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SPIRITUALITY: EXPLICIT AND IMPLICIT. HINDRANCES TO THE SCIENTIFIC STATUS OF RESEARCH ON SPIRITUALITY?

Although spirituality is a popular subject of research in many fields of science about man today, there still are problems with defining it. Their causes, at least in psychology, though unfounded, include distortions reflecting the scientist's personal bias: apologetic on the one hand and anti-fideist on the other. Bias of the first type often stems from the beliefs, held by the author of a given concept, that go beyond the paradigm of science. This refers to two concepts recognizing the existence of the spiritual dimension of the human being as substantially different from the psychological dimension: V. E. Frankl's logotherapy, being a concept of the spiritual dimension as the source of the need for meaning, and D. Helminiak's concept, according to which spirituality is the realization of the principle of authentic transcendence of the self. Such concepts are referred to as explicit. However, there are also explicit concepts of spirituality acceptable in academic psychology; the described example is the concept of spirituality developed by J. Averill. Bias of the second type dominated Western psychology for a long time. It may be the cause for the term "spirituality" not being used by the authors of the concepts whose distinctive features appear in this article. These are the implicit concepts of spirituality. Their three examples are: Terror Management Theory (developed by T. Pyszczynski, J. Greenberg, and S. Solomon), the Meaning Maintenance Model (authored mainly by T. Proulx and S. Heine), and Józef Koziński's transgressive concept of man. They include similar elements, but the transgressive concept appears to be the most useful. The conclusion contains proposals of research using the ideas of meaning, coping with absurdity, and the form of transgression as ones that lead to spiritual transformation.

Keywords: spirituality, theory, concept, transformation.

IN SEARCH OF THE CONTROVERSY OF STUDYING SPIRITUALITY:
IS IT “CAN WE?” OR “IS IT WORTH IT?”

Spirituality, possibly one of the most timely concepts in the humanities and social sciences, was not favored by their representatives – until recently. This applies both to those involved in the scientific study of religions and to psychologists. What is more, this also applies to anyone using the research paradigm of social sciences. How should one study something that is not definable in terms that would be acceptable to the majority of the interested professionals? Ultimately, this also regards the operationalization of spirituality. No empirically (and least of all experimentally) provable category exists; spirituality manifests itself exclusively as a subjective experience. Attempts to get to the core of the phenomena associated with spirituality via phenomenological description (cf. Zinnbauer et al., 1997) essentially allow one to see only that which is commonly considered as spirituality by those practicing some forms of spiritual development. Apparently, it is not possible to formulate any consistent theory explaining what spirituality is, but only one describing the impressions generated by different individuals. The research problem is not the core of spirituality but the psychosocial determinants of – one or another – understanding of spirituality. The majority of cases would display the religious understanding of spirituality; this is because most subjects (and researchers, too) are religious, which might determine the cognitive accessibility of such a scheme (Beit-Hallahmi, 1980; Spilka, Shaver, & Kirkpatrick, 1985). Another feature determining the way spirituality is understood in many published studies is the pragmatic mind-set of their authors, which limits spirituality to its positive functions such as wellbeing. In fact, the large body of studies containing these two notions does not prove the applicative potential of their content.¹ Only rarely is spirituality identified as a psychologically rooted and autonomous theoretical category.

The inaccurate understanding of scientific standards often seems to be the source of academic psychology’s “resistance” to theoretically grounded research on spirituality. Such resentment stems from the conviction about the “unremitting” – and obviously unreasonable – conflict between religion and science.² As

¹ The Google Scholar search identified around 149,000 items containing these two words. Date of access: May 18, 2013.

² Avoiding philosophical or theological considerations, one can illustrate this ostensible controversy by showing incorrect reasoning in the title of the movie *21 Grams*. This is supposedly the weight of the soul, because the same value is found to be missing just after a person’s death. However, a soul should not have any weight, as it is an immaterial being. This fact marks an obvious incompatibility of scientific and religious perspectives.

in research on religiousness, the fear of the apologetic bias sometimes leads to its opposite: the anti-fideist bias. The reluctance to carry out research focused on spirituality can arise from a fear of (one or the other) bias. The co-authors of studies on the role of spirituality in health psychology, Irena Heszen-Niejodek and Ewa Gruszczyńska (2004), explicitly warned about it.

THE CONCEPTS OPERATIONALIZING SPIRITUALITY AND THOSE WHERE SPIRITUALITY IS ONLY INCLUDED

Spirituality can be part of a concept even when it is not present therein as a term. Among the already mentioned reasons, as well as other ones, some psychologists seem to act like Mr. Jourdain from Molière's piece *The Bourgeois Gentleman*, who did not realize that, all his life, he spoke prose. Therefore, it is crucial to establish what is recognizable in the *implicit* (hidden) concepts of spirituality that is evident in the *explicit* (salient) ones.

What are the core features of spirituality that make its identification possible? It can be assumed that they involve the following ideas (although not all of them simultaneously, and to different degrees):

Transcendence, or transformation; crossing the boundaries of the current status (applies to personality, self, value systems, or beliefs);

Search for meaning in order to understand the surrounding world (nature, people) and one's self, together with the relationships between those two;

Understanding of necessities and limitations, including the unavoidable transience and death, in a way resulting in optimal adaptation, which can be seen as an important foundation of a mature personality, wisdom, or a sense of freedom;

Enhancement of cognitive competencies (development of control over the previously unconscious data processing, or – simply speaking – the expansion of the scope of consciousness);

Striving for harmony and internal integration, resulting – among other things – in increased wellbeing and health – mental and/or even physical;

Identification or integration with the outer world, nature, people, supernatural beings – transcendent (merging with something or somebody), or immanent (annihilation of the self); in either case – the self/non-self dualism disappears.³

³ Particular features of spirituality appear in different concepts, for example "the transcendence of the self" is the essence of spirituality as understood by Heszen-Niejodek and Gruszczyńska (2004). This is only a tentative, incomplete list. Its author is entirely responsible for its shape. The truth is that it is difficult to identify the authors of the leading ideas here because these ideas

This list does not include any propositions on the autonomous existence of spirituality as a separate being, irreducible to the mind or to the physical characteristics of the brain. Perhaps this is why Bartłomiej Dobroczyński (2009) expresses his rather pessimistic views on “the troubles with spirituality.” Accepting the existence of such obstacles, one cannot reject all effort to cope with them. Contrary to what it may seem, there is a relatively simple way to handle them – assuming that it will be accepted by “spirituality skeptics.” A demonstration of several selected concepts of mainstream, academic psychology, considered as hidden theories of spirituality in the light of the abovementioned assumptions, should convince psychologists about the advantages of referring to the framework of spirituality. Such theories, supported by replicable research methods, would open wide opportunities of integration with other concepts.

