

Does Thinking about the Meaning of Life Make you Satisfied with Life in a Religious and Globalised World? A 75-Nation Study

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Abstract

This paper reports on a multi-level study of 75 nations, which tests two hypotheses that arose from considering Tolstoy's experience of thinking about the meaning and purpose of life. The globalization-as-exacerbator hypothesis predicts that as globalization increases the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more negative. The religiosity-as-buffer hypothesis predicts that as religiosity increases, the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more positive. The results presented here support both hypotheses. We also found that it is religious attendance not religious belief that functions as a buffer in the relationship between thinking about the meaning and purpose of life and life satisfaction.

Keywords: meaning of life, globalization, religion, subjective well-being, life satisfaction, happiness, culture

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Introduction

Much psychological research on meaning focuses on the relations between measures of meaning or purpose and measures of well-being (e.g., Baumeister & Vohs, 2002; Debats, van der Lubbe, & Wezeman, 1993; Ryff, 1995; Steger, 2009; Zika & Chamberlain, 1992). The research on meaning and life satisfaction shows that *the presence of* meaning and purpose in life positively predicts life satisfaction (e.g. Steger & Frazier, 2005; Steger, Frazier, Oishi, & Kaler, 2006; Steger & Kashdan, 2006; Zika & Chamberlain, 1992), but *the search for* meaning and purpose in life is negatively or not significantly correlated with life satisfaction (e.g., Steger, Frazier, Oishi, & Kaler, 2006), except for people with very high presence of meaning in their life (Park, Park, & Peterson, 2010). In a large cross-cultural analysis, Haller and Hadler (2006) also found that *thinking about* the meaning and purpose of life is not a significant predictor of life satisfaction. The present paper is the first study to explicitly focus on the relationship between *thinking about* the meaning and purpose of life and life satisfaction. This paper sought to expand this limited literature through investigating two potential moderators of this relationship, namely religiosity and national globalization. The main purpose was to figure out if the relationship between thinking about the meaning and purpose of life and life satisfaction varies across the levels of these two moderators. The theoretical rationales for these hypotheses, and how they arise from considering the philosophical literature on thinking about the meaning of life are discussed below.

Thinking about the meaning and purpose of life is a broader concept than searching for the meaning of life because it could involve savouring the presence of meaning in life and ruminating on life's absence of meaning, as well as wondering what the point of one's own

life, and life in general, might be. Despite an immense amount of data having been collected on the question, “How often, if at all, do you think about the meaning and purpose of life?” (through the World Values Survey and the European Values Study), the only statistically significant empirical findings concerning thinking about the meaning and purpose of life are that most people ‘sometimes’ or ‘often’ think about the meaning and purpose of life (Campbell & Curtis, 1996), and, that the reported frequency of thinking about the meaning and purpose of life increased in 26 out of 37 societies and in 16 out of 20 advanced industrial democracies from 1991–1998 (Inglehart & Baker, 2000).

In contrast, and thanks mainly to philosophers, there are many theoretical and phenomenological ‘findings’ on thinking about the meaning and purpose of life (e.g., Baggini, 2005; Metz, 2007; Metz, 2012; Solomon, 1976; Weijers, forthcoming). For example, Tolstoy, who was very well-travelled and well-read, argued that thinking about the meaning and purpose of life caused him to experience intense dissatisfaction with his life (Tolstoy, 2000). Tolstoy’s dissatisfaction with life remained until he became convinced that there was an objective meaning and purpose of life, a religious one in his case (Tolstoy, 2000).

In *My Confession*, Tolstoy (2000) discusses how, despite the excellent circumstances of his life, thinking about the meaning and purpose of his life led him to become completely dissatisfied. Being a well-travelled ‘man of the world’, Tolstoy would have been one of the few people of his time to be exposed to the economic, social, and political ideas of other cultures (Christian, 1978). But, because the knowledge Tolstoy gained on his travels only produced depressing answers to questions about the meaning and purpose of life, the more he thought about the meaning and purpose of life, the less satisfied he became with his life (Tolstoy 2000). Might the globalization of modern times have a similar effect on the

relationship between thinking about the meaning and purpose of life and life satisfaction for us?

Modern times are often characterized by the ever increasing influence of the media and the internet, and accelerated international exchange via migration, tourism, and exchange studentships. These phenomena mean that an average citizen of today is much more exposed to the flow of information from almost all parts of the world. Indeed, we are now living in the era of globalization, which has been described as the “process of creating networks of connections among actors at multicontinental distances, mediated through a variety of flows including people, information and ideas, capital, and goods” (Dreher, 2006, p. 1092).

Pluralistic and multi-dimensional approaches to globalization generally posit that this variable has three dimensions: economic (i.e., flows of goods, capital, services, and market information across national boundaries), political (i.e., diffusion of government policies), and social (i.e., the spread of ideas, information, images, and people) (Dreher, 2006; Dreher et al., 2008; Keohane & Nye, 2000).

