusz kompetencji społecznych*, Pracownia Testów Psychologicznych PTP, Warszawa 2012.

[14] T. Maruszewski, *Psychologia poznania*, GWP, Gdańsk 2011, pp. 17–24.

[15] R. Brickenkamp, L. Schmidt-Atzert, D. Liepmann, *Zrewidowana wersja testu do badania uwagi i koncentracji*, Pracownia Testów Psychologicznych PTP, Warszawa 2020.

[16] S. Popek, *Kwestionariusz twórczego zachowania KANH*, Wydawnictwo UMCS, Lublin 2010.

4. Spirituality and the emotional, social and cognitive spheres in selected studies

At the beginning, it should be noted that due to an increasing diversity of views and opinions in contemporary society, it seems impossible to speak about healthy or unhealthy spirituality. As the authors of social studies demonstrate, what is treated as unhealthy in one culture is sometimes fully accepted in another.[17] What is strange for one person is sometimes a normal expression of spiritual life for another.[18] Sometimes religious involvement is related to psychological development, and sometimes it may support behaviours that are not linked with development.[19]

A study whose respondents were 43 women who worked in the US army revealed that in very stressful situations, spiritual involvement acts as a mediating variable, leads to the reduction of symptoms of post-traumatic stress disorder[20] and allows a person to successfully cope with stress.[21] Although mere participation in rites has no such effect, being a member of a religious community and participating in its rites helps to recover from trauma.[22]

A study of 132 Americans demonstrated that a sense of meaning in life is a stronger predictor of mental health than spirituality or religiosity.[23] A study of 22 US female students has confirmed a positive impact of spiritual involvement

[17] C. Wesley, *Some reflections on spirituality, religion and mental health*, "Mental Health, Religion & Culture" 3 (2000) issue 1, pp. 1–12.

[18] M. Elliott, J. C. Reuter, *Making space: spirituality and mental health*, "Mental Health, Religion & Culture" 5 (2002) issue 2, pp. 143–162.

[19] M. Elliott, J. C. Reuter, *Religion, spirituality, and mental illness among working professionals: an in-depth interview study*, "Mental Health, Religion & Culture" 24 (2021) issue 9, pp. 931–947.

[20] N. M. Richardson, A. L. Lamson, E. M. Sesemann, M. Lacks, *Religion in the face of trauma: active duty women and spiritual health*, "Mental Health, Religion & Culture" 25 (2022) issue 3, pp. 332–344.

[21] L. Upenieks, *Resilience in the aftermath of childhood abuse? Changes in religiosity and adulthood psychological distress*, "Journal of Religion and Health" 60 (2021) issue 4, pp. 2677–2701.

[22] C. M. Westerfeld, B. R. Doolittle, *Spirituality of the traumatized child: A Call for Increased Faith Community Participation in the Trauma Healing Process for Children*, "Journal of Religion and Health" 61 (2022) issue 1, pp. 203–213.

[23] E. Yoon, L. Cabirou, A. Hoepf, M. Knoll, *Interrelations of religiousness/spirituality, meaning in life, and mental health*, "Counselling Psychology Quarterly" 34 (2021) issue 2, pp. 219–234.

on a person's positive well-being and perception of their health.[24] A study of 250 Iranian outpatients has indicated that such involvement positively correlates with an overall love of life, which improves a person's health prognosis.[25] Also, a study on a sample of 4,562 Canadians with neurological conditions has shown that spiritual involvement significantly increases both life satisfaction and quality of life.[26]

The impact of spiritual involvement on health has been confirmed not only in the areas linked to mental health and general well-being. For example, a study conducted in the United States (618 respondents) revealed that spiritual involvement is also positively correlated with minimising the effects of stress on inflammation.[27]

It is not only spiritual involvement alone that is important for a person's health; the image of God a person believes in also matters.[28] A study of 1,426 Americans demonstrated that a belief in a merciful God negatively correlates with such psychiatric symptoms as general anxiety, social anxiety, paranoia, obsession and compulsion. A belief in a merciful, benevolent God is also associated with greater hope and life satisfaction, which has been confirmed by a study conducted on a group of 2,010 Americans.[29]

Summarising the results of previous studies, it can be said that there is a two-way relationship between the spiritual involvement variable and the variable that is related to mental and physical health. A person's spiritual involvement affects their health, and at the same time the state of a person's mental and

[24] L. W. Nelms, D. Hutchins, R. J. Pursley, *Spirituality and the health of college students*, "Journal of Religion and Health" 46 (2006) issue 2, pp. 249–265.

