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Existential Quest Scale

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Abstract

The 9-item Existential Quest Scale (EQS) measures flexibility in one's own existential beliefs and worldviews by questioning, valuing doubt on, and being open to change them. The measure applies to all people, independently of the specific content of their existential beliefs and worldviews. It has successfully been used in research across 17 countries of various religious, including secular, heritage and has thus been translated into 13 languages. Beyond its psychometric qualities (reliability, unidimensionality, item response theory analysis) and cross-cultural validity, accumulated research reviewed or meta-analyzed here offers solid evidence of interest for the construct and predictive validity of the measure. Indeed, the EQS is mostly independent from religiosity/spirituality and is related but not reduced to several indicators of cognitive open-mindedness, liberalism in sociomoral attitudes, and flexibility in group identity. In addition, existential quest, as measured by the EQS, reflects humility, other-oriented disposition, and tolerance, but also prevention regulatory focus and some negative emotionality impacting life satisfaction. As focusing on flexibility specifically in the existential domain, the EQS has unique power, beyond the effects of sociomoral liberalism and low religiosity, in predicting low scores on fundamentalism, prejudice, and moral opposition to issues such as abortion, euthanasia, or same-sex parenting. Finally, research indicates that existential questers are open to various types of mindfulness interventions (secular or spiritual) and are receptive of the positive effects of mindfulness interventions.

Keywords

Existential quest – Existential beliefs – Flexibility – Uncertainty – Openness to change – Dogmatism – Tolerance – Worldviews

Introduction: Theoretical Foundations

People hold different opinions, beliefs, and worldviews about universal existential issues and questions. The latter are ones regarding the meaning and goal of one's own life, the origin and finality of the world, the existence or not of afterlife and a transcendent entity or force, one's ultimate concerns and values, and so on. Independently of the content of the answers and the specific worldviews people have regarding existential issues (e.g., a religious, spiritual, atheist, humanistic, ecological, nihilistic, or any other kind of perspective, systematized or not), there exists important interindividual variability in the flexibility (or not) with which people hold their existential opinions, beliefs, and worldviews. Van Pachterbeke et al. (2012) introduced and defined this construct as "existential quest". Existential quest means interrogation on, valuing doubt about, and openness to possible future change of one's current existential beliefs and worldviews—irrespectively of the specific content of the latter. Inversely, low existential quest means inflexibility, i.e., certainty about and conviction of the unchanged nature of one's own existential beliefs and worldviews.

Development and Initial Validation

In line with the theorization presented above, Van Pachterbeke et al. (2012) created a brief, 9-item, measure of the above psychological construct, called the Existential Quest Scale (EQS), and provided initial validation through a series of five studies. This section will describe the development and the initial validation of the scale. A next section will provide cross-cultural information on the scale's validity.

Distinctiveness from Religious Quest

Van Pachterbeke et al. (2012) were inspired by previous important theorization and work by Batson et al. (1993) on a more focused construct and measure called "religious quest orientation" and the corresponding Religious Quest Scale (RQS; 12 items). However, Van

Pachterbeke et al. (2012) underlined the limits of the RQS, in particular in modern, secularized societies, as well as the need for a broader measure of existential quest: (1) the RQS measured questioning specifically religious beliefs and worldviews, which are not the only possible answers to the existential questions; (2) the RQS can be meaningfully applied only to religious samples; and (3) results on the RQS coming from studies on the general population including both religious and nonreligious participants confound religious doubt, as a dimension inherent to mature religiosity among the religious participants, with low religiosity or irreligion in the whole sample.

One can also add the fact that (4) the domain of existential issues and questions is much broader than religious beliefs; (or all RQS items use the word “religion”, “religious”, or specifically “God”. Furthermore, (5) RQS theorization and/or items included additional ideas: Religious quest is raised by the contradictions and tragedies of life; questions are far more important than answers; religious change is a consequence of personal growth across time; and the complexity of existential questions should not be reduced. These ideas are assumptions that have some evaluative tone and/or describe hypothetical explanatory processes.

