Supplemental Material

Study 1a

Results

In all multilevel modeling analyses, we followed the recommendations by Nezlek (2012) by trimming error terms if the p-values were greater than .15 (trimming error terms did not affect the significance of the fixed effects which were the primary interest of our models). HLM provides unstandardized coefficients and the basic model to test the first analyses was as follows (as reported in the manuscript):

Person level: y_{ij} (meaninglessness) $= \beta_{0j} + \beta_{1j}$ (political orientation) $+ r_{ij}$

Country level: $\beta_{0j} = \gamma_{00} + u_{0j}$

$\beta_{1j} = \gamma_{10} + u_{1j}$

In the analyses involving satisfaction with life and political orientation, we used only those participants who also completed the measure of meaning in life. Because more participants completed the satisfaction with life question than the meaning in life question, we additionally ran a model involving all participants who completed the satisfaction with life item. The coefficients from these analyses did not differ meaningfully ($\gamma_{10} = .09$, t-ratio $= 13.27$, $p < .001$ vs. $\gamma_{10} = .09$, t-ratio $= 8.37$, $p < .001$).

To statistically compare the strength of the relationship between political orientation and meaning in life with the relationship between political orientation and satisfaction with life, we first standardized the meaning in life and satisfaction with life variables. We believed this was necessary because the amount of variance at each level of analysis for meaning in life (between-country: .02; within-country: .83) and satisfaction

with life (between-country: .26; within-country: 3.65) was not as close as one would desire for such calculations. After standardizing, the amount of variance at each level for meaning in life (between-country: .03; within-country: .97) was comparable to the amount of variance at each level for satisfaction with life (between-country: .07; within-country: .93).

After standardizing each variable, we stacked the data and created a response variable that alternated between meaning and satisfaction. Dummy codes were created for meaning and satisfaction, and political orientation variables were created by multiplying each by each respective dummy code. Each dummy code was entered uncentered at level 1 and each newly created political orientation variable was entered group mean centered at level 1, and the level 1 intercept was dropped as follows:

Person level: y_{ij} (response) = β_{1j} (Meaning dummy code) + β_{2j} (Satisfaction dummy code) + β_{3j} (Meaning political orientation) + β_{4j} (Satisfaction political orientation) + r_{ij}.

Country level: $\beta_{1j} = \gamma_{10} + u_{1j}$

$$\beta_{2j} = \gamma_{20} + u_{2j}$$

$$\beta_{3j} = \gamma_{30} + u_{3j}$$

$$\beta_{4j} = \gamma_{40} + u_{4j}$$

The standardized meaning political orientation coefficient (γ_{30} = .03, t-ratio = 4.71, $p <$ .001) and the standardized satisfaction political orientation coefficient (γ_{40} = .04, t-ratio = 7.73, $p <$ .001) were constrained to be equal with a chi-squared based test of fixed effects. They were not significantly different from each other, $\chi^2(1)$ = 2.30, $p >$ .10.

The estimated within-country correlation between life satisfaction and meaning in life was .30. This was calculated in two steps. First, we ran a null model with satisfaction

with life as the outcome measure. We noted the within-country variance at level 1. Second, we added meaning in life as a predictor at level 1, group-mean centered. We then noted the variance at level 1. After running these two models, we subtracted the level 1 variance from the second model (which included meaning in life) from the level 1 variance of the first model. Next, we divided this difference by the level 1 variance from the null model. This provides a percentage of reduced variance, R^2. We took the square root of this to obtain an estimated correlation, r. A similar process was used in calculating estimated correlations and effect size estimates throughout the manuscript (Nezlek, 2012, pp. 84-85).

Study 1b

The data from the European Values Survey were collected between 1981 – 1984. To replicate the findings from these data with a more recent sample, we analyzed data collected from the Baylor Religion Survey, Wave II, collected in 2007 (Baylor University, 2007).

