# THE COGNITIVE PROFILE OF THE GOOD QUALITY OF LIFE

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# Abstract

The purpose of the study was to identify the psychological processes characterizing good quality of life (QOL), in terms of the Kreitler meaning system. The meaning system is a widely used theory and methodology for assessing different kinds of meaning. There are five major kinds of meaning variables referring to contents, types and forms of relation, forms of expression and shifts in the referent or input. Since previous studies showed that personality traits and emotions are correlated with specific sets of meaning variables, the hypothesis was that there would be a specific meaning profile characteristic for QOL. The participants were 230 undergraduates of both genders. They were administered online the Meaning Test, assessing the individual's meaning assignment tendencies, and the multidimensional QOL. The results showed that there were 24 significant correlations between QOL and the meaning variables. Regression analysis showed that the five major kinds of meaning variables accounted for 69% of the variance in QOL. A structural analysis indicated that high QOL is a function of a realistic approach, reflecting both interpersonal and personal meanings, focusing on the facts as well as on the normative and desired aspects, revealing good analysis of situations, planning and creativity.

Keywords: Quality of life, meaning, personality traits, emotions.

# 1. Introduction

Happiness is one of the most persistent goals of human beings in all cultures (Compton, 2005; Diener, 2013). In the course of years different manifestations of happiness have been identified, such as the cognitive, affective, or physical ones, as well as correlates in the domains of personality, behavior and economics (Diener, 2006). The concept has undergone several conceptualizations that have resulted in constructs, such as quality of life, well-being, pleasure, and life satisfaction (Kim-Prieto et al., 2005). Recent studies have shown that the different constructs are highly correlated and support the concept of one global factor of well-being (Diener, 2006; Medvedev & Landhuis, 2018) that can be represented by the overarching construct of quality of life (QOL) (WHOQOL, 1994). Good QOL was found to be positively correlated with different psychological tendencies, such as purpose in life, personal growth, social relations, self-esteem, optimism, autonomy, and having the right emotions (Diener et al., 2010; Ryff & Keyes, 1995; Seligman, 2004; Tamir, Schwartz, Oishi & Kim, 2017) but much less so with social state, environmental factors and life circumstances (Costa, McCrae & Zonderman, 1987; Csikszentmihaliy, 1999; Lin & Ju, 1997; Lyubomirsky, 2007; Medvedev & Landhuis, 2018). Thus, stable individual differences are more useful than life circumstances in predicting QOL.

The findings concerning well-being and QOL support the conclusion that QOL is function of a basic psychological characteristic that contributes on the one hand to the enhancement of the positive correlates of well-being and on the other hand enables overcoming the potentially negative impact of environmental factors. The assumption underlying this study was that this basic psychological characteristic depends on the meanings that the individual assigns to one's life and one's external circumstances. The purpose of the study was to examine the meaning assignment tendencies that characterize individuals who score high on QOL as contrasted with those who score lower.

# 2. The meaning system

The study was done in the framework of the meaning theory which provides the constructs, methodology and a large body of studies concerning the nature, functioning and effects of meanings (Kreitler, 2020). The major tool of the theory is the meaning system which defines the variables describing meaning assignment tendencies and assigned meanings. Major assumptions underlying the system are that meanings are communicable, include a part that is interpersonally shared and another part which is more

personal and private, may be expressed verbally and non-verbally and that it is a complex multi-dimensional or multi-layered construct. The variables are based on extensive empirical data collected from a great number of subjects requested to communicate the meanings of different kinds of inputs (Kreitler, 2014).

On the basis of the empirical data and theoretical considerations, meaning was defined as a referent-centered pattern of meaning values. In this definition, referent is the input, the carrier of meaning, which can be anything, such as a word, an object, a situation, an event, or even a whole period, whereas meaning values are cognitive contents assigned to the referent for the purpose of expressing or communicating its meaning. For example, when the referent is 'Chair', responses such as 'made of wood' or 'stands in a room' or 'a piece of furniture' are three different meaning values. The referent and the meaning value together form a meaning unit (e.g., Chair - a piece of furniture) (Kreitler & Kreitler, 1990).

