

Article

Personality Traits and the Spiritual and Moral Intelligence of Early Adulthood in Poland: Research Reports

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Abstract: Spiritual and moral intelligence have recently become popular research questions in studies. The aim of the present study was to investigate the relationship between spiritual and moral intelligence. It was also intended to link spiritual and moral intelligence with personality traits among people in early adulthood (aged 18 to 35) in Poland. In addition, in order to better understand the group, it was also planned to investigate the association of spiritual and moral intelligence with age. The theoretical framework for our study is the concept of spiritual intelligence as consisting of four dimensions: critical existential thinking, personal meaning-making, transcendental awareness and conscious state expansion. Measurements were based on the concept of moral intelligence as consisting of the four main dimensions of integrity, responsibility, compassion and forgiveness, and subcategories (competencies) including integrity, honesty, courage, confidentiality, commitment, personal responsibility, accountability for decisions, self-control, helping others, caring for others (compassion), understanding others' feelings (altruism) and understanding their emotional needs (faith, belief). A total of 160 individuals aged 18 to 35 years from Poland were surveyed using the Spiritual Intelligence Self-Report Inventory, the Moral Intelligence Scale, the Ten-Item Personality Inventory. The article reports on the results of this study.

Keywords: spiritual intelligence; moral intelligence; personality traits; early adulthood



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1. Introduction

In the literature, intelligence is sometimes perceived as the ability to: adapt to given circumstances (Binet and Simon 1904), benefit from experience (Sternberg 2000), solve new problems (Bingham 1937), think purposefully, deal effectively with the environment (Wechsler 1958). Current research sometimes treats intelligence as a multidimensional and multifaceted construct that includes different types of intelligence: social, practical, analytical, cognitive and emotional (Ayoub and Aljughaiman 2016; González-Treviño et al. 2020; Yousefi and Heshmati 2015).

Currently, there is a growing interest in spiritual and moral intelligence. Spirituality, like morality, is sometimes considered an intrinsic part of human nature. However, it is sometimes perceived as a separate construct that does not fit into the categories of moral or social development. Spirituality can be a source of meaning, openness and human development (Socha 2000). It can help to explain various events and provide hope, value and comfort. Morality is sometimes defined as a system of rules and values for human behaviour that is generally accepted by society or by a specific group of people (Asif et al. 2020). Spirituality supports morality in the realisation of important values such as freedom of justice (Bagherpur et al. 2022). Ongoing research into the link between spirituality and morality has shown that spiritual people perform better in teamwork (Mitroff and Denton 1999). They are also characterised by being more honest, kind and supportive of others in their problems, needs (Cash and Gray 2000; Krishnakumar and Neck 2002; Beazley and Gemmill 2006). Spiritual principles and values help to better understand moral

issues, to see their depth, to make the right decisions (McGhee and Grant 2008). Spirituality shapes personality and is an important centre for the development of morality, where the meaning of human existence is concentrated. Today, researchers in many countries are devoting their research to the problem of moral, spiritual and personal human functioning (Rozuel 2011; Strohminger and Nichols 2014).

Moral and spiritual intelligence are helpful in solving problems concerning values, searching for the meaning of life events. They make it possible to look at a problem in a wider meaningful context, to make an adequate judgement of a given situation. Spiritual intelligence is not the result of just a combination of spirituality and intelligence, just as moral intelligence is not a simple combination of morality and intelligence. Both spiritual and moral intelligence derives from a substrate of cognitive, emotional, socio-moral processes and personal development. For a better understanding of the human being, it therefore seems important to look at spiritual intelligence, moral intelligence and to know the relationship between spiritual intelligence, moral intelligence and personality traits, which are dependent on genetic predisposition and environment (Bleidorn et al. 2014).

Spiritual intelligence is sometimes described as a form of intelligence that enables people to solve problems, to achieve certain goals in life (Emmons 1999, 2000a). It is also sometimes perceived as a set of adaptive capacities based on non-material and transcendental aspects of reality (King and DeCicco 2009).

Moral intelligence as commonly understood means the ability to distinguish right from wrong, to have rules and norms of behaviour. It is also sometimes considered as an ability acquired and developed during life (Bahrami et al. 2012). It is related to an individual's ability to process and manage ethical issues (Bezanjani et al. 2019). Nowadays, for young adults it is not a problem to cope with the processing of incoming information and technological developments. On the other hand, it is difficult to maintain respect for oneself and other people, to comply with current norms, standards and to search for meaning in everyday activities and life problems. The individualism, materialism and consumerism currently being promoted are leading to a growing fragility of the value system and an increase in narcissistic tendencies (Hyde 2008). The negative effects of the changes taking place can be seen in the current economic, political and environmental crises (Clarken 2010). The social and economic functioning of modern nations will depend on the level of moral and spiritual culture of young adults (Shevchenko et al. 2019).