In creating the EQS, Van Pachterbeke et al. (2012) paid thus attention to focus on purely descriptive and not evaluative items. They also created items allowing to capture interindividual variation strictly on the psychological construct itself, i.e., existential quest, without referring to any specific ideology and worldviews and without including additional assumptions (e.g., on causes or outcomes, as in the RQS), which would have not been an ideal situation conceptually and psychometrically.

Face and Content Validity

Inspired by their own previous training in various disciplines in human and social sciences (psychology, religious sciences, sociology, philosophy), previous research and

knowledge on various relevant psychological subfields, and the theorization by Batson et al. (1993) on a measure of religious quest, and coming from three different cultural/ethnic and religious backgrounds, the three co-authors (Van Pachterbeke, Keller, and Saroglou) developed initially 13 items to capture existential quest. After discussion with other experts from the US and European countries, they finally retained 9 items (see Appendix) that seemed to offer satisfactory face validity, i.e., responded to the theoretical considerations and concerns developed above, and content validity, i.e., did not paraphrase one single idea. Rather, the items cover various, presumably all, aspects of the construct (uncertainty, valuing doubt, being open to change) and are broad in the terminology used regarding the object (“meaning of life”, “goal of life”, “religion/spirituality”, “existential questions”, “way of seeing the world”) and the cognitive product (“opinion”, “attitude”, “convictions”, “beliefs”).

Psychometric Qualities and Item Response Theory Analysis

Through a series of five studies, on young adults and adults in Belgium and Germany, as well as additional psychometric analyses on the whole data ($n = 861$), including applying Item Response Theory (IRT), Van Pachterbeke et al. (2012) provided an initial validation of the scale. The internal consistency of the EQS was high (Cronbach’s $\alpha = 0.74$), and the unifactorial structure on the whole data was found through a principal components factor analysis with direct oblimin rotation. There was only weak indication of some content distinctiveness between anyway inter-related subgroups of items (see also a next section for further cross-cultural validation of these psychometric qualities). The EQS scores were normally distributed. There were no major (at least marked or consistent) gender differences, but, as it intuitively could be expected, age was negatively related to the EQS scores. Future research should clarify whether this is due to strictly age, cohort, or both.

The IRT analysis showed that all items had an acceptable fit to the Rasch model and that they discriminate well (better) people at the intermediate levels of existential quest--in

other words, additional items may better capture the two extreme ends, i.e., very strong conviction/inflexibility and very strong uncertainty/flexibility. Furthermore, the IRT analysis showed that valuing doubt is not difficult--low questers can do it; intermediate levels are characterized by interrogations about the meaning and goal of one's life; and the highest, more difficult, level refers to openness to the change of beliefs about religion and spirituality.

Initial Construct Validity

In terms of construct, convergent, and divergent validity, Van Pachterbeke et al. (2012) argued first that the EQS should importantly reflect low dogmatism, i.e., readiness to change one's own opinions and beliefs in face of new, contradicting, evidence, but also not be reduced to it given that the EQS taps specifically into existential worldviews and not all sorts of opinions and beliefs in general. In addition, the authors argued that the low end of dogmatism, at least as defined in Altemeyer's Dogmatism scale, denotes believing in little or nothing, whereas existential quest as defined in the EQS does not mean people do not hold certain beliefs and worldviews. Similarly, existential quest as measured by the EQS should be importantly related to low need for closure (epistemic need for order, structure, and answers rather than keeping the questions open) and low intolerance of ambiguity, but not be reduced to them given that the low ends of them, i.e., need to avoid closure and enjoyment of ambiguity, should differ from existential quest. Indeed, conceptually, existential quest implies flexibility and openness to change but not necessarily opposition to order, structure, and internal consistency of beliefs and worldviews—neverminded which they are.

Second, Van Pachterbeke et al. (2012) also argued that the EQS should be importantly related to the RQS, since the former conceptually encompasses the latter, but not be reduced to it and predict more broadly external outcomes, since existential quest should be mostly independent from religiosity and spirituality. Nevertheless, at the mean level, religious believers, as certain of their religious convictions, should be lower than nonbelievers in

existential quest. Finally, existential quest, given its very nature of flexibility and openness to change regarding basic beliefs, should be related—but rather moderately or weakly given the existential quest’s conceptual specificity—to liberal and autonomous sociomoral attitudes (low right-wing authoritarianism), some preference for cognitive curiosity, and readiness to consider and empathize with other’s perspective.

