

The Existential Quest Scale by Van Pachterbeke et al.: Russian Adaptation and Psychometric Properties

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Abstract

Introduction. Phenomena such as openness to the world, flexibility in changing one's existential beliefs and worldview, and the ability to ask oneself complex questions are of both epistemological and psychological interest. Van Pachterbeke et al. refer to this readiness to engage in questioning as existential quest. Their proposed construct allows for assessing an individual's readiness to change their fundamental beliefs related to existential questions and worldview. The Scale of Existential Quest is a reliable tool for research abroad but has not been used in Russian psychology. The aim of this study is to test and validate the Scale of Existential Quest on a Russian-speaking sample as a tool for determining openness to changing one's existential beliefs. **Methods.** The adaptation of the scale was carried out in several stages. At the first stage, the scale was translated, and its content validity was assessed through expert evaluation (16 experts). At the second stage, the internal reliability and convergent validity of the adapted scale were examined (177 participants). At the third stage (500 respondents), external and construct validity were evaluated. The following methods were used: NEO-FFI Questionnaire; UCLA Loneliness Scale; DASS-21 Depression Scale; The Death Attitude Profile Revised; Existential Concerns Questionnaire; Meaning in Life Questionnaire; Existential Isolation Scale. **Results.** The basic psychometric indicators of reliability and validity of the scale generally met expectations (content validity of all items was confirmed). Most of the expected correlations were highly significant, except for a significant correlation with «search for meaning in life» at the second stage, which can be explained by sample

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characteristics. The results of exploratory factor analysis at the second and third stages of the study revealed several factors in the scale, which, based on theoretical justification, is not plausible. The Appendix provides the finalized questionnaire ready for use. **Discussion.** The obtained data confirmed the validity of using the concept of existential quest as a measurable psychological construct.

Keywords

Existential quest, beliefs, openness, worldview, existential questions, changes, worldview

For citation

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Introduction

Through out human history, people have engaged in spiritual quests, striving to understand the deepest questions about the nature of reality, the meaning of life, morality, justice, and other fundamental aspects of existence. Spiritual quests are often accompanied by profound introspection, questions posed to oneself and others, and the search for answers to these questions (Asmus, 1999). From a psychological perspective, this quest is connected to human motivation and psychological needs. It can be driven by curiosity, a desire for knowledge, and a need to understand the world. This drive can stem from intellectual, emotional, or ethical sources (Reischer et al., 2020). It is a unique personal journey—from questions about the nature of reality and the limits of human knowledge to the search for comfort and the fulfillment of a higher purpose, and further to the question of one's true purpose, freedom, and responsibility. The spiritual quest can be represented as stages and culturally related components of philosophical, religious, and existential search. These higher spiritual and personal aspects represent a relevant scientific interest for psychological science.

According to A. Maslow's concept of self-actualization (Maslow, 1962), philosophical quest is defined by the striving to achieve one's potential and to become aware of one's values and goals. Maslow argued that individuals experiencing the need for self-actualization may be more inclined to ask existential questions and explore profound ideas. McAdams et al. (1997) found that philosophical quest can also be driven by the need for meaning and connection with others. People with a philosophical orientation typically value deep and intellectual conversations, strive for meaningful social connections, and seek a deeper understanding of others. In any case, philosophical quest is an individual

process that involves reflection, a desire for knowledge, and is linked to the need for understanding oneself, the world, and finding meaning in life (Leontiev, 2007). In this regard, philosophical quest is often considered in the context of religion as a carrier of value systems that define the meaning of existence. This is evident in the works of J. Habermas, T. Luckmann and P. Berger, A. Giddens, A. Ellis, E. Fromm, and others (Titov, 2013).

G. Allport (Allport, 1950) problematized the influence of religiosity on personality and human behavior through the stages of religious sentiment. By introducing the concepts of extrinsic and intrinsic religiosity, he linked them to personality maturity. A «mature religious personality» is holistic, reflective, possesses a structured life philosophy integrated into their worldview, and mediates a hierarchy of values; it is not associated with prejudice or demonstrativeness in expression (Allport, 1966). Allport's psychological research allowed for the operationalization of the concepts of intrinsic and extrinsic religious orientation, the formulation of several hypotheses, and the creation of a scale to measure religious orientation (Allport & Ross, 1967).