During early adulthood, which lasts until about 18 to 35 years of age, young adults shape their own self, find their place in the world, enter into various life roles and developmental tasks (Havighurst 1981), show greater awareness, emotional stability and, to a lesser extent, agreeableness (Bleidorn 2015). These three traits characterise individuals demonstrating greater social maturity (Roberts and Mroczek 2008). Changes in personality structure contribute to more positive relationships, professional success and better health functioning (Roberts et al. 2007). During early adulthood, moral development is dominated by the conventional level (referring to social conventions). Individuals at this stage of life develop towards the post-conventional level. When attempting to solve moral problems, young adults appeal to the wisdom knowledge they possess. The purpose of this article is to examine the correlation between spiritual intelligence, moral intelligence and to test the assumption regarding the links between spiritual and moral intelligence and the age of the respondents. It also seems important to test the predictive role of personality traits in connection with spiritual and moral intelligence.

1.1. Spiritual Intelligence

Spiritual intelligence is sometimes perceived as a type of intelligence that enables a person to understand the mystery of life and its meaning. Gardner argues that, "if we humans can relate to the world of nature, we can also relate to the supernatural world - to the cosmos that extends beyond what we can perceive directly, to the mystery of our own existence, and to life-and-death experiences that transcend what we routinely encounter" (Gardner 1999, p. 54). The term of spiritual intelligence arose from the combination

of intelligence and spirituality (Emmons 2000a; Mahasneh et al. 2015). In the field of psychology, this construct is controversial, due to the existing theoretical limitations, the lack of coherent definitions of the issue (Oman 2013; Skrzypińska 2014, 2020; Streib and Hood 2016). Spiritual intelligence is sometimes referred to as a third type of intelligence (Zohar and Marshall 2000), a mental capacity (King 2008), an ability to discern, search for meaning, solve problems (Nasel 2004), a set of adaptive mental capacities (King and DeCicco 2009), an ability to ask existential questions (Nasel 2004), and involves a high degree of individual and social awareness (Sadiku and Musa 2021).

Zohar and Marshall (2004) describe spiritual intelligence as an ability that allows people to discover and experience deeper levels of meaning and purpose in human existence and cherished values, while achieving the highest possible level of motivation. Furnham (2008) points out that, “it is the ability to master a set of diffuse and abstract concepts about being, but also mastering the craft of altering one’s consciousness in attaining a certain state of being” (Furnham 2008, p. 212). King (2008) described spiritual intelligence as “a set of mental capacities which contribute to the awareness, integration, and adaptive application of the nonmaterial and transcendent aspects of one’s existence, leading to such outcomes as deep existential reflection, enhancement of meaning, recognition of a transcendent self, and mastery of spiritual states” (p. 56). As Gardner (2000, p. 27) claims, “whether spirituality should be considered an intelligence depends upon definitions and criteria”. Gardner (2006, p. 20) believed that spiritual intelligence is “the intelligence of big questions”, as it relates to the human predisposition to ask basic questions about existence.

Spiritual intelligence consists of two components: transcendence and mysticism. The first component of intelligence is sometimes associated with going beyond physicality. Mysticism is sometimes described as having an awareness of ultimate reality. (Emmons 2000a). King (2008) identifies four components of spiritual intelligence: critical existential thinking, personal meaning production, transcendental awareness, and conscious state expansion. Critical existential thinking (CET) involves thinking about one’s existence. It is sometimes described as the ability to critically contemplate meaning, purpose, skills that lead to original existential relationships, contemplating non-existential issues related to one’s own life.

Personal meaning production (PMP) is characterised by the ability to derive personal meaning and goals from all experiences of a mental and physical nature and the ability to live according to a specific life purpose. It represents the core of spiritual intelligence. The personal meaning production increases the motivation to take action, provides a sense of stability, order and direction. A person learns to see meaning in everyday activities, work, events both positive and negative.

Transcendental awareness (TA) involves the ability to intensify transcendental dimensions/patterns of the self, the physical world, other persons, when experiencing states of consciousness accompanied by the ability to identify a correlation with one’s Self and the physical world. It allows one to perceive reality more deeply, to penetrate the material world, to connect interdependent structures, to build relationships with the Self.

Conscious state expansion (CSE) is characterised by the ability to enter and exit higher states of consciousness (King 2008). A higher state of consciousness involves a narrowing or widening of the scope of attention. States of consciousness are achieved through methods such as self-contemplation, prayer and meditation.

Emmons (2000a) identified the traits of spiritually intelligent people, which included the ability to: transcend, enter higher states of consciousness, make meaning of everyday activities, relationships, use resources to solve problems, show forgiveness, be humble, be compassionate (being virtuous). The last of the indicated traits, due to its controversial nature, has been removed (Emmons 2000b).

Research conducted on spiritual intelligence and personality traits in the Big Five model has shown positive associations of conscientiousness, agreeableness and extraversion with spiritual intelligence. A negative correlation was shown between spiritual intelligence and neuroticism (Amrai et al. 2011). Idris et al. (2021), in the research conducted among

trainee teachers, showed that there was a positive correlation of spiritual intelligence with extraversion and openness to experience. In contrast, no link was found between spiritual intelligence and acceptance, emotional stability and mindfulness. A similar research was conducted by Mahasneh and collaborators (2015), who found a positive and statistically significant correlation between dimensions of spiritual intelligence (critical existential thinking, personal meaning-production, transcendental awareness and conscious state expansion) and personality traits (neuroticism, extraversion, openness to experience, agreeableness and conscientiousness).