A full description of a meaning unit consists in describing it in terms of the following sets of variables: (a) Meaning Dimensions, which characterize the contents of the meaning values from the viewpoint of the specific information communicated about the referent, such as the referent's Sensory Qualities (e.g., Sky - blue), Feelings and Emotions it experiences (e.g., Mother -loves her child) or evokes (e.g., Darkness- fear), Range of Inclusion (e.g., Body - the head, arms, and torso); (b) Types of Relation, which characterize the immediacy of the relation between the referent and the cognitive contents, for example, attributive (e.g., Winter - cool), comparative (e.g., Spring - warmer than winter), exemplifying instance (e.g., Country - the U.S.); (c) Forms of Relation, which characterize the formal regulation of the relation between the referent and the cognitive contents, in terms of its validity (positive or negative; e.g., Yoga - is not a religion), quantification (absolute, partial; Apple - sometimes red), and status (factual, desired or desirable; Law - should be obeyed, Happiness - I wish I had more); (d) Referent Shifts, which characterize the relation between the referent and the original input or the previous referent, for example, the referent may be identical to the input or the previous referent, it may be its opposite, or a part of it, or a modification of it or even apparently unrelated to it; (e) Forms of Expression, which characterize the forms of expression of the meaning units (e.g., verbal, denotation, graphic) and its directness (e.g., actual gesture or verbal description of gesture) (Kreitler & Kreitler, 1990).

Each of the meaning variables represents a specific process of thinking and experiencing, for example, function, causes, comparison or metaphor. Thus, each variable has a unique contribution to the tools for understanding and reacting.

In assessing meaning communications, each unit of response is coded in terms of one variable from each of the five sets of variables. The variables of the meaning system are used for coding the responses of individuals to the Meaning Test (see Tools). The coding produces the individual's meaning profile which presents the set of meaning variables used by the individual.

# 3. Hypothesis

A great number of studies were performed for exploring the interrelations of the meaning system with personality traits. The paradigm consisted of administering to the same group of subjects the Meaning Test and a standard measure of some personality trait. The meaning variables that differentiated significantly between the high and low scorers on the personality measure were considered as constituting the meaning profile of that personality trait.

A body of research has shown that each of over 300 personality traits was correlated with a specific set of meaning variables (Kreitler & Kreitler, 1990). The studies dealt with the Big Five and other personality tendencies as the defense mechanisms (Kreitler, 2004) and the self-concept (Kreitler & Kreitler, 1987). Similarly, different emotions, including anxiety, anger and fear were found to be correlated with specific sets of meaning variables (Kreitler, 2003, 2011, 2014).

QOL is a tendency that was found to be correlated both with personality traits as well as with emotions (Pocnet et al., 2017; Watten, Syversen, & Myhrer, 1995; Wrosch & Scheier, 2003). Hence, it was hypothesized that QOL will be found to be correlated with a unique set of meaning variables. This set would constitute the meaning profile of QOL. It was expected that it would shed light on the nature and functioning of QOL.

#### 4. Method

The study was empirical and consisted in a correlational survey.

#### 4.1. Participants

The participants were 230 undergraduates in the behavioral sciences in the age range 22 to 27 years. They included 130 women and 100 men.

# 4.2. Tools

The two following tools were used: (a) the Multidimensional QOL Inventory (short version) which includes 22 items, each with four response alternatives (i.e., 'very true' to 'not at all true', scored as 4 to 1) (Kreitler & Kreitler, 2006). It provided a summative score and five sub-scale scores referring to activity, emotions, cognition, health, and social contacts. The reliability of the Inventory was in the range of .74-.82 in different samples. (b) The Meaning Test which consists of 11 familiar words (e.g., street, telephone, friendship). The task is to express their general and personal meanings using any means of response one chooses. A computerized analysis of the responses in terms of the five sets of meaning variables produces the individual's cognitive profile. The reliability of the profile is in the range of .70 to .79 in different studies.

