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THE SCALE OF SPIRITUAL TRANSCENDENCE: CONSTRUCTION AND VALIDATION*

This paper presents the construction of the Scale of Spiritual Transcendence (STD), which is based on Ralph Piedmont's conception of spiritual transcendence. Piedmont defined it as the ability to transcend a direct sense of time and place and to perceive life from a broader, more objective perspective. The obtained measure is characterized by good psychometric parameters. In the validation process ($N = 1859$), the relations of the Scale of Spiritual Transcendence (the global result and two main subscales) with existing measures of social approval, religiosity and spirituality, materialism, and personality traits were tested. The presented scale could be implemented in experimental and correlational studies in this field. It is designed for studies on populations above the age of 16.

Keywords: spiritual transcendence, measurement, construction.

INTRODUCTION

The problem of spirituality becomes more and more relevant in contemporary psychology, and the psychology of religion is more and more often characterized as the psychology of religion and spirituality. Spirituality is also the object

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of research interest in areas other than psychology of religion domains. For example, it has been included in the psychology of personality, social psychology, the psychology of management, and psychotherapy (e.g., Paloutzian & Park, 2005). Reflecting on the general increase in the significance of spirituality in the social sciences, Grygier (2010) reports that before the year 2000 the term *spirituality* was indexed in *Institute for Scientific Information* less than 100 times per year but by 2008 the figure went up to 489 times per year. This illustrates the enormous increase in the number of publications resulting from an amplified interest in this phenomenon (see also Różycka & Skrzypińska, 2011; Skrzypińska, Grzymała-Moszczyńska, & Jarosz, 2013).

Spirituality has acquired many theoretical concepts and methods of assessment (e. g. Davis et al., 2009; Hill, 2005; Hill & Pargament, 2003; Kapuscinski & Masters, 2010; Yakushko, 2011). Definitions of spirituality could be divided into two groups; one assumes that spirituality should be understood as a relationship with God (or Higher Power) while the other does not make this assumption (cf. Westerink, 2012). Among those that belong to the former group, several definitions could be mentioned. Benner's (1989, p. 20) definition states that spirituality is "the human response to God's gracious call to a relationship with Himself." Armstrong (1995, p. 3, as cited in Zinbauer & Pargament, 2005) presents spirituality as "the presence of a relationship with a Higher Power that affects the way in which one operates in the world." In the latter group, among the classical approaches, Doyle's definition (1992, p. 302) is worth mentioning: "The search for existential meaning." For Shafranske and Gorsuch (1984, p. 231), spirituality is "a transcendent dimension within human experience . . . discovered in moments in which the individual questions the meaning of personal existence and attempts to place the self within a broader ontological context." While definitions may differ, common elements of spirituality exist that relate to unity, transcendence, and search for meaning. After analyzing 73 definitions of spirituality in English-language works related to health sciences, Chiu, Emblen, Van Hofwegen, Sawatzky, and Meyerhoff (2004), identified several common components: (a) existential reality or meaning and a way of being in life; (b) transcendence; (c) connectedness and wholeness; (d) the presence of unifying power or energy.

In comparison with the English-language literature, there are few Polish-language methods for assessing spirituality (e.g., Jarosz, 2011). Among the few that exist there is the Self-Description Questionnaire by Heszen-Niejodek and Gruszczyńska (2004), Socha's Feeling of Sacredness Test (2007), the Spiritual Sphere Questionnaire by Skrzypińska and Karasiewicz (paper printed on pp. 513-538 of this issue), and Owczarek's (2004) unpublished scale, which includes

a small group of measures dedicated only to assessing spirituality. However, none of the methods mentioned is firmly based on a theoretical conception.

THE THEORETICAL BACKGROUND OF SCALE CONSTRUCTION

Because there is confusion regarding the definitions of spirituality in the literature, it is important to base the new method on a strictly specified definition and theory. To fill the gap in Polish methods, the authors have decided to create a scale based on one of the most important contemporary theories of spirituality – Ralph Piedmont’s (1999, 2001) Spiritual Transcendence Theory. It was selected for several reasons, including but not limited to: exact localization of spirituality in personality, detailed description of its relationship to religiosity, and a multitude of empirical works from different countries and areas of research that refer to this theory (e.g., Diessner, Solom, Frost, Parsons, & Davidson, 2008; Carter, 2009; Burris, Sauer, & Carlson, 2011; Tomcsanyi, Martos, Itztes, Horvath-Szabo, Szabo, & Nagy, 2013). Piedmont defines spiritual transcendence as “the capacity of individuals to stand outside of their immediate sense of time and place to view life from a larger, more objective perspective” (Piedmont, 1999, p. 988). This definition could be considered the opposite of materialism (Piedmont, 2004), which is defined as the desire to possess goods and the satisfaction of actually having them (Kasser, 2002; Richins & Dawson, 1992; Zawadzka, 2006).