Beshlideh et al. (2011) conducted a research on the correlation between spiritual intelligence and personality traits in male students. The results showed a significant correlation between extraversion, agreeableness and conscientiousness. A regression analysis by Madalaimuthu and Kadiravan (2016) saw that spiritual intelligence accounted for 18% of the variance in extraversion, 5% of the variance in agreeableness, 11% of the variance in conscientiousness and 6% of the variance in emotional stability.

Research by Altalha (2020) showed that spiritual intelligence, age, gender, and specialisation are independent predictors of mental health. Desai (2016) showed that age has a significant impact on adult spirituality.

According to Zohar and Marshall (2000), spiritual intelligence helps us to experience life at a deeper level of meaning. It can be a helpful skill in dealing with issues of right and wrong. Seybold and Hill (2001) suggested that spiritual practices, commitments and beliefs are associated with positive mental and physical health outcomes, positive interactions with others and higher levels of quality of life. According to Emmons (2000a, 2000b), spiritual intelligence can protect a person from undesirable and maladaptive behaviours. The findings of the research conducted so far motivate the search for links between spiritual intelligence and moral behaviour, the formation of the ability to distinguish between right and wrong.

1.2. Moral Intelligence

Moral intelligence means doing things at the right time and for the right reasons (Yaghoobi et al. 2018). It is sometimes described as a guide for people to help them integrate their optimal actions (Lee and Hwang 2016). Moral intelligence can also be defined “as the mental capacity to determine how universal human principles should be applied to our personal values, goals, and actions” (Lennick and Kiel 2005, p. 7). Borba (2001), on the other hand, defines moral intelligence as the ability to distinguish right from wrong, to have ethical beliefs and to act in accordance with them. Moral intelligence includes social ethics, which are the general principles that build society, and personal ethics, which include individual behaviour and the virtues possessed by a person (Olusola and Samson 2015).

Lennick and Kiel (2005) identified four components of moral intelligence: integrity, responsibility, compassion and forgiveness. Integrity characterises a person’s behaviour in accordance with one’s principles, beliefs and values. It shows a strong connection with keeping promises, telling the truth and defending important values. In various situations in life, people with integrity act in accordance with their conscience. People characterised by a high degree of honesty are rational, independent and fair (Becker 1998). Responsibility is admitting one’s mistakes, failures, accepting responsibility for oneself, others and one’s choices (Stone-Johnson 2014). Accepting responsibility for one’s actions moves a person towards success and forces one in some way to avoid undesirable behaviour.

Forgiveness involves showing tolerance for the mistakes of others and one’s own. Compassion is characterised by concern for others, caring about their goals. It occurs when one observes other people in their difficulties and suffering and is then motivated to help them (Hojjat and Cramer 2013).

Moral intelligence is characterised by certain knowledge, certain behaviours, ways of thinking, acting and feeling. It allows a person to recognise what is right or wrong without contributing to changes in a person’s actions, abilities, or feelings (Beigi and Tabaeian 2014). Borba (2001) identifies seven virtues that underpin moral intelligence; these include: em-

pathy (the ability to understand and feel other people's problems); conscience (the ability to act according to principles of right action); self-control (involves control of the mind, action, thus enabling one to act appropriately); respect (the ability to appreciate others and acting in a friendly manner); kindness (showing concern, affection towards other people); tolerance (respecting the rights, dignity of others, taking into account the difference of their views and religion); honesty (openness in thinking, acting).

Mohagheghi et al. (2021) conducted a research on moral intelligence and personality traits. The results showed a positive correlation between moral intelligence and personality traits (honesty, modesty, conscientiousness and openness to experience).

Some researchers recognise that certain personality traits, for example, conscientiousness, agreeableness, neuroticism, have an impact on the moral orientation adopted and spiritual abilities manifested (Beshlideh et al. 2011). Golipour et al. (2014) conducted research on the correlation of spiritual and moral intelligence as important variables in the lives of Iranian volunteers. The results of the research showed a positive correlation between moral and spiritual intelligence and sense of life. Spiritual intelligence explained 5.6% of the observed difference in meaning of life among men and 18.6% among women. Furthermore, moral intelligence explained the variation in meaning of life among 13.2% of men and 6.8% of women. Ramezanzadeh and Moslehamirdehi (2020) showed in research conducted among students that spiritual and moral intelligence could significantly predict 25% of students' resilience ($p < 0.01$).

Research by Moghadas and Khaleghi (2013) found a correlation between the components of moral intelligence (telling the truth, keeping promises, taking responsibility for personal choices, admitting mistakes and failures, accepting responsibility for serving others, actively caring for others and being able to accept others' mistakes) and age.