Given this description of globalization, people residing in nations that have been highly affected by globalization are likely to be exposed to an enormous and diverse set of ideas, including many ideas about what the meaning and purpose of life is. Most of these ideas about what the meaning and purpose of life is will be religious, but a few will be secular or even nihilistic—purporting that there is no meaning or purpose of life. Being exposed to a large amount of these supposed truths about the meaning and purpose of life seems likely to diminish some people’s conviction that any one of the ideas is actually true, perhaps even to the extent that belief in a particular religion, God, or secular source of the meaning and purpose of life is irrational (this is similar to the “many Gods” objection in philosophy; Saka, 2001). Therefore, people who frequently ponder the meaning and purpose of life seem likely to be less happy if they live in a nation that has been more affected by

globalization than if they live in a relatively unaffected nation. This is the basis for the globalization-as-exacerbator hypothesis.

In the end, despite all his worldly knowledge and disdain for organised religion—which he initially perceived as irrational and monstrous (Tolstoy, 2000, p. 16)—Tolstoy turned from reason to faith, and became a Christian of sorts (Weijers, forthcoming). Through religion, he began to believe there was a meaning and purpose of life and began to become more satisfied with his life (Tolstoy, 2000). Research on religiosity and meaning suggests that Tolstoy’s experience is not unique. Religion has been described as “a multifaceted object, incorporating cognitive, emotional, motivational, and behavioral aspects” (Hackney & Sanders, 2003, p. 45). And, religiosity has been described as referring to the “various dimensions associated with religious beliefs and involvement” (Bergan & McConatha, 2001).

It is well documented that people turn to religion in times of hardship (Inglehart, 2010), and that the benefits of religious belief include justifications for the way things are, including why we are here and what the purpose of life is (Emmons & Paloutzian, 2003; Frankl, 1977; Geertz, 1966; Jonas & Fischer, 2006; Schweiker, 1969). Indeed, reviewing the limited literature comparing religious systems of meaning with non-religious systems of meaning, Newton and McIntosh (2013) found that religious meaning was more complex and more coherent, that it was better than non-religious meaning at dampening the negative effects of thinking about death and meaningless (Jonas & Fischer, 2006; Norenzayan & Hansen, 2006; Van Tongeren & Green, 2010), and that religious people were more likely to report their lives as having meaning and purpose compared to non-religious people (92% to 83%; Crabtree & Pelham, 2008). Therefore, since non-religious people are less likely to hold clear positive systems of justification surrounding the meaning and purpose of life, religious people who frequently ponder the meaning and purpose of life might enjoy doing so more than non-religious people, who, like Tolstoy did, might find that doing so decreases their

satisfaction with life. This is the basis for the religion-as-buffer hypothesis. Furthermore, different aspects of religiosity might play different roles in this process. For example, the strength of belief in the system and the ability to effectively use the system might depend on the extent of an individual's belief in the importance of God and their level of participation in religious events (at which how the system provides meaning and purpose might be explained). Combined with the importance of using more than one measure when assessing religiosity (Bergan & McConatha, 2001), this is the basis for using a measure of religious belief and a measure of religious attendance to assess religiosity.

In sum, the purpose of this paper is to assess two hypotheses based on Tolstoy's phenomenological account of his experience of thinking about the meaning and purpose of life. The globalization-as-exacerbator hypothesis predicts that as globalization increases the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more negative. The religiosity-as-buffer hypothesis predicts that as religiosity increases, the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more positive.

Finally, various aspects of economic prosperity have been shown to correlate positively with thinking about the meaning and purpose of life (Inglehart & Baker, 2000) and globalisation (e.g., Dreher, 2006), and negatively with religiosity (Diener, Tay, & Myers, 2011). Therefore, a careful test of the hypotheses above should control for economic prosperity to ensure that the hypothesized relationships are not driven by economic prosperity.

Method

Participants

In the present study, we combined data from the World Values Survey and European Values Study (EVS, 2011; WVS, 2009). These surveys are large-scale surveys on human values and norms that have been conducted in developing and industrialized nations in several waves since 1981. These sources provide data from representative national samples of about 80 societies that contain 85% of the world's population. In the present study, all waves from 1999 to 2010 (i.e., 1999–2004, 2005–2007, & 2008–2010) were included.

A total of 143,085 participants from 75 nations completed all measures of the study. The included countries, sample sizes, and national-level means and *SDs* of the variables under study are reported in Table 1. Intercorrelations of the individual-level variables are reported in Table 2.

Measures

Thinking about the meaning and purpose of life. This variable was measured with participants' answers to the question "How often, if at all, do you think about the meaning and purpose of life?" on a 4-point scale ranging from 1 = *Often* to 4 = *Never*. The responses were reverse-coded such that higher scores indicated a higher frequency of thinking. At times this variable will be referred to as "thinking about meaning" for the sake of brevity.

