Supplemental Materials

Method

In addition to person-level measures of prayer, we included several person-level measures of well-being. Although the 12 person-level prayer items loaded onto a single factor, we examined the correlations between each of the four prayer types and well-being to demonstrate consistencies between our results and previous research. Well-being was assessed with an affect circumplex (e.g., Feldman Barrett & Russell, 1998), the satisfaction with life scale (Diener et al., 1985), the Meaning in Life Questionnaire (Steger et al., 2006), and the Rosenberg self-esteem scale (Rosenberg, 1965). Positive activated affect (PA) was measured with enthusiastic, happy, and excited; positive deactivated affect (PD) was measured with calm, peaceful, relaxed, and contented; negative activated affect (NA) was measured with stressed, tense, and nervous; negative deactivated affect (ND) was measured with depressed, disappointed, and sad. Participants were asked to report the extent to which they generally felt each affective state. Responses were recorded on a 7-point scale (1 = *do not feel this way at all*, 4 = *feel this way moderately*, 7 = *feel this way very strongly*).

The complete list of items used to measure affect differed slightly across studies. In Studies 1 and 2, positive activated affect (PA) was measured with enthusiastic, happy, excited, alert, and proud; positive deactivated affect (PD) was measured with calm, peaceful, relaxed, contented, and satisfied; negative activated affect (NA) was measured with stressed, tense, nervous, embarrassed, and upset; negative deactivated affect (ND) was measured with depressed, disappointed, sad, sluggish, and bored. We trimmed a few items to improve the reliabilities of the measures. In Study 3, we used the affect items from the smaller list of items that hung together reliably, and we included a few additional adjectives. Positive activated affect was

measured with enthusiastic, delighted, happy, glad, and excited; positive deactivated affect was measured with calm, peaceful, relaxed, contented, and at ease; negative activated affect was measured with stressed, angry, annoyed, tense, and nervous; negative deactivated affect was measured with depressed, disappointed, miserable, gloomy, and sad. To be consistent across studies, we limited our analyses to the adjectives that were assessed in all three studies, reported in the main text.

The satisfaction with life scale consists of 5 items that were rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Participants also completed the 5-item Presence subscale from the Meaning in Life Questionnaire (Steger et al., 2006). Responses were recorded on a 7-point scale (1 = *absolutely untrue*, 7 = *absolutely true*). Rosenberg's self-esteem was measured with 10 items with responses on a 4-point scale (1 = *strongly agree*, 4 = *strongly disagree*).

Results

Person-Level Factor Analyses of Prayer Items

As noted in the main text, in addition to the person-level factor analysis of the prayer items, we ran the same analysis after excluding those who did not pray at all during the two-week diary study. There were 241 participants in these analyses. The eigenvalues were 7.45, 1.26, 1.10, .80, .36, .22, .20, .18, .16, .11, .09, and .07. An argument could be made for one, two or three factors based on the eigenvalues. A parallel analysis indicated two factors. We present the standardized factor loadings of one factor, two factor, and three factor analyses in Supplemental Table 1 below.

Supplemental Table 1. Factor analyses among participants who prayed at least once.

	One-factor solution	Two-factor solution		Three-factor solution		
Prayer Item	**Factor 1**	**Factor 1**	**Factor 2**	**Factor 1**	**Factor 2**	**Factor 3**
Supplication 1	.66	.36	.33	.97		
Supplication 2	.72	.55		.87		
Supplication 3	.74	.53		.57		
Thanksgiving 1	.79	.60		.31	.41	
Thanksgiving 2	.73	.65			.54	
Thanksgiving 3	.80	.75			.61	
Confession 1	.64		.85			.83
Confession 2	.71		.99			.99
Confession 3	.72		.83			.85
Adoration 1	.87	.98			.93	
Adoration 2	.89	.99			.99	
Adoration 3	.83	.82			.83	

In the one-factor model, all loadings were .64 or greater. In the two-factor solution, confession comprised one factor, and supplication, thanksgiving, and adoration comprised the other factor. Some of the factor loadings were small, and one of the supplication items loaded weakly onto two factors. In the three-factor model, confession comprised one factor, supplication comprised another, and thanksgiving and adoration comprised the other. Some of the loadings were fairly weak though, and one of the thanksgiving items loaded onto two factors. Thus, the

results from the two-factor and three-factor models at the person-level did not match the theoretical claims of the ACTS taxonomy.