Further work within this construct revealed contradictory data: some studies found opposing correlations between intrinsic and extrinsic religiosity (Trimble, 1997), which drew the attention of C. D. Batson (Batson, 1976). He proposed taking a step back and returning to the original formulation of the concept of a mature, spiritually oriented individual, adding the value of self-criticism, doubt, complexity, and incompleteness. According to Batson, to the existing dimensions of «religion as an end» and «religion as a means», a third dimension should be added—«religion as a quest». By introducing this new aspect of intrinsic religiosity, he implied a continuous process of seeking and doubting, related to life's contradictions, reflections on the higher meaning of society and life itself, and an eternal quest where questions are more important than answers (Batson, 1976, p. 32). The justification for this construct was provided by him and other researchers through a series of original experiments (Darley & Batson, 1973; Batson et al., 1986) and within correlational designs focused on studying existential givens (Batson & Raynor-Prince, 1983) and moral judgments (Sapp & Jones, 1986). However, the concept of «quest» as a new religious variable faced criticism regarding its construct validity (Hood, Morris & Watson, 1990) and other psychometric properties (Beck & Jessup, 2004). Subsequently, the scale was refined by the author himself, although the debate over what exactly the scale measures—agnosticism, religious conflict, or anti-traditionalist views—remained unresolved (Batson & Schoenrade, 1991).

The Scale of Religious Quest has several significant limitations. First, due to the specific nature of its original purpose, measurements can only be conducted on religious individuals. Second, as noted by Van Pachterbeke et al. (Van Pachterbeke, Keller & Saroglou, 2012), existential beliefs are often significantly broader and more universal than religious ones. In this regard, the development of a new scale that measures aspects of philosophical quest without being confined to the religious domain represents an important task.

The Scale of Existential Quest: Development and Testing in Research

The diversity of people, religions, ideologies, countries, and historical eras determines the existence of various perspectives, opinions, and beliefs regarding existential questions. These questions are associated with issues of time, life, and death; freedom, responsibility, and choice; communication, love, and loneliness; and the meaning or meaninglessness of existence (Yalom, 1999). Regardless of an individual's specific beliefs, everyone has their own understanding of the essence of these questions (Grishina, 2018).

However, beyond commonly accepted views on existential questions, there are significant differences among individuals in how categorically, intensely, and consistently they adhere to their beliefs or how open they are to revising and transforming them. Van Pachterbeke et al. (Van Pachterbeke, Keller & Saroglou, 2012) refer to this readiness for self-reflection and inner exploration as existential quest. Unlike philosophical and religious quests, which are driven by the pursuit of abstract universal answers, existential quest focuses on the concrete experience of human existence and individual responses tied to personal experiences and self-awareness. The authors define it as openness to doubt and re-evaluating one's views on existential questions.

This readiness exists independently of the specific content of beliefs and is applicable to individuals with various foundational attitudes. Thus, the authors introduced into the scientific field a construct that assesses an individual's readiness to change their core beliefs related to existential questions and their worldview.

To measure this construct, the Existential Quest Scale was developed, consisting of nine items. Unlike the religious focus of previous works (Allport, 1966; Allport & Ross, 1967; Batson, 1976; Batson & Schoenrade, 1991), the research by Van Pachterbeke et al. focuses on existential questions in general, without tying them to religiosity. This is because, in their view, adopting religious beliefs is merely one specific way of addressing existential issues (Van Pachterbeke, Keller & Saroglou, 2012, p. 3).

The construct validity of the instrument was tested by analyzing correlations with scales such as authoritarianism (Altemeyer, 1996; Funke, 2005), the need for closure (Webster & Kruglanski, 1994), intolerance of ambiguity (Batson & Schoenrade, 1991), and others. Hypotheses were formulated suggesting a negative correlation between existential quest (EQ) and these scales, given the fundamental differences between openness to existential questions (EQ) and the desire for certainty (the other scales). Additionally, one hypothesis posited that there should be a negative correlation between religiosity and EQ levels based on the research findings.

