

THE MEANINGFULNESS OF LIFE: ITS ASSESSMENT AND NATURE

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Abstract

The paper deals with Meaningfulness of Life (MOL), presenting the definition of the construct, its theoretical and methodological background and its importance. The first part (sections 1.-5.) is devoted to describing a new tool for the assessment of MOL and the relation of its total score to different kinds of instructions, the overall evaluation of one's MOL, quality of life, personality traits, cognitive processes and health. Scores representing four categories of MOL were correlated with age, gender, occupation, and specific personality traits. The second part section 6) is devoted to describing a study of MOL in cancer patients focused on the issue whether MOL in cancer patients is a function of depression.

Keywords: *Meaningfulness of Life, assessment, personality, cognition, cancer.*

1. Common approaches to the definition of the Meaningfulness of Life (MOL)

In recent years there has been a surge of interest in the concept of meaningfulness of life (MOL), which has come to be touted as a first-rate resource for overcoming the effects of traumas and for improving coping with the hardships of life (Antonovsky, 1987). The different approaches that have been proposed for accounting for the effects of the MOL emphasize positive attitudes, a sense of purposefulness and creativity, which are largely grounded in the theoretical framework of positive psychology. They have inspired most of the commonly used questionnaires for assessing MOL, such as the Life Regard Index (Battista & Almond, 1973), Meaning in Life Questionnaire (Steger et al., 2006), Sense of Coherence scale (Antonovsky, 1987), Purpose in Life test (Crumbaugh & Maholick, 1964), Purpose in Life Scale (Ryff, 1989). In many of the common scales the respondents are required to provide overall evaluations of their life's meaningfulness by means of items referring to qualities, such as the authenticity, richness, self-actualization, purpose, significance or fulfillment in one's life. The stated adjectives imply the conception of MOL as a positive construct, reflecting a rich, interesting, authentic, creative, energetic, goal-directed, adventurous, or satisfying life.

The underlying accompanying assumption is that having MOL is related to a good quality of life, mental health, physical health (Cohen, Bavishi, & Rozanski, 2016), contacts with people (Stilman et al., 2009), happiness and hope (Ryan & Deci, 2001). More specifically, MOL was anchored in finding value by acts of inventiveness and productivity, by sensory experiences or novel attitudes (Frankl, 1963); in self-control which allows individuals to feel that they can effectively manage their life so as to attain their goals (Vohs & Baumeister, 2004); in overcoming death anxiety (Becker, 1962; Quinto et al., 2022). Thus, the full picture implies that the presence of MOL is attended by happiness and satisfaction while its absence brings about depression, low quality of life, and despair.

2. Major shortcomings of the conventional approaches to MOL

There are several shortcomings of the mentioned approaches and scales which limit their applicability in psychology. First, the definitions and scales are all oriented towards the positive pole so that the difference between the positive goal and the manner or tools for attaining MOL are blurred. Secondly, they are unidimensional, such as authenticity, creativity etc. representing one kind of goal without concern for its constituents that may differ, e.g., creativity through art or gardening. Thirdly, they are grounded in one major theoretical framework which is positive psychology. Finally, there are no indications how to change or improve one's MOL if so desired.

3. A new tool for assessing MOL

The new described tool is based on the attempt to resolve some of the problems characterizing the conventional tools. It is based on a different theoretical framework which is cognition, specifically the meaning system which is the system of constructs and processes supplying the raw materials for cognitive acts or function. It includes basic kinds of contents that can be communicated in different forms (metaphors, analogies, examples), styles (positive or negative) and means of expression (verbal or nonverbal) (Kreitler, 2022a, 2022b). The meaning-based measure of MOL includes statements describing MOL in terms of the 22 basic content categories of the system of meaning. These categories refer to the following contents that have been defined on the basis of a large empirical body of data and may describe any subject or referent: Contextual allocation; range of inclusion (subgroups, parts); function, purpose or role; actions and potentialities of action (that the referent does or are done to or with it); manner of occurrence or operation; antecedents and causes; consequences and results; domain of application (subjects to which the referent refers or are affected by it); material; structure; state and possible changes in it; weight and mass; size and dimensionality; quantity and number; locational qualities; temporal qualities; possessions and belongingness; development; sensory qualities (characterizing the referent or perceived by it); feelings and emotions (evoked by the referent or experienced by it); judgments and evaluations (about the referent or held by the referent); cognitive acts and qualities (evoked by the referent or of the referent).

The MOL includes items presenting the title of the category and one or more examples, e.g., Actions, e.g., to be active, to do things. The subject is requested to respond to each item by checking one answer that describes the item's contribution to one's MOL (i.e., contributes a lot, contributes, contributes a little, does not contribute at all, scored 4-1, respectively).