Life satisfaction. This variable was used as the outcome in multi-level analysis. Participants answered the question "All things considered, how satisfied are you with your life as a whole these days?" on a 10-point scale ranging from 1 = *completely dissatisfied* to 10 = *completely satisfied*.

Importance of God. The first measure of religiosity tracks the importance of God in the participants' lives and used participants' answers to the question "How important is God in your life?" on a 10-point scale ranging from 1 = *not at all important* to 10 = *very important*.

Religious attendance. The second measure of religiosity tracks the frequency of participants' attendance at religious services and used participants' answers to the question "Apart from weddings, funerals and christenings, about how often do you attend religious services these days?" on a 8-point scale ranging from 1 = *more than once a week* to 8 = *never, practically never*. The responses were reverse-coded such that higher scores indicated a higher frequency of religious attendance.

National level of globalization. We used the KOF globalization index (Dreher, 2006; Dreher et al., 2008) for the year 2010, which measures economic, social, and political aspects of globalization. The index values range between 0 and 100, with higher values indicating more globalization.

National economic prosperity. To measure the economic prosperity of the nations in the study, the economy sub-index of the 2012 Legatum Prosperity Index was used. This index measures "countries' performance in four key areas: macroeconomic policies, economic satisfaction and expectations, foundations for growth, and financial sector efficiency" (Legatum Institute, 2012, p. 12). The economy index ranges from -6.78 to 3.33.

Statistical analysis

Given that in the present study, the data structure is hierarchical (i.e., individuals are nested within nations), we used multi-level modeling to analyse the data. In traditional fixed parameter techniques (such as ANOVA), the random variability associated with group-level characteristics are ignored. In contrast, multi-level modeling simultaneously considers within-group variability at the individual level, and between-group variability, which is the most efficient and realistic way of analysing hierarchically nested data (Snijders & Bosker, 2012). Moreover, multi-level analysis allows us to test hypotheses about variables defined at various levels of analysis. Given that, in the present study, we are interested in both

individual-level and national-level predictors, and their interactions, multi-level modeling serves as the most useful technique.

Multi-level analyses were conducted using SPSS 19, with restricted maximum likelihood, to estimate the models. *Interaction 1.7.2211* was used to produce the graphs (Soper, 2013). We used random-intercepts/random slopes models, where both the intercepts and the slopes of individual-level predictors are allowed to vary across the groups (Luke, 2004). All individual-level variables were group-mean centred and the two national-level variables were grand-mean centred (Bryk & Raudenbush, 1992; Nezlek, 2011).

Results

The intercorrelations between the individual-level variables (Table 2), show that all of the variables are significantly correlated with each other ($p < .01$), which does not come as a surprise given the large sample size at the individual level. The two measures of religiosity—importance of God and religious attendance—are moderately correlated, and the other correlations are small. Life satisfaction is negatively correlated with the other variables and the other variables are all positively correlated with each other.

We tested an unconditional means (or a null) model (Luke, 2004; Peugh & Enders, 2005), excluding all the predictors. An unconditional means model is identical to a one-way ANOVA with random effects. The results of this analysis reveal the proportion of variability in life satisfaction that exists at the individual and cultural levels before adding covariates. The results showed that there was statistically significant variability both at the individual ($b = 5.20$, Wald $Z = 319.82$, p (one-sided) $< .001$) and national ($b = 1.04$, Wald $Z = 6.06$, p (one-sided) $< .001$) levels in life satisfaction scores. Therefore, it was justifiable to add predictors to the model to explain the existing unexplained variance at both levels.

In a second model, we the following predictors: thinking about meaning, importance of God, religious attendance, and globalization. The results showed that the slopes of importance of God ($b = .004$, Wald $Z = 4.29$, p (one-sided) $< .001$), religious attendance ($b = .002$, Wald $Z = 4.70$, p (one-sided) $< .001$), and thinking about meaning ($b = .019$, Wald $Z = 4.68$, p (one-sided) $< .001$) were significantly variable across the nations.

Adding all the individual and national-level predictors to the model reduced the unexplained within-culture variability by ($5.20 - 5.02 =$) 0.18 , meaning the covariates explained about 3.4% of the variability in the individual-level scores of life satisfaction. The remaining amount of unexplained variance is still significantly different from zero ($b = 5.02$, Wald $Z = 262.065$, p (one-sided) $< .001$). Adding these predictors to the model also reduced the unexplained between-culture variability by ($1.04 - .79 =$) 0.25 , meaning the covariates explained about 24% of the variability in the national-level scores of life satisfaction. A significant amount of variance remains to be explained by additional covariates ($b = .79$, Wald $Z = 6.014$, p (one-sided) $< .001$).