Across five studies (Van Pachterbeke et al., 2012), all these expectations were tested and confirmed, often with replicated results, with the EQS being importantly but not fully related to low dogmatism, low need for closure, and high religious quest, and moderately or weakly related to low intolerance of ambiguity, low authoritarianism, and high perspective-taking and empathy (the link with need for cognition was inconsistent). Furthermore, in a joint factor analysis with the items of the EQS and the items of the RQS put together, the EQS items formed a clearly distinct factor from the items of the RQS. In addition, across the above studies, the EQS was mostly unrelated to religiosity and occasionally positively related to spirituality.

Construct and Predictive Validity Across Cultures

Subsequent studies further validated the EQS and provided broad cross-cultural validity and additional construct and predictive validity. Several of the EQS correlates were identified across several samples, what also allows for meta-analytic estimations of the respective mean effect sizes I made here, specifically for the purposes of the present chapter (Table 1 details this meta-analytic information).

Cross-Cultural Use and Validation

The EQS has been used as part of a broad international study (Saroglou et al., 2020, 2022) involving samples of young adults from 14 countries grouped into seven civilizational zones of religious heritage representing most world religious traditions: US (Protestant

majority), secular Western European countries (Christian and secular traditions), religious Catholic countries, Greece (Christian Orthodox), Israel (Jewish), Turkey (Muslim), and Taiwan (East Asian religions). The EQS was administered in English (US), French (Belgium, France, Switzerland), Spanish (Costa Rica, Spain), and, in the predominant spoken language for the remaining countries, that is, Chinese (Taiwan), German (Germany), Greek, Hebrew, Italian, Polish, Slovak, and Turkish (11 languages).

The Cronbach's alphas ranged from 0.64 to 0.82 across the 14 countries. A multigroup Confirmatory Factor Analysis (CFA) was conducted and established configural, metric, scalar, and strict invariance of the EQS across the 14 countries (Table 2 of Saroglou et al., 2020). In addition, as it will be detailed below, many of the correlational and regression results were consistent across cultures (analyses were made at the seven cultural zones level) and the data from these zones were included as representing seven samples in the meta-analysis of the EQS correlates conducted here (results are presented in Table 1 here; additional correlations with other constructs were computed for the purposes of the present review).

In addition to the international study by Saroglou et al. (2020), other studies successfully administered the EQS, as part of a series of measures, in samples of young adults or older adults, in various countries. These included the US (e.g., Sullivan et al., 2014), the UK (Kira et al., 2019), South Korea (Joshani, 2020), Italy (Rizzo et al., 2019, 2022), and Egypt (Abdou & Saroglou, 2022, unpublished raw data). Thus, the EQS has additionally been translated into Korean and Arabic. In total, the EQS has now been used in research in 13 languages and 17 countries.

Furthermore, Rizzo et al. (2019) conducted a thorough examination of the psychometric qualities of their Italian translation of the EQS. Their work confirmed the scale's internal consistency, unifactorial structure, discriminant validity, full measurement

invariance across gender, and partial measurement invariance for age. Items 1 and 8, referring respectively to uncertainty about the meaning of life and non-change, across years, of the way of seeing the world may resonate differently for younger versus older participants. One item (Item 7) performed poorly both in the factor analysis conducted and in the measurement invariance tests, but note that Item 7 is one of the two reverse-coded items of the scale.

Insert Table 1 about here

Distinctiveness from Specific Worldviews

The meta-analytic examination we computed here of the association between EQS and religiosity and spirituality (Table 1) indicates first that the EQS does not overlap with irreligiosity but holds a weak negative association with religiosity, given that intensity in *religiousness* typically implies some certainty about beliefs and worldviews. Nevertheless, the negative association attenuates when one moves from religious countries (mean $r = -0.20$, Cis $[-0.27/-0.13]$, $k = 12$) to secular ones (mean $r = -0.14$, Cis $[-0.17/0.04]$, $k = 10$), $Q^* = 5.69$, $p = 0.017$. Thus, high existential questers may more often be low in religiosity or be non-religious (57% and 60% in respectively secular and religious countries), what suggests some affinity between existential quest and secularism (see also Anderson et al., 2023), but may also be religious (43% and 40%, respectively, in these countries). Nevertheless, among the nonbelievers or atheists, who are known to hold a firmer conviction about the non-existence of God, score lower in existential quest than agnostics, who are known to be uncertain about God's (in)existence (Uzarevic et al., 2021; see also Van Pachterbeke et al., 2012, Study 1, for an inverted-U relationship between EQ and religiosity).