In Piedmont’s opinion, spiritual transcendence is a personality trait that is common for people all over the world. He claims that it supplements the Big Five model of personality traits, and he presents persuasive arguments for this (e.g., Piedmont, 1999, 2007; Piedmont, Ciarrochi, Dy-Liacco, & Williams, 2009; cf. Saucier & Goldberg, 1998; Rican & Janosova, 2010). Piedmont identifies seven aspects (or facets) of spiritual transcendence: prayer fulfillment (feelings of joy and contentment that result from personal encounters with a transcendent reality, fulfillment in prayer or meditation), universality (a belief in the unitive nature of life), connectedness (a belief that one is part of a larger human orchestra whose contribution is indispensable in creating life’s continuing harmony), tolerance for paradoxes (the ability to live with inconsistencies and contradictions in one’s own life, to think of things in terms of “both-and” rather than “either-or,” tolerance for inconsistency and incoherence), nonjudgmentality (an ability to accept life and others on their own terms and to avoid making va-

lue judgments; a sensitivity to the needs and pains of others), existentiality (a desire to live in the moment and to embrace the experiences that life confronts us with as opportunities for growth and joy), gratefulness (an innate sense of wonder and thankfulness for all the many shared and unique features of one's life). The authors of the article believe it is necessary to add one more aspect to this list. This additional aspect was described during a discussion between persons working on this scientific issue and refers to the feeling of being part of a cause or idea more important than oneself. It was decided to give it a provisional name: *ideologicality*.

Piedmont assumes that spiritual transcendence is the sixth trait of personality, so during the construction of his own scale he rejected all aspects of spiritual transcendence that correlated with any trait from the Big Five model (Costa & McCrae, 1992). As a consequence, his measure, named ASPIRES, consists of only three components: prayer fulfillment, universality, and connectedness (Piedmont, 2010).

Spiritual transcendence is closely related to religiosity. Piedmont (2010) regards spiritual transcendence as a personality trait and religiosity as a sentiment (i.e., a phenomenon that emerged from personality traits, but is not one of them). Religiosity and spirituality have a strong positive connection, although they are not identical. Other authors formulate the relationship between religiosity and spirituality differently, treating them as separate phenomena (Paluczuk, 2004). Sometimes religiosity is seen as a form of spirituality (Libiszowska-Żótkowska, 2010; Socha, 2010; Zinnbauer & Pargament, 2005), and sometimes spirituality is seen as a form of religiosity (Jeżowski, 2010; Zinnbauer & Pargament, 2005; Saroglou, 2011). Still, others argue that sometimes these two phenomena partly overlap each other (Saucier & Skrzypińska, 2006) or even that the two concepts are synonymous (Grom, 2009). Regardless of how they define the relation between them, most of authors indicate a positive relationship between spirituality and religiosity. Similar conclusions have been drawn from correlational research (e.g., Piedmont, 2010; Saroglou & Galand, 2004).

On the basis of the connections described above and in order to confirm the validity of the Scale of Spiritual Transcendence (STD), the following variables were measured in this study: materialism, religiosity, and all the traits of Big Five model. It was expected that the level of spiritual transcendence would be higher among clergy participants than among other respondents and that it would be higher among believers than among nonbelievers. Correlations of our newly constructed method with existing measures of spirituality were computed; the

relationship of STD with tendency to agree, tendency to give extreme answers, and with the measure of social approval were also examined.

PSYCHOMETRIC PROPERTIES OF THE SCALE OF SPIRITUAL TRANSCENDENCE (STD)

Samples

During the construction of STD, 1859 participants from four samples were examined. In Sample I, in addition to STD, some of the participants answered questions about religious practices. Sample I consisted of 1859 persons (164 men and 557 women; 269 participants did not indicate their gender) who ranged from 18 to 61 years of age. Sample II consisted of 614 participants (157 men and 449 women; 8 participants did not indicate their gender) ranging in age from 18 to 71 years. Participants answered questions for the Religious Fundamentalism Scale and Religious Life Inventory, in addition to the STD; some of the participants completed the NEO-FFI inventory, the Materialism Scale, the Self-Description Questionnaire, and the Spiritual Sphere Questionnaire. In Sample III, data were collected from 128 participants (33 men and 78 women; 17 participants did not indicate their gender) ranging in age from 19 to 49 years. These participants filled the STD twice, with a two-week break between the first and the second time. They also completed the Social Approval Questionnaire and the Likes Scale. In Samples I – III, the selection of candidates was based on convenience. In the case of Sample IV, data were collected from a purposive sample of 129 members of the clergy: 48 women (nuns), and 81 men (30 priests and 51 monks) aged from 23 to 75. They filled only STD.