The estimates for this model are shown in Table 3. While thinking about the meaning and purpose of life was not a significant predictor, importance of god, religious attendance, and national globalization were significant positive predictors. The interaction of thinking about meaning and importance of god was not significant, but the interaction of thinking about meaning and religious attendance was significant, which is consistent with religious attendance (but not importance of God) moderating the relationship between thinking about meaning and life satisfaction. This interaction is schematically shown in Figure 1. The figure indicates that for individuals scoring lowly and moderately on religious attendance, thinking about the meaning of life is negatively correlated with life satisfaction. For people scoring highly on religious attendance, however, this relationship is positive. The interaction of thinking about meaning and national globalization was also significant. This interaction is

shown in Figure 2. Consistent with the globalization-as-exacerbator hypothesis, for individuals living in more globalized nations, thinking about the meaning of life is negatively correlated with life satisfaction. For individuals living in less globalized nations, however, this relationship is positive.

Finally, in order to examine if the moderation effects would hold when controlling for economic prosperity, we tested a third model by adding economic prosperity as a national-level predictor to the second model (keeping all previous predictors in the model). We found that national economic prosperity was a significant positive predictor of life satisfaction ($b = .39$, $SE = .06$, $t = 6.53$, $p < .001$). However, the interaction term of thinking about meaning and religious attendance ($b = .013$, $SE = .003$, $t = 3.83$, $p < .001$), and that of thinking about meaning and national globalization ($b = -.007$, $SE = .001$, $t = -6.06$, $p < .001$) remained significant. This indicates that these interactions cannot be explained by differences in nations' wealth.

Discussion

The intercorrelations between the individual-level variables (Table 2) are in line with previous research and our expectations. Although all of the variables were highly significantly correlated, the large sample size of the study is reason to consider the size of the correlation more important than the significance. In line with previous research (e.g., Okulicz-Kozaryn, 2010), the correlations between life satisfaction and the religiosity variables (importance of God and religious attendance) are very small and negative. This should not be understood as evidence that religiosity leads to lower life satisfaction. Detailed studies have shown that religiosity tends to increase life satisfaction when confounding variables are controlled for (Inglehart, 2010). The correlation between thinking about meaning and life satisfaction was small in size and negligible. Also in line with expectations

(because of their close conceptual connection), the strongest correlation was between the two religiosity variables. The religiosity variables were positively correlated with thinking about meaning, which might reflect tendencies for people who frequently ask existential questions to turn to religion for answers, and for religious people to be prompted to think about the meaning and purpose of life more often than non-religious people.

The results of the multilevel modelling analysis (Table 3) were mostly in line with our expectations and both replicated and added to existing findings in the literature. The findings showed that national globalization was positively related to life satisfaction, suggesting that living in a more globalized country is advantageous for an individual's level of life satisfaction. Very little research has been done on the relationship between globalization and life satisfaction. Using micro data from 15 European nations, Hessami (2011) found globalization to be a positive predictor of life satisfaction, especially for right-wing voters, high-skilled workers, and high-income earners. Using national-level data from 70 nations, Bjørnskov, Dreher, and Fischer (2008) found that globalization was a significant positive predictor of life satisfaction only for right-wing voters. The significant positive relationship between globalization and life satisfaction found in the present study fits better with Hessami's results. The differences in the results between these three studies cannot be explained by the globalization measure used, since it was the same in each analysis; rather, the number of nations and variables included and the structure and breadth of the data used are likely to have led to these different relationships between globalization and life satisfaction.

Replicating previous findings, religiosity as measured by importance of God was a significant predictor of life satisfaction (e.g., Helliwell, 2003; 2006; Joshanloo & Weijers, 2013), as was religiosity measured by religious attendance (Elliott & Hayward, 2009; Haller & Halder, 2006). Religiosity is thought to promote mental health and subjective well-being in

a variety of ways (for a review see: Schieman, Bierman, & Ellison, 2013), including through providing meaning and purpose in life (Chamberlain & Zika, 1988; Steger & Frazier, 2005).

Also replicating previous findings (e.g., Haller and Hadler, 2006), thinking about the meaning and purpose of life was not a significant predictor of life satisfaction. This result is probably best explained by the highly different beliefs about the meaning or purpose of life that people hold. Some people believe that there is no meaning or purpose of life, or that they will never be certain of what the meaning or purpose of life is, both of which probably make them less satisfied with their lives when they think about the meaning or purpose of life. In contrast, other people firmly believe that there is a meaning or purpose of life, which probably makes them feel more satisfied with their lives when they think about the meaning or purpose of life. Indeed, this interpretation was consistent with the results for the interaction terms discussed below.