There is no room here to report all the concepts that deserve attention, let alone to consider a fundamental analysis and assessment thereof. Only some of them – those explicitly referring to about spirituality (salient) and those implying it (hidden), are given as examples. The former will prompt what to look for in the latter ones, if the latter can be considered as concepts of spirituality too. The next reason to attempt the research on salient spirituality is the conviction that spirituality is a natural human feature – a distinctive one: like walking on two limbs instead of four. This makes research on spirituality indispensably important. However, the salient concepts of spirituality often include empirically non-verifiable aspects, or ideas. In general, they are defined as “phenomenological” (Elkins et al. 1988). One example is Viktor E. Frankl’s (1963) “classic” logotherapy, another is Daniel Helminiak’s (1996 a, b) concept of spirituality as realization of the principle of authentic transcendence of the self. The third concept, or rather a syncretic synthesis of multiple concepts and approaches of both speculative and cognitive-objective character, is James Averill’s (1998) considerations. There are also explicit concepts – simultaneously acceptable within mainstream psychology – such as Kenneth I. Pargament’s (1999) approach to spirituality as the search for the sacred or the view of spirituality as the capability of transcendence proposed by Irena Heszen (Heszen-Niejodek & Gruszczyńska, 2004).⁴

Among the implicit (hidden) concepts, also three will be dealt with: two American concepts, namely Terror Management Theory (further abbreviated as TMT), developed about twenty years ago mainly by Jeff Greenberg, Sheldon

appear in the works of other authors, who often – as one can believe – take advantage of multiple sources and are not even aware of one another’s work.

⁴Recently, this eminent health psychologist has been using only the first part of her surname.

Solomon, and Tom Pyszczynski (1987, and many other references),⁵ and the Meaning Maintenance Model (further abbreviated as MMM), initially proposed by two psychologists from the University of British Columbia in Vancouver, Canada – Travis Proulx and Steven Heine (Proulx & Heine, 2006, 2009, 2010); and a Polish concept, namely Józef Koziński's (1986, 1987 a, b) transgressive concept of man.⁶ The reason of choosing this concept is its domestic origins, although its author presented it to the foreign reader a little later.⁷

TMT will be included in the discussion of the Meaning Maintenance Model for a few reasons, the first being its relative popularity among psychologists and other scholars in various fields of the humanities and social sciences. The second reason – related to the first one – is that TMT has lost much of its appeal and impact since the period following the tragedy of September 11th, 2001, and the publication of a book explaining the mechanisms of responses to this attack (Pyszczynski, Greenberg, & Solomon, 2003).⁸ Last but not least, the authors of the newer theory – MMM – argue that the mechanism explained within the framework of TMT is only one of the mechanisms of construction and maintenance of meaning.

The explicit (salient) theories of spirituality involve at least one of the listed phenomena or processes identifying them. The core of Viktor E. Frankl's logo-

⁵ There are at least two extensive analyses of this concept in Poland: the first by Rusaczyk (2008) and the second by Łukaszewski (2010). Rusaczyk also included several translated experimental studies by the main proponents as well as the objectors of Terror Management Theory. Łukaszewski presented rich materials concerning the relationships between mortality salience and death anxiety or the lack of it. Moreover, he included both experimental and descriptive reports showing that sometimes people desire to die, and even intentionally choose death. The data show the limitations of TMT.

⁶ Józef Koziński defines theory as a system of laws forming well-shaped hierarchies and proved by valid experimental methods. Koziński calls his own, only partly proven, views concerning needs and the mechanisms of transgression a concept. This approach is worth attention. Apart from its name, Terror Management Theory is just a concept, too.

⁷ Regrettably, the following will not be discussed here, although they deserve the name of implicit theories of spirituality (or its significant aspects): C. G. Jung's (1934-1954) framework of individuation, Roberto Assagioli's (1982) psychosynthesis, Kazimierz Dąbrowski's (1979) concept of positive disintegration and his ideal of mental health, C. Daniel Batson's (1976) concept of the third quest religious orientation (apart from the earlier two established by Allport and Ross [1967]), Mihaly Csikszentmihalyi's (1990) concept of flow, Jesse Bering's (2002) so-called existential theory of mind, Michael Thalbourne's concept of transliminality (Thalbourne & Delin, 1999), the concept of coherence in Aaron Antonovsky's (1995) theory of salutogenesis, David Hay's (1994) biological theory of God, and, finally, two concepts of spiritual intelligence extremely different from each other: one presented by Danah Zohar and Ian Marshall (2000) and the other by Robert Emmons (2000).

⁸ The authors of the TMT were often interviewed, explaining – among other phenomena – the acts of aggression of US citizens towards Muslims, and the re-election of George W. Bush. This explains the unusual popularity of the TMT compared to other theories of social psychology.

theory is the need for meaning, satisfied thanks to being a “spiritual person,” a nonmaterial agent unifying the psychophysical content of human life experiences. Such a proposition seems unacceptable in the naturalistic approach, dominant among academic psychologists. That proposition operates exclusively in the therapeutic domain, provided that one believes in its existence. “That which is corporal (as only a possibility) needs a soul (as its realization) and, finally, a spirit (as its fulfillment),” wrote Frankl ([1950] 1984). Moreover, the need for meaning evolves towards an “ultimate meaning,” which equals “the unconscious God.”⁹ In fact, Frankl stated later on, in order to avoid any exaggerated associations with religion, that the noetic (spiritual) dimension should be understood as an anthropological, not a theological one (Frankl, [1969] 2010, p. 30). However, he did not reject the “non-reductive” separation of this dimension from the remaining ones: biological and psychological.

Logotherapy is precursory to the presently developed concepts of cognitive character, or even ones integrative with regard to the psychological, historical, anthropological, and sociological approaches, for example Roy F. Baumeister’s (1991) concept of the meaning of life. The best Polish example of Frankl’s inspiration is Kazimierz Popielski’s (1993) study concerning personality determinants of the meaning of life. One can assume that Frankl’s narrative is only a metaphor. What is called “a soul” is the outcome of the synthesis of complex conscious and unconscious cognitive processing, and a belief in the validity of the statement about a supernatural essence of the spirit is the ultimate condition of that outcome, particularly of the effectiveness of the therapeutic process (logotherapy) (“faith works miracles”). Postulations that love and conscience are the highest phenomena of an exclusively human ability to transcend the self are the theoretical clues here (Popielski, p. 31).

The theme of transcendence (breaking boundaries or limitations), present in Irena Heszen’s concept, can be also found in the second “non-reductive” concept of spirituality. Following the assumptions of the eminent Catholic theologian Bernard Lonergan and remaining mostly in line with Maslow’s basic propositions of transpersonal psychology, Helminiak developed the fourfold concept of spirituality, where the spirit is understandable from a holistic perspective. It includes neutral positivistic-empirical psychology, authentic-philosophic humanistic psychology, monotheistic (one God) theology, and – which is likely beyond the scope of any academic approach – theotic (theotics’) viewpoints. Although each of the viewpoints is legitimate, the complete description and explanation of

⁹ “Faith in the ultimate meaning is meaning itself” (Frankl, 1984, p. 66).