Measures

Social Approval Questionnaire. This questionnaire measured social approval (Wilczyńska & Drwal, 1995).

Jakubowska's (2005) Likes Scale. This scale was used to measure tendency to agree and tendency to give extreme answers.

Self-Description Questionnaire by Heszen-Niejodek and Gruszczyńska (2004). This method was used for spirituality assessment.

Spiritual Sphere Questionnaire by Skrzypińska and Karasiewicz (paper printed on pp. 513-538 of this issue). This questionnaire was used for spirituality assessment.

Materialism Scale. This scale measured satisfaction from owning material goods (Zawadzka, 2006).

Socha's (1999) adaptation of Religious Life Inventory (Batson & Schoenrade, 1991a, 1991b). This instrument measured religious orientations: intrinsic, extrinsic, and quest.

Religious Fundamentalism Scale (Altemeyer & Husnberger, 1992). This scale measured religious fundamentalism, understood as total acceptance of religious dogmas.

NEO-FFI Personality Inventory (McCrae & Costa, 1987) as adapted by Zawadzki, Strelau, Szczepaniak, and Śliwińska (1998).

The Preliminary Stage in the Construction of the Scale of Spiritual Transcendence

The initial set of items in the Scale of Spiritual Transcendence (STD) consisted of 40 statements. They referred to eight spirituality facets, seven of which were taken straight from Piedmont's spiritual transcendence conception; the last one was defined by the authors as a feeling of unity with a cause or idea transcending the individual self. The items generated were based on Piedmont's ASPIRES (2010) and analyses of particular spirituality facets. At first, there were five questions for each facet. The selection of items was based on the results of factor analysis and reliability analysis carried out for subscales. Items with loadings lower than .40, with high loadings on a wrong factor, and items decreasing the reliability of subscales were eliminated.

Factor Analysis Results

Factor analysis was conducted. In particular, the principal component analysis was used with Oblimin rotation because the orthogonality of factors was not assumed for data collected in Sample I. Based on scree plot analysis, we decided to distinguish two factors. The first factor, with the eigenvalue of 9.41, explained 23.53% of variance. The second one, with the eigenvalue of 4.14, explained 10.34% of variance. Based on factor loading values and reliability analysis, 11 items were included in the first subscale (items decreasing reliability were excluded). This subscale was named "Transcendence Proper." It consists of items that refer to the following facets: prayer fulfillment, universality, connectedness, and ideologicity. Additionally, 11 items were included in the second subscale, which was named "Spiritual Openness." This one consists of items referring to acceptance of paradoxes, nonjudgmentality, existentiality, and gratefulness.

Table 1.

Factor Loadings of Particular Items in the First and Second Factors Obtained in Factor Analysis (with Oblimin Rotation)

	Factor 1	Factor 2
Eigenvalue	9.41	4.14
% of explained variance	23.53	10.34
I experienced deep satisfaction and joy trough prayer or meditation	.80	.03
I find inner strength and/or peace from my prayers or meditations	.79	-.01
There is a higher plane of consciousness or spirituality that binds all people	.76	.17
I believe there is a larger plan to life	.71	.33
The needs of my body do not keep me from my prayers or meditations	.68	.04
I believe that at a certain level my life is closely tied with the whole humanity	.67	.26
I feel that I am part of humanity, needed for maintaining harmony	.66	.36
I believe there is a larger meaning to life	.65	.42
I pray or meditate to obtain a higher level of spiritual consciousness	.64	-.01
When I pray or meditate, I forget about the events of this world	.64	-.06
I feel that I am a part of a bigger cause, exceeding me	.64	.32
I feel that at a certain level all of us share a common bond	.62	.12
I feel I am a better person due to participating in causes more important than me	.58	.41
I still have strong emotional ties with someone that has died	.44	.16
I am a link in a chain of my family's heritage, a bridge between the past and the future	.43	.36
It is worthwhile to subordinate your entire life to a really important cause	.41	.22
People whom I really admire are the ones who sacrificed everything for the sake of important causes	.40	.30
Images of some of my dead relatives still influences my current life	.30	.18
There is no one right way of living	-.27	.23

Participating in the realization of causes important to me gives me a sense of purpose in life	.33	.66
I am grateful for the chances I have received in my life	.40	.65
Everyday experiences are opportunities for entertainment and development for me	.08	.64
Every moment of my life is important to me	.23	.62
I feel that fighting with difficulties really enriches me	.28	.61
I feel that my life is a special miracle	.47	.60
I can enjoy current moments	.06	.59
I feel deeply grateful for all that happened to me in my life	.49	.58
My life is the most beautiful gift	.39	.55
I try not to close my mind to things strange and unusual	.14	.50
The uniqueness of my life astonishes me	.33	.50
I appreciate that life is full of paradoxes	-.05	.49
I happily accept all that life brings	.20	.49
World is interesting thanks to including plenty of contradictions	-.13	.46
In many situations, truth is more complicated than it appears	.11	.45
I am concerned about those who will come after me	.34	.43
I try to understand others instead of judging them	.09	.43
I do not judge anyone's life	.14	.41
I believe I do not have the right to judge other people's actions	.22	.40
I avoid judging others	.05	.29
I accept other people as they are	-.07	.23

The factor loadings that qualify a given item for inclusion in one of the subscales are bolded. The remaining items were not included because of low factor loadings, because of similar factor loadings on two factors, or because they decreased the reliability of subscales.