Person-level correlations between prayer and well-being

We present the person-level correlations between the prayer types and well-being (Supplemental Table 2). These results were largely consistent with previous research (Whittington & Scher, 2010). Each of the four prayer types were highly correlated with each other (rs > .69). Each prayer type was positively related to positive affect, satisfaction with life, meaning in life, and self-esteem. They were either negatively or not significantly related to negative affect.

Supplemental Table 2. Correlation matrix of trait prayer and well-being measures.

1. Supplication	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2. Thanksgiving	.79									
3. Confession	.70	.69								
4. Adoration	.75	.79	.71							
5. Positive activated affect	.26	.31	.19	.26						
6. Positive deactivated affect	.14	.23	.12	.18	.57					
7. Negative activated affect	-.01	-.10	-.03	-.04	-.08	-.40				
8. Negative deactivated affect	-.04	-.13	-.02	-.09	-.36	-.37	.58			
9. Satisfaction with life	.23	.36	.18	.22	.59	.49	-.34	-.56		
10. Meaning in life	.16	.29	.18	.24	.45	.28	-.24	-.39	.47	
11. Self-esteem	.10	.18	.04	.10	.52	.48	-.40	-.56	.56	.44

Multilevel Factor Analysis of Daily Prayer Items

As described in the main text, we ran a multilevel exploratory factor analysis of the twelve daily prayer items. The multilevel EFA conducted with MPlus creates two variance-covariance matrices, one for the within-person level of analysis and one for the between-person level of analysis. We were interested in the within-person level as our primary analyses concerned within-person relationships involving the four prayer types. We present the goemin rotated factor loadings below.

Supplemental Table 3. Within-person factor loadings of daily prayer items.

Prayer Item	**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**
Supplication 1	.960			
Supplication 2	.916			
Supplication 3	.735			
Thanksgiving 1		.825		
Thanksgiving 2		.920		
Thanksgiving 3		.900		
Confession 1			.850	
Confession 2			.901	
Confession 3			.826	
Adoration 1				.795
Adoration 2				.937
Adoration 3				.805

Multilevel Factor Analysis of Daily Well-Being Items

Although prior research has demonstrated that the various well-being measures are distinct constructs with divergent validity, we present additional analyses to support the use of multiple well-being measures. We first conducted a multilevel EFA of all 31 well-being items (13 affective circumplex items, 9 distinct emotion items, 2 meaning in life items, 4 self-esteem items, and 1 satisfaction with life item). The first within-level eigenvalues were 8.39, 2.97, 1.84, 1.40, 1.35, 1.26, 1.07, 1.02, .94, .83, .71, .62, .60, .56, .52, .46…The 31 items should map onto 11 constructs, and we thought a reasonable argument could be made to examine 11 factors. Although the Mplus program indicated that the standard errors of some of the model parameters may not be trustworthy, we were able to examine the factor loadings. The well-being items loaded neatly into the 11 factors as predicted with the exception of satisfaction with life and self-esteem. The satisfaction with life item had a loading of .319 on the factor with two of the positively worded self-esteem items (.710 and .896). The reverse-coded self-esteem items loaded onto a separate factor (1.143 and .358). This suggests the reverse-coded self-esteem items may represent a different construct, which could have also affected satisfaction with life.

One specific concern with the distinct emotional states (envy, gratitude, guilt, and awe) is whether they are truly distinct from the affective circumplex items. We therefore ran a separate multilevel EFA with the 21 affect items. The first within-level eigenvalues were 5.78, 2.84, 1.61, 1.39, 1.24, 1.15, 1.02, .92, .62, .60, .56, .52, .46… Eight factors seemed like a reasonable solution, and the factor loadings were reasonably high for the distinct constructs with the exception of the item “contented” which loaded weakly on the positive activated and positive deactivated factors.