“the human core of spirituality” as the path towards the ultimate goal of authenticity seems impossible. This goal equals ongoing commitment to the ideals of truth, good, honesty, and justice, a focus on responsibility, and unrestricted striving for the realization of the inborn dynamisms of consciousness.¹⁰ One cannot help but notice that such an approach is not applicable as a theoretical background for an empirical design. Helminiak’s concept is more educational than explanatory. The researcher uses the notion of “authentic self-transcendence” (Helminiak, 1996 a, b). To accomplish this authenticity, or spiritual development, one needs to follow four precepts: “be attentive” – perceive as much as possible, objectively, without cognitive filters; “be intelligent” – identify and name images, objects, and ideas; “be reasonable” – consider the value of images objects, and ideas; and “be responsible” – choose adequately. The principles thus accomplished: experience, understanding, judgment, and decision, establish the structure of the human spirit and allow its permanent growth. “The human spirit” is, however, understood as a non-substantial phenomenon of human consciousness – of non-reflective character. According to Helminiak, this is the only way to make the acquisition of “a dynamic, open-ended, self-regulating, self-determining dimension of human being and becoming” possible (Helminiak, 1996, p. 7).

These phenomena are not explicitly related to spirituality, particularly if the last one is understood – following Frankl and Helminiak – as a unique dimension of the human being, irreducible to the psychological dimension or, needless to say, to the physical one. Such an understanding cannot be classified as illegitimate within the scientific paradigm. This “non-reductive approach” equals – here and in similar concepts – the anthropological proposition that “man is not entirely complete only within the physical and social space, and therefore to understand his existence it is vital to assume that there is still ‘another dimension’ of human existence and we call this dimension ‘spirituality’” (Kłoczowski, 2006, p. 19). This seems to be a renouncement of the possibility of gradual acquisition of knowledge about spirituality in a “reductive,” certainly imperfect, yet falsifiable way. What remains is only to admit a kind of failure. Andrzej Grzegorzcyk, who realized the crucial character of research on spiritual values, stated: “Without the existence of the spiritual world, reality would be too miserable, life in it with all its disturbances and dramas would not be meaningful. However . . . the inclusion of this issue in intellectual discussions can sometimes break the threshold of intimacy of personal experience” (Grzegorzcyk, 2006, p. 34).

¹⁰ Helminiak borrowed this understanding mostly from Lonergan, but indirectly also from philosophers such as Charles Taylor.

Academic scholars increasingly attempt to transform notions similar to those mentioned above into operational language. One of them is James Averill, who analyzed numerous concepts of spirituality in order to elaborate a model demonstrating how spirituality is considered within religious and secular contexts. The model involves three aspects: vitality, connectedness, and meaningfulness. Spiritual experiences arising in these contexts are differentiated in terms of intensity. According to Averill, spirituality can be considered as a way of emotional expression. Human beings transform simple emotions into complex feelings. Moreover, by employing their unique abilities, they can make spiritual experiences play the role of a mechanism transforming negative feelings (e.g., depression, anxiety) into positive ones (happiness, love). Secondly, spiritual experience can function as a way of comprehending reality, transcending the rational one (intuitive cognition, holistic cognition, noetic value, as well as feelings of meaning, value, and sense). Thirdly, it is a form of creative insight into the infinitely varied means of expression, changing over time and according to place. Forms of spiritual expression are likely to be subject to many as yet unrecognizable influences.

At this point, Averill recalls concepts that are not necessarily associated with spirituality. He claims that, at least in some of its manifestations, spirituality reflects the individual development, the growth of individual skills (including the acquisition of the “feeling of being perfect”): peak experience (Maslow, 1964), flow (Csikszentmihalyi, 1990), self-integration, finalization of individuation (Jung, 1934-1954), self-actualization (Rogers, 1981), the unity integration and differentiation processes. According to Averill, spirituality implies an extension of the self as a subject, identified in religious traditions as an immaterial being: the atman, the soul, or even as a kind of emptiness (void).

Placing spiritual experiences within cognitive constructs, Averill speaks about two independent dimensions of these experiences: differentiation and integration. The self as an object turns into the self as a subject. Spiritual growth is, in a sense, deconstructing the objective pole of the self, increasing the level of integration of the cognitive constructs, and lowering the level of differentiation of those constructs. Finally, the self as a subject becomes an increasingly salient aspect of experiences.

SPIRITUALITY HIDDEN
IN THE LABORATORIES OF SOCIAL PSYCHOLOGISTS:
THE CORE OF THE “TERROR OR ABSURD” CONTROVERSY

Let Averill’s “explicit” concept be a pretext for presenting yet other concepts of spirituality than those he recalled – the implicit, hidden ones. As suggested, Viktor E. Frankl’s logotherapy is among the most important ones – for a number of reasons. Not only because almost all the themes already listed as relevant for spirituality appear therein. Logotherapy was the background of many empirical studies, including Polish ones (e.g., Tatarowicz, 1988; Popielski, 1993; Płużek, no date¹¹). First of all, assuming that the sense of meaning is an unavoidable element of spirituality, the presumption that the need for meaning is irreducible to mental processes should be cut off with Ockham’s razor. Moreover, there are quite many concepts connected with this need, which makes them all candidates for recognition as implicit concepts of spirituality. The point is that these concepts, in one or another way, explain the reasons and mechanisms of the construction of meaning. For instance, the noteworthy and fundamental alternative is whether the impulses for the construction of meaning originate in our genes, or whether we learn it in our ontogenesis. On the other hand, the relevant issue is how and why a person chooses a particular explanation of what is happening to her/him, to others, and to the world. In general, the attribution theory already provides such explanations, although reduced to the issues of choice between religious and secular reasons for events (Spilka, Shaver, & Kirkpatrick, 1985).