Results on the distinguished subscales correlated significantly for Sample I, $r = .32$, $p < .001$. For Sample II, this correlation was $r = .31$, $p < .01$, and for Sample III $r = .48$, $p < .001$. This being the case, the total score for the Scale of Spiritual Transcendence was also calculated.

Reliability

The internal consistency of scales was measured based on data obtained in Sample I, and stability was measured based on data from Sample III. For the Transcendence Proper subscale, internal consistency was $\alpha = .89$, and stability $r = .92$. For the Spiritual Openness subscale, these coefficients were $\alpha = .80$, and $r = .81$, respectively. The internal consistency of the whole scale was $\alpha = .87$, and stability was $r = .91$.

Mean STD Subscale Scores and STD Total Score

The mean score for the whole STD (Sample I) was 2.87 ($SD = 0.45$). For the subscales, it was $M = 2.61$, $SD = 0.64$ for the Transcendence Proper subscale and $M = 3.13$, $SD = 0.46$ for the Spiritual Openness subscale.

Relations Between STD Scores and Gender and Age

The relationship between STD and age as well as gender were studied on data from Sample II. Both subscales correlated positively with age ($r = .16$, $p < .01$ in the case of Transcendence Proper, $r = .12$, $p < .01$ in the case of Spiritual Openness), as did also the total STD score ($r = .17$, $p < .01$).

Women ($M = 2.95$, $SD = 0.40$) had higher scores on the STD than men ($M = 2.75$, $SD = 0.46$), $t(173.65) = 4.33$, $p < .001$. On the Transcendence Proper subscale, women's scores ($M = 2.66$, $SD = 0.61$) were higher than men's, ($M = 2.42$, $SD = 0.67$), $t(516) = 3.60$, $p < .001$, which was also the case for the Spiritual Openness subscale, $t(516) = 4.03$, $p < .001$ ($M = 3.24$, $SD = 0.39$ for women, $M = 3.07$, $SD = 0.47$ for men).

Correlations of the STD with Social Approval and Answer Giving Styles

Table 2.

Correlation Coefficients (Pearson's r) Between the Scale of Spiritual Transcendence (STD) and Social Approval as Well as Styles of Giving Answers ($N = 128$)

	Transcendence Proper	Spiritual Openness	Scale of Spiritual Transcendence
Need for social approval	.15	.21*	.20*
Tendency to agree	-.04	.12	.08
Tendency to give extreme answers	-.04	-.01	-.03

Note. * $p < .05$ (two-tailed)

The total score for the Scale of Spiritual Transcendence and the Spiritual Openness subscale correlated weakly with results on the Social Approval Questionnaire (KAS). There was no correlation between KAS and Transcendence Proper. Neither the total score on the STD, nor the results in the subscales correlated with the tendency to agree or tendency to give extreme answers.

The Scale of Spiritual Transcendence and Other Measures of Spirituality

Table 3.

Correlation Coefficients (Pearson's r) Between the Scale of Spiritual Transcendence (STD) and Measures of Spirituality ($N = 82$) as Well as Materialism ($N = 393$)

	Transcendence Proper	Spiritual Openness	Scale of Spiritual Transcendence
Religious Attitudes	.72***	.10	.53***
Ethical Sensitivity	.49***	.25*	.45***
Harmony	.37***	.20*	.35**
Self-Description Questionnaire (total score)	.66***	.21*	.55***
Lack of Relation with Higher Power	-.56***	-.01	-.37***
Aspirituality	-.60***	-.07	-.44***
State of Spiritual Sphere	.62***	.20*	.52***
Dynamics of Spiritual Sphere	.74***	.14	.56***
Materialism	-.14**	-.15**	-.18***

Note. * $p < .05$ (two-tailed), ** $p < .01$ (two-tailed), *** $p < .001$ (two-tailed)

Correlations with Self-Description Questionnaire. The Transcendence Proper subscale correlated with the total score and all the subscales of the Self-Description Questionnaire (KS), as did the STD total score. In case of Spiritual Openness, weak correlations with Ethical Sensitivity, Harmony, and KS total score were observed. There was no correlation, however, between Spiritual Openness and Religious Attitudes.