We also present the within-person correlations between all well-being variables to demonstrate that they represent distinct constructs. Most correlations were moderate in

magnitude. The few larger correlations were between satisfaction with life, self-esteem, and meaning in life. Taken together, these analyses justify the use of the distinct well-being measures.

Supplemental Table 4. Within-person factor loadings of all well-being items.

Affect item	**F1**	**F2**	**F3**	**F4**	**F5**	**F6**	**F7**	**F8**	**F9**	**F10**	**F11**
Enthusiastic	.758										
Happy	.540										
Excited	.787										
Calm		.776									
Peaceful		.747									
Relaxed		.695									
Contented	.257	.340									
Stressed			.655								
Tense			.760								
Nervous			.578								
Depressed				.684							
Disappointed				.424							
Sad				.866							
Jealous					1.245						
Envious					.489						
Grateful						.806					
Thankful						.848					
Repented							.592				
Blameworthy							.759				
Guilty							.781				
Full of awe								.805			

Full of wonder	.772			
Satisfaction				.319
Meaning 1		.937		
Meaning 2		.805		
Self-esteem 1			1.143	
Self-esteem 2				.710
Self-esteem 3			.358	
Self-esteem 4				.896

Supplemental Table 5. Within-person factor loadings of all affect items.

Affect item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Enthusiastic	.786							
Happy	.561							
Excited	.790							
Calm		.780						
Peaceful		.753						
Relaxed		.699						
Contented	.292	.359						
Stressed			.663					
Tense			.763					
Nervous			.585					
Depressed				.665				
Disappointed				.457				
Sad				.883				
Jealous					1.203			
Envious					.510			
Grateful						.801		
Thankful						.860		
Repented							.588	
Blameworthy							.763	
Guilty							.786	
Full of awe								.875

Supplemental Table 6. Within-person correlations of all daily measures.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Positive Events																
2. Negative Events	.03															
3. Supplication	.02	.05														
4. Thanksgiving	.10	-.03	.50													
5. Confession	.04	.02	.38	.29												
6. Adoration	.08	-.02	.40	.60	.36											
7. PA	.43	-.16	-.03	.12	.01	.06										
8. PD	.29	-.25	-.05	.10	.00	.09	.55									
9. NA	-.07	.34	.13	-.03	.02	-.03	-.25	-.44								
10. ND	-.16	.43	.07	-.06	.04	-.02	-.35	-.38	.41							
11. Envy	.05	.23	.05	-.01	.05	.01	-.04	-.08	.16	.26						
12. Gratitude	.28	-.14	.05	.20	.05	.15	.44	.38	-.16	-.25	-.02					
13. Guilt	.01	.31	.09	.00	.21	.05	-.11	-.13	.21	.34	.26	.00				
14. Awe	.22	-.02	.02	.14	.05	.14	.31	.30	-.11	-.13	.07	.36	.11			

15. Satisfaction	.36	-.35	-.02	.15	-.01	.10	.62	.54	-.39	-.56	-.14	.43	-.21	.27		
16. Meaning	.33	-.17	.03	.16	.04	.11	.45	.36	-.20	-.34	-.07	.35	-.10	.23	.57	
17. Self-esteem	.29	-.36	-.02	.13	-.04	.08	.49	.47	-.36	-.59	-.19	.35	-.31	.20	.69	.52

Note: PA = positive activate affect, PD = positive deactivated affect, NA = negative activated affect, ND = negative deactivated affect.