COPING WITH EXISTENTIAL TERROR
AS A UNIQUE MANIFESTATION OF PROCESSES DIRECTED
TO THE CONSTRUCTION AND MAINTENANCE OF MEANING

The general attribution theory – as too broad on the one hand and too often confined to religiousness on the other, mostly in its aspect concerning beliefs – has been replaced by the Meaning Maintenance Model. The authors of this model, Travis Proulx and Steven Heine, claim quite redundantly that humans have a need for meaning, which means looking through the cognitive representations of the expected relationships that organize their way of perceiving the

¹¹ Zenomena Płużek adapted the Purpose in Life Test by Crumbaugh & Maholick (1964) to Polish samples.

world. One of their papers starts with the description of a card “trick.” If we replaced the colors of cards, visible very briefly on the screen – if, for example, hearts were black and spades – red, the majority of participants would not notice this. Following their perceptual habit, they would likely say that hearts were red and spades were black. Moreover, those subjects who only noticed that “something was not correct” could feel some discomfort or even anxiety. Apparently, in many instances when “something is not correct” – that is, breaks our cognitive schemata – we feel the cognitive dissonance. In another paper (Proulx & Heine, 2010), the frog in Kierkegaard’s beer symbolizes the feeling of absurdity, which haunted the “father of existentialism” and later other existentialistic thinkers such as Albert Camus or Martin Heidegger – not only because of such a regrettable discovery in a glass of beer. For psychology, it is concepts showing the ways out of the feeling of being lost in the world filled up with emotional disorders that seem more significant. Here follow references to the well-known logotherapy, Jean Piaget’s idea of the equilibration of cognitive structures, to such notions as the need for coherence from Aaron Antonovsky’s (1995) theory of salutogenesis or the need for a cognitive closure described by Arie Kruglansky (Kruglansky & Webster, 1996). In short, human beings strive for establishing an order in things and for the understanding of the surrounding phenomena. In the process, they apply not only the inborn evolutionary adjustments but also certain patterns of meaning and comprehension – already accumulated for millennia. This resource is unknown to any other living creature. We learn such things from the first days of our lives. Within the social learning framework, we develop our belief systems and our knowledge about the world; for instance, we understand that dogs do not speak or that snow is cold. Apart from familiarity with the physical environment, which allows a relatively safe functioning, it is, for example, essential to learn how to interact with others in order not to become alienated. Among many examples listed in papers describing the foundations of MMM, just one more is our wish to dress in accordance with the standards of fashion accepted in a particular place and time.

The core assumption of MMM is that human beings are restless constructors of meaning. However, Proulx and Heine recall the research evidence proving that people do not care for an unlimitedly positive self-esteem. It must only meet the accepted criteria. Excessively positive self-esteem also raises problems, such as the threat of being rejected by the group of reference. Thus, self-esteem ultimately serves the more general purpose of maintenance of meaning within all relationships that bring together the phenomena in the world. Proulx and Heine (2006, p. 316) refer to Heidegger, who distinguishes the fear of death from the

fear of disappearance. In the latter case, fear is justified because disappearance equals disastrous destruction of all relations within the self as well as between the self and the outer world. So, the feeling of an adequate understanding of what is happening in the surrounding world is the most fundamental human need. In this way, MMM meets several conditions for being classified as an implicit (hidden) theory of spirituality.

IS THERE ANYTHING MORE IMPORTANT THAN THE SALIENCE OF MORTALITY?

Some psychologists would object, insisting that the most important assumption proved in many respects within the TMT is the mortality salience hypothesis. TMT draws predictions from the so-called two buffers of existential terror: worldview and self-esteem, and it convincingly tests them. That is true – TMT, developed by Jeff Greenberg, Sheldon Solomon and Tom Pyszczynski, is now a handbook subject. It was inspired by Ernest Becker, and particularly by his *Denial of Death* (1973).¹² An important point of Becker's position is his existentialism merged with several propositions of psychoanalysis. For example, following Otto Rank, Becker assumes that not libido but the death anxiety is the most powerful motive of behaviors. At least because of that, and because it meets the requirements of scientific replication (including experimentation), by all means it deserves to be regarded as an implicit concept of spirituality. Nevertheless, TMT is a subject of debate (usually very interesting and relevant), also in Poland. Apart from the relevant papers of the theory's founders, presenting research evidence for the validity of TMT, also several papers of its critics were presented by Rusaczyk (2008). Łukaszewski (2011) collected rich research material concerning the relationships between mortality salience and death anxiety – or its absence (sometimes people desire to die or even consciously choose to die). The latter evidence points to some substantial limitations of TMT.

The Meaning Maintenance Model is thus an adequately wide theoretical framework, while Terror Management Theory is simply just its part. The crucial limitation of TMT is the oversized scope of the application of what the authors call the mortality salience hypothesis. Proulx and Heine underscore that we search for, and if necessary – construe meanings, which contribute to the worldview not only because of death anxiety. More generally, we experience death

¹² Ernest Becker's *Denial of Death* appeared in 1973 and won the Pulitzer Prize. It is considered as a significant contribution to the considerations on the human condition.

anxiety because death makes no sense from our existential (frankly speaking, self-centered, egocentric) point of view.

The authors of MMM offer an alternative for the terror management mechanism: the fluid compensation mechanism. What are the threats triggering the activation of their compensation? There are as many as nine of them:

- Disruption of the system of cognitive constructs initiates the processes of their conservation, but also evokes “emotional distress.”

- Disruption of beliefs about literal immortality results in accepting beliefs affirming symbolic immortality (TMT also explains this).

- Disruption of social bonds results in efforts aimed at their restoration or replacement with new ones.

- Disruption of the integrity of the social system makes people undertake efforts justifying that system.

- Disruption of the subjective feeling of certainty results in the acceptance of another source of such certainty.

- Disruption of the feeling of safety forces people to look for it in other ways.

- Disruption of beliefs about the possibility of maintaining control over a situation provokes people to accept the beliefs of others concerning the issue.

- Disruption of constructs concerning the value and purpose of life evokes efforts to approve other values and purposes.

The founders of the MMM realize that the problems arising out of these and other existential threats, the methods of resolving them, and the accompanying concepts, develop from the outset of scientific psychology and its practical implementations. They take the position that the same motivation – the desire to maintain the mental representations of the expected relationships within reality, the meaning – underlies all these phenomena.

According to the MMM, all experiences disrupting our expectations concerning the situations that happen to us are threats to meaning. A disruption can be an unexpected event, a discrepancy between someone’s attitude and behavior, a lack of control, realization of injustice, a feeling of insecurity, the awareness of death, etc. Furthermore, sometimes our expectations are undermined by positive experiences, which are threats to actual meanings as well. There is evidence that a positive assessment can also be a source of stress for a person’s self-esteem, if she or he previously maintained a lower opinion regarding himself or herself.

What do people do when they cannot make sense of what is happening? The authors of the MMM claim that in such cases their search tends to follow “the easy way,” applying the strategy of understanding an incomprehensible event in

a way not corresponding to the previous, fallacious explanation. Meanings not associated with the preceding event can be particularly appealing, since they do not restore the feeling of meaninglessness formerly maintained. For example, Burris and Rempel (2004) proved that subjects confronted with some anomaly (they were told about saprophytes possibly nesting in their skin) approved more strict moral standards, and appeared to be more critical towards their social environment. Navarette, Kurzban, Fessler, and Kirkpatrick (2004) challenged their subjects' feeling of security by suggesting a possible theft. This experimental manipulation radicalized the subjects' attitudes towards persons who were criticizing the USA (thus effecting the approval of a new way of constructing meaning). It was also proved that a possibility to finding and approving of an alternative explanation of the anomaly forms: the subjects who had read short stories by Franz Kafka, containing – as it was expressed – elements of absurdity, found a new solution to the problem of the experienced anomaly (Proulx & Heine, 2009). Mortality salience was not induced in any of those studies. The conclusion was that such threats to meaning as death anxiety were not the only relevant ones.