[25] M. Dadfar, J. F. Gunn, D. Lester, A. M. Abdel-Khalek, *Love of Life Model: role of psychological well-being, depression, somatic health, and spiritual health*, "Mental Health, Religion & Culture" 24 (2021) issue 2, pp. 142–150.

[26] T. Chambers-Richards, B. Batholomew Chireh, C. D'Arcy, *Relationship between spirituality, religiosity, and general life satisfaction among Canadians living with neurological conditions in New Brunswick and Manitoba*, "Journal of Religion and Health" 61 (2022) issue 5, pp. 4119–4138.

[27] E. C. Shattuck, M. P. Muehlenbein, *Religiosity/spirituality and physiological markers of health*, "Journal of Religion and Health" 59 (2020) issue 2, pp. 1035–1054.

[28] N. R. Silton, K. J. Flannelly, K. Galek, C. G. Ellison, *Beliefs about God and mental health among American adults*, "Journal of Religion and Health" 53 (2014) issue 5, pp. 1285–1296.

[29] N. Krause, G. Ironson, *Religious involvement, God images, and life satisfaction*, "Mental Health, Religion & Culture" 22 (2019) issue 1, pp. 41–55.

physical health affects the type and strength of their spiritual involvement.[30] However, this correlation is not obvious and straightforward. As Fraser Watts demonstrates, people with mental disorders often become more sensitive to the spiritual realm, and he even argues that depression can be "part of a person's spiritual journey".[31]

Finally, it is also worth mentioning Magdalena Kapała's study dedicated to spiritual sensitivity and her questionnaire that explores this sensitivity,[32] which contains seven scales related to its different understandings.

5. Students' spiritual resources and their emotional, social and cognitive functioning—methodology of the study

The respondents of the study described in the article consisted of a group of 38 pedagogy students, 20 of which were members of the same group at university, while the others were recruited individually. At the very beginning, the author asked the respondents for their permission to anonymously use the results of the study; however, not all 42 respondents agreed, hence only the results of 38 of them are considered. All the respondents were women who studied pedagogy. Their average age was 26, with the oldest respondent being 51 and the youngest being 20.

During the study, the spiritual, emotional, social and cognitive development of female students were diagnosed. The theoretical aim of the study was to identify the level of development in the selected spheres in this social group. The practical aim was to draw conclusions that could be helpful in the formation of young people today. The research problem was formulated in the following way: What are the relationships between the level of spiritual involvement and the level of emotional, social and cognitive development of female students? In order to answer the general research problem, the following specific problems were posed:

- What are the relationships between the level of spiritual involvement and the level of emotional intelligence of the respondents?

[30] C. C. Cook, *Spirituality, religion & mental health: exploring the boundaries*, "Mental Health, Religion & Culture" 23 (2020) issue 5, pp. 363–374.

[31] F. Watts, *Theology and science of mental health and well-being*, "Zygon" 53 (2018) issue 2, pp. 336–355.

[32] M. Kapała, *Duchowość jako niedoceniany aspekt psyche*, pp. 7–37.

- What are the relationships between the level of spiritual involvement and the level of social competence of the respondents?
- What are the relationships between the level of spiritual involvement and the level of selected cognitive skills of the respondents?

The variables analysed in the study were as follows: in the emotional sphere: emotional intelligence, the ability to use emotions to support thinking and acting, the ability to recognise emotions, state anxiety, and trait anxiety; in the social sphere: intimate behaviours, social exposure, and assertiveness; and in the cognitive sphere: concentration, algorithmic thinking, heuristic thinking, nonconformist thinking, and conformist thinking. The variables associated with spiritual experience were as follows: trust, anxiety, dependence, autonomy, rebelliousness, guilt, identification, co-humanitarianism, ethical norms, acceptance of beliefs, centrality of religion, fear of uncertainty, positive and negative emotions, anger, guilt and the image of God. The variables were not divided into dependent and independent because in the literature, the relationship between them is described both ways: as the fact that mental health depends on spiritual involvement and also as the fact that spiritual involvement depends on mental health.