It is clearly religious fundamentalists who, consistently across samples and countries, are characterized by low existential quest (see also Table 1). Using the EQS, Saroglou et al.

(2022) also showed that, across the various religious-cultural zones of the study (of Catholic, Protestant, Christian Orthodox, Jewish, Muslim, and East Asian religious tradition), low existential quest uniquely predicts and partly explains religious fundamentalism, beyond the well-known role of right-wing authoritarianism, but also beyond the role of intensity of religiosity, on fundamentalism. On the contrary, as mentioned earlier, the EQS is greatly related to religious quest (Van Pachterbeke et al., 2012, Study 5).

Spirituality is characterized by independence from structured religious institutions and ideologies. The EQS is overall unrelated to spirituality or is related to it diversely across cultural contexts. Specifically, in religious contexts, where spirituality has a traditional religious flavor, the EQS tends to show a weak negative association with spirituality (mean $r = -0.11$, CIs $[-0.25/0.04]$, $k = 6$), whereas, in secular contexts, the overall association changes significantly and becomes slightly positive (mean $r = 0.09$, CIs $[0.01/0.18]$, $k = 10$), $Q^* = 8.70$, $p = 0.003$. This suggests some weak connection in secular societies between being a spiritual seeker and being open to reconsider one's own worldviews.

A quasi-behavioral confirmation of the above comes from research showing that existential quest was positively associated with willingness to try mindfulness in general and types of mindfulness framed as either secular, Buddhist, or spiritual. On the contrary, religious participants who were attached to scriptural literalism were willing to try only mindfulness labeled as spiritual or "from your own religious tradition," but were unwilling to try Buddhist or secular mindfulness (Palitsky et al., 2022; see also Anderson et al., 2023, for existential questers' higher sensitivity to the positive effects of secular and Buddhist mindfulness interventions, compared to the religious participants' sensitivity to the effects of spiritual and religious mindfulness).

Personality, Cognitive, Emotional, and Self-Concept-Related Characteristics

The meta-analytic examination we carry out here of the relationships between the EQS and the big five personality factors, across samples and countries (Table 1), also reveals associations of existential quest with (1) low dispositions for closed-mindedness and search of order (high openness to experience, low conscientiousness) and (2) negative, or low positive, emotionality (high neuroticism, low extraversion). The negative mean association with agreeableness seems less consistent--the value of 0 is included in the 95% CIs.

The cognitive orientation for flexibility is also attested by the meta-analytic effect sizes showing that the EQS greatly denotes low dogmatism and, to a much lesser extent, low need for closure and high need for cognition and epistemic curiosity (Table 1). Individual studies also showed that the EQS is associated with low intolerance of ambiguity (Leary et al., 2017, US; Van Pachterbeke et al., 2012, Study 5, Germany; Zachry et al., 2018, US) and with a low myside bias, i.e., high propensity of being creative in imagining arguments contrary to their own opinions (a behavioral measure: Van Pachterbeke et al., 2012, Study 3, Belgium). Moreover, possibly because of the underlying cognitive and convictional flexibility and openness to change, participants scoring high in the EQS are characterized by high intellectual humility, low narcissism, and low social desirability (Leary et al., 2017; Zachry et al., 2018), the latter probably denoting some sense of autonomy.

The above flexibility and complexity of the existential questers seems to characterize more deeply their self-concept. Work by Sullivan et al. (2014; Study 1) in the US showed that the EQS is associated with adoption of what the authors call a dramaturgical perspective, i.e., viewing society as an elaborate play or game in which individuals enact different roles. In that study, the EQS was also associated with self-monitoring (the ability to monitor and regulate self-presentations, emotions, and behaviors in response to social environments and situations) and self-complexity (the belief that our self consists of many distinct aspects or roles).