THE NEED FOR MEANING OR THE INSTINCT OF MAINTENANCE?
OR PERHAPS AN INSTINCT OF MEANING?

Lee Kirkpatrick's and David Navarette's scepticism concerning the TMT is grounded in their evolutionary approach. Following the concept of inclusive fitness proposed by William Hamilton, they assume that one should see evolutionary adaptations not from the point of view of one or another individual, but from the perspective of a gene. “. . . one's own survival and reproduction provides only one way for one's genes to be transmitted to future generations . . . [Genes] ensure the productive success of close kin . . .” (Kirkpatrick & Navarette, 2006, p.289). Kirkpatrick and Navarette call into question four propositions of the TMT:

- Humans, like other species, possess the “survival instinct”;
- The integration of this instinct with extraordinary human cognitive abilities resulted in the paralyzing, incapacitating death anxiety, the new problem of adaptation;
- The natural selection has caused the new adaptation to appear: the terror management mechanism, which reduces death anxiety;

– Defense of one’s worldview is the main process within the structure of terror management.

The authors of this criticism claim that something like the survival instinct does not exist. The inclusive fitness causes particular individuals, from ants to humans, to be desperate to pay the highest price for the survival of their genes (best if identical, or at least most similar), including infertility and the sacrifice of their life for others (children, or other persons with a better chance of outliving them).¹³ From this perspective, the survival instinct appears maladaptive (from the viewpoint of species, and even from the viewpoint of a relatively small community, it is maladaptive to leave behind one’s own, or in fact any, children in a burning house). Such an instinct would be also useless as too general. The rule of “avoiding death” does not instruct how to flee death; actually, only practical ways of avoiding it define the various kinds of threats, such as the metaphorical “Don’t play with fire.”

Secondly, if death anxiety was paralyzing and debilitating, it would work against the survival of the species and their genes. It is only one of the innumerable ideas created thanks to human cognitive abilities, and it appears in definite forms such as the anxiety concerning the decay of the body after death (which it is possible to cope with through cremation), or – taking into the account the historically more recent experiences – the anxiety of radioactivity (fought through opposition to the development of the nuclear energy industry). Moreover, it is not clear why similar mechanisms of terror management have not arisen as a response to difficulty in finding a partner or having children, both of which are threats to the genes’ survival. Most of all, the paralyzing death anxiety could not be an evolutionary product, as it is, in principle, maladaptive. Therefore, the terror management mechanism does not have a reason to exist.

Finally, with regard to the worldview, Kirkpatrick and Navarette (2006, p. 292) claim: “A worldview-defense system seems immensely complicated and would require countless genetic modifications to instantiate. An infinitely simpler solution to the problem of excessive death anxiety would be simply to recalibrate the anxiety mechanisms that give rise to the problem in the first place.” As has been mentioned, worldview systems include notions which are both calming and threatening. Paul W. Pruyser (1968) believed that the so-called illusionistic world of our imagery, thoughts, and notions can be subject to distortions in two directions: autistic and realistic. The autistic distortions of the illusionistic world

¹³ Among insects, a good example is the bee (there is only one mother in the hive), and among human beings – persons living in celibacy and other deliberately non-married people; some also include homosexuals here.

sometimes result in excessive terror – in the Judeo-Christian culture these include catastrophic views and visions. The realistic distortions of the illusionistic world turn into aggressiveness, motivated by racial, ethnic, class, or religious prejudice, which is common among fundamentalists and in their ideologies. It can be the result of anxiety suppression by means of cognitive constructs. Only the illusionistic world, free from distortions, the world of imagination, myths, religions, creativity and play, can serve the management of mortality terror.

In the process of natural selection, the task leading to the prevention of death anxiety would be trivially simple, and a solution would emerge much earlier than the development of a complex system of terror management. The evidence of its absence is such behaviors as participation in extreme sports, or dangerous driving, which show that it is the young individuals who most often engage in risky behaviors and that taking risks decreases after they get married and increases after they divorce or lose a spouse. From the perspective of the principle of inclusive fitness, this can be explained by competitive behavior, which results in a greater probability of the replication of genes, which upholds the disposition to further repeat such strategies.

To sum up, death anxiety is a relatively new phenomenon, developed as a by-product of our mind. According to Kirkpatrick and Navarette, the effects of a laboratory manipulation of consciousness reveal the existence of adaptation systems which have developed for definitely different reasons. Priming the anxiety of death from starvation can influence attitudes towards the consumption of certain foods, making them more favorable towards previously disliked foods and less favorable towards those previously preferred.¹⁴ The assumption that the evolutionary mechanism of terror management played a role here is not necessary.

The founders of TMT obviously deny its incompatibility with the theory of evolution, claiming that the critics presented their views inadequately and that the proposed replacement of TMT with the so-called coalition theory is not sufficiently valid. Therefore, it is impossible to find convincing evidence for or against TMT. Finally, TMT founders appeal to evolutionary psychologists to move beyond the simplified presentations of their theory and the evidence for its validity, and to join the research aimed to integrate TMT with the evolutionary

¹⁴ Priming is one of the recently used methods in research on cognitive processes. It is applied when it is necessary to hide the researcher's intentions or to bypass self-censorship. Information is provided subliminally – being inaccessible in the subject's awareness, it resides in the subject's cognitive structures, and influences further cognitive processes.

reflection on culture and human social behaviors (Landau, Pyszczynski, Solomon, & Greenberg, 2007).

The proposal acquires a special flavor in the light of the conclusion that Tadeusz Bielicki inferred from Hamilton's principle of inclusive fitness or kin selection. In his lecture "On some incredible features of the human species," quoted by Jędraszewski (2006), Bielicki calls behaviors such as psychological reactance achieved even at the cost of self-harm, i.e., the ability to oppose the principle of maximum fitness, extraordinary and exclusive to the humankind.¹⁵ Later, Bielicki (2001) admitted: "Words such as 'deep mystery' or 'space hidden in the darkness' could be – I suppose – related with even greater power to the origins of human mind. However, such expressions are today outdated in biology. What is worse, perhaps for someone who has chosen the profession of scholar-researcher, for someone who has no right to believe in the existence of inexplicable mysteries, it is illegitimate to use them?" The answer to this question clarifies the difference between the intuitive, "phenomenological," "understanding" insight, and the scientific one. Regrettably, Bielicki did not admit that everyone, including himself, can personally and privately believe in anything that is unexplainable, but not as a scientist. Moreover, neither the belief in explaining the "unexplainable," nor the belief in the impossibility of explaining it is a matter of science.