1.3. Personality Traits in the Big Five Model

Personality is defined as "the set of psychological traits and mechanisms within the individual that are organised and relatively enduring and that influence his or her interactions with, and adaptations to, the intra-psychic, physical and social environments" (Larsen and Buss 2014, p. 4). Personality is sometimes defined as a set of traits that are revealed in a person's behaviour, thinking and everyday situations (Allemand and Mehl 2017). Costa and McCrae (1992) describe personality as physical and intellectual traits, habits that include specific emotional, thinking and behavioural patterns in a variety of situations.

Personality traits are defined as certain dispositions to perform a certain type of response in different situations (Rauch and Frese 2007). Personality is sometimes referred to relatively-fixed behavioural inclinations related to well-being, health and relationships (Tetzner et al. 2020). A well-known and widely accepted concept of personality is the Five Factor Model of Personality (Big Five), which consists of five personality factors: conscientiousness, extraversion, openness to experience, agreeableness and neuroticism (McCrae and Costa 1997). The Big Five model, according to Goldberg (1993), makes it possible to predict behavioural patterns and social outcomes. Personality traits as indicated by various analyses are relatively stable over the course of a life (Johnson 1997). Over the course of a human life, conscientiousness and agreeableness remain relatively stable traits (De Vries et al. 2021). As they enter adulthood, young people's experiences increase in agreeableness, emotional stability and conscientiousness (Arnett 2000; Bleidorn et al. 2014).

Conscientiousness is associated with a sense of self-control, responsibility to others, following rules, being hardworking, striving to maintain high standards, and being dutiful (Jackson and Roberts 2017; Shiner and DeYoung 2013). The trait is also associated with perseverance and planning (Jackson and Hill 2019).

Extraversion is sometimes equated with sociability, positive emotionality, entering new situations, and assertiveness (Shiner and DeYoung 2013; Smillie et al. 2019). It positively correlates with well-being, seeking support in difficult situations (Sun et al. 2019). Individuals with low levels of this trait are closed-minded and tend to withdraw from social exposure because it represents a large psychological cost for them (Tetzner et al. 2020).

Openness to experience is associated with a willingness to engage in new activities, learning about new ideas, curiosity, and cognitive exploration (Schwaba 2019). This trait is also associated with creative problem solving and autonomy (Kandler et al. 2016).

Agreeableness is sometimes linked to traits such as empathy, compassion, modesty, and kindness (Soto and John 2017; Tackett et al. 2019). Agreeable individuals strive to have cooperative, harmonious interactions with other people.

Neuroticism is sometimes associated with experiencing emotions such as uncertainty, sadness, irritability and anxiety (Shiner and DeYoung 2013). It is also associated with social maladjustment, specific difficulties with cognitive processing, e.g., negative perceptions of self, including one's competence (Shackman et al. 2016).

1.4. The Present Study

It should be noted that very little research has been undertaken to date on the relationship between spiritual and moral intelligence. Recent studies have indicated associations of spiritual intelligence with personality traits (positive with conscientiousness, agreeableness, extraversion and negative with neuroticism; Amrai et al. 2011; Beshlideh et al. 2011; Farsani et al. 2013; Sood et al. 2012) and moral intelligence with personality traits (conscientiousness, openness to experience, modesty and honesty; Mohagheghi et al. 2021). There have also been studies on the relationship of moral intelligence, spiritual intelligence, social intelligence and emotional intelligence and the relationship of spiritual intelligence and moral intelligence (Golipour et al. 2014). The present study aimed to investigate the relationship between spiritual and moral intelligence. In addition, in order to better analyse the group, it was also planned to investigate the relationship of spiritual and moral intelligence with age. It was also intended to examine the relationship between spiritual and moral intelligence and personality traits among young people in early adulthood from Poland. So far, no research has been conducted in Poland which would allow the relationship between spiritual and moral intelligence and age and personality traits to be discerned in young people in early adulthood.

2. Materials and Methods

On the basis of the literature review, the following hypotheses were put forward:

H1. *There is a correlation between selected aspects of spiritual intelligence and moral intelligence in individuals in early adulthood.*

H2. *Personality traits play a predictive role in the association with spiritual intelligence and moral intelligence in young adults.*

2.1. Procedure and Respondents

The online survey was conducted from 25 April to 30 September 2022 using the LimeSurvey. The instructions included information about the persons conducting the survey, the topic of the survey, anonymity, voluntary participation and the purpose of the survey. The method of reaching respondents was the snowball sampling and the method of sending out e-mail invitations. Respondents had the option to split the survey into parts. A total of 405 surveys were collected, of which 160 were fully completed. Only surveys that were fully completed were used for further analysis. A total of 160 people (101 women and 59 men) with an age range of 18 to 35 years ($M = 24.40$; $SD = 4.55$) were surveyed. The majority of respondents were unmarried. The largest number of respondents lived in cities with more than 300,000 inhabitants (33%), the smallest in towns with up to 10,000 inhabitants (6%). Most respondents had siblings (84%). The majority of respondents had secondary education (53% of respondents) and higher education (43% of respondents). The fewest people had primary education (1%).