The method used in the study was a diagnostic survey, and the technique was a questionnaire. The tools used in the study included: Anna Matczak and Aleksandra Jaworowska's *Emotional Intelligence Questionnaire* [*Kwestionariusz inteligencji emocjonalnej*]; Anna Matczak's *Social Competence Questionnaire* [*Kwestionariusz kompetencji społecznych*]; Stanislaw Popek's *KANH Creative Behaviour Questionnaire* [*Kwestionariusz twórczego zachowania KANH*]; the *State-Trait Anxiety Inventory (STAI)* in the Polish adaptation by Tytus Sosnowski, Kazimierz Wrześniewski, Aleksandra Jaworowska and Diana Fecenec; Jacek Śliwak and Rafał Bartczuk's *Scale of Religious Relationships* [*Skala relacji religijnych*]; *Inventory of Emotions Towards God* [*Skala emocji względem Boga*] in the Polish adaptation by Barbara Zarzycka, Rafał Bartczuk and Marek Jarosz; *The Bonds with God Questionnaire* [*Kwestionariusz Więzi z Bogiem*] by Rafał Bartczuk and Wiesław Matys; the revised version of the *d2-R Attention and Concentration Test* [*Zrewidowana wersja testu do badania uwagi i koncentracji d2-R*] by Rolf Brickenkamp, Lothar Schmidt-Atzert and Detlev Liepmann; and *the Image of God Questionnaire* [*Kwestionariusz Obrazu Boga*] developed in an experimental version by the author of this article.

6. Students' spiritual resources and their emotional, social and cognitive functioning—analysis of the results

This section of the article presents the results of the study dedicated to the relationships between the respondents' spiritual involvement and their levels of emotional, social and cognitive development. Due to the fact that only two variables related to social competence—assertiveness and intimate behaviours—have a normal distribution (verified by Shapiro-Wilk test), only non-parametric tests will be used in the analyses. Due to the large number of variables analysed and the inability to examine all correlations in detail, only statistically significant correlation values are included in the tables.

6.1. The respondents' spiritual involvement and the level of their emotional development

To analyse the relationships between the respondents' spiritual involvement and their level of emotional development, Spearman's Rho test was conducted. Table 1 presents its results.

Table 1. The relationships between the respondents' spiritual involvement and the level of their emotional development

Variable related to spiritual development	Variables with a statistically significant correlation (p<0.05) and correlation in Spearman's Rho				
	Ability to recognise emotions	Ability to use emotions to support thinking and acting	INTE Emotional intelligence	State anxiety	Trait anxiety
Trust	0.43		0.35		
Anxiety				0.59	0.47
Rebelliousness				0.33	0.50
Co-humanitarianism					–0.43
Ethical norms					–0.39
Positive (emotions towards God)	0.50	0.33	0.54		
Negative (emotions towards God)				0.67	0.64

Variable related to spiritual development	Variables with a statistically significant correlation (p<0.05) and correlation in Spearman's Rho				
	Ability to recognise emotions	Ability to use emotions to support thinking and acting	INTE Emotional intelligence	State anxiety	Trait anxiety
Guilt				0.67	0.63
Anxiety (Inventory of Emotions Towards God)				0.59	0.47
Images of God:					
God the delusion		0.54	0.40		
Cruel God	–0.33	–0.33			
Unpredictable God				0.37	
Weak God					0.41
God of the catechism					
Ideal God				0.51	
Gentle and sensitive God	–0.38			0.36	
God of theologians		0.47			
God the Rock				0.40	
Safe God				0.48	0.47

Source: own study

The results indicate that traits such as trust and positive emotions towards God positively correlate with emotional intelligence in general and with this intelligence understood as the ability to recognise emotions and the ability to use them. Anxiety, rebelliousness, negative emotions towards God and guilt positively correlate with trait anxiety and state anxiety. Co-humanitarianism and ethical norms correlate negatively. These results lead to the conclusion that emotional development corresponds with spiritual development understood as trust in God and ethical sensitivity.