Multivariate Within-Person Relationships Between Well-Being and Prayer Content

In the main text, we examined the antecedents of well-being on prayer content (See Models 1b). In these models, we examined each well-being variable as a predictor in separate models. These models appropriately addressed our research questions of interest. In addition to those analyses, we address a separate research question that may be of interest to some readers. In the model presented below, we included all of the well-being variables as predictors in the same model. The individual coefficients represent the relationship between that specific well-being variable and the specific prayer variable after controlling for all other well-being variables. We note that the effect of positive activated affect on supplication after controlling for positive deactivated affect, negative activated affect, negative deactivated affect, satisfaction with life, meaning in life, and self-esteem is difficult to interpret and may hold little theoretical significance. The conceptual space of well-being is broad and heterogeneous, not internally coherent as we expect of a typical construct. Accordingly, there is likely a complex pattern of causality among well-being variables; they are not merely indicators of an unmeasured, latent factor. Whether it is desirable to control for other well-being variables depends on the pattern of causal relationships among them. For instance, it would make sense to control for a secondary well-being variable if it is a common cause (confounder), but not if it is a mediator or common effect. Controlling a mediator unwittingly would wipe out the effect of interest, and controlling a common effect would induce a spurious relation. Because the true pattern of causal relations among well-being variables is difficult to discern, controlling a variety of well-being variables indiscriminately introduces significant interpretational difficulties. For details regarding some of these issues, see Thrash (2021), section 9.4.1. Interpretational difficulties notwithstanding, the results are presented below for interested readers.

Supplemental Model 1b

Day level: y_{ij} (prayer variable) = β_{0j} + β_{1j} (positive activated affect) +

β_{2j} (positive deactivated affect) + β_{3j} (negative activated affect) +

β_{4j} (negative deactivated affect) + β_{5j} (satisfaction with life) +

β_{6j} (meaning in life) + β_{7j} (self-esteem) + r_{ij}

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

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

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

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

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

$\beta_{5j} = \gamma_{50} + u_{5j}$

$\beta_{6j} = \gamma_{60} + u_{6j}$

$\beta_{7j} = \gamma_{70} + u_{7j}$

Supplemental Table 7. All daily well-being variables predict each prayer type.

	Supplication			**Thanksgiving**			**Confession**			**Adoration**		
Well-being	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***
PA	-.03	-1.78	.075	.01	.65	.514	.01	.78	.437	-.02	-1.60	.110
PD	.01	.27	.786	.03	1.63	.102	.01	.50	.617	.05	3.24	.002
NA	.10	6.00	< .001	.03	2.43	.015	.01	.53	.594	.01	1.09	.278
ND	.05	2.47	.014	.04	2.12	.034	.01	.96	.339	.04	2.67	.008
SWL	.03	1.46	.145	.06	2.83	.005	.00	.08	.936	.04	2.30	.022
ML	.07	3.52	.001	.08	4.60	< .001	.04	3.52	.001	.06	4.12	< .001
SE	.01	.41	.685	.04	2.19	.028	-.05	-3.06	.003	.01	.54	.588

Note: PA = positive activate affect, PD = positive deactivated affect, NA = negative activated affect, ND = negative deactivated affect, SWL = satisfaction with life, ML = meaning in life, SE = self-esteem.
HLM provides unstandardized coefficients.

Multivariate Within-Person Relationships Between Discrete Emotions and Prayer Content

Similar to the analyses with well-being, we ran additional models in which each of the discrete emotions (envy, gratitude, guilt, awe) were entered as simultaneous predictors each of the prayer content variables. In contrast to the analyses we reported in the main text in which each specific discrete emotion was paired with the theoretically meaningful prayer content, we now report the results in which all discrete emotions are entered together. For instance, these models examine the effect of envy on supplication after controlling for the effects of gratitude, guilt, and awe. Though these relationships are more difficult to understand conceptually and address questions we deem less theoretically important, we describe the models and results below for interested readers.

Supplemental Model 1c

Day level: y_{ij} (prayer variable) = $\beta_{0j} + \beta_{1j}$ (envy) + β_{2j} (gratitude) + β_{3j} (guilt) + β_{4j} (awe) + r_{ij}

Person level:

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

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

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

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

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

Supplemental Table 8. All discrete emotion variables predict each prayer type.