Whereas thinking about meaning was not a significant predictor of life satisfaction in the multi-level model (see Table 3), importance of God and religious attendance were significant predictors. This is not consistent with the interpretations of the “How often, if at all, do you think about the meaning and purpose of life?” question as a measure of religiosity (Haller and Hadler, 2006), or of spiritual concerns (Inglehart & Baker, 2000). Our findings suggest that this question should probably be interpreted much more literally, and not as an activity that only the religiously or spiritually inclined undertake. Indeed, when this evidence is combined with Inglehart and Baker’s (2000) own finding that thinking about the meaning and purpose of life increased most in the advanced industrial democracies (which are also the least religious; Deiner, Tay, & Myers, 2011), and the relatively small correlations between the thinking about meaning and religiosity variables reported in Table 2, it should now be untenable to interpret the thinking about meaning question as a measure of religiosity.

The interaction of thinking about the meaning and purpose of life with religious attendance was a significant predictor of life satisfaction, but the interaction of thinking about the meaning and purpose of life with belief in God was not. This result does not completely support the religiosity-as-buffer hypothesis. However, this result would support the more specific religious-attendance-as-buffer hypothesis: as religious attendance increases, the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more positive. A possible explanation for why attendance affects the relationship between thinking about meaning and life satisfaction, while belief in God does not, is that believing in God might help people to believe that there is a meaning and purpose of life, but attending religious ceremonies helps strengthen this belief *and* also helps people understand how to use religious belief to engender a sense of meaning and purpose in their lives. For example, a non-church attending Christian might believe that God put humans on Earth to do his bidding, but might not understand exactly what God wants of her. This could make thinking about the meaning and purpose of life confusing or stressful, rather than satisfying. On the other hand, a Christian who attended church regularly would be exposed to information about how God's plan for the meaning and purpose of life relates to humans, and would be more likely to understand how to live in accordance with God's wishes. This could make thinking about the meaning and purpose of life more fulfilling. It should also be noted that, as a measure of religiosity, importance of God is best suited to theistic religions, and not well suited to some other religions, such as Buddhism, which do not stipulate a God to believe in.

Also in support of the religious attendance-as-buffer hypothesis, Figure 1 shows that the relationship between thinking about meaning and life satisfaction is negative for the least religious group (in terms of attendance) and positive for the moderately and highly religious groups. The idea that religion is a major source of positive answers to existential questions

about the meaning and purpose of life (Newton & McIntosh, 2013) fits well with these results. Also consider that, if there were common non-religious sources of positive answers to existential questions about the meaning and purpose of life, then it would be unlikely to observe the much more negative relationship between thinking about meaning and life satisfaction in the least religious group (compared to the more religious groups). Furthermore, the relationship between thinking about meaning and life satisfaction in the more religious groups is positive, indicating that thinking about the meaning and purpose of life is probably quite satisfying for people who attend religious services frequently.

The interaction of thinking about the meaning and purpose of life with national globalization was a significant predictor of life satisfaction. This result is consistent with the globalization-as-exacerbator hypothesis. Also in support of the globalization-as-exacerbator hypothesis, Figure 2 shows that the relationship between thinking about the meaning and purpose of life and life satisfaction is positive for the group of nations with the lowest globalization scores, less positive for the group of nations with the moderate globalization scores, and negative for the group of nations with the highest globalization scores—the relationship becomes increasingly negative as globalization increases. The idea that globalization is a source of multiple perspectives on answers to existential questions about the meaning and purpose of life, and thereby of uncertainty about the truth of any particular positive set of answers to those questions, fits well with these results. People living in nations with the lowest levels of globalization are likely to be exposed to far less criticism of the culturally dominant beliefs, including religious beliefs and other belief systems that attempt to answer existential questions. Therefore, they are more likely to have higher credence in belief systems that positively answer questions about the meaning and purpose of life. Furthermore, thinking about the meaning and purpose of life seems like it would be a satisfying experience for individuals' who firmly believe in positive answers to those

existential questions, and less satisfying or perhaps even unsatisfying for individuals' who do not firmly believe in any positive answers (or disbelieve all positive answers). Following this line of reasoning, and given the results of this study, it seems plausible that national globalization makes thinking about the meaning and purpose of life less satisfying because the influx of ideas that globalization brings weakens people's credence in belief systems that provide positive answers to existential questions.

If this finding about the negative effect of globalization on people who think frequently about the meaning and purpose of life is correct, then it has important implications. The majority of the world is still undergoing the process of globalization. Most importantly, more and more of the world's people are being exposed to many new ideas about how existential questions about the meaning and purpose of life should be answered. This increased exposure to these new ideas seems inevitable and, if the finding above is correct, so too is a decrease in life satisfaction for most of those who frequently ponder the meaning and purpose of life. Exacerbating this potential problem is the fact that people in the most industrialized nations (which also tend to be the most globalized) are starting to think about the meaning and purpose of life more frequently (Inglehart & Baker, 2000). If this trend continues, then as the economic aspects of globalization promote industrialization around the world, an increasing number of people might be thinking more and more about the meaning and purpose of life while also believing less and less in any system of beliefs that might provide positive answers to these existential questions. A surprise consequence of globalization, then, might be an epidemic of existential angst and a widespread downward pressure on life satisfaction that might mitigate some of the positive effects globalization could have on life satisfaction in developing and undeveloped nations.