### 4.3. Procedure

The study got the approval of the ethics committee of Tel-Aviv University. The two questionnaires were administered in random order on the internet unanimously. Participation was voluntary and provided the participants credits. The data was analyzed by SPSS 25.

# 5. Results

### 5.1. Control analyses

A preliminary principal components analysis done with the five scores of the QOL sub-scales showed that they all defined one factor. The communalities were .79, .65, .55, .51, .32 for actions, emotions, health, cognition and social connections, respectively. All eigenvalues were >2.10. The five sub-scales together accounted for 72% of the variance. Therefore, QOL was treated as one factor, based on the summative score.

Mean comparisons of the QOL and major summative scores in the meaning test (based on the sums of the different meaning dimensions, types of relation, forms of relation, forms of expression and referent shifts) showed no significant differences between the genders in terms of t-test results. Further, there were no significant correlations between age and QOL and the summative scores in the meaning test, probably due to the limited rage of age used in the study. Thus, gender and age were not considered in further analyses in this study.

#### 5.2. Regression analyses and correlations

The relations between QOL and the meaning variables were analyzed in two steps. First, the Pearson correlations between QOL and the different meaning variables in the subjects' meaning profiles were examined. A set of the significant correlations was prepared, including the positive and negative ones, summarized in terms of the standard clusters (e.g., emotions experienced or evoked are summarized as one, negative forms of relation are summarized as one regardless of whether they refer to absolute or partial statements) (Kreitler, 2020). There were 24 significant correlations (see last column, Table 1).

Predictors	Standardized beta		No. of variables
	coefficients	QOL <sup>1</sup>	related to QOL
Meaning	0.51**	Emotions .39; Cognitive Q. 45; Sensory Q. 44; Function .41;	10
dimensions		Action .55; Range of application .35; Causes29; State .33;	
		locational Q. 25; Temporal Q. 32	
Types of	0.44**	Attributive .57; Comparative: difference	4
relation		34; Exempillustrative .33; metaphoric .38	
Forms of	0.39*	Neg forms of relation -46; conjunctive positive .27;	5
relation		disjunctive -33; normative	
		28; desired .37	
Forms of	0.25*	Nonverbal: visual .34; Nonverbal motoric .29	2
expression			
Referent shifts	0.28*	Close shifts .45; medium shifts .52; distant shifts33	3

Table 1. Results of multiple regression analysis with the five sets of meaning variables as predictors and QOL summative score as the dependent variable and correlation coefficients of QOL with specific variables.

Dependent variable: QOL (R = 0.831;  $R^2 = 0.690$ ) F= 7.58, df=4/225, p<.01

<sup>1</sup>All correlation coefficients in this column are significant at least on the p<.01 level

The second step consisted in submitting the data to a regression analysis. There were five predictors, representing the five sets of meaning variables, i.e., the mean of the significant correlations with QOL of the meaning dimensions, types of relation, forms of relation, forms of expression, and referent shifts. The model was significant and showed that the five predictors accounted for 69% of the variance in QOL. The meaning dimensions had the largest contribution to the prediction, followed by types of relation, with forms of relation in the third place, and referent shifts and forms of expression in the last places.