There are two kinds of scores of the MOL. The first is a summary score, that represents the sum total of the responses to all the items.

A second kind of score is based on four categories of contents which represent the results of a factor analysis of the items of the MOL: (a) actional-dynamic aspects, including items such as to be active, to do things, to develop; (b) experiential-cognitive aspects, including items, such as to be able to think, to understand, to have many emotional experiences; (c) sensory-perceptual aspects, including items, such as to listen to music, to be exposed to many different colors and tastes, smells; (d) contextual aspects, including items, such as to feel that I belong to something or someone, to live in a place I like. The subject's responses to each item are summed and divided by the number of items in the category so that one gets a mean of the responses to each category.

4. Results of studies that are based on the total summary score

(a) *Instructions*. Comparing the scores in the summary score of the MOL questionnaire administered with the following different instructions: which of the following exist at present in your life, which of the following could exist in your life, which of the following should exist in your life, which of the following you would like or wish to exist in your life. All four instructions were administered in random sequence to 42 subjects (age 25-41, both genders). The results showed the following mean scores: 6.9, 10.4, 4., 7.8 ($F=3.2, p \leq .01$). The results indicate that the specific contents of the instruction matter. The mean of responses is lowest for the normative question, and highest for the desired, which is the optional in reality (Kreitler, 2016a).

(b) *Overall rating of life's meaningfulness*. Correlation between total summary score of MOL and the overall rating of one's meaningfulness of life. The subjects were 84 students in the social sciences, including both genders. They were administered the MOL and in addition were asked to rate the overall meaningfulness of their life on a scale 1-10 and to describe in words 'what is the state of the meaningfulness of your life'. The results were that the summary score and the rating were correlated positively and significantly ($r=.71, p \leq .001$). The finding indicates that the MOL is a valid measure of the meaningfulness of one's life. The verbal responses showed that ratings of 7-10 indicated that 'my life is very meaningful', while a rating of 2-4 was evaluated as 'my life is meaningless' (Kreitler, 2016a).

(c) *Quality of life*. The relation between the total summary score of MOL and quality of life. This question was examined in a study with healthy adults aged 30-56 (Kreitler, 2016b). Quality of life was assessed by The Multidimensional Quality of Life Inventory for Adults (Kreitler & Kreitler, 2006). The score of MOL was related positively to the score of quality of life – the total score and the subscales of emotional state, functional state and physical state. The highest correlation was with the emotional state.

(d) *Personality traits*. The relation between the total summary of the MOL and personality traits. The sample consisted of 88 students aged 21-32, of both genders, who were administered the MOL and the NEO-PI. Correlation coefficients were computed between the summative total score of MOL and each of the Big Five personality tendencies. The only significant correlation was obtained for the score of MOL

with Openness. (A more detailed analysis of scores in the four different categories of MOL, showed significant correlations between Extraversion and the dynamic-actional category [$r=.42$] and between Agreeableness and the sensory-perceptual category [$r=.46$] (See also 5) (Kreitler, 2018b).

(e) *Cognition*. The relation between the total summary score of the MOL and the cognitive profile. The cognitive profile was assessed by the Meaning Test, which requests the subjects to communicate the meaning of 11 familiar, such as street and feeling (Kreitler, 2022a). The subjects (69 undergraduates) were administered the Meaning Test and the MOL. Analyzing the results showed that the contents of the items in the MOL selected as contributing or contributing a lot to one's MOL corresponded in 71-74% to the content of the variables used by the subject in communicating meanings of words in the Meaning Test. For example, if an item referring to Possessions was selected as contributing a lot to one's meaningfulness of life, the variable denoting possessions was used with high frequency in one's Meaning Test in communicating meanings in general. This indicates that the MOL reflects one's general meaning assignment tendencies (Kreitler, 2016c, 2017).

A second set of important findings refers to the meaning profile of the subjects which represents their tendencies to use various cognitive processes. Analyzing the relation between the MOL and the meaning profile showed that high scorers on MOL used meaning communications showing focus on reality; preferences for interpersonally-shared meanings; emphasis on actional-dynamic aspects (doing things), complemented by references to experiential-cognitive and sensory aspects; focus on goals; tending not to shift too far from the major context; being orderly and systematic; characterized by complex thinking (Kreitler, 2014, 2016c).

(f) *Health*. The relation between the total score of the MOL and physical health. The relation was studied in a sample of 52 adult volunteers (age 24-60) who were administered the MOL and a self-report questionnaire of health (Schat, Kelloway, & Desmarais, 2005). The correlation between the two variables was $r=.42$ ($p\leq.01$) (Kreitler, 2017).