TRANSGRESSION

AS THE KEY MECHANISM OF SPIRITUAL TRANSFORMATION

Looking for the features attributed to spirituality in the mainstream psychology concepts that do not mention spirituality directly, it is worth considering the so-called transgressionism, developed by Józef Koziellecki. The fundamental thesis of this concept is that "man is a transgressive creature," and that transgression is a phenomenon of intentionally moving beyond one's possessions and

¹⁵ Perhaps Bielicki forgot about the human capability of time transcendence. If there is life after death (some are certain that there literally is, others see it symbolically), the maximum fitness principle still applies. The adjustment takes place in Heaven, through salvation, or nirvana. These are famous compensators, a category once introduced by Rodney Stark and William Sims Bainbridge (1987). It is not impossible that just this will make our species go extinct (in evolutionary terms, religion developed too late to satisfy "the selfish gene"). One can also argue that the belief in death transcendence, even symbolic, triggers selective matching of genes, or it was already the cause of the domination of homo sapiens over the remaining species. If the hare believed in after-life, or survival in the memories of descendent hares as a hero, it would more often acquire food and the acceptance of opposite sex hares. Then, its progeny would be more and more fearless.

identity. There are four “worlds of transgressions”: towards things (“to have”), towards others (expansion of control over others, but also altruism and extension of individual freedom), towards symbols (creation of new nonconventional constructs of thought, development of knowledge about the world), and towards oneself (self-creation). More recently, Koziellecki (2001) added the virtual world of transgressions. Its place is on the junction of the four previously listed worlds. Additionally, in order to enable virtual transgressions, the real worlds must first emerge.

Transgressions are inventive and expansive acts going beyond the standard boundaries. They contribute to the formation of new constructs or to the destruction of established ones; they result in new values, both positive and negative. These acts are the source of both progress and regress. Man consciously breaks the encountered boundaries: material, social, and symbolic. This is the reason why transgressions differ from the more fundamental defensive behaviors. The heterostatic principle works reversely: meeting the new goals of transgression does not reduce the motivation to act further, but rather conserves this motivation – or even increases it.

One can see here the majority of the features of spirituality listed at the beginning of this article: transcendence, striving for integration, and the widening of the scope of consciousness. We cannot escape from ourselves: the main source of transgressions is the hubristic motivation – considered by the TMT founders as one of the two buffers of existential terror – that is, striving for confirmation, maintenance and possible enhancement of self-worth. Hubris is egoistic and hedonistic, both individual (success, domination over others) and collective (revolutions, political coups). The hubristic motivation is often directed towards perfection: Leonardo da Vinci spent twenty years painting his *Last Supper*. Hubristic acts can be constructive (altruism, also aimed at confirming one’s value, or war heroism) or destructive (Raskolnikov’s crime, terrorist attacks).

The second type is motivation of auto-telic, self-rewarding nature, and – according to Koziellecki – not oriented towards self-gratification. For the founder of this concept, a good example is the cognitive motivation: non-egocentric and moving beyond the pleasure principle. It only expresses endeavor towards intellectual control of reality. Koziellecki claims that people look for and create information only because they need to satisfy their curiosity or want to experience the beauty of previously unknown forms, or to minimize boredom and monotony, etc. This motivation, then, is purely intrinsic. Still, do people – by triggering the cognitive motivation – move beyond the egocentric perspective of

seeing themselves and the world? According to Koziellecki – they do. Nevertheless, from the perspective of cognitive psychology, this is a symptom of falling into illusion. Cognitive needs have an essentially utilitarian character. They are a part of the system of orientation within the world, and they serve the purpose of adaptation to it.¹⁶ There is nothing wrong in it. However, this also does not disqualify individual convictions that one is motivated by pure curiosity. It seems that the point is in the difference between subjective (phenomenological, relying on the evidence of consciousness) and objective (empirical, inferring indirectly from behavioral evidence) paradigms of doing psychology.

Koziellecki's assumption that man is a self-directed, intentional, expansive, and creative creature,¹⁷ and that her or his behavior is only partly determined, brings us closer to the integrated paradigm, subjective and objective at the same time. Transgression is the transcendence of boundaries, and "the boundaries" can be of many kinds. They are determined by the scope of power or freedom, by the level of educational progress, or by the restrictions and rules of law and morality. This is the next coincidence between the concept of transgression and the existential character of the explicit concepts of spirituality, which employ the notion of transformation (transcendence) boundaries that are impossible to go beyond. The boundaries are the already mentioned limitations.

Starting from Frankl's thought, conjunction between meaning, evaluation, values, and goals can be found in concepts of spirituality. The most fundamental determinants of the strength of motivation are goals. A goal, as the desired result of action, brings the value man is searching for. Human acts are directed towards values. These acts, both practical and cognitive, are an instrument to attain valuable outcomes, such as food, social approval, or freedom.¹⁸

Koziellecki's concept is close to TMT because it also includes temporal – real or illusory – attempts to prolong "personal time." The forms of defensive activities aimed at literally prolonging one's life are the realistic ones. Attempts of persistence in the domain of culture are of a more transgressive kind. They include creative and innovative activities, but also the acceptance of religious be-

¹⁶ "Cognition is the ability of man and other species to receive information from the environment and to process it in order to effectively control one's own activity and better adjustment to the environmental demands" (Nęcka, Orzechowski, & Szymura, 2006, p. 22).

¹⁷ According to Koziellecki, there are also paradox transgressions. For example donating one's kidney decreases the probability of longer life. It is the "towards others" transgression combined with denial of transgression "towards self," unless the motivation is self-growth (a Promethean deed).

¹⁸ Acts directed towards values are the function of the subjective assessment of their probability, and therefore they are burdened by some dose of uncertainty (and sometimes by risk). Programs of transgressive behaviors are by nature heuristic, imperfect, and indefinable.

liefs, since – according to most religious beliefs – death does not equal the individual's complete disappearance.