To test the construct validity, five studies were conducted. The first study, involving a sample of 323 students, aimed to validate the hypotheses regarding the absence of correlations with the aforementioned scales. The second study (N = 206) sought not only to replicate the results but also to examine the influence of age. The third study tested the validity of the EQ scale for myside bias—the tendency to see confirmation of one's own

opinions. The fourth study repeated the objectives of the first three but with a sample from a different country. The fifth study examined incremental validity in the context of religious quest and the search for meaning. The hypotheses proposed by the authors were confirmed through experiments conducted in Belgium and Germany with a total sample of 861 participants (Van Pachterbeke, Keller, & Saroglou, 2012).

M. Rizzo et al. (2019) adapted the EQ scale for Italy. In 2018, the authors conducted a study (N = 291, aged 19 to 82, M = 37.0, σ = 14.6, 64.3% were women), surveying participants using the EQ scale (van Bruggen et al., 2015), RWA (Funke, 2005), the short form of the Need for Cognitive Closure Scale (Roets & Van Hiel, 2011), and the short form of the Mental Health Continuum (Keyes, 2002; Petrillo et al., 2015). Overall, the results confirmed the validity of the original scale. The only significant difference was that the seventh item was excluded following factor analysis. The authors of the study recommend omitting this item in the final questionnaire for the Italian sample (Rizzo et al., 2019).

Thus, based on its testing on a European sample, it has been confirmed that the EQ scale is an effective tool and can be used to assess openness to changing one's existential beliefs.

Research Objective

The aim of our study was to adapt and validate the Scale of Existential Quest on a Russian-speaking sample.

Methods

The adaptation of the scale was carried out in several stages. At the first stage, the original scale was translated into Russian, and its content validity was assessed through expert evaluation. At the second stage, the internal reliability and convergent validity of the adapted scale were examined. At the third stage, external and construct validity were evaluated. The design of this study was approved by the Ethics Committee of the St. Petersburg Psychological Society (Resolution No. 10 dated October 15, 2021, and No. 20 dated March 9, 2023). All respondents provided informed consent to participate. The study design, hypotheses, and necessary documents were preregistered in the Open Science Framework system (Smirnov & Makarova, 2023a).

Sample

In the first stage of the study, 16 individuals participated, each holding a master's degree or higher in psychology and having experience in the field of existential psychology. Respondents were recruited through invitation emails. Participation was voluntary, anonymous, confidential, conducted online, and did not involve monetary compensation.

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In the second stage, 177 individuals participated (155 women, 20 men, 6 chose not to specify their gender, with an average age of 21). All respondents were students of the Faculty of Psychology at St. Petersburg State University. Participation was voluntary and confidential, conducted online. Anonymity was limited in the first phase of the study due to the need for retesting. After this phase, participants' personal data were anonymized.

In the third stage, 500 individuals participated (412 women, 74 men, 14 chose not to specify their gender, with an average age of 36). Respondents were recruited through social media announcements. Participation was anonymous and confidential. The study was conducted online.

Data Collection

Data were collected in accordance with modern recommendations for ethical and ecological considerations (Hughes, Camden, & Yangchen, 2016) and included the following demographic information: age, gender, country and city of residence, education level, income level, and religious or spiritual preferences.

To assess construct validity, seven methods were used:

1. NEO Five-Factor Inventory (NEO-FFI) (Costa & McCrae, 2008; adapted by Orel & Senin, 2008): A shortened version of the NEO PI-R questionnaire, it measures factors of neuroticism and extraversion and assesses the relationship between variables and the «Big Five» personality traits. The questionnaire consists of statements (e.g., «I enjoy being around people») rated on a Likert scale from 1 («strongly disagree») to 5 («strongly agree»).
2. UCLA Loneliness Scale, Version 3 (Russell, 1996; adapted by I. N. Ishmukhametov, 2006): This scale diagnoses subjective feelings of loneliness and social isolation based on common experiences. It includes 20 questions (e.g., «How often do you feel that people are around you but not with you?») rated on a Likert scale from 1 («never») to 4 («always»).
3. Depression Anxiety Stress Scale (DASS-21) (Lovibond & Lovibond, 1995; adapted by A. A. Zolotareva, 2020): A shortened version of the questionnaire measuring psychological distress in the modern world, it assesses depression, anxiety, and stress through self-report. Respondents rate statements (e.g., «I felt that I had nothing to look forward to») based on how often they experienced such states in the past week, from 0 («never») to 3 («almost always»).
4. Death Attitude Profile-Revised (DAP-R) (Wong, Reker, & Gesser, 1994; adapted by T. A. Gavrilova, 2011): This questionnaire measures attitudes toward death across five scales: fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance. Statements (e.g., «The thought of death causes me anxiety») are rated on a Likert scale from 1 («strongly disagree») to 7 («strongly agree»).