### 6. Discussion

The findings of the study indicate that there is a meaning profile specific for QOL. When the mean of correlations in the five sets of the meaning system are considered as predictors, they are related significantly to QOL and account for 69% of the variance in QOL. This finding indicates that QOL is supported by a set of meaning variables related to it. All five sets have significant contributions, with the largest being based on meaning dimensions and the lowest on forms of expression. The relatively large contribution of meaning dimensions signifies that QOL depends mainly on handling reality in terms of specific contents, e.g., attending to sensory qualities, location, time, and who or what are present. Also, the form of expression, for example, the non verbal one may be important for QOL but less than the contents of one's cognition. These results indicate that the meaning profile of QOL is a rich and variegated profile. Also, the number of significant correlations in the profile supports this conclusion (n=24). It is richer than that corresponding to personality traits (the mean for traits is  $13.8\pm6.5$ ).

The meaning profile of QOL shows that there is a specific set of cognitive contents and processes correlated significantly with QOL. The specificity of the profile is manifested both structurally and in terms of contents. Comparing the meaning profile of QOL with the criteria characterizing the meaning profiles of personality traits (Kreitler & Kreitler, 1990) shows that the meaning profile of QOL deviates in all criteria from those corresponding to personality traits. Hence it is trait dissimilar. QOL seems to be supported by a set of meaning variables unique in terms of structure and contents.

In terms of contents the profile of QOL provides information about the habitual cognitive approaches of those who score high on QOL. These individuals have a broad and well balanced mode of thinking: they consider the external world (sensory qualities, range of application, state, time, location), the internal experiential world (emotions, cognitions) and the sphere of action (actions, function, causes). Their preferred types of relation indicate that they apply both the interpersonally-shared mode of meaning (attributive) and the personal-subjective mode (exemplifying-illustrative and metaphoric) which is characteristic of creative individuals (Kreitler, 2020). Notably they refrain from noting differences by comparisons. Their preferred forms of relation show consideration for both conjunction and disjunction, which indicates the weighing of alternatives and choice of possibilities, tendencies which characterize good planners (Kreitler & Kreitler, 1986). In the meaning profile of QOL there is an uncommon complementation of the realistic approach by awareness of the normative and desired aspects of reality. A most important characteristic is their abstaining from negation. The use of the nonverbal forms of expression indicates a tendency to express their subjective and personal experiences which lend themselves for better expression nonverbally than verbally. Finally, refraining from distant referent shifts and focusing to advantage on the close and medium shifts guarantees adherence to reality.

It is of interest to note the three meaning variables correlated negatively with QOL because they suggest the means of guarding oneself from reacting inadequately to inputs which may potentially reduce one's QOL. First in line is the tendency of ignoring negations, that is, overlooking things that are not available or have a negative impact, such as the things one does not possess. Secondly, there is the tendency of disregarding differences, such as the salary I get is different from that of my neighbor; I am not respected as highly as Mr. X. And finally, there is the tendency of suppressing the inclination to escape in one's thinking too far-fetched realms.

In sum, the meaning profile of good QOL describes an individual who has a strong grip on various aspects of external reality as well as internal reality; is focused on actions and function; is a good planner; takes into account many different aspects of situations; is creative; considers one's own needs and experiences; without deviating too much from reality leaves space also for what should be and what is desired; avoids dwelling on things that are missing, as well as on differences between oneself and others; and overcomes the temptation of succumbing to escapism.

The constituents of the meaning profile of QOL provide clear cut guidelines for interventions for improving and maintaining QOL by enhancing at least some of the involved meaning variables which may be missing or weak in the meaning profiles of individuals with lower QOL. In line with the suggestion of Seligman (2004), in order to improve one's QOL it is necessary to deal with the constituents and underlying tendencies rather than directly with QOL. The meaning profile of QOL provides precisely the opportunity to become aware of the underlying factors shaping and affecting one's QOL. There exists a systematic and targeted method of intervention for enhancing specific meaning variables in one's meaning profile (Kreitler, 2020).

## 7. Limitations

The major limitations of the study are the small size of the sample and its homogenous character. In order to further develop the results concerning the meaning profile of QOL it is advisable to repeat the study with larger samples of individuals in different age groups and cultures. Additionally, it is necessary to apply the intervention method for raising the level of QOL.

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