The higher the emotional intelligence, the stronger the perception of God as God the delusion and God of theologians (positive correlation). The higher the level of trait anxiety and state anxiety, the stronger the perception of God as unpredictable God, weak God, ideal God, gentle and sensitive God, God the Rock and safe God.

The higher the emotional intelligence, the weaker the perception of God as a cruel God and gentle and sensitive God (negative correlation). It can be assumed that people who seek support and security in God are often those with higher levels of anxiety. It can also be noted that perceiving God as cruel correlates with emotional intelligence in a similar way as perceiving Him as gentle and sensitive—it seems that such God is perceived negatively.

In order to extend the results, hierarchical regression analysis was conducted; it analysed the prediction of emotional development under the influence of spiritual development based on trust, co-humanitarianism and ethical norms. Trust proved to be a significant predictor of emotional intelligence (beta=0.35, p=0.03). Moreover, trust (beta=0.56, p=0.01), co-humanitarianism (beta=-0.52, p=0.03) and ethical norms (beta=0.61, p=0.01) were good predictors for the ability to recognise emotions. An interesting conclusion drawn from these results is that high co-humanitarianism is a predictor of a low ability to recognise emotions.

6.2. The respondents' spiritual involvement and the level of their social development

The relationships between the respondents' spiritual involvement and their level of social development are shown in Table 2.

Table 2. The relationships between the respondents' spiritual involvement and the level of their social development

Variable related to spiritual development	Variables with a statistically significant correlation (p<0.05) and correlation in Spearman's Rho		
	Intimate behaviours	**Social exposure**	**Assertiveness**
Trust		–0.37	
Dependence	–0.46	–0.34	
Autonomy	0.36		
Identification		–0.35	
Acceptance of beliefs	–0.45	–0.41	–0.42
Centrality of religion	–0.38	–0.32	–0.36
The images of God:			
Unpredictable God	–0.40		–0.45

Variable related to spiritual development	Variables with a statistically significant correlation (p<0.05) and correlation in Spearman's Rho		
	Intimate behaviours	Social exposure	Assertiveness
God of the catechism	–0.46	–0.52	
Ideal God	–0.63	–0.51	–0.62
God the teddy bear	–0.48	–0.69	
God the feudal lord	–0.42	–0.40	
God the healer	–0.43	–0.40	
God like Zawisza	–0.38	–0.39	–0.35
Gentle and sensitive God	–0.65	–0.66	–0.33
God of theologians	–0.41	–0.41	–0.37
God the Father		0.40	
God the Rock	–0.64	–0.64	–0.49
Safe God	–0.65	–0.65	–0.37

Source: own study

These results reveal that autonomy correlates positively with high levels of competence in the area of intimate behaviours, while dependence, the acceptance of beliefs and the centrality of religion correlate negatively. Trust, dependence, identification, the acceptance of beliefs and the centrality of religion negatively correlate with high levels of competence related to social exposure. The acceptance of beliefs and the centrality of religion are negatively correlated with high levels of assertiveness. Most of the relationships here are negative correlations. Thus, it can be said that people with higher levels of spirituality are often characterised by lower levels of social competence. The question is whether such people seek their place in spirituality, or whether social competence understood as openness to social exposure, maintaining intimate relationships and assertiveness are of less interest to people with high levels of spiritual development. Arguably, a lack of social competence is linked with introversion and orientation towards inner development.

The correlations of social competence with perceptions of God confirm the above findings. Persons with high levels of competence related to intimate behaviours tend not to perceive God as unpredictable God, God of the catechism, ideal God, God the teddy bear, God the feudal lord, God the healer, God like Zawisza, gentle and sensitive God, God of theologians, God the Rock and safe

God. The respondents with high levels of competence related to social exposure to a lesser extent perceive God as God of the catechism, ideal God, God the teddy bear, God the feudal lord, God the healer, God like Zawisza, gentle and sensitive God, God of theologians, God the Rock and safe God and frequently see him as Father. Those with high levels of assertiveness are less likely to perceive God as an unpredictable God, ideal god, God like Zawisza, gentle and sensitive God, God of theologians, God the Rock and safe God.