5. Existential Concerns Questionnaire (ECQ) (van Bruggen et al., 2017; adapted by Smirnov & Makarova, 2023b): This questionnaire assesses anxiety triggered by existential threats such as death, meaninglessness, and loneliness. It consists of 22 statements (e.g., «I worry that I am not living the life I could be living») rated on a Likert scale from 1 («not at all») to 7 («absolutely»).
6. Meaning in Life Questionnaire (MLQ) (Steger et al., 2006; adapted by Smirnov & Makarova, 2023c): This 10-item questionnaire evaluates the presence of and search for meaning in life (e.g., «I understand what makes my life meaningful») using a Likert scale from 1 («not at all») to 7 («absolutely»).
7. Existential Isolation Scale (Pinel et al., 2017; adapted by Smirnov & Makarova, 2023d): This scale consists of six questions (e.g., «Other people usually do not understand my experiences») rated on a sten scale with a leftward shift (values range from 0 to 9), where lower values indicate disagreement and higher values indicate agreement.

Research Hypotheses

We assume that the EQ scale will demonstrate content validity and internal reliability, positively correlate with the search for meaning factor in the life meaning questionnaire, general existential anxiety, and neuroticism, while negatively correlating with the presence of meaning in life at the present moment. We do not expect to find significant correlations with extraversion or existential isolation.

Our hypotheses are based on the description of the construct in the original article by Van Pachterbeke, Keller, and Saroglou (2012). The authors argue that openness to change (reflecting the recognition that individuals can revise their positions and views over time) does not imply that people hold no beliefs at all. They also posit that a strong orientation toward EQ is not equivalent to a tendency to avoid certainty, as the flexibility of existential attitudes stems from the human need to maintain consistency, meaning, and order. At the same time, individuals capable of questioning and revising their existential attitudes possess a certain curiosity and interest in exploring alternative ways of creating meaning.

Existential anxiety refers to the fear triggered by one of the threats to human existence—death, meaninglessness, and fundamental isolation (van Bruggen et al., 2017). Existential anxiety may encourage EQ, which does not necessarily entail existential loneliness (isolation) or extraversion. EQ can lead to a sense of connection with others, as individuals discover that they share common existential concerns. This sense of connection may counteract existential isolation.

Data Analysis

The data analysis was conducted using a Jupyter Notebook written in Python, utilizing the following packages: NumPy (Harris et al., 2020), SciPy (Virtanen et al., 2020), pandas (The pandas development team, 2023), pingouin (Vallat, 2018), reliability (Fernández, 2022), and factor_analyzer. The notebook is available under the MIT open-source license on the GitHub web service.

The analysis was carried out in several stages. First, we excluded all responses that met any of the following criteria: (a) at least one mandatory question was left unanswered, (b) the time taken to complete the survey was less than five minutes, or (c) the absolute difference between responses to repeated questions and their originals exceeded the number of such duplicates. To assess internal consistency, we calculated Pearson's correlation coefficient r for each item, Cronbach's alpha (α), and McDonald's omega (ω). For the correlation coefficients, we expected high but not excessively high values: $0.3 \leq r \leq 0.7$ (Kline, 1986; Streiner, Norman & Cairney, 2015). The following thresholds were adopted for interpreting the correlation coefficients: 0.2 (weak correlation), 0.4 (moderate correlation), and 0.7 (strong correlation) (Dancey & Reidy, 2011). For test-retest reliability, a value of 0.7 was considered sufficient (Akoglu, 2018).

Results

First Stage

Initially, the scale was translated into Russian. Three experts, including two authors of this article who possess either a certificate confirming their proficiency in English or relevant academic qualifications, independently translated the original items. After discussing the differences in their translations, the experts agreed on a single version. The Russian text was then sent to a translator who is a certified member of the Institute of Translation and Interpreting (ITI, membership number 11982). The translator performed a back-translation from Russian into English. Discrepancies between the original items and their translations were discussed by the experts and the translator, after which necessary adjustments were made to the Russian version. A total of three iterations of revisions were conducted.