While the study presented here gains credibility from its large sample size and large number of nations under study, several limitations should be noted. First, the large sample

size in this study makes significant results at the individual level easier to come by, possibly raising doubts about whether some of the significant relationships would hold with a smaller sample size. Second, the statistical procedures used in this study do not permit any firm conclusions about causality in the relationships between the predictors and moderators. For example, the results are also consistent with thinking about meaning moderating the relationship between globalization and life satisfaction. We have provided justifications for our arrangement of the variables, but future analyses, including perhaps longitudinal and experimental analyses should further investigate the direction of causality in these relationships. Third, data for the national-level variables in the present study are collected over a short period very recently, while the individual-level data are collected over a longer timeframe. We were constrained in this by some of our measures not covering many nations in other timeframes. We consider this a minor limitation as the national-level variables do not change significantly over the relevant ten-year period in most nations for which there are data. Fourth, empirical research on globalization (in particular) is in its infancy, and our study did not assess a broad range of possibly confounding variables, so it is possible that other factors can explain the seeming impact of globalization (and the other variables and interactions) on life satisfaction. Finally, the reliance on single-item measures for the individual variables in this study might have distorted the results slightly due to interpersonal and cultural differences in understanding and responding to the specific questions. This is perhaps most important for the measures of religiosity since the concept admits of many conceptual divisions and not all religions fit well with measures within those different divisions.

Conclusion

In this paper we reported on a multi-level analysis study of 75 nations testing two hypotheses that arose from considering Tolstoy's experience of thinking about the meaning and purpose of life. The globalization-as-exacerbator hypothesis predicts that as globalization increases the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more negative. The results presented here support this hypothesis. To justify this result, we argued that the influx of ideas that comes with globalization weakens people's credence in any system of beliefs that provide answers to existential questions about the meaning and purpose of life, which makes thinking about the meaning and purpose of life more worrisome.

The religiosity-as-buffer hypothesis predicts that as religiosity increases, the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more positive. The results presented here did not fully support this hypothesis, since the interaction between thinking about meaning and importance of God was not a significant predictor of life satisfaction. However, the results did support a more specific hypothesis, the religious-attendance-as-buffer hypothesis, which predicts that as religious attendance increases, the relationship between thinking about the meaning and purpose of life and life satisfaction becomes more positive. To justify this result, we argued that religious attendance might help people understand how their religion's teachings about the meaning and purpose of life relate to their personal lives, which, in turn, is likely to make thinking about the meaning and purpose of life more satisfying.