Correlations with the Spiritual Sphere Questionnaire. Transcendence Proper correlated with all the scales of the Spiritual Sphere Questionnaire, positively with the State of Spiritual Sphere and the Dynamics of Spiritual Sphere, and negatively with the Aspirituality and Lack of Relation with Higher Power. The strongest correlation occurred for the Dynamics of Spiritual Sphere. Analogous results were obtained for the STD total score. The Spiritual Openness subscale correlated positively but weakly with the State of Spiritual Sphere.

Correlations with the Materialism Scale. The results on the subscales and STD total score correlated negatively with the Materialism Scale.

The Scale of Spiritual Transcendence (STD) and Religiosity

Correlations with religiosity measures. Transcendence Proper correlated with all of the used measures of religiosity. Its correlations with Extrinsic and Quest Religiosity were relatively weaker. A similar pattern of correlations occurred for STD total score. Spiritual Openness correlated weakly only with Quest Religiosity (see Table 4).

Table 4.

Correlation Coefficients (Pearson's r) Between the Scale of Spiritual Transcendence (STD) and Measures of Religiosity (N = 526)

	Transcendence Proper	Spiritual Openness	Scale of Spiritual Transcendence
Religious Practices	.55***	.02	.42***
Intrinsic Religiosity	.67***	.04	.52***
Extrinsic Religiosity	.29***	.00	.22***
Quest Religiosity	.33***	.16***	.32***
Religious Fundamentalism	.60***	-.01	.44***

Note. * $p < .05$ (two-tailed), ** $p < .01$ (two-tailed), *** $p < .001$ (two-tailed)

Comparison between believers' and nonbelievers' scores. In Sample II, based on self-identification, groups of believing Catholics ($N = 433$) and nonbelievers ($N = 61$) were distinguished. Believers ($M = 2.96$, $SD = 0.39$) obtained higher scores on the STD than nonbelievers ($M = 2.52$, $SD = 0.44$), $t(502) = 8.03$, $p < .001$. Also, in the case of Transcendence Proper, the results of believers ($M = 2.71$, $SD = 0.55$) were higher than those of nonbelievers ($M = 1.87$, $SD = 0.64$), $t(72.89) = 9.81$, $p < .001$. In the case of Spiritual Openness, there was no difference between believers ($M = 3.21$, $SD = 0.41$) and nonbelievers ($M = 3.17$, $SD = 0.46$), $t(502) = 0.66$, $p = .508$.

Comparison between clergy and lay participants. The results of 129 clergy participants (Sample IV) were compared with the results of participants from Sample I. Clergy participants ($M = 3.20$, $SD = 0.43$) obtained higher STD scores than laypersons ($M = 2.61$, $SD = 0.64$), $t(1069) = 7.79$, $p < .001$. Also, on the Transcendence Proper subscale, clergy participants ($M = 3.23$, $SD = 0.50$) had higher scores than other participants ($M = 2.61$, $SD = 0.64$), $t(188.11) = 12.76$, $p < .001$. There was no difference between clergy ($M = 3.16$, $SD = 0.46$) and other participants ($M = 3.13$, $SD = 0.46$), $t(1069) = 0.74$, $p = .536$ in the case of the Spiritual Openness subscale.

Associations Between the STD and Fundamental Personality Traits

In the case of the Transcendence Proper subscale, no correlations with traits from the Big Five personality model occurred. The Spiritual Openness subscale correlated negatively with Neuroticism and positively with Extraversion, Openness, and Conscientiousness. STD total score correlated positively with Extraversion, Openness, and Conscientiousness (see Table 5).

Table 5.
Correlation Coefficients (Pearson's r) Between the Scale of Spiritual Transcendence (STD) and NEO-FFI ($N = 239$)

	Transcendence Proper	Spiritual Openness	Scale of Spiritual Transcendence
Neuroticism	.06	-.24***	-.07
Extraversion	.10	.29***	.22**
Openness	.13	.21**	.19**
Agreeableness	.09	.09	.11
Conscientiousness	.09	.20**	.16*

Note. * $p < .05$ (two-tailed), ** $p < .01$ (two-tailed), *** $p < .001$ (two-tailed)

GENERAL DISCUSSION

This study developed a research tool for assessing spiritual transcendence (as defined by Piedmont, 1999). The questionnaire consists of two subscales: Transcendence Proper and Spiritual Openness. It contains 11 items for each subscale, but it is also possible to calculate one general result for the whole instrument. Both subscales as well as the whole questionnaire are characterized by high reliability, internal consistency, and time stability. The Scale of Spiritual Transcendence (STD) is relatively free from the impact of the social approval variable; bias or tendency to answer by choosing extreme options does not seem to have affected the results, either.

Transcendence Proper correlated significantly with all the implemented tools for assessing religiosity and spirituality. Additionally, the results differentiated between believers and non-believers as well as between clergy and lay participants. One could state that this subscale measures the phenomenon strictly and that it is similar in accuracy to other established measures of spirituality.