2.2. Methods

The Spiritual Intelligence Self-Report Inventory (SISRI-24) is a scale based on King's definition and the four fundamental components of spiritual intelligence: critical existential thinking, personal meaning production, transcendental awareness and conscious state expansion (King 2008). In the Polish adaptation: Skrzypińska and Atroszko (2017). The survey questionnaire consists of 24 questions, which are assigned to 4 subscales: critical existential thinking (CET), personal meaning production (PMP), transcendental awareness (TA), and conscious state expansion (CSE). The respondents give their answers on a five-point Likert scale: 1 "this is completely untrue about me"; 2 "this is not completely true about me"; 3 "there is some truth in this about me"; 4 "there is a lot of truth in this about me"; 5 "this is completely true about me". Sample questions from the subscales: critical existential thinking ("I happen to spend time contemplating the purpose or cause of my existence"), personal meaning-making ("I am able to define the purpose and cause of my existence"), transcendental awareness ("I am aware of a deeper purpose between myself and other people"), expanding state of consciousness ("I am able to reach higher states of consciousness").

King reported Cronbach's alpha coefficient for the subscales of 0.78, 0.78, 0.87 and 0.91 for critical existential thinking, personal meaning production, transcendental awareness and conscious state expansion, respectively. The calculated Cronbach's alpha coefficient for the subscales: critical existential thinking, personal meaning making, transcendental consciousness state expansion were 0.886, 0.747, 0.849, 0.904, respectively.

The Polish adaptation of the SISIR-24 questionnaire showed a four-factor structure similar to the original method. There was no overall SI factor in the Polish sample (Atroszko et al. 2021).

The Yakut-Moral Intelligence Scale (Yakut and Yakut 2021), consists of 20 questions. The scale contains four subscales defined as empathy, conscience, self-control and courtesy. Factor analysis determined that the Kaiser-Meyer-Olkin coefficient value was 0.776 statistically (Yakut and Yakut 2021). The reliability of the scale as determined by the Cronbach's alpha coefficient is 0.845. The items of the survey questionnaire are rated on a five-point Likert (1 "Strongly disagree", 2 "Disagree", 3 "I am not sure", 4 "Agree" and 5 "Completely agree" (Yakut and Yakut 2021)). The scale does not have a Polish adaptation. For the purposes of the article, the survey questionnaire was translated into Polish.

Example subscale items: empathy ('When I see someone sad, it makes me sad too'), conscience ('Conscience is important in communication'), self-control ('I can control my emotions such as anger, joy and sadness'), politeness ('In conversation, I respect the rights of the people I am talking to').

The Cronbach's alpha reliability coefficient calculated on the scores obtained for the scale was 0.842. The Cronbach's alpha coefficient for the individual subscales was: for the empathy scale 0.679, for the conscientiousness scale 0.828, for self-control 0.851, and for the courtesy scale 0.994.

The Ten Item Personality Inventory TIPI (Gosling et al. 2003), TIPI-PL in the Polish adaptation (Sorokowska et al. 2014), contains 10 items that form five scales: emotional stability, extraversion, openness to experience, agreeableness and conscientiousness.

The respondent answers on a seven-point scale from 1- strongly disagree to 7- strongly agree. Sample questions for the subscales: Emotional stability ("Not worried, emotionally stable"), Extraversion ("Enjoys the company of others, active, optimistic"), Conscientiousness ("Conscientious, disciplined"), Openness to experience ("Open to new experiences, in a complex way of perceiving the world"), agreeableness ("According, kind").

The reliability of the scale, as determined by Cronbach's alpha coefficient, is between 0.45 and 0.83. The Cronbach's alpha coefficient calculated for each subscale of emotional stability, extraversion, conscientiousness, openness to experience, agreeableness was 0.634, 0.683, 0.647, 0.443, 0.592. The scale was chosen because of its satisfactory psychometric qualities and its compatibility with the adopted five-factor theory of personality.

3. Results

The interpretation of the results obtained was based on the recalculated results obtained using the three research tools. Statistical calculations were carried out using the IBM SPSS Statistics 28.0 programme. In the first step of the analyses carried out, the distributions of the quantitative variables were examined. For this purpose, basic descriptive statistics were calculated together with the Kolmogorov-Smirnov test to check the normality of the distribution, as shown in Table 1.

Table 1. Basic descriptive statistics of the measured variables with the Kolmogorov-Smirnov test.