The next step was to assess the content validity of the translated items. Sixteen experts in personality psychology with knowledge of existential psychology and a master's degree or higher in psychology were surveyed. The sample was not random: respondents were selected by sending email invitations to staff members of Saint Petersburg State University. Following the method proposed by B. Nevo (1985), we asked participants to rate how well each item corresponded to the measured construct on a scale from 1 to 5, where: 1 – «not related at all», 2 – «weakly related», 3 – «adequately related», 4 – «well related», and 5 – «perfectly related». The ratings were then averaged for each item. An item was considered valid if the average expert rating was equal to or exceeded 3.0 (Nevo, 1985).

The results are presented in Table 1.

Table 1

Mean Content Validity Ratings of the Existential Quest Scale by Experts (on a scale from 1 to 5)

Question Number	Mean Content Validity Ratings
1	3,9
2	3,7
3	3,7
4	3,8
5	3,3
6	2,5
7	3
8	3,2
9	3,7

Note. *Values in bold indicate low levels of content validity.*

From Table 1, it follows that all items except for the sixth one demonstrated sufficient levels of content validity. The sixth item («My opinion varies on a lot of subjects», English version – «My opinion varies on a lot of subjects») received an average score of 2.5. Indeed, such a formulation is rather vague, as it does not explicitly specify which subjects are being referred to. While respondents completing the questionnaire in the context of existential quest might correctly interpret the item, the experts' concerns were justified. Therefore, in the subsequent analysis, it was necessary to evaluate the contribution of this item to the overall scale score and, if needed, either rephrase or exclude it.

Second Stage

Out of the 177 responses received, eight were excluded based on the predefined exclusion criteria. The mean score was 43 ± 1 . Cronbach's alpha (α) was 0.81, and McDonald's omega coefficients were $\omega_t = 0.85$ and $\omega_h = 0.65$. The significant difference between the latter coefficients suggests that the scale may contain multiple factors, necessitating exploratory factor analysis (Dunn, Baguley & Brunsden, 2014; Trizano-Hermosilla et al., 2021).

For the retest, responses from 71 respondents were considered, meeting the requirements outlined in the «Procedures and Tools» section. Respondents' answers could be uniquely identified using voluntarily provided unique identifiers. On average, the interval between the test and retest was three weeks. The results indicate high test-retest reliability for the scale ($r = 0.83$, $p \ll 0.001$).

The item-total correlation coefficients for each item are presented in Table 2 (second row). Analysis of the table reveals that all items contribute as expected to the total scale score. Item 5 has an excessively high correlation with the total score, which may indicate its redundancy, necessitating further verification at the next stage. Surprisingly, Item 6, which had low content validity, demonstrated a high correlation coefficient ($r = 0.63$, $p < 0.05$). Thus, its inclusion in the scale at this stage is not redundant. The scale showed high test-retest reliability ($r = 0.83$, $p \ll 0.001$).

Given these results, it was decided to examine the factor structure. The exploratory factor analysis demonstrated sufficient reliability: Bartlett's test yielded a value of 325.41 ($p < 0.001$), and the KMO coefficient was 0.73. Since the scale authors did not provide theoretical assumptions for the factors, and due to the characteristics of the sample and distribution, the minimum residual method with varimax rotation was used to identify orthogonal factors. However, it should be noted that the results obtained using other parameters (maximum likelihood and principal component methods, oblimin rotation) did not differ significantly. The scale has three factors with eigenvalues greater than one ($p < 0.05$). The cumulative contribution of the factors is 0.44. The factor analysis revealed the following structure:

- Factor 1: Items 3, 4, 5
- Factor 2: Items 2, 9
- Factor 3: Items 1, 6, 7, 8

Due to the limited sample size at this stage, a detailed analysis will be conducted in the next phase. As expected, the Existential Quest scale positively correlates ($p < 0.05$) with the existential anxiety scale ($r = 0.29$) and neuroticism ($r = 0.30$), negatively correlates with the presence of meaning in life factor ($r = -0.29$), and shows no significant correlation ($p > 0.05$) with extraversion ($r = -0.16$) or anxiety ($r = 0.19$). However, the presence of a weak correlation ($p < 0.05$) between EQ and existential isolation ($r = 0.21$) was unexpected, as was the lack of a significant correlation ($p < 0.05$) with the search for meaning in life factor ($r = 0.17$).