It might be interesting to analyse how spiritual development can be predicted based on such variables as trust, the acceptance of beliefs and the centrality of religion. The hierarchical regression analysis revealed that these variables are not good predictors of social development.

6.3. The respondents' spiritual involvement and the level of their cognitive development

The relationships between the respondents' spiritual involvement and their level of cognitive development are presented in Table 3.

Table 3. The relationships between the respondents' spiritual involvement and the level of their cognitive development

Variable related to spiritual development	Variables with a statistically significant correlation ($p<0.05$) and correlation in Spearman's Rho				
	Con-centration	Con-formism	Non-con-formism	Heuristic thinking	Algorithmic thinking
Trust		0.57	0.32		
Dependence	–0.35				
Autonomy	0.33				
Guilt		–0.37			
Identification			0.36		
Acceptance of beliefs		0.47			0.39
Centrality of religion	–0.40	0.34			0.35
The images of God:					
Cruel God		0.33			0.35

Variable related to spiritual development	Variables with a statistically significant correlation (p<0.05) and correlation in Spearman's Rho				
	Con-centration	Con-formism	Non-con-formism	Heuristic thinking	Algorithmic thinking
Unpredictable God		0.38			
Weak God		0.36			
God of the cat-echism				–0.34	
Ideal God		0.42		–0.40	
God the feudal lord		0.38			
God the healer		0.45			
God like Zawisza		0.36			
Gentle and sensi-tive God		0.58			
God of industri-ous ants					0.38
God of theolo-gians	0.42		–0.37	–0.42	
God the Rock		0.43			
Safe God		0.45			

Source: own study

Heuristic thinking, which is associated with creativity, shows a positive correlation with trust and identification. Conformist thinking, which is considered non-creative, is positively correlated with trust, the acceptance of beliefs, and the centrality of religion. Algorithmic thinking, also regarded as non-creative, is positively correlated with the acceptance of beliefs and the centrality of religion. A negative correlation was found between conformism and guilt, suggesting that as conformism increases, individuals report lower levels of guilt. This may be related to the fact that conformist behaviour tends to be guided primarily by external control of behaviour.

Trust and identification positively correlate with nonconformist and heuristic thinking, which are manifestations of creativity. Trust, the acceptance of beliefs and the centrality of religion positively correlate with non-creative (i.e., conformist and algorithmic) thinking, while guilt negatively correlates with such thinking.

Trust has a positive correlation with both creative and non-creative thinking, while non-creative thinking—both algorithmic and conformist—is positively correlated with the acceptance of beliefs and the centrality of religion.

People with low levels of creative thinking (heuristic and non-conformist) perceive God primarily as God of theologians, God of the catechism, and ideal God, whereas those with high levels of non-creative thinking (algorithmic and conformist) tend to perceive God as cruel God, unpredictable God, weak God, ideal God, God the feudal lord, God the healer, God like Zawisza, gentle and sensitive God, God the Rock and safe God. Based on these results, it can be concluded that creative people rarely identify with the image of God conveyed by theologians and the catechism. The lack of creativity is most strongly associated with seeking safety in God.

Concentration, which is a trait related to the efficiency of performing cognitive tasks, shows little correlation with spiritual development.

Also here the hierarchical regression analysis was conducted to analyse the prediction of cognitive development under the influence of spiritual development. The following were selected as variables of spiritual development: trust, the centrality of religion and the acceptance of beliefs. Trust proved to be a significant predictor of both conformism (beta=0.40; p=0.01) and non-conformism (beta=0.36; p=0.04).

7. Discussion of the results and conclusions

The results of previous studies have demonstrated that a belief in a merciful God negatively correlates with such psychological symptoms as general anxiety and social anxiety. A belief in a merciful, benevolent God is also associated with greater hope and life satisfaction,[33] i.e., with better emotional functioning. The study described in the article has confirmed these results. Trust in God and positive emotions towards Him positively correlate with emotional intelligence, with the ability to understand emotions and the ability to express them. Negative emotions towards God and being afraid of Him positively correlate with trait anxiety and state anxiety. An interesting question is why co-humanitarianism turned out to be a negative predictor of understanding emotions. Perhaps a particular

[33] N. Krause, G. Ironson, *Religious involvement, God images, and life satisfaction*, "Mental Health, Religion & Culture" 22 (2019) issue 1, pp. 41–55.

opinion (that faith is related to the treatment of another person) which a person declares is not always what this person implements in life.