Variable	M	SD	Sk.	BSk.	Kurt.	B.Kurt.	Min.	Max.	K-S.	p
Age	24.40	4.55	0.85	0.19	−0.42	0.38	18.00	35.00	0.202	<0.001 *
TIPI_Stability	3.66	1.69	0.11	0.19	−1.12	0.38	1.00	7.00	0.124	<0.001 *
TIPI_Extraversion	5.03	1.48	−0.72	0.19	−0.17	0.38	1.00	7.00	0.152	<0.001 *
TIPI_Conscientiousness	4.88	1.46	−0.64	0.19	−0.28	0.38	1.00	7.00	0.152	<0.001 *
TIPI_Openness	4.52	1.13	−0.10	0.19	−0.12	0.38	1.50	7.00	0.117	<0.001 *
TIPI_Agreeableness	5.40	1.13	−0.70	0.19	0.49	0.38	1.00	7.00	0.153	<0.001 *
Ya_Em.	3.82	0.59	−0.22	0.19	−0.10	0.38	2.40	5.00	0.080	0.014
Ya_Con.	4.01	0.71	−0.74	0.19	1.13	0.38	1.00	5.00	0.101	<0.001 *
Ya_Se.	3.37	0.85	−0.43	0.19	−0.25	0.38	1.00	5.00	0.090	0.003
Ya_C.	3.55	0.70	−0.35	0.19	−0.41	0.38	1.80	5.00	0.102	<0.001 *
SI_CET	22.49	7.19	−0.18	0.19	−0.75	0.38	7.00	35.00	0.072	0.040
SI_PMP	16.80	4.71	−0.33	0.19	−0.39	0.38	5.00	25.00	0.089	0.004
SI_TA	23.76	6.27	−0.36	0.19	−0.43	0.38	7.00	35.00	0.078	0.019
SI_CSE	11.74	5.01	0.31	0.19	−0.72	0.38	5.00	25.00	0.105	<0.001 *

Note: Ya_Em.—Yakut_Empathy; Ya_Con.—Yakut_Conscience; Yakut_Se.—Yakut_Self-control; Yakut_C.—Yakut_Courtesy; SI_CET—SI_Critical existential thinking; SI_PMP—SI_Personal meaning production; SI_TA—SI_Transcendental awareness; SI_CSE—SI_Conscious state expansion. * Lower limit of actual significance.

The results obtained from the Kolmogorov-Smirnov test indicate that the distribution is not normal for most scales. However, given the central limit theorem, which states that a trait assumes a normal distribution when there are at least 30 respondents and the fact that no measure of skewness exceeded an absolute value of 1 (George and Mallery 2016), it can be assumed that the examined variables take on a distribution close to normal. The first aim of the research was to determine the correlations occurring between moral and spiritual intelligence. In the first stage of the analyses, Pearson's R correlation was carried out (see Table 2).

Table 2. Pearson's R correlations between moral and spiritual intelligence scales and age.

	Ya_Em.	Ya_Con.	Ya_Se.	Ya_C.	SI_CET	SI_PMP	SI_TA	SI_CSE
Ya_Em.	1	-	-	-	-	-	-	-
Ya_Con.	0.442 **	1	-	-	-	-	-	-
Ya_Se.	0.090	0.156 *	1	-	-	-	-	-
Ya_C.	0.339 **	0.429 **	0.346 **	1	-	-	-	-
SI_CET	0.340 **	0.267 **	0.030	0.168 *	1	-	-	-
SI_PMP	0.110	0.238 **	0.328 **	0.285 **	0.386 **	1	-	-
SI_TA	0.280 **	0.342 **	0.174 *	0.241 **	0.625 **	0.642 **	1	-
SI_CSE	0.206 **	0.232 **	0.150	0.120	0.536 **	0.429 **	0.651 **	1
Age	−0.026	0.116	0.223 **	0.137	−0.056	0.100	−0.097	−0.035

Note: Ya_Em.—Yakut_Empathy; Ya_Con.—Yakut_Conscience; Yakut_Se.—Yakut_Self-control; Yakut_C.—Yakut_Courtesy; SI_CET—SI_Critical existential thinking; SI_PMP—SI_Personal meaning production; SI_TA—SI_Transcendental awareness; SI_CSE—SI_Conscious state expansion. ** $p < 0.01$; * $p < 0.05$.

There are positive correlations between spiritual and moral intelligence scales in individuals in early adulthood. Respondents showed positive correlations of the moral intelligence subscale of empathy with critical existential thinking ($r = 0.340$), transcendental awareness ($r = 0.280$), and conscious state expansion ($r = 0.206$). The moral intelligence

conscience subscale showed positive correlations with critical thinking ($r = 0.267$), personal meaning production ($r = 0.238$), transcendental awareness ($r = 0.342$) and conscious state expansion ($r = 0.232$). The self-control subscale from the moral intelligence scale showed positive correlations with personal meaning production ($r = 0.328$) and transcendental awareness ($r = 0.174$). Courtesy, however, from the moral intelligence subscales showed a positive correlation with critical existential thinking ($r = 0.168$), personal meaning production ($r = 0.285$) and transcendental awareness ($r = 0.241$).

The second aim of the study was to make correlations between spiritual, moral intelligence and age (see Table 2). In the analyses conducted, a positive correlation of the self-control moral intelligence subscale with age was found ($r = 0.223$). The other subscales of moral and spiritual intelligence showed no significant correlation with age.

The third aim of the analyses conducted was to test whether personality traits play a predictive role in the relationship between spiritual intelligence and moral intelligence in young adults, a multiple regression analysis was conducted with personality traits as predictors of spiritual intelligence (cf. Table 3) and a multiple regression analysis with personality traits as predictors of moral intelligence (cf. Table 4). One assumption of the regression model is the presence of independence of observation errors. The Durbin-Watson test was used to assess autocorrelation among the residuals. All the models obtained had a Durbin-Watson index of 1.5–1.9, which justifies the use of regression, as the predictors are correlated with each other to a small degree. An input regression model was used in the analyses. This type of variable selection procedure allows all variables to be entered.