Spiritual Openness correlated only with one particular scale measuring spirituality and religiosity, namely with Quest Religiosity. There were no differences in scores between believers and nonbelievers or between clergy and lay participants. Thus, Spiritual Openness apparently measures those aspects of spirituality which are often overlooked by other questionnaires and related to the non-religious spiritual domain.

The General Transcendence subscale was found to be unrelated to basic personality traits. It is worth of noting that this subscale contains questions that are manifestation of Piedmont's three spiritual transcendence aspects: prayer fulfillment, universality, and connectedness (i.e. the same as the ASPIRES, which is based on Piedmont, 2010). On the other hand, Spiritual Openness correlated with four of five basic personality traits, similar to what other measures of spirituality – e.g., Saroglou's (2002), MacDonald's (2000) and Schnell's (2012) – have found. Interestingly, this scale primarily consists of questions referring to aspects originally identified by Piedmont in his spiritual transcendence conception and finally rejected on the basis of empirical research. As a result, one could state that the STD employs a broader operationalization of the spiritual transcendence construct than the ASPIRES does. It is a complex comprehensive instrument for the assessment of spiritual transcendence, including those of its aspects that overlap with basic personality traits.

In summary, it can be stated that the Scale of Spiritual Transcendence is a useful tool for the assessment of spiritual transcendence. It is characterized by

high reliability and proved validity. Additionally, it measures two distinct but strictly interrelated aspects of spirituality. Transcendence Proper, which is strictly related to religiosity and independent of basic personality traits from the Big Five model, is equivalent to the spirituality construct measured by other established tools such as Piedmont's ASPIRES. Spiritual Openness, which is related to basic personality traits and independent from religiosity, measures the aspects of spirituality commonly overlooked by existing methods. Spiritual Openness comprises positively evaluated aspects of spirituality, sometimes described as virtues related to spirituality: nonjudgmentality, respect toward others, existentiality, tolerance of paradoxes, and gratefulness (see e.g. Trzebińska, 2008). Only when both aspects of spirituality are considered will one be able to have full insight into the spiritual nature of the human individual.

REFERENCES

- Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *The International Journal for the Psychology of Religion*, 2(2), 113-133.
- Batson, C. D., & Schoenrade, P. (1991a). Measuring religion as quest: Validity concerns. *Journal for the Scientific Study of Religion*, 30, 416-429.
- Batson, C. D., & Schoenrade, P. (1991b). Measuring religion as quest: Reliability concerns. *Journal for the Scientific Study of Religion*, 30, 430-447.
- Benner, D. G. (1989). Toward a psychology of spirituality: Implications for personality and psychotherapy. *Journal of Psychology and Christianity*, 5, 19-30.
- Burriss, J. L., Sauer, S. E., & Carlson, C. R. (2011). A test of religious commitment and spiritual transcendence as independent predictors of underage alcohol use and alcohol-related problems. *Psychology of Religion and Spirituality*, 3(3), 231-240.
- Carter, J. (2009). Transformational leadership and pastoral leader effectiveness. *Pastoral Psychology*, 58(3), 261-271.
- Chiu, L., Emblen, J. D., Van Hofwegen, L., Sawatzky, R., & Meyerhoff, H. (2004). An integrative review of the concept of spirituality in the health sciences. *Western Journal of Nursing Research*, 26(4), 405-428.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *NEO PI-R professional manual*. Odessa, FL: Psychological Assessment Resources.
- Davis, D. E., Worthington Jr., E. L., Hook, J. N., Van Tongeren, D. R., Green, J. D., & Jennings II, D. J. (2009). Relational spirituality and the development of the similarity of the offender's spirituality scale. *Psychology of Religion and Spirituality*, 4(1), 249-262.
- Diessner, R., Solom, R. C., Frost, N. K., & Parsons, L. (2008). Engagement with beauty: Appreciating natural, artistic and moral beauty. *The Journal of Psychology*, 142(3), 303-329.
- Doyle, D. (1992). Have we looked beyond the physical and psychosocial? *Journal of Pain and Symptom Management*, 7, 302-311.
- Grom, B. (2009). *Psychologia religii. Ujęcie systematyczne*. Cracow: Wydawnictwo WAM.
- Grygier, P. (2010). Duchowość (spirituality) jako przedmiot badań i analiz socjologicznych. Analiza cytowań bibliograficznych. In M. Libiszowska-Żółtkowska & S. Grotowska (Eds.),