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Tables and Figures

Table 1

Sample sizes and mean scores for all variables of the study

	Sample size	Thinking about meaning		Life satisfaction		Religious attendance		Importance of God		Globalization index
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean
New Zealand	954	2.63	1.20	7.89	1.86	2.79	2.37	5.35	3.47	78
China	3015	2.78	.99	6.68	2.43	2.10	1.97	3.58	2.91	59
Saudi Arabia	1502	2.78	.99	7.28	2.27	4.67	2.45	9.78	1.16	67
Spain	5109	2.78	.84	7.18	1.80	3.52	2.57	5.74	3.04	84
Great Britain	3602	2.86	1.00	7.51	1.89	2.84	2.43	5.10	3.28	85
Germany	6175	2.88	.87	7.04	2.04	3.01	2.23	4.32	3.20	81
India	4003	2.92	.96	5.47	2.32	5.49	2.07	8.01	2.56	52
Poland	3605	2.96	.94	6.85	2.24	6.02	1.76	8.28	2.24	79
Slovenia	3409	2.98	.90	7.35	2.08	3.82	2.37	5.22	3.19	77
Serbia	1220	2.99	.89	6.01	2.09	4.49	1.88	7.12	2.58	65
Uruguay	1000	3.00	.94	7.46	1.87	4.14	2.61	7.32	3.07	65
Norway	2115	3.00	.82	8.03	1.61	2.82	2.01	4.20	3.06	82
Sweden	3205	3.02	.87	7.69	1.88	2.34	1.78	4.00	3.12	88
Luxembourg	2821	3.06	.87	7.85	1.95	3.47	2.37	5.07	3.14	85
Netherlands	3607	3.08	.83	7.87	1.33	3.12	2.46	4.90	3.19	91
Japan	2458	3.08	.66	6.71	1.92	3.91	1.68	5.01	2.66	64
Belarus	2500	3.09	.85	5.59	2.21	3.68	2.03	6.26	2.82	55
Denmark	2530	3.09	.85	8.31	1.82	3.05	1.95	4.07	2.76	88
Argentina	2282	3.11	.97	7.48	2.13	3.95	2.56	8.41	2.50	58
Austria	3032	3.12	.81	7.79	2.04	4.08	2.35	6.20	2.99	89
Estonia	2523	3.12	.88	6.35	2.19	2.93	2.01	4.38	3.01	80
Bulgaria	3501	3.13	.88	5.52	2.61	3.83	2.04	5.61	3.05	72
Chile	2200	3.15	.92	7.18	2.11	4.20	2.61	8.71	2.16	73
Lithuania	2518	3.15	.84	5.91	2.50	4.30	1.99	6.46	2.86	73
Cyprus	2050	3.17	.86	7.31	2.13	4.87	2.09	8.57	2.16	86
Croatia	2528	3.17	.83	6.93	2.36	4.77	2.23	7.22	2.80	75
Pakistan	2000	3.17	.76	4.85	1.46	7.08	1.20	10.00	.00	52
France	4117	3.18	.89	6.99	2.02	2.45	2.10	4.43	3.08	84
Peru	3001	3.18	.90	6.73	2.33	5.63	2.07	9.08	1.80	64
Russian Federation	6037	3.19	.89	5.62	2.62	2.92	2.03	5.86	3.19	68
Bosnia and Herzegovina	2712	3.20	.82	6.49	2.44	4.91	2.27	7.79	2.77	62
Finland	3186	3.20	.79	7.79	1.75	3.04	1.96	5.65	3.09	85
Switzerland	2513	3.22	.85	7.96	1.73	3.31	2.30	6.13	3.11	86
Australia	1421	3.22	.79	7.30	1.80	2.93	2.41	6.09	3.37	82
Iraq	5026	3.23	.92	4.82	2.44	3.88	2.96	9.84	.69	40
Singapore	1512	3.23	.75	7.24	1.80	5.34	2.27	8.23	2.49	89
Ukraine	3702	3.24	.82	5.49	2.55	3.97	2.09	6.95	2.98	68
Zambia	1500	3.24	.80	6.06	2.50	6.28	2.10	9.18	1.55	56
Mexico	3095	3.24	.90	8.19	2.21	5.66	2.16	9.41	1.54	59
Canada	4095	3.30	.83	7.79	1.79	4.08	2.54	7.43	2.98	85
United States	2449	3.30	.78	7.46	1.81	4.88	2.63	8.39	2.55	75
South Korea	2400	3.30	.68	6.30	2.15	4.32	2.61	5.56	2.91	62
Iran	5199	3.32	.75	6.40	2.41	5.21	2.21	9.49	1.46	40
Italy	4531	3.33	.79	7.10	2.06	5.16	2.19	7.44	2.63	81
Thailand	1534	3.33	.72	7.21	1.81	6.22	1.65	7.98	1.42	64
Macedonia	2555	3.33	.78	6.13	2.72	4.71	1.93	7.65	2.81	60
Bangladesh	1500	3.34	.71	5.78	2.18	5.79	2.46	9.66	1.51	41

Romania	4411	3.34	.81	5.96	2.61	5.23	1.81	8.88	1.97	73
Egypt	6051	3.35	.83	5.57	3.04	4.95	2.74	9.77	.88	58
Albania	2534	3.35	.79	5.88	2.36	3.63	2.31	7.12	2.89	58
Turkey	8337	3.37	.72	6.17	2.79	4.40	2.73	9.26	1.86	69
Algeria	1282	3.37	.73	5.67	2.86	4.75	2.95	9.81	1.09	52
South Africa	5988	3.38	.78	6.76	2.58	5.71	2.34	9.14	1.67	64
Uganda	1002	3.43	.80	5.65	2.47	6.74	1.45	9.26	1.68	46
Mali	1534	3.44	.76	6.09	2.59	6.53	2.20	9.17	1.59	47
Ghana	1534	3.45	.67	6.12	2.63	6.90	1.72	9.78	.75	55
Brazil	1500	3.46	.77	7.64	2.11	5.43	2.46	9.63	1.29	59
Guatemala	1000	3.46	.78	7.95	2.09	6.47	1.95	9.72	.94	60
Philippines	1200	3.47	.75	6.65	2.53	6.11	1.83	9.56	1.33	56
Moldova	3605	3.47	.72	5.67	2.56	4.63	1.83	8.15	2.36	63
Indonesia	3019	3.48	.69	6.93	2.12	6.34	1.89	9.70	1.14	55
Viet Nam	2495	3.48	.69	6.86	1.98	2.90	2.19	4.99	3.26	47
Jordan	2423	3.48	.79	6.40	2.77	5.91	3.01	9.93	.56	70
Colombia	3025	3.49	.76	8.31	1.94	5.32	2.34	9.67	1.09	52
Burkina Faso	1534	3.49	.70	5.57	2.18	6.54	2.23	9.11	1.68	44
Nigeria	2022	3.49	.63	6.87	2.32	7.39	1.25	9.62	1.20	61
Venezuela	1200	3.52	.76	7.52	2.50	4.67	2.38	9.53	1.41	49
Morocco	3464	3.60	.73	5.78	2.34	4.49	3.14	9.83	1.00	61
Zimbabwe	1002	3.62	.65	3.94	2.79	6.28	2.31	9.61	1.39	51
Kyrgyzstan	1043	3.64	.63	6.48	2.57	3.99	2.49	7.80	2.77	56
Ethiopia	1500	3.64	.73	4.99	2.01	6.72	1.75	9.21	1.56	37
Georgia	3000	3.67	.60	5.21	2.37	4.76	2.02	9.10	1.59	62
Tanzania	1171	3.74	.65	3.87	3.22	6.89	1.81	9.61	1.54	39
Trinidad and Tobago	1002	3.77	.53	7.26	2.23	5.46	2.27	9.67	1.29	58
Rwanda	1507	3.85	.42	4.97	2.11	7.63	1.11	9.45	1.37	42