Method

These data were collected by the Baylor Institute for Studies of Religion as part of a Templeton Foundation grant and in collaboration with the Gallup Organization. They used a mixed-mode sampling design which included telephone calls and mailed surveys. 1,000 telephone interviews were conducted with an 18-year old or older adult of the household who had the most recent birthday to ensure random selection. Of those contacted, 624 agreed to participate by providing their mailing address. Gallup also mailed 1,836 surveys using Gallup's RDD database. In total, 2,460 questionnaires were mailed out, and 1,648 questionnaires were returned (67% response rate). Participants were compensated with $5.00 for their participation. Further details can be found in

Bader, Mencken, and Froese (2007) and online at

http://www.thearda.com/Archive/Files/Descriptions/BAYLORW2.asp.

Of the 1,648 participants, 1,595 completed a measure of political orientation and the analyses were conducted on this sample. The demographics were similar to those of the General Social Survey (M_{age} = 51.01, SD = 16.28; 55.2% were female). 71.3% completed at least some college, and 39.1% completed a college degree or more. 57.7% had an annual household income of $50,000 or more. 22.4% earned $100,000 or more.

Measures. In addition to the political orientation and purpose in life items described in the manuscript, religious attendance was included in some analyses. Religious attendance was measured with a single item that read, "How often do you attend religious services at a church, mosque, synagogue, or other place of worship?" Responses were recorded on an 9-point scale (0 = *Never*, 1 = *Less than once a year*, 2 = *Once or twice a year*, 3 = *Several times a year*, 4 = *Once a month*, 5 = *2-3 times a month*, 6 = *About weekly*, 7 = *Weekly*, 8 = *Several times a week*; M = 3.79, SD = 2.90).

Demographic controls included age (M = 51.01, SD = 16.28), gender (714 males, 881 females), area of residence (225 in a large city, 437 in a suburb near a large city, 553 in a small city or town, 322 in a rural area), income (1 = *$10,000 or less*, 2 = *$10,001 - $20,000*, 3 = *$20,001 - $35,000*, 4 = *$35,001 - $50,000*, 5 = *$50,001 - $100,000*, 6 = *$100,001 - $150,000*, 7 = *$150,001 or more*; M = 4.46, SD = 1.52), and education (1 = *8th grade or less*, 2 = *9th-12th grade (no high school diploma)*, 3 = *High school graduate*, 4 = *Some college*, 5 = *Trade/technical/vocational training*, 6 = *College graduate*, 7 = *Postgraduate work/degree*; M = 4.69, SD = 1.63).

Results

To be consistent with the other studies, we report unstandardized coefficients for this study accompanied by effect sizes. In addition to the analyses reported in the paper, we additionally regressed purpose in life on political orientation and religious attendance without other demographic controls for the sake of thoroughness. Political orientation was no longer significantly related to purpose in life after statistically adjusting for religious attendance, $b = .01$, 95% CI [-.01, .03], $t(1462) = 1.33$, $p = .19$. However, as noted in the manuscript, the relationship between political orientation and purpose in life was quadratic. After controlling for religious attendance in the quadratic models, political orientation was still significantly related to purpose in life, $b = .01$, $t(1461) = 2.26$, $p = .02$. Similar to the findings of the other studies, conservatives reported more purpose in life than liberals after statistically adjusting for religiosity.

Study 2

Results

When constraining the coefficients in Study 2, we used the Fisher r-to-z transformation. We additionally used a bootstrapping technique that does not assume normality in each sample. The results from the bootstrapping analyses yielded the same conclusions as the Fisher r-to-z transformation, so we just report the simple analyses in the manuscript.

For example, using a bootstrapping technique (Wilcox, 2011, pg. 308, 387), we found that the correlation between political orientation and meaning in life was stronger than the correlation between political orientation and satisfaction with life, 95% CI [.08, .17]. The correlation between conservatism on social issues and meaning in life was stronger than the correlation between conservatism on economic issues and meaning in

life, 95% CI [-.15, -.06]. In contrast, the correlation between conservatism on social issues and satisfaction with life was not as strong as the correlation between conservatism on economic issues and satisfaction with life, 95% CI [.02, .05].

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Study 3

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Method

       Sample size determination and power analyses. Power analyses in multilevel modeling require estimates of many parameters that are not required for such calculations for non-nested data (Bolger, Stadler, & Laurenceau, 2012). The estimates of all required parameters were not known a priori, rendering such calculations impossible. Instead, we relied on an effect size estimate from a preliminary study in which 670 undergraduate students from the same university provided trait measures of meaning in life and political orientation. Conservatives reported more meaning in life than liberals, $r(668) = .23$, $t = 6.05$, $p < .001$.