At the same time, consistently across seven religious-cultural zones, the EQS is positively related to negative affect and negatively related to positive affect, the two kinds of affect being measured by the PANAS (see also Table 1). Possibly because of this underlying negative emotionality, individual studies in the US indicated that the EQS is related to low self-esteem (Young et al., 2021; Zachry et al., 2018), high anxious attachment in close relationships and self-insecurity, but also high depression, though not high anxiety (Young et al., 2021). The EQS was also found to relate to existential annihilation anxieties (Kira et al., 2019). It was also found (Table 1) to relate to prevention regulatory focus (a motivation to avoid losses, to be accurate, and to see one's goals as responsibilities) and to be unrelated to preventions focus (a motivation to achieve gains with an emphasis to approach strategies).

Implications for Meaning in Life, Life Satisfaction, and Prosociality/Tolerance

Beyond relevant intra-individual dispositions (personality, cognitive, emotional, and self-concept-related characteristics), one can anticipate existential quest as measured by the EQS to also reflect other dispositions at the existential and interpersonal levels. Some of the latter may be particularly interesting for the psychology of mindfulness.

Being at the crossroad of the two dispositions, i.e., high flexibility but also low certainty, interestingly, the EQS has been found to be associated with both high search of meaning in life (Van Pacheterbeke et al., 2012, Study 5, Germany) and low perception of meaning in life and high meaning insecurity (Young et al., 2021, US). Not surprisingly thus, my meta-analytic estimation here of the links between the EQS and life satisfaction/subjective well-being (Table 1, for the mean effect size) indicates a consistent across nine samples of various cultures negative association between the two. Only one study in Korea (Joshanloo, 2020, Study 2) showed a positive association between EQ and psychological well-being and, as an outlier, was not included in the meta-analysis.

However, also possibly because of the underlying cognitive/convictional flexibility and humility, the EQS seems to be positively associated with other-oriented dispositions. These include at least self-reported empathy (Table 1) and altruism (Van Pachterbeke et al., 2012, Study 4, Germany) though not behavioral generosity, i.e., spontaneously sharing hypothetical gains (Deak & Saroglou, 2015, 2017, Belgium). The prosocial orientation extends to tolerance of (diverse) others (Zachry et al., 2018) and low inter-religious prejudice, the latter effect being constant across various cultures (Table 1). The effect of EQ on low interreligious prejudice is unique and exists beyond the effect of (low) intensity of religiosity and (low) authoritarianism, and this is found consistently across cultural zones of various monotheistic traditions (Saroglou et al., 2022).

A similar pattern of results was found in two other studies having investigated Belgians' attitudes toward the legalization of abortion, same-sex adoption, and adult and child euthanasia (Deak & Saroglou, 2015, 2017). Conservative moral attitudes, measured through the endorsement of the collectivistic values (in particular, purity and loyalty), as well as intense religiosity, predicted moral opposition to the legalization of these issues, i.e., leaving to everyone the right to decide about them. Nevertheless, being high in existential quest, which was negatively related to the collectivistic moral foundations, showed unique and additive predictive role, beyond the one of religiosity and conservative morality, in explaining the support of depenalization of these moral issues.

Finally, behind tolerance and low prejudice in intergroup relationships, one may suspect flexibility in one's own collective identity. Initial evidence shows that the EQ is negatively associated with identities by descent (regional, national, and Arab identities among Egyptians; Abdou and Saroglou, 2022, unpublished raw data), positively associated with acculturation to the new, mainstream, culture while negatively associated with acculturation to the origin culture (among second-generation Muslims in Belgium, but not in Italy; Rizzo et

al., 2022), and positively associated with perceiving oneself as a world citizen (among US adults; Wannamaker & Ma-Kellams, 2020). High EQS scorers seem thus open to social change. They do not support the “status quo”, i.e., do not endorse system justification beliefs (Sullivan et al., 2014).