Table 3. Results of multiple regression analyses with personality traits as predictors of spiritual intelligence in specific domains.

Variable		β	T	F	R	R ²	AdjustedR ²
SI_CET				0.890	0.168	0.028	−0.003
SI_PMP				12.349 **	0.535	0.286	0.263
	TIPI_Sta	0.258	3.217 **				
	TIPI_Open	0.181	2.526 *				
	TIPI_Ex	0.190	2.327 *				
	TIPI_Con	0.156	2.082 *				
SI_TA				2.470 *	0.272	0.074	0.044
	TIPI_Open	0.203	2.489 *				
SI_CSE				0.880	0.167	0.028	−0.004

* $p < 0.05$; ** $p < 0.01$.

Table 4. Results of multiple regression analyses with personality traits as predictors of moral intelligence in specific domains.

Variable		β	T	F	R	R ²	AdjustedR ²
Ya_Em.				2.533 *	0.276	0.076	0.046
	TIPI_Sta	−0.217	−2.381 *				
	TIPI_Ex	0.220	2.370 *				
Ya_Con.				2.968 *	0.296	0.088	0.058
	TIPI_Agr	0.189	2.352 *				
	TIPI_Open	−0.183	−2.259 *				
Ya_Se.				11.083 **	0.514	0.265	0.241
	TIPI_Sta	0.445	5.470 **				
Ya_C.				4.199 **	0.346	0.120	0.091
	TIPI_Agr	0.228	2.885 **				

* $p < 0.05$; ** $p < 0.01$.

A regression model of the dependence of spiritual intelligence on four predictors was found to be statistically significant $F(5,154) = 12.349$, $p < 0.001$; the model explains 26.3% of the variance in the dependent variable. Emotional stability proved to be the most

important predictor in explaining personal meaning production ($\beta = 0.258$). Next, in terms of importance, was extraversion ($\beta = 0.190$), followed by openness to experience ($\beta = 0.181$) and conscientiousness ($\beta = 0.156$).

A regression model of the dependence of moral intelligence dimension of self-control on a single predictor was found to be statistically significant $F(5.154) = 11.083$, $p < 0.001$. The model explains 24.1% of the variance. Emotional stability proved to be a significant predictor ($\beta = 0.445$).

4. Discussion

In the research conducted, the first aim was to examine the relationship between spiritual and moral intelligence in people in early adulthood from Poland. The second aim was, when analysing the study group, to additionally take into account age and its relationship with spiritual and moral intelligence. The third aim was to examine the relationship between spiritual and moral intelligence and personality traits.

The analyses conducted in the first hypothesis revealed the presence of positive relationships between the dimensions of spiritual intelligence (critical existential thinking, personal meaning production, transcendental awareness and conscious state expansion) and the dimensions of moral intelligence (empathy, conscience, self-control and courtesy) in people in early adulthood. In a study by [Ramezanzadeh and Moslehamirdehi \(2020\)](#), there was a similar association between spiritual and moral intelligence. Spiritual and moral intelligence have been shown to be helpful in solving one's own and other people's problems. They contribute to a better understanding of one's own and others' difficulties in life ([Emmons 1999](#); [Nasel 2004](#)). On the basis of analyses, it appears that a better knowledge of oneself in the world and the ability to ask existential questions may be helpful in understanding and experiencing difficulties experienced by other people ([Borba 2001](#); [Nasel 2004](#)). The ability to experience normal as well as deeper states' and experience deeper states of consciousness has been shown to be helpful in motivating oneself to act for others ([Borba 2001](#); [Zohar and Marshall 2004](#)). A person, according to analyses, who has a critical view of their life, skills and life goals, is more likely to be guided by principles of right action in that life ([Borba 2001](#); [King 2008](#)). Living in harmony with one's life goals allows one to better adhere to certain norms and rules in daily functioning ([King and DeCicco 2009](#); [King 2008](#)). The ability to build harmony with the physical world, one's own "I", to enter and go beyond higher states of consciousness promotes actions in line with one's own rules of conduct ([Borba 2001](#); [Emmons 2000a](#); [King 2008](#); [Zohar and Marshall 2004](#)). According to the analyses, people who experience connectivity with the world and their actions are more in control of their actions and act in accordance with the norms ([Borba 2001](#); [King 2008](#)). The results of the conducted analyses allowed us to perceive a relationship between critical reference to the importance of one's goals, oneself in the world and the manifestation of caring, positive feelings towards other people ([King 2008](#); [Lee and Hwang 2016](#); [Yakut and Yakut 2021](#)).