5. Results of the studies that are based on the four content categories

Table 1. Means of the four MOL categories in different groups.

Group	Age	No.	Gender	Dynamic-actional category	Experiential-cognitive category	Sensory-perceptual	Contextual category	Sig
Children	8-12	50	35 girls, 15 boys	4.1	1.9	3.5	3.6	ns
Middle aged	25-40	55	36 women, 19 men	7.2	3.9	3.2	5.4	$p\leq.01$
Elderly	65-85	52	26 women, 26 men	5.4	6.2	5.8	6.7	ns
Gender:	35-60	30	Women 30	6.2	5.8	4.3	2.2	$p\leq.01$
Gender:	35-60	30	Men 30	6.7	3.1	2.2	7.5	$p\leq.01$
Occupation								
Tourist guides	42-50	30	25 men, 5 women	7.6	1.5	5.8	3.9	$p\leq.01$
Artists	45-63	25	7 men, 18 women	3.5	6.9	7.3	2.4	$p\leq.01$

(a) *Age*: The effects of age on the MOL responses show that in younger age an in the elderly there is representation of responses in all four categories, although the scores are higher in the elderly than in the children (Table 1). In these two groups there seems to be no preference for specific categories. In the middle-aged adults the pattern is different: there seems to be a preference for two categories (i.e., dynamic-actional and contextual) (Kreitler, 2016a, 2017).

(b) *Gender*: Women were found to score higher on the categories of dynamic-actional and experiential-cognitive while men scored higher on the categories of dynamic-actional and contextual (Kreitler, 2017, 2022a).

(c) *Occupation*: The subjects were recruited unanimously on the social media. They were administered the MOL and a brief background questionnaire about their gender, age and occupation. The results show that MOL is affected by occupation: tourist guides score high on the categories of dynamic-actional and sensory-perceptual while artists score high on the categories of experiential-cognitive and sensory-perceptual aspects. The categories with high scores correspond to the aspects that the different occupations call for (Kreitler, 2022b).

6. The study about MOL and cancer patients

6.1. Objective

There are studies indicating on the one hand that cancer patients tend to suffer from low meaning of life and that higher meaning of life affects them beneficially (Krok & Telka, 2018). But the empirical results concerning the level of meaningfulness of life in cancer are not completely univocal (Quino et al., 2018). In addition, depression which is prevalent in cancer patients (Spiegel & Giese-Davis, 2003) is considered as related to low meaningfulness of life (Sun et al., 2022), but again the support of the empirical data is not strong (Kleftaras & Psarra, 2012). The purpose of the study was to examine whether cancer patients score low on MOL and whether depression affects negatively their MOL score (Kreitler, 2018a, 2019).

6.2. Method

Cancer patients (n=75) in the age range 48 to 76 years and a control group (n=40) of individuals with mood disorders tending to dysthymia, in the same age range. The subjects were recruited for the study through clinics and the social media. They were administered the MOL and the Zung Self-Rating Depression Scale (1965).

6.3. Results

The cancer patients and controls were divided into two groups high and low in depression, in line with the mean on the Zung scale. In the cancer group the mean was 57.2, in the control it was 50.1 (in both groups the mean denoted the difference between the non-depressed and the mildly depressed). The MOL scores in high and low scorers on Depression were in the cancer patients 6.1 (Sd=1.6) and 5.6 (Sd=0.8); in the control 7.3 (Sd=2.4), 6.7(Sd=1.9). The differences in MOL between high and low scorers in depression in cancer patients and control were not significant. However, in each of the subgroups the cancer patients had significantly lower scores (in both cases of high and low scorers in depression $p \leq .01$).

6.4. Conclusion

The findings indicate that depression does not play a critical role in regard to MOL, but that cancer patients tend to score lower on MOL than the controls with mood disorders, regardless of their scores on depression. It is possible that the findings in regard to depression are not significant because the levels of depression represented in this study were relatively low. Thus, cancer as a disease, or psychological and physiological factors associated with it, rather than depression, seem to be the cause for lower MOL in cancer patients. The reason for this may be the preoccupation with death that is conventionally evoked by cancer. Death has been found by previous investigators as a major propellant factor for experiencing meaninglessness of existence and for an intensified search for meaning.

7. Summary notes

Meaningfulness of life has been shown to be amenable to assessment by a valid, simple, flexible tool, enabling different kinds of scores in terms of a total score and specific categories. It is widely accessible, reflecting differences in terms of age, gender, and occupation and is based on a good theoretical background of the theory of meaning. Meaningfulness of life emerges as a potentially basic factor in psychology, playing an important role in cognition, personality and coping with disease, enabling insights into the psychological dynamics of human beings.

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