	Supplication			**Thanksgiving**			**Confession**			**Adoration**		
Emotion	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***
Envy	.03	1.84	.065	-.00	-.28	.777	-.00	-.03	.974	-.00	-.36	.722
Gratitude	.04	2.66	.008	.14	8.30	< .001	.02	1.82	.070	.07	5.39	< .001
Guilt	.09	4.72	< .001	-.00	-.20	.840	.12	6.80	< .001	.04	2.61	.010
Awe	-.01	-.53	.599	.06	3.25	.002	.00	.31	.758	.05	3.89	< .001

Results presented separately by study

Next, instead of aggregating the data across studies as we did in the main text, we present the results from each individual study (Supplemental Table 9-12).

Supplemental Table 9. Descriptive statistics of daily variables.

	Intercept			Variance: Within			Variance: Between			ICC			Reliability		
Daily Measure	**S1**	**S2**	**S3**	**S1**	**S2**	**S3**	**S1**	**S2**	**S3**	**S1**	**S2**	**S3**	**S1**	**S2**	**S3**
Daily events															
Positive events	1.14	1.07	.98	.16	.16	.23	.16	.18	.31	.51	.52	.57			
Negative events	.55	.40	.56	.10	.08	.15	.10	.05	.25	.49	.35	.63			
Prayer types															
Supplication	1.11	1.34	.48	.79	.91	.49	1.51	1.74	.64	.66	.66	.57	.90	.92	.81
Thanksgiving	1.17	1.32	.54	.73	.84	.58	1.68	1.79	.74	.70	.68	.56	.91	.94	.89
Confession	.51	.51	.27	.32	.42	.25	.68	.63	.39	.68	.60	.61	.88	.91	.78
Adoration	.82	.89	.42	.40	.55	.30	1.29	1.20	.69	.76	.68	.70	.85	.89	.80
Well-being															
PA	4.23	4.23	3.71	1.30	1.30	1.40	1.00	1.05	1.11	.43	.45	.44	.71	.73	.72
PD	3.87	3.74	3.48	.86	1.01	1.09	.92	.93	.92	.52	.48	.46	.71	.74	.77
NA	3.46	3.33	3.42	1.40	1.45	1.55	1.02	.93	1.08	.42	.39	.41	.58	.59	.63
ND	2.43	2.13	2.48	1.14	1.11	1.29	1.00	.55	1.07	.47	.33	.45	.67	.64	.70
SWL	4.81	4.85	4.66	1.21	1.25	1.50	.64	.62	1.13	.35	.33	.43	.81	.82	
ML	3.95	4.12	4.20	1.04	1.19	1.37	1.60	1.95	1.38	.61	.62	.50	.86	.86	.87
SE	5.23	5.34	4.91	.92	.88	1.06	.92	1.04	.95	.50	.54	.47	.62	.54	.57
Specific emotions															
Envy	1.89	1.76	2.06	.77	.81	1.03	.97	.77	1.08	.55	.49	.51	.81	.80	.71
Gratitude	4.02	3.91	3.92	1.44	1.36	1.67	2.30	2.54	1.85	.62	.65	.53	.85	.80	.81
Guilt	2.00	1.87	2.03	.81	.72	.82	.90	.89	1.01	.53	.55	.55	.71	.72	.66
Awe	2.27	2.44	2.56	.95	1.12	1.35	1.49	1.72	1.49	.61	.61	.52	.75	.75	.70

Note: Reliability statistics were not calculated for single item measures or for daily events as we did not expect them to be internally consistent as suggested by Stone, Kessler, and Haythomthwatte (1991).
S1 = Study 1, S2 = Study 2, S3 = Study 3, PA = positive activate affect, PD = positive deactivated affect, NA = negative activated affect, ND = negative deactivated affect, SWL = satisfaction with life, ML = meaning in life, SE = self-esteem.

Supplemental Table 10. Daily events predict each prayer type in separate models.