The authors of most previous studies have reported positive correlations between spirituality and emotional life, well-being, meaning in life, and life satisfaction.[34] This study found that spiritual development positively correlates with emotional development but not with social development. Most of the variables of spiritual development correlate negatively with both assertiveness and skills related to the area of social exposure and intimate behaviours. Thus, it seems that introverts, who often have problems with social behaviours, function better in the spiritual sphere. At the same time, the results have revealed that the link between spirituality and cognitive development is basically non-existent. Both creative and non-creative people are capable of trusting God.

In summary, it is worth emphasising that the sample used in the study was very small. Therefore, a larger sample would likely reveal additional significant correlations. It would also be valuable to conduct studies with gender differentiation. In this case, only women were included, which limits the generalisability of the findings to the broader population.

In conclusion, the results confirmed that spiritual development corresponds to emotional development and that the relationship between spiritual development and other spheres of development is rather complex. This means, however, that every person, regardless of their personality traits and intellectual ability, has a capacity for full spiritual development.

References

Brickenkamp R., Schmidt-Atzert L., Liepmann D., *Zrewidowana wersja testu do badania uwagi i koncentracji*, Pracownia Testów Psychologicznych PTP, Warszawa 2020.

Chambers-Richards T., Batholomew Chireh B., D'Arcy C., *Relationship between spirituality, religiosity, and general life satisfaction among Canadians living with neurological conditions in New Brunswick and Manitoba*, "Journal of Religion and Health" 61 (2022) issue 5, pp. 4119–4138, https://doi.org/10.1007/s10943-022-01510-y.

Cook C. C., *Spirituality, religion & mental health: exploring the boundaries*, "Mental Health, Religion & Culture" 23 (2020) issue 5, pp. 363–374, https://doi.org/10.1080/13674676.2020.1774525.

[34] E. Yoon, L. Cabirou, A. Hoepf, M. Knoll, *Interrelations of religiousness/spirituality*, pp. 219–234; L. W. Nelms, D. Hutchins, R. J. Pursley, *Spirituality and the health*, pp. 249–265.

Dadfar M., Gunn J. F., Lester D., Abdel-Khalek A. M., *Love of Life Model: role of psychological well-being, depression, somatic health, and spiritual health*, "Mental Health, Religion & Culture" 24 (2021) issue 2, pp. 142–150, https://doi.org/10.1080/13674676.2020.1825360.

Elliott M., Reuter J. C., *Making space: spirituality and mental health*, "Mental Health, Religion & Culture" 5 (2002) issue 2, pp. 143–162, https://doi.org/10.1080/13674670210144095.

Elliott M., Reuter M. C., *Religion, spirituality, and mental illness among working professionals: an in-depth interview study*, "Mental Health, Religion & Culture" 24 (2021) issue 9, pp. 931–947, https://doi.org/10.1080/13674676.2021.1966401.

Goleman D., *Inteligencja emocjonalna*, trans. A. Jankowski, Media Rodzina, Poznań 1997.

Jarosz M., *Pojęcie duchowości w psychologii*, w: *Studia z psychologii w KUL*, vol. 16, eds. O. Gorbaniuk, B. Kostrubiec-Wojtachnio, Wydawnictwo KUL, Lublin 2010, pp. 9–22.

Kapała M., *Duchowość jako niedoceniany aspekt psyche. Propozycja nowego ujęcia duchowości w psychologii – kategoria wrażliwości duchowej,* "Annales Universitatis Mariae Curie-Skłodowska. Sectio J" 30 (2017) nr 1, pp. 7–37.

Krause N., Ironson G., *Religious involvement, God images, and life satisfaction*, "Mental Health, Religion & Culture" 22 (2019) issue 1, pp. 41–55, https://doi.org/10.1080/13674676.2019.1586860.