Table 2

Intercorrelations between the individual-level variables

	1	2	3	4
1- Thinking about meaning	1			
2- Importance of God	.213	1		
3- Religious attendance	.154	.510	1	
4- Life satisfaction	-.015	-.058	-.016	1

All correlations are significant at $p < .01$.

Table 3

Hierarchical Linear Modelling Predicting Life Satisfaction (the Second Model)

	<i>b</i>	St. Error	<i>t</i>	Sig.
Intercept	6.637	.103	63.871	.000
Thinking about meaning	.003	.018	.210	.834
Importance of God	.043	.008	5.196	.000
Religious attendance	.042	.006	6.321	.000
National globalization	.043	.007	6.157	.000
Thinking about meaning × Importance of God	.001	.003	.321	.748
Thinking about meaning × Religious attendance	.013	.003	3.828	.000
Thinking about meaning × National globalization	-.007	.001	-6.069	.000

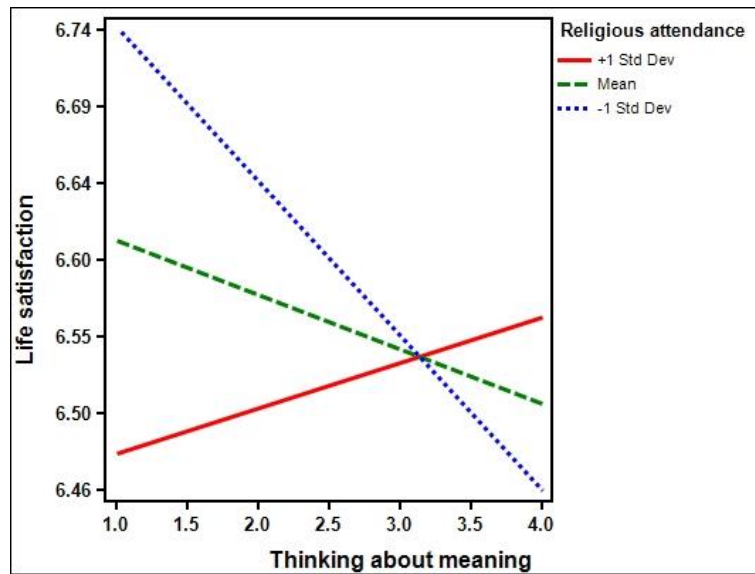


Figure 1

The relationship between thinking about meaning and life satisfaction as moderated by religious attendance

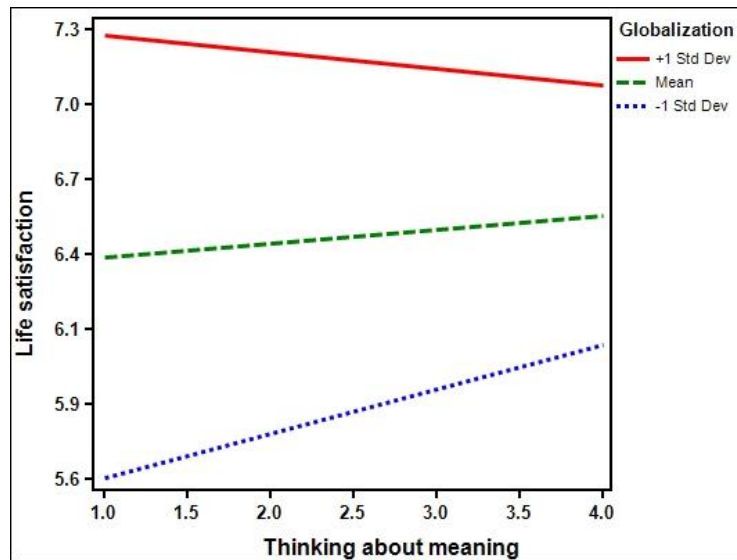


Figure 2

The relationship between thinking about meaning and life satisfaction as moderated by national globalization