       We recruited as many participants as possible under the constraints of the participant pool from our university. A power calculation based on Pearson's correlation from the preliminary study between the daily means of meaning in life and political orientation showed a power estimate of .79 ($n = 141$, $r = .23$, alpha = .05). This estimate is likely a conservative one because the aggregation of daily means eliminates information that is used in multilevel modeling analyses.

       Statistical power for the other studies was not discussed because the data from those studies were already collected by other researchers and sample sizes were very large.

       Data cleaning. Participants completed a total of 1,843 daily entries. Entries were deleted if they were incomplete, completed after 10:00am the following day, were

duplicate entries, were completed in less than 2 minutes, or if the participant failed to answer an instructed response question correctly (e.g., "Please select 'occurred and not important' for this question.") as recommended by Meade and Craig (2012). Participants who completed less than 5 valid entries were also eliminated. In total, 132 daily entries (7.2%) were deleted and 1,711 entries were included in final analyses. Three participants were dropped (2.08%) from the initial sample of 144, which left 141 participants left for analyses. Participants completed an average of 12.13 daily entries (SD = 1.76; minimum completed = 6), indicating good compliance in comparison to typical daily diary studies.

Participants also completed daily measures of helping behaviors, attachment to God, and searching for meaning in life for the purpose of another study. Details are available by request from the first author.

Analyses. Reliabilities were calculated by creating three level models in which items were nested within days and days were nested within persons. (Cronbach's alpha, a common measure of internal consistency, is an inappropriate measure of reliability for daily measures because it confounds between- and within-person variation.) The unconditional or null model provides an estimate of true variance over total variance for a given set of items, which is the classic definition of reliability. See Nezlek (2016) for a description of such procedures. These reliabilities are presented in Table 2.

When political orientation was entered as a quadratic term in the model, we entered religiosity as a linear predictor at level 2 and found that the quadratic political orientation term was still significant ($p = .02$). Prior to running this model, we tested the nonlinear effect of religiosity on daily meaning in life and found that there was a marginally significant quadratic effect, $\gamma_{02} = .30$, t-ratio = 1.74, $p = .09$. Given that this quadratic term was not significant, we entered a linear religiosity term as a control

predictor at level two along with the linear and quadratic political orientation measures. Nevertheless, for the sake of thoroughness, we entered linear and quadratic religiosity measures as control variables at level 2 along with the linear and quadratic political orientation measures. The quadratic political orientation measure became marginally significant, $\gamma_{02} = .09$, t-ratio $= 1.98$, $p = .051$.

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Study 4

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Method

   Hofmann, Wisneski, Brandt, and Skitka (2014) did not exclude any participants. Thus, the analyses included all participants who completed the relevant measures.

Results

   To compare the strengths of the relationships between political orientation and the different well-being variables, we relied on a technique known as stacking the data. In these models, we created a response variable that alternated between purpose in life and the other measures. A similar technique has been used to create mediation analyses in multilevel models to compare direct and indirect effects simultaneously (Bauer, Preacher, & Gil, 2006). In the models shown below, dummy codes were created for each indicator, and the level 1 intercept was dropped.

Moment level:	y_{ijk} (response) $= \pi_{1jk}$ (purpose dummy code) $+ \pi_{2jk}$ (other well-being dummy code) $+ e_{ijk}$
Day level:	purpose: $\pi_{1jk} = \beta_{10k} + r_{1jk}$
	other well-being: $\pi_{2jk} = \beta_{20k} + r_{2jk}$
Person level:	purpose: $\beta_{10k} = \gamma_{100} + \gamma_{101}$ (political orientation) $+ u_{10k}$
	other well-being: $\beta_{20k} = \gamma_{200} + \gamma_{201}$ (political orientation) $+ u_{20k}$

In doing so, the level 1 coefficient for each indicator represents the mean of that dependent variable. Political orientation was entered at level 3, which means that the γ_{101} coefficient represents the relationship between political orientation and purpose in life, and the γ_{201} coefficient represents the relationship between political orientation and the other well-being measure. These coefficients were constrained with a chi-squared based test of fixed effects.

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