It is worth underlining that Koziellecki focused on the role of myths and illusions in generating temporal transgressions. The gratification of the need for meaning and understanding, even at the cost of distorting the truth – even if the subject is not aware of it – is one of the crucial features of spirituality. Hence, the construction of myths or unconventional and original illusions is also a creative process. Koziellecki called the generation of and faith in myths and illusions “nonspecific transgressions.” The illusory beliefs concerning one's happy future, or the possibility of taking complete control over the economic phenomena do not fall into the dichotomy of “true-false,” but rather into that of “faith-doubt.” They are not empirically provable. Myths are irreducible elements of cultures and cognitive constructs; they gratify the need to understand the world. A culture without mythical elements is inconsistent. Myths increase the subjective probability of reaching goals and constitute a source of positive emotions. By shaping attitudes towards the world, myths shape the individual's emotional relationships with others. However, they also often distort them, becoming a reason for prejudice or the so-called “national mythologies,” sometimes even the dreadful ones. Myths influence engagement in defensive and transgressive activities (e.g., the illusion of control, belief in omnipotence), thus becoming “material powers.” The value of myth or illusion includes its positive and negative outcomes. When the sum is positive, people accept the myth or illusion and incorporate it into their cognitive constructs; a disadvantageous outcome increases the chance of rejection of such transgressions. The mechanism would not be entirely conscious. Moreover, people integrate myths and illusions with other structures – rational and disputable, without seeing any controversy in it. Delusionary constructs, specific forms of symbolic transgressions, are close to myths. Both forms are far from realistic. The world consists here of improvable illusions, fantasies, and magic. Nevertheless, myths are objectified elements of cultures, while delusions are more individualized and private.

AN ISSUE WORTH CONSIDERING

– NO CATEGORY FOR SYNTHETIC DISCOURSE IN PSYCHOLOGY IS MORE IMPORTANT THAN SPIRITUALITY

The explicit and implicit concepts of spirituality have been presented for two reasons: the first was the wish to show – polemically – the reasons for their

sometimes controversial character. With regard to the explicit concepts, this applies to Helminiak's views and partly to Frankl's, and in the case of the implicit ones – to the motives of not using the term *spirituality*. The second reason was the belief that one needs to recall at least several concepts, since the popularity of such categories as spirituality is growing, not exclusively in psychology (cf., Grzegorzczak, Sójka, & Koschany, 2006; Pasek, 2013). The description of the most important features of TMT, MMM, and transgression has a partly polemical purpose also because – as any other theory – those mentioned here have their advantages as well as disadvantages. Their discussion in a necessarily abbreviated and selective form should be sufficiently justified in the light of the second reason.

Of the implicit concepts of spirituality presented, the transgressive concept is a concept of spirituality to the highest degree. Moreover, it contributes some new themes to the debate, e.g., through shifting the focus to destructive transgressions or to the functions of the cognitive motivation, although – as it seems – not necessarily the autotelic one. Similarly to Averill, and also to Csikszentmihalyi (whose concept of flow has been left aside due to limited space), Koziellecki mentions two dimensions of transgressive growth: the increase of differentiation and the increase of integration. As destructive transgressions permit entropy and disorganization, they restrain the process of differentiation.

The transgressive concept of man can be a challenging platform for designing the research on this wide thematic area. The Meaning Maintenance Model also offers this kind of platform. Such research could, for instance, attempt to check the hypothesis that the behavior of religiously orthodox persons (e.g., towards ethnic minorities) is more similar to the behavior of atheists than to that of religiously open and questing individuals. On the other hand, the behavior of the latter should be the most similar to that of agnostics. Such a research design can be considered for the comparison of the forms of transgression: one can suppose that both hard-core believers and atheists would prefer hubristic and defensive transgressions, while questing individuals and agnostics would prefer heterostatic, non-egoistic and creative transgressions. Extending this project to the MMM concept, one could also check whether the orthodox and atheists need more time, compared to the religiously questing and agnostics, to correctly answer questions about the meaning of the selected sentences of a purely nonsensical character.

In the same vein, both within the transgressive concept of man and the MMM, research could be designed on behavioral differences in existential situations between subjects experiencing mystical states and those who do not expe-

rience them. Apparently, one can manipulate the morality salience variable, and then compare its impact to the behaviors of subjects with the impact of other variables, possibly underlying meaning. Such or similar research would meet scientific standards. This is the advantage stemming from the application of concepts accepted by mainstream psychology.

It was not the point to consider the listed concepts as concepts of spirituality forcefully. Rather, the purpose was to demonstrate that – although belonging to different domains of discourse – concepts dealing with spirituality and those not speaking of spirituality directly (that is, explicit and implicit ones) have much in common. At least we can thus defend mainstream psychology as a science, which yet does not exclude man from its scope of discourse.

REFERENCES

- Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey-Bass.
- Aronson, E. (1969). The theory of cognitive dissonance. A current perspective. In L. Berkowitz (Ed.), *Advances in experimental social psychology, Vol. 4* (pp. 1-34). New York: Academic Press.
- Averill, J. R. (1998). Spirituality: From the mundane to the meaningful – and back. *Journal of Theoretical and Philosophical Psychology, 18*, 101-126.
- Batson, C. D. (1976). Religion as prosocial: Agent or double agent? *Journal for the Scientific Study of Religion, 15*(1), 29-45.
- Baumeister, R. F. (1991). *Meanings of life*. New York: The Guilford Press.
- Becker, E. (1973). *Denial of death*. New York: The Free Press. Division of Collier Macmillan Publishers.
- Beit-Hallahmi, B. (1980). Psychology of religion – what do we know? *Archive für Religionspsychologie, 14*, 228-236.
- Bielicki, T. (2001). On the zoological vision of man, or, a short essay on conceit. *Znak, 551*. Retrieved from http://www.miesiecznik.znak.com.pl/bielicki_551.html, August 23, 2012.
- Crumbaugh, J. C. & Maholick, L. T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology, 20*(2), 200-207.
- Csikszentmihalyi, M. (1990). *Flow. The psychology of optimal experience*. New York: Harper & Row.
- Dobroczyński, B. (2009). *The troubles with spirituality*. Cracow: Zakład Wydawniczy Nomos.
- Elkins, D. N., Hedstrom, L. J., Hughes, L. L., Leaf, J. A., & Saunders, C. (1988). Toward phenomenological spirituality: Definition, description, and measurement. *Journal of Humanistic Psychology, 28*(4), 5-18.
- Emmons, R. A. (1999). *The psychology of ultimate concerns: Motivation and spirituality in personality psychology*. New York: The Guilford Press.
- Emmons, R. A. (2000). Is spirituality an intelligence? Motivation, cognition, and the psychology of ultimate concern. *The International Journal for the Psychology of Religion, 10*(1), 3-26.