In addition, when analysing the study group, age was taken into account as a factor that could contribute to a better understanding of the functioning of the analysed group. In the analyses conducted, there was a relationship between the subscale of moral intelligence self-control and age. Self-control is an important element in the formation of morality, the regulation of behaviour ([Hirtenlehner and Kunz 2016](#); [Morán-Soto and Benson 2018](#); [Olivares and Ceglie 2020](#); [Vitell et al. 2009](#)). Similar correlations in ongoing research were seen by [Tangney et al. \(2004\)](#), who showed that a person with high levels of self-control has greater attachment to professed values and, thus, finds it more difficult to violate professed moral principles. Previous research indicates that self-control is associated with age ([Greenberg 2008](#); [Pratt 2016](#)). By adolescence, there is a propensity for sensation-seeking in young people, a greater need to take risks. In later stages of life, self-control is somewhat stabilised due to the maturation processes taking place ([Caspi and Roberts 2001](#); [Hay and Meldrum 2016](#); [Pratt 2016](#)).

The relationship between spiritual intelligence, moral intelligence and personality traits was also analysed in the third hypothesis. Personality traits, as indicated by the results of the analyses, play a predictive role in the relationship between spiritual intelligence and moral intelligence in early adolescents. In the case of spiritual intelligence, the dimension of personal meaning making had the best fit, while in moral intelligence the dimension of self-control in association with personality traits had the best fit.

For the spiritual intelligence dimension of creating personal meaning, emotional stability, extraversion, openness to experience and conscientiousness were found to be significant predictors. Emotionally stable individuals are characterised by calmness, the ability to cope with stress, and the absence of feelings of inner tension and irritability (Kraczla 2017). They more easily perceive the significance of life events experienced and have a sense of control over their lives (King 2008).

Extraversion was also found to be a positive predictor of spiritual intelligence. Individuals characterised as sociable, friendly in social interactions, and entering new situations are more likely to establish the importance of life goals, define their interests and also set life plans (King 2008; Shiner and DeYoung 2013; Smillie et al. 2019; Sun et al. 2019). Sternberg (1997) saw similar relationships.

Additionally, openness to experience is a predictor of spiritual intelligence, which has been confirmed in ongoing research. Openness to experience characterises people who are eager to engage in new tasks, demonstrate cognitive curiosity (Schwaba 2019), and seek creative solutions to problems when experiencing difficulties (Gardner 2000; Kandler et al. 2016; Nasel 2004). People who are open to experiences perceive meaning in the daily actions they take, both positive and negative (King 2008).

Conscientiousness has also been shown to be an important predictor of the personal meaning-making dimension of spiritual intelligence. Conscientious individuals who are characterised by being responsible to others, following rules, and striving to maintain high standards are more likely to seek meaning in experienced difficult situations (King 2008; Nasel 2004). They show greater self-motivation, which provides them with greater stability, dutifulness and a sense of meaning in the activities they pursue (Jackson and Roberts 2017; Shiner and DeYoung 2013). Research by Saroglou (2010) also found a positive relationship between conscientiousness and spiritual intelligence. A conscientious person relates his or her activities to professed values, seldom succumbs to negative emotions, and experiences a dreamlessness of pursued activities.

Spiritual intelligence has been shown to be positively related to personality traits: extraversion, conscientiousness and agreeableness, (Amrai et al. 2011) and emotional stability (Madalaimuthu and Kadiravan 2016).

Emotional stability has been shown to play an important predictive role in moral intelligence in the self-control dimension. Emotionally stable individuals cope better with tension and stress (Kraczla 2017), in situations where it is necessary to optimise their own actions (Lee and Hwang 2016). Even when experiencing various stressors, they are able to defend the values that are most important to them act in accordance with their conscience and take responsibility for their actions (Borba 2001; Lennick and Kiel 2005). Being able to control one's own actions contributes to being more in line with certain norms of behaviour (Borba 2001).

The research carried out has identified some links between spiritual and moral intelligence in people in early adulthood. Some connections between spiritual intelligence, moral intelligence and personality traits were also recognised. The changes taking place in the personality of young people are conducive to the formation of a mature personality characterised by emotional stability, openness to experience, extraversion, conscientiousness and self-control (Bleidorn et al. 2014; Roberts and Mroczek 2008).

5. Limitations

The research was carried out on a group of 160 people with a clear female predominance. In conducting similar surveys in the future, it would be advisable to aim for equal groups of respondents. In conducting the research, the researchers relied on the availability of the respondent. Given that the survey sample does not accurately represent the population, the analyses conducted have a lower level of generalisability compared to probability sampling. In the future, when conducting this type of research, it would be worthwhile to use stratified sampling. The age of the people analysed is also a limitation of the research conducted. The sample is clearly dominated by young adults in the upper age range of early adulthood. When planning similar research in the future, it would be worth extending the age range of the persons analysed to include the developmental period of middle adulthood, in which the cognitive processes taking place, personality changes (larger distance, autonomy, level of reflexivity) may be relevant to the moral and spiritual functioning of persons. The research presented here is a preliminary report allowing us to see some relationships between spiritual and moral intelligence and personality traits. Further in-depth analyses are necessary to gain a deeper understanding of the relationships between the variables analysed.

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