Third Stage

After applying the exclusion criteria, 35 responses were removed. The mean score was 41 ± 1 . Cronbach's alpha (α) was 0.80, and McDonald's omega coefficients were $\omega_t = 0.83$ and $\omega_h = 0.63$. These results align with those obtained in the previous stage, further suggesting the presence of multiple factors in the scale.

The item-total correlation coefficients are presented in Table 2 (third row). In this case, all items fall within the required range. Item 5 still has a high item-total correlation ($r = 0.67$), but it does not exceed the maximum acceptable threshold. Item 6, whose content validity was questioned in the first stage of the study, shows a moderate correlation with the total score ($r = 0.49$), indicating that the decision to retain it in the scale was justified. Excluding this item from the sample results in a Cronbach's alpha of $\alpha = 0.79$.

Table 2

Correlations Between Items of the Existential Quest Scale and the Total Scale Score

Nº	1	2	3	4	5	6	7	8	9
2	0,53	0,64	0,63	0,55	0,71	0,63	0,44	0,35	0,62
3	0,54	0,64	0,51	0,57	0,67	0,49	0,33	0,53	0,65

Note. The first row (Nº) indicates the item number of the scale. The second row (2) shows the results from the second stage of the study, and the third row (3) presents the results from the third stage. Values in bold indicate strong correlations.

The exploratory factor analysis (Bartlett's test = 720.94, $p = 0.001$, KMO = 0.77), as in the previous stage, revealed the presence of three factors ($p = 0.001$). However, their cumulative contribution was lower (0.37), and the factor structure differed:

- Factor 1: Items 3, 4, 5, 6, 8
- Factor 2: Items 2, 9
- Factor 3: Items 1, 7

A comparison of the factor structure at this stage with the results from the second stage shows that Factor 2 remained unchanged, while Items 6 and 8 shifted from Factor 3 to Factor 1. This may indicate similarities between these items.

The correlation matrix is presented in Table 3. As in the previous stage, the Existential Quest scale positively correlates ($p < 0.05$) with the existential anxiety scale ($r = 0.31$) and

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negatively correlates with the presence of meaning in life factor ($r = -0.26$). No significant correlation ($p > 0.05$) was found with the overall meaning in life ($r = 0.04$). However, as expected, this study found no significant correlation ($p > 0.05$) with existential isolation ($r = -0.01$) and a positive correlation ($p < 0.05$) with the search for meaning in life factor ($r = 0.37$). It is worth noting that the greatest contribution to the correlation with existential anxiety comes from the general existential anxiety factor in the ECQ ($r = 0.36$), while the remaining two factors, avoidance and fear of death, have a weaker impact.

Table 3

Correlation Matrix Between the Existential Quest Scale and Other Scales at the Third Stage

	EQ	MLQ	MLQ P	MLQ S	EIS	ECQ	ECQ GA
EQ		0,04	-0,26*	0,32*	-0,01	0,31*	0,36*
MLQ	0,04		0,74***	0,73***	-0,21*	-0,14	-0,06
MLQ P	-0,26*	0,74***		0,08	-0,21*	-0,46**	-0,45**
MLQ S	0,32*	0,73***	0,08		-0,10	0,26*	0,36*
EIS	-0,01	-0,21*	-0,21*	-0,10		0,15	0,14
ECQ	0,31*	-0,14	-0,46**	0,26*	0,15		0,94***
ECQ GA	0,36*	-0,06	-0,45**	0,36*	0,14	0,94***	

Note. * $p \leq 0,05$; ** $p < 0,01$; *** $p < 0,001$. EQ – Existential Quest, MLQ – Meaning in Life Questionnaire, MLQ P – MLQ Presence, MLQ S – MLQ Search, EIS – Existential Isolation Scale, ECQ – Existential Concerns Questionnaire, ECQ GA – ECQ General Anxiety

Discussion

The results of the adaptation of the Existential Quest scale appear somewhat contradictory. On the one hand, the basic psychometric indicators of reliability and validity generally meet expectations. The contribution of the sixth item, whose content validity was questioned in the first stage of the study, to the total scale score is normal and moderate in value. Most of the expected correlations were obtained with high significance. The absence of a significant correlation with the search for meaning in life at the second stage may be explained by the characteristics of the sample: participants were students with an average age of 21. For such a sample, it is not particularly common to grapple with existential questions (Grishina, 2018). Additionally, the sample at the second and third stages of the study is characterized by a significant gender imbalance, with women making up more than 80% of the participants, although no statistically significant differences in correlations were found between male and female subgroups.