- Frankl, V. E. ([1946]1963). *Man's search for meaning: An introduction to logotherapy*. Boston: Beacon Press. Originally in German: *Ärztliche Seelsorge. Grundlagen der Logotherapie und Existenzanalyse*. Wien: Franz Deuticke.
- Frankl, V. E. ([1950]1984). *Homo patiens. Versuch einer Pathodizee*. Wien: Franz Deuticke. Referred to after the Polish edition: *Homo patiens*. Warsaw: Instytut Wydawniczy PAX.
- Frankl, V. E. ([1969]2010). *The will to meaning. Foundations and applications of logotherapy*. New York: Plume, the member of Penquin group. Referred to after the Polish edition: *Wola sensu. Założenia i zastosowanie logoterapii*. Warsaw: Wydawnictwo Czarna Owca.
- Greenberg, J., Solomon, S., & Pyszczynski, T. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements, In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology, Vol. 29* (pp. 61-72). New York: Academic Press.
- Grzegorzczak, A. (2006). The empirical identification of spirituality. In A. Grzegorzczak, J. Sójka, & R. Koschany (Eds.), *Fenomen duchowości* (pp. 29-34). Poznań: Wydawnictwo Naukowe Uniwersytetu Adama Mickiewicza.
- Hay, D. (1994). "The biology of God": What is the current status of Hardy's hypothesis? *International Journal for the Psychology of Religion, 4*(1), 1-23.
- Heine, S. J., Proulx, T., & Vohs, K. D. (2006). The Meaning Maintenance Model: On the coherence of social motivations. *Personality and Social Psychology Review, 10*(2), 88-110.
- Helminiak, D. A. (1996a). *The human core of spirituality. Mind and psyche and spirit*. Albany: SUNY Press.
- Helminiak, D. A. (1996b). A scientific spirituality: The interface of psychology and theology. *The International Journal for the Psychology of Religion, 6*(1), 1-19.
- Heszen-Niejodek, I., & Gruszczyńska, E. (2004). The spiritual dimension of man, its significance to the psychology of health, and its measurement. *Przegląd Psychologiczny, 47*(1), 15-31.
- Hill, Peter C., Pargament, Kenneth I., Hood, Ralph W. Jr., McCullough, Michael E., Swyers, James P., Larson, David B., & Zinnbauer, Brian J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behavior, 30*(1), 51-77.
- Jędraszewski, M. (2006). Human spirituality as the ability to defy the maximization of fitness (MF) principle. In A. Grzegorzczak, J. Sójka, & R. Koschany (Eds.) (pp. 35-48). Poznań: Wydawnictwo Naukowe Uniwersytetu Adama Mickiewicza.
- Jung, C. G. (1934-1954), *The archetypes and the collective unconscious. Collected works*. Vol. 9 Part 1 (2nd ed.), Princeton, NJ: Bollingen (published 1981).
- Kirkpatrick, L. A., & Navarette, C. D. (2006). Reports of my death have been greatly exaggerated: A critique of terror management theory from an evolutionary perspective. *Psychological Inquiry, 17*(4), 288-298.
- Kłoczowski, J. A. (2006). What is spirituality? The religious and cultural context. In A. Grzegorzczak, J. Sójka, & R. Koschany (Eds.) (pp. 13-19). Poznań: Wydawnictwo Naukowe Uniwersytetu Adama Mickiewicza.
- Kozielecki, J. (1986). A transgressive model of man. *New Ideas in Psychology, 4*, 89-105.
- Kozielecki, J. (1987a). *A transgressive concept of man*. Warsaw: Państwowe Wydawnictwo Naukowe.
- Kozielecki, J. (1987b). The role of hubristic motivation in transgressive behavior. *New Ideas in Psychology, 5*, 120-141.
- Kozielecki, J. (2001). *Psychotransgressionism. A new discipline of psychology*. Warsaw: Wydawnictwo Akademickie "Żak."
- Kruglanski, A., & Webster, D. M. (1996). Motivating closing of the mind: "Sizing" and "freezing." *Psychological Review, 103*, 263-283.

- Landau, M. J., Solomon, S., Pyszczynski, T., & Greenberg, J. (2007). On the compatibility of terror management theory and perspectives on human evolution. *Evolutionary Psychology*, 5(3), 476-519.
- Lukaszewski, W. (2011). *The anguish of life. How do people cope with the death anxiety?*. Sopot: Smak Słowa.
- Maslow, A. H. (1964). *Religions, values, and peak-experiences*. New York: A Viking Compass Book.
- Navarette, C. D., Kurzban, R., Fessler, D. M. T., & Kirkpatrick, L. A. (2004). Anxiety and intergroup bias: Terror management or coalitional psychology. *Group Processes and Intergroup Relations*, 7(4), 370-397.
- Necka, E., Orzechowski, J., & Szymura, B. (2007). *Cognitive psychology*. Warsaw: Wydawnictwo Naukowe PWN.
- Obuchowski, K. (1985). *Creative adaptation*. Warsaw: Książka i Wiedza.
- Pasek, Z. (2013). *New spirituality. The cultural contexts*. Cracow: Wydawnictwo Aureus.
- Pargament, K. I. (1997). *The psychology of religion and coping. Theory, research, practice*. New York: The Guilford Press.
- Paszkievicz, E. (1983). *The structure of psychological theories. Behaviorism, psychoanalysis, humanistic psychology*. Warsaw: Państwowe Wydawnictwo Naukowe.
- Plużek, Z. (no date). *The Polish adaptation of the Purpose in Life Test (PIL) by J. Crumbaugh & L. Maholick*. Unpublished manuscript.
- Popielski, K. (1993). *The noetic dimension of personality. Psychological analysis of the sense of meaning in life*. Lublin: Redakcja Wydawnictw KUL.
- Proulx, T., & Heine, S. J. (2006). Death and black diamonds: Meaning, mortality, and the meaning maintenance theory. *Psychological Inquiry*, 17(4), 309-318.
- Proulx, T., & Heine, S. J. (2008). The case of transmogrifying experimenter. Affirmation of a moral schema following implicit change detection. *Psychological Science*, 19(12), 1294-1300.
- Proulx, T., & Heine, S. J. (2009). Connections from Kafka: Exposure to meaning threats improves learning of the artificial grammar. *Psychological Science*, 20, 1125-1131.
- Proulx, T., & Heine, S. J. (2010). The frog in Kierkegaard's beer: Finding meaning in the threat-compensation literature. *Social and Personality Psychology Compass*, 4(10), 889-905.
- Pruyser, P. W. (1968). *A dynamic psychology of religion*. New York: Harper & Row.
- Pyszczynski, T., Greenberg, J., & Solomon, S. (2003). *In the wake of 9/11: The psychology of terror*. American Psychological Association.
- Reich, K. H. (1989). Between religion and science: The role of complementarity in the religious thinking of young people. *British Journal of Religious Education*, 11, 62-69.
- Rogers, C. (1961). *On becoming a person: A therapist's view of psychotherapy*. London: Constable.
- Rusaczyk, M. (Ed.) (2008). *Terror management theory. Discourse in the American literature*. Warsaw: Wydawnictwo Naukowe Scholar.
- Spilka, B., Shaver, P., & Kirkpatrick, L. A. (1985). General attribution theory for the psychology of religion. *Journal for the Scientific Study of Religion*, 24(1), 1-20.
- Stark, R., & Bainbridge, W. S. (1987). *A theory of religion*. New York: Lang and Toronto Studies on Religion.
- Tatarowicz, J. (1988). *The religiousness of young people and their life purpose and self-perfection*. Warsaw: ANS.
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G. et al. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36, 549-564.