Limitations

One limitation of the EQS may be the fact that 2 of the 9 items, namely Items 2 and 9, explicitly refer to religion/spirituality. Though they do not imply at all a pro-religious attitude—nonbelievers may also change their “attitude toward religion/spirituality” and “opinion on religious/spiritual beliefs”—it is possible that respondents who answer quickly may perceive them as referring to flexibility when being religious/spiritual. Not including the 2 items in the scale in one study increased reliability (from 0.64 to 0.76; Joshanloo, 2020, a Korean sample), but in another study it decreased it (from 0.74 to 0.68; Saroglou et al., 2020, 14 countries). Nevertheless, it is recommended to use all 9 items, especially if space is available in the study. This is for the following reasons: the correlations of the EQS with external variables are very similar be it with 7 or 9 items (our re-analysis of Saroglou et al., 2020 and 2022, data); the 2 items are neutral with regard to religion; and these 2 items may serve as an illustration for participants of what may be the existential beliefs (they add thus predictive value).

Another limitation, not strictly of the scale itself but of the construct the scale measures, may be the fact that, as suggested by Rizzo et al. (2019), the psychological significance of scoring high in the EQS, especially in terms of the possible underlying negative emotionality, may not be the same for young adults compared to older adults. Indeed, research indicates that, as people age and mature, doubt in (religious) convictions reflects to a lesser degree emotional instability (Galek et al., 2007).

Conclusion

The Existential Quest Scale is a 9-item unidimensional measure providing a single score indicating individuals' level on high versus low flexibility in one's own existential beliefs and worldviews by questioning, valuing doubt on, and being open to change them. The scale has been used in research in both its English original version and translation in other 13 languages. An IRT analysis showed that all items had an acceptable fit to the Rasch model and discriminate well people, in particular those at the intermediate levels of existential quest.

Taken as a whole, the findings from the several studies that have used the EQS across 17 countries demonstrate not only the psychometric qualities and cross-cultural validity of the EQS, but also its specificity and uniqueness as measuring low certainty, high flexibility, and high openness to the possibility of change regarding one's own existential beliefs and worldviews, including the ones about religion and spirituality. Though it importantly relates to both religious quest and low dogmatism, existential quest is distinct from them. Despite its affinities with a secular mindset, existential quest does not necessarily imply low religiosity—several religious people may be high in existential quest—, and it is rather orthogonal to spirituality, with existential questers, unlike orthodox religionists, being open to both spiritual and secular forms of mindfulness and being receptive of the positive effects of these forms of mindfulness interventions.

Existential quest, probably because of its very nature as flexibility specifically in existential beliefs, (which are somehow central and guiding one's life, thus needing some minimal coherence), is moderately or weakly related to other constructs measuring open-mindedness in general (openness to experience), socio-cognitive and epistemic flexibility in particular (low need for closure, intolerance of ambiguity, and myside bias, and high need for cognition), and liberal sociomoral and sociopolitical attitudes (low authoritarianism,

endorsement of collectivistic moral foundations, and orientation to power/dominance). Confirming its specificity, the EQS has been found, consistently across various cultures, to uniquely predict low fundamentalism, high interreligious tolerance, and lack of moral opposition, and this beyond and above the role of low religiosity and liberal sociomoral attitudes on these three outcomes. To say this inversely: low existential questers may be fundamentalists, discriminate religious outgroups, and oppose legalization of euthanasia, abortion, and same-sex parenting even if they are not themselves very religious or conservative in the sociomoral/political domain.

Finally, being flexible in one's own existential beliefs and worldviews seems to imply a double reality regarding individual functioning and interpersonal and intergroup relationships. On the one side, the EQS, very likely as denoting convictional open-mindedness, is associated with humility, perspective-taking, empathy, intergroup tolerance, and acculturation to a new culture. On the other side, the EQS, very likely as also denoting some uncertainty on basic issues, reflects negative emotionality, insecure attachment, and prevention regulatory focus, all of them not contributing to the highest life satisfaction. Nevertheless, the two are not necessarily incompatible with each other and may be complementary. Existential questers to some extent lack meaning but are searching for meaning in their life; and they seem very open, without ideological constraints, to opportunities that are offered to them, for instance, to benefit from various kinds of mindfulness interventions.

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Note: The number in brackets after certain references helps to identify the study as listed in Table 1 (last column).