On the other hand, exploratory factor analysis at the second and third stages of the study revealed the presence of multiple factors within the scale. This may be due to the fact that the scale contains conceptually distinct constructs. This is indirectly supported by the values of McDonald's omega coefficients.

From Table 3, it follows that the first and seventh items contribute the most to the third factor: «Today, I still wonder about the meaning of life» and «I know my purpose in life very well». Both items are related to the meaning of life and essentially duplicate similar items from the Meaning in Life Questionnaire. Thus, the third factor could be labeled "awareness of one's own meaning in life." However, if these items are separated into a distinct factor and its correlation with the MLQ is assessed, it would not be high ($r = -0.20$ and $r = 0.39$ for the MLQ and the search for meaning in life factor, respectively).

Table 4

Contribution of Each Item to Factors F1–F3 for the Existential Quest Scale

Nº	Question	F1	F2	F3
1	Today, I still wonder about the meaning and goal of my life	0,15	0,23	0,45
2	My attitude toward religion/spirituality is likely to change according to my life experiences	0,15	0,76	0,10
3	Being able to doubt about one's convictions and to reap- praise them is a good quality	0,76	0,03	0,01

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Nº	Question	F1	F2	F3
4	In my opinion, doubt is important in existential questions	0,54	0,20	0,18
5	My way of seeing the world is certainly going to change again	0,51	0,42	0,06
6	My opinion varies on a lot of subjects	0,31	0,16	0,24
7	I know perfectly well what the goal of my life is	–0,02	–0,00	0,39
8	Years go by but my way of seeing the world doesn't change	0,42	0,31	–0,10
9	I often reappraise my opinion on religious/spiritual beliefs	0,22	0,60	0,21

Note. All values exceeding the threshold (0.3) are highlighted in bold.

The second factor consists of items 2, 9, and possibly 5 and 8. The first group of items explicitly relates to the theme of religion and spirituality, so if limited to these, the second factor could be labeled «attitude toward spirituality». Items 5 and 8 share a common theme of change (or lack thereof) in one's worldview. Moreover, items 3 and 6 are similar in theme, as they also relate to beliefs about general questions and the world as a whole. However, attitudes toward the world, change, and spirituality are still distinct constructs.

Thus, dividing the scale into separate factors is possible, but they would contain only a few items each. Furthermore, the wording of the items focuses not on specific constructs but on their search and (presumed) changes in personality, which constitutes the foundation of existential quest. This construct has multiple facets, including attitudes toward religion or spirituality, meaning in life, and openness to change. Therefore, we believe that a single-factor structure of the Existential Quest scale is more plausible than a multidimensional one, based on the following results and arguments:

(1) the differences between the total and hierarchical McDonald's omega values are present but not sufficiently high to clearly indicate the existence of a factor other than the primary one;

(2) there is no clearly defined factor structure across different samples—items «shift» from one factor to another between the second and third stages of the study;

(3) content and critical analyses suggest that a more plausible explanation for the statistically significant grouping of items is the existence of common contexts, such as spirituality and meaning in life, which are directly related to existential quest.

For the same reason, we do not consider it necessary to exclude the seventh item from the questionnaire, as was done in the Italian sample (Rizzo et al., 2019). The statistical indicators fall within the specified limits. A substantive analysis of this item indicates its connection to the construct of meaning in life, which, in turn, is related to existential quest. Therefore (and based on the results of the first stage), this item possesses content validity.

The development and validation of the Existential Quest scale confirm the concept of existential quest as a measurable psychological construct (Van Pachterbeke, Keller & Saroglou, 2012). The use of this scale in further research will provide insights into factors influencing existential quest, such as age, gender, life events, beliefs, and personality traits (e.g., as in the study by Saroglou et al., 2020). The scale can be used to explore the role of existential quest in overall psychological well-being, mental health, and the quality of life of modern individuals. From a practical perspective, the application of the Existential Quest scale will enable safe psychodiagnostics, the results of which can complement the work of an existentially oriented approach in setting therapeutic goals, tracking the dynamics of the counseling process, and increasing client awareness (e.g., as in the study by Arrowood, Vail & Cox, 2021).