- Religijność i duchowość – dawne i nowe formy* (pp. 231-261). Cracow: Zakład Wydawniczy NOMOS.
- Heszen-Niejodek, I., & Gruszczyńska, E. (2004). Wymiar duchowy człowieka, jego znaczenie w psychologii zdrowia i jego pomiar. *Przegląd Psychologiczny*, 47(1), 15-31.
- Hill, P. C. (2005). Measurement in the psychology of religion and spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 43-61). New York: The Guilford Press.
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality. *American Psychologist*, 58(1), 64-74.
- Hill, P. C., Pargament, K. I., Hood, R. W., McCullough, M. E., Swyers, J. P., Larson, D. B., & Zinbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, 30, 51-57.
- Jakubowska, U. (2005). *Ekstremizm polityczny. Studium psychologiczne*. Gdańsk: GWP.
- Jarosz, M. (Ed.) (2011). *Psychologiczny pomiar religijności*. Lublin: Towarzystwo Naukowe KUL.
- Jeżowski, M. (2010). Duchowość – paradygmat socjologii religii czy socjologii moralności? A może socjologia duchowości? In M. Libiszowska-Żółtkowska & S. Grotowska (Eds.), *Religijność i duchowość – dawne i nowe formy* (pp. 66-78). Cracow: Zakład Wydawniczy NOMOS.
- Kapuscinski, A. N., & Masters, K. S. (2010). The current status of measures of spirituality: A critical review of scale development. *Psychology of Religion and Spirituality*, 4(2), 191-205.
- Kasser, T. (2002). *The high price of materialism*. Cambridge: MIT Press.
- Libiszowska-Żółtkowska, M. (2010). Od religijności rodzinnej do duchowości indywidualnej – z biografii studentów. In M. Libiszowska-Żółtkowska & S. Grotowska (Eds.), *Religijność i duchowość – dawne i nowe formy* (pp. 167-183). Cracow: Zakład Wydawniczy NOMOS.
- MacDonald, D. A. (2000). Spirituality: Description, measurement, and relation to the five factor model of personality. *Journal of Personality*, 68(1), 153-197.
- Mariański, J. (2010). Nowa duchowość – alternatywa czy dopełnienie religijności? In M. Libiszowska-Żółtkowska & S. Grotowska (Eds.), *Religijność i duchowość – dawne i nowe formy* (pp. 19-34). Cracow: Zakład Wydawniczy NOMOS.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.
- Mielicka, H. (2010). Religijny wymiar duchowości. In M. Libiszowska-Żółtkowska & S. Grotowska (Eds.), *Religijność i duchowość – dawne i nowe formy* (pp. 45-55). Cracow: Zakład Wydawniczy NOMOS.
- Owczarek, M. (2004). *Jakość życia a doświadczenia wewnętrzne*. (Unpublished doctoral dissertation). Warsaw: Cardinal Stefan Wyszyński University.
- Paloutzian, R. F., & Park, C. L. (Eds.) (2005). *Handbook of the psychology of religion and spirituality*. New York: The Guilford Press.
- Pawluczuk, W. (2004). Duchowość. In M. Libiszowska-Żółtkowska & J. Mariański (Eds.), *Leksykon socjologii religii. Zjawiska – badania – teorie* (pp. 90-92). Warsaw: Verbinum.
- Piedmont, R. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the Five-Factor Model. *Journal of Personality*, 67(6), 985-1013.
- Piedmont, R. (2001). Spiritual transcendence and scientific study of spirituality. *Journal of Rehabilitation*, 67, 4-14.
- Piedmont, R. (2004). The Logoplex as a paradigm for understanding spiritual transcendence. *Research in the Social Scientific Study of Religion*, 15, 262-284.
- Piedmont, R. (2007). Cross-cultural generalizability of the Spiritual Transcendence Scale to the Philippines: Spirituality as a human universal. *Mental Health, Religion & Culture*, 10(2), 89-107.