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Table 1

Meta-Analytic Estimations of the Mean Effect Sizes of the Associations Between the Existential Quest Scale and Relevant Individual Differences

Individual differences	Mean <i>r</i>	95% CIs	<i>k</i> (<i>n</i>)	Studies included
Worldviews (religious/spiritual)				
Religiosity	-0.14	[-0.20/-0.08]	22 (7,032)	[1-2], [7-8], [10-13], [15-16]
Spirituality	0.00	[-0.21/0.21]	16 (5,664)	[1-2], [9], [12-13]
Fundamentalism	-0.31	[-0.41/-0.21]	8 (3,393)	[10-11]
Personality				
Extraversion	-0.07	[-0.13/-0.01]	9 (3,892)	[9], [15-16]
Agreeableness	-0.07	[-0.14/0.01]	9 (3,892)	[9], [15-16]
Conscientiousness	-0.14	[-0.21/-0.07]	9 (3,892)	[9], [15-16]
Neuroticism	0.16	[0.09/0.22]	9 (3,892)	[9], [15-16]
Openness to experience	0.12	[0.02/0.21]	9 (3,858)	[5], [9], [16]
Socio-cognitive constructs				
Dogmatism	-0.55	[-0.76/-0.24]	4 (809)	[5], [13], [16]
Need for closure	-0.10	[-0.15/-0.05]	12 (4,285)	[7], [10], [13], [16]
Need f. cognition/curiosity	0.11	[-0.10/0.32]	4 (809)	[5], [13], [16]
Emotionality and well-being				
Positive affect	-0.11	[-0.21/-0.01]	7 (3,218)	[9]
Negative affect	0.15	[0.09/0.22]	7 (3,218)	[9]
Prevention focus	0.23	[0.09/0.36]	5 (1,219)	[12-13]
Promotion focus	-0.01	[-0.10/0.32]	5 (1,219)	[12-13]
Life satisfaction	-0.17	[-0.24/-0.10]	9 (3,947)	[7], [9], [16]
(Pro)social attitudes				
Empathy	0.26	[0.09/0.42]	5 (875)	[1-2], [13]

Interreligious prejudice	-0.22	[-0.32/- 0.10]	7 (3,218)	[10]
Right-wing authoritarianism	-0.28	[-0.33/- 0.23]	12 (4,018)	[7], [10], [13]

Notes. CIs: Confidence intervals. When the value of 0 is included in the CIs, mean *r* is in italics. Meta-analytic effect sizes were computed when *k* (number of studies/samples) was at least 4. The numbers in the last column refer to the studies (for the correspondence, see the References section) included for computing each effect (three additional unpublished dissertations are included).

Appendix: Existential Quest Scale

Citation

Van Pachterbeke, M., Keller, J., & Saroglou, V. (2012). Flexibility in existential beliefs and worldviews: Introducing and measuring existential quest. *Journal of Individual Differences*, 33(1), 2-16. <https://doi.org/10.1027/1614-0001/a000056>

Items

1. Today, I still wonder about the meaning and goal of my life.
2. My attitude toward religion/spirituality is likely to change according to my life experiences.
3. Being able to doubt about one's convictions and to reappraise them is a good quality.
4. In my opinion, doubt is important in existential questions.
5. My way of seeing the world is certainly going to change again.
6. My opinion varies on a lot of subjects.
7. I know perfectly well what the goal of my life is. (Reverse-coded)
8. Years go by but my way of seeing the world doesn't change. (Reverse-coded)
9. I often reappraise my opinion on religious/spiritual beliefs.

Instructions

Responses to questions are provided on a 7-point Likert scale [1 = *not at all true* and 7 = *completely true*; alternatively: 1 = *strongly disagree* and 7 = *strongly agree*]. R = reverse-coded item (Items 7 and 8). No specific constraints for the introductory instruction are provided. An example is: "Here are several statements that may or may not apply to you. Please indicate the extent to which you agree or disagree with it". It is advised not to administer the scale after measures of religiosity/spirituality, to avoid priming religion and subsequent possible pro- or anti-religious sentiments. A composite score is computed by averaging the score of all items.

Translations

Arabic, Chinese, French, German, Greek, Hebrew, Italian, Korean, Polish, Slovak, Spanish, Turkish. The list of the translations' authors and contact information can be found here: https://www.psyreli.org/_files/ugd/ba70ca_8100f8ec8e1d495fa59c0e184ee3d95d.pdf