Individuals open to existential quest actively seek meaning in their lives while losing a sense of meaning in the present. They exhibit higher levels of anxiety, including existential anxiety, and are slightly more prone to depression and stress. However, no differences were found in the social context (through extraversion or isolation). It is possible that to construct a three-dimensional scale aligned with the original theoretical framework, a new existential quest questionnaire should be developed for Russian-speaking samples or the original one expanded, which may equate to creating a new instrument.

Conclusion

The conducted study demonstrates that the adapted Existential Quest (EQ) scale is internally reliable and possesses content and construct validity. Most of the expected correlations were obtained with high significance. Specifically, construct validity is supported by the scale's positive correlation with the existential anxiety scale, with the general existential anxiety factor contributing the most, while the remaining two factors—avoidance and fear of death—have a weaker impact. The scale does not correlate with the

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overall meaning in life, negatively correlates with the presence of meaning in life at the present moment, and positively correlates with the search for meaning in life. Additionally, there is no correlation with existential isolation. At the third stage, the sample was more representative (though not entirely random), increasing the likelihood that the study's results can be generalized to the broader population, thereby ensuring the external validity of the research.

For the Russian-speaking sample, all items are significant, unlike the Italian sample, for which the seventh item was excluded. The scale measures various facets of existential quest, including attitudes toward meaning in life, spirituality, and changes in worldview (the full text of the scale is provided in the Appendix). For this reason, it is formally possible to isolate separate factors; however, statistical and critical analyses indicate that this is not advisable.

The findings suggest that the EQ scale is a robust tool for assessing existential quest in Russian-speaking populations. Its application can contribute to a deeper understanding of the role of existential exploration in psychological well-being, mental health, and quality of life. Future research could further refine the scale and explore its utility in diverse cultural and clinical contexts.

Data

The study design and hypotheses (excluding the expert evaluation part) were preregistered on the Open Science Framework website. All referenced documents, as well as raw data, are available at the following link: <https://osf.io/bjafd>

Limitations

The present study has the following limitations:

1. The sample at the first stage is not random.
2. The sample at the second stage is not representative: participants were exclusively students from the Faculty of Psychology at Saint Petersburg State University.
3. The sample at the third stage is not fully random: respondents were recruited through social media by posting announcements, but the groups for posting were subjectively selected by the authors of this article using catalogs and other sources.

These limitations should be taken into account when interpreting the results and generalizing the findings to broader populations. Future research could address these limitations by employing more diverse and randomly selected samples.

Appendix

Шкала экзистенциального поиска

1. Сегодня я всё ещё задаюсь вопросом о смысле жизни.
2. Моё отношение к религии/духовности, скорее всего, изменится в соответствии с моим жизненным опытом.
3. Способность сомневаться в убеждениях и пересматривать их – это хорошее качество.
4. Мне кажется, что сомнение является важным в экзистенциальных вопросах.
5. Мой взгляд на мир обязательно изменится снова.
6. Моё мнение различается по многим вопросам.
7. Я очень хорошо знаю свою цель в жизни.
8. Годы идут, но мой взгляд на мир не меняется.
9. Я часто пересматриваю свои религиозные/духовные убеждения.

Респондент указывает степень своего согласия или несогласия с утверждениями при помощи шкалы от 1 до 7 баллов: 1 – «абсолютно нет»; 2 – «в основном нет»; 3 – «скорее, нет»; 4 – «ни да, ни нет»; 5 – «скорее, да»; 6 – «в основном да»; 7 – «абсолютно да».

Шкала содержит 2 обратных вопроса: № 7 и № 8.

Средние значения выраженности экзистенциального поиска по результатам адаптации шкалы на русскоязычной выборке: от 9 до 40 баллов – низкий уровень выраженности экзистенциального поиска; от 40 до 42 балла – средний уровень выраженности экзистенциального поиска; 42–63 балла – высокий уровень выраженности экзистенциального поиска.

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Conflict of Interest Statement

The authors declare no conflict of interest.