- Piedmont, R. (2010). *Assessment of spirituality and religious sentiments. Technical manual. Second edition*. Timonium, MD: published by the author.
- Piedmont, R., Ciarrochi, J. W., Dy-Liacco, G. S., & Williams, J. E. G. (2009). The empirical and conceptual value of the Spiritual Transcendence and Religious Involvement Scales for personality research. *Psychology of Religion and Spirituality, 1*(3), 162-179.
- Piedmont, R., & Wilkins, T. (2011, in press). Spirituality, religiousness, and personality: Theoretical foundations and empirical applications. In K. Pargament, J. Exline, & J. Jones (Eds.), *APA handbook of psychology, religion and spirituality*. Washington, DC: American Psychological Association.
- Rican, P., & Janosova, P. (2010). Spirituality as a basic aspect of personality: A cross-cultural verification of Piedmont's model. *International Journal for the Psychology of Religion, 20*, 2-13.
- Różycka J., & Skrzypińska K. (2011). Perspektywa noetyczna w psychologicznym funkcjonowaniu człowieka. *Roczniki Psychologiczne, 14*(2), 101-121.
- Saroglou, V. (2002). Religion and the five factors of personality: A meta-analytic review. *Personality and Individual Differences, 32*(1), 15-25.
- Saroglou, V. (2010). Religiousness as a cultural adaptation of basic traits: A Five-Factor Model perspective. *Personality and Social Psychology Review, 14*(1), 108-125.
- Saroglou, V. (2011). Believing, bonding, behaving, and belonging: The big four religious dimensions and cultural variation. *Journal of Cross-Cultural Psychology, 42*(8), 1320-1340.
- Saroglou, V., & Galand, P. (2004). Identities, values and religion: A study among Muslim, other immigrant, and native Belgian young adults after the 9/11 attacks. *Identity: An International Journal of Theory and Research, 4*, 97-132.
- Saucier, G., & Goldberg, L. R. (1998). What is beyond the Big Five? *Journal of Personality, 66*, 495-524.
- Saucier, G., & Skrzypińska, K. (2006). Spiritual but not religious? Evidence for two independent dispositions. *Journal of Personality, 74*(5), 1257-1292.
- Schnell, T. (2012). Spirituality with and without religion – Differential relationships with personality. *Archive for the Psychology of Religion, 34*, 33-61.
- Seidlitz, L., Abernethy, A. D., Duberstein, P. R., Evinger, J. S., Chang, T. H., & Lewis, B. L. (2002). Development of the Spiritual Transcendence Index. *Journal for the Scientific Study of Religion, 41*(3), 439-453.
- Shafranske, P., & Gorsuch, R. L. (1984). Factors associated with the perception of spirituality in psychotherapy. *Journal of Transpersonal Psychology, 16*, 231-241.
- Skrzypińska, K. (2004). Czy duchowość jest tożsama z religijnością? Nowe perspektywy badawcze. *Przegląd Religioznawczy, 4*, 13-25.
- Skrzypińska, K. (2008). Dokąd zmierzam? – duchowość jako wymiar osobowości. *Roczniki Psychologiczne, 1*, 39-57.
- Skrzypińska, K., Grzymała-Moszczyńska, H., & Jarosz, M. (2013). *Nauka wobec religijności i duchowości człowieka*. Lublin: KUL.
- Skrzypińska, K., & Karasiewicz, K. (2013). Granice duchowości – perspektywa druga – Kwestionariusz Sfery Duchowej. *Roczniki Psychologiczne, 16*(3), 485-509.
- Socha, P. (1999). Ways religious orientations work: A Polish replication of measurement of religious orientation. *The Journal for the Psychology of Religion, 9*, 209-228.
- Socha, P. (2007). Poczucie świętości jako rezultat przemiany poznawczej. *Przegląd Religioznawczy, 225*(3), 13-26.
- Socha, P. (2010). Duchowość jako przemiana. Nowa teoria duchowości i jej zastosowanie w badaniach. In M. Libiszowska-Żółtkowska & S. Grotowska (Eds.), *Religijność i duchowość – dawne i nowe formy* (pp. 262-274). Cracow: Zakład Wydawniczy NOMOS.

- Tomscanyi, T., Martos, T., Ittzes, A., Horvath-Szabo, K., Szabo, T., & Nagy, J. (2013). Spiritual transcendence and mental health of psychotherapists and religious professionals in a Hungarian adult sample. *International Journal for the Psychology of Religion, 23*(2), 161-170.
- Trzebińska, E. (2008). *Psychologia pozytywna*. Warsaw: Wydawnictwa Akademickie i Profesjonalne.
- Westerink, H. (2012). Spirituality in psychology of religion: A concept in search of its meaning. *Archive for the Psychology of Religion, 34*, 3-15.
- Wilczyńska, J., & Drwal, R. Ł. (1995). Opracowanie Kwestionariusza Aprobata Społecznej (KAS) J. Wilczyńskiej i R. Ł. Drwala. In R. Drwal (Ed.), *Adaptacja kwestionariuszy osobowości. Wybrane zagadnienia i techniki* (pp. 57-66). Warsaw: Wydawnictwo Naukowe PWN.
- Yakusko, O. (2011). Preliminary validation of the Women's Spirituality Instrument: Development of a measure to assess feminist religious and spiritual attitudes. *Psychology of Religion and Spirituality*. Advance online publication.
- Zawadzka, A. M. (2006). Wartości osobiste tłumaczące orientację materialistyczną jednostek. *Roczniki Psychologiczne, 9*(2), 61-80.
- Zawadzki, B., Strelau, J., Szczepaniak, P., & Śliwińska, M. (1998). *Inwentarz Osobowości NEO-FFI Costy i McCrae. Adaptacja polska. Podręcznik*. Warsaw: Pracownia Testów Psychologicznych PTP.
- Zinnbauer, B. J., & Pargament, K. I. (2005). Religiousness and Spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 21-42). New York: The Guilford Press.