Matczak A., *Kwestionariusz kompetencji społecznych*, Pracownia Testów Psychologicznych PTP, Warszawa 2012.

Matczak A., Jaworowska A., *Kwestionariusz inteligencji emocjonalnej*, Pracownia Testów Psychologicznych PTP, Warszawa 2008.

Matys W., Bartczuk R. P., *Kwestionariusz Więzi z Bogiem*, in: M. Jarosz, *Psychologiczny pomiar religijności*, Towarzystwo Naukowe KUL, Lublin 2011, pp. 131–151.

Maruszewski T., *Psychologia poznania*, GWP, Gdańsk 2001.

Nelms L. W., Hutchins D., Pursley R. J., *Spirituality and the health of college students*, "Journal of Religion and Health" 46 (2006) issue 2, pp. 249–265, https://doi.org/10.1007/s10943-006-9075-0.

Popek S., *Kwestionariusz twórczego zachowania KANH*, Wydawnictwo UMCS, Lublin 2010.

Richardson N. M., Lamson A. L., Sesemann E. M., Lacks M., *Religion in the face of trauma: active duty women and spiritual health*, "Mental Health, Religion & Culture" 25 (2022) issue 3, pp. 332–344, https://doi.org/10.1080/13674676.2021.1964459.

Shattuck E. C., Muehlenbein M. P., *Religiosity/spirituality and physiological markers of health*, "Journal of Religion and Health" 59 (2020) issue 2, pp. 1035–1054, https://doi.org/10.1007/s10943-018-0663-6.

Silton N. R., Flannelly K. J., Galek K., Ellison C. G., *Beliefs about God and mental health among American adults*, "Journal of Religion and Health" 53 (2014) isuue 5, pp. 1285–1296, https://doi.org/10.1007/s10943-013-9712-3.

Straś-Romanowska M., *Rozwój człowieka a rozwój osobowy*, "Studia Psychologica" 3 (2002), pp. 91–104.

Śliwak J., Bartczuk R., *Skala relacji religijnych – Przeżywane Relacje do Boga D. Hutsebauta*, in: M. Jarosz, *Psychologiczny pomiar religijności*, Towarzystwo Naukowe KUL, Lublin 2011, pp. 171–200.

Watts F., *Theology and science of mental health and well-being*, "Zygon" 53 (2018) issue 2, pp. 336–355, https://doi.org/10.1111/zygo.12412.

Wesley C., *Some reflections on spirituality, religion and mental health*, "Mental Health, Religion & Culture" 3 (2000) issue 1, pp. 1–12, https://doi.org/10.1080/13674670050002054.

Upenieks L., *Resilience in the aftermath of childhood abuse? Changes in religiosity and adulthood psychological distress*, "Journal of Religion and Health" 60 (2021) issue 4, pp. 2677–2701, https://doi.org/10.1007/s10943-020-01155-9.

Yoon E., Cabirou L., Hoepf A., Knoll M., *Interrelations of religiousness/spirituality, meaning in life, and mental health*, "Counselling Psychology Quarterly" 34 (2021) issue 2, pp. 219–234, https://doi.org/10.1080/09515070.2020.1712651.

Westerfeld C. M., Doolittle B. R., *Spirituality of the traumatized child: A call for increased faith community participation in the trauma healing process for children*, "Journal of Religion and Health" 61 (2022) issue 1, pp. 203–213, https://doi.org/10.1007/s10943-021-01416-1.

Wrześniewski K., Sosnowski T. J., Fecenec D., *Inwentarz stanu i cechy lęku STAI. Polska adaptacja STAI*, Pracownia Testów Psychologicznych PTP, Warszawa 2011.

Zarzycka B., Jarosz M., Bartczuk R., *Polska adaptacja Skali Emocji względem Boga S. Hubera*, in: M. Jarosz, *Psychologiczny pomiar religijności*, Towarzystwo Naukowe KUL, Lublin 2011, pp. 264–291.

Zyzak W., *Zdrowie człowieka w kontekście chrześcijańskiej duchowości holistycznej*, "Psychoonkologia" 22 (2018) no. 1, pp. 34–40.