		Supplication			Thanksgiving			Confession			Adoration		
Well-being	**Study**	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***
Positive events	1	.02	.35	.723	.13	1.88	.059	.07	1.81	.070	.08	2.08	.037
Positive events	2	-.03	.45	.653	.16	2.29	.024	.03	.59	.557	.15	2.34	.021
Positive events	3	.12	2.09	.039	.20	3.35	.001	.08	1.86	.065	.10	1.78	.077
Negative events	1	.13	1.48	.141	-.22	2.75	.007	.09	1.71	.089	-.06	1.20	.234
Negative events	2	.21	2.41	.016	-.10	.95	.346	.04	.58	.564	-.09	1.08	.284
Negative events	3	.03	.48	.631	-.01	.29	.771	-.00	.08	.936	-.02	.44	.657

Supplemental Table 11. Daily well-being predicts each prayer type in separate models.

		Supplication				**Thanksgiving**				**Confession**				**Adoration**			
Well-being	**Study**	***b***	***t***	***p***	$r_w^{(f1v)}$	***b***	***t***	***p***	$r_w^{(f1v)}$	***b***	***t***	***p***	$r_w^{(f1v)}$	***b***	***t***	***p***	$r_w^{(f1v)}$
PA	1	-.01	.61	.545	.13	.13	5.35	< .001	.25	-.01	.71	.482	.12	.03	2.08	.039	.16
PA	2	-.05	1.88	.062	.17	.07	2.79	.007	.23	-.00	.21	.831	.11	.06	2.81	.006	.19
PA	3	-.01	.40	.692	.16	.06	2.58	.012	.15	.03	1.74	.086	.18	.01	.62	.534	.17
PD	1	-.09	3.57	.001	.12	.06	2.28	.024	.11	-.04	1.83	.069	.21	.05	2.46	.015	.15
PD	2	-.04	1.38	.169	.11	.13	4.33	< .001	.27	-.01	.69	.490	.02	.10	4.02	< .001	.24
PD	3	-.01	.20	.846	.22	.08	3.03	.004	.19	.04	2.42	.027	.21	.04	1.75	.083	.23
NA	1	.11	4.95	< .001	.22	-.02	.89	.375	.13	.04	3.45	.001	.10	.00	.04	.965	.16
NA	2	.11	4.53	< .001	.22	-.03	1.72	.084	.06	-.01	.79	.433	.13	-.03	2.13	.034	.09
NA	3	.05	2.48	.014	.16	.00	.14	.888	.02	.00	.16	.877	.02	-.01	.53	.593	.12
ND	1	.06	2.65	.009	.08	-.06	2.85	.005	.11	.05	2.77	.007	.21	-.01	.68	.494	.06
ND	2	.06	2.27	.025	.17	-.07	2.61	.011	.21	.01	.31	.758	.20	-.03	1.47	.143	.19
ND	3	.03	1.23	.224	.22	-.01	.28	.782	.01	-.00	.13	.898	.15	.01	.48	.632	.13
SWL	1	-.01	.67	.502	.04	.16	5.70	< .001	.32	-.02	1.44	.152	.22	.07	3.97	< .001	.23
SWL	2	-.02	.80	.423	.18	.14	5.05	< .001	.28	.00	.02	.987	.11	.08	3.48	.001	.29
SWL	3	.00	.14	.887	.17	.06	3.06	.003	.09	.02	1.65	.099	.13	.03	1.63	.107	.16
ML	1	.03	1.01	.314	.16	.12	4.33	< .001	.24	.01	.60	.546	.24	.06	2.86	.005	.21
ML	2	.05	1.66	.099	.23	.20	6.32	< .001	.35	.03	1.71	.090	.18	.13	5.33	< .001	.30
ML	3	.02	.74	.462	.17	.08	3.40	.001	.17	.03	2.46	.014	.13	.03	2.00	.045	.12
SE	1	-.04	1.44	.151	.11	.12	4.81	< .001	.18	-.06	2.76	.007	.28	.04	2.08	.038	.07
SE	2	-.03	.97	.333	.14	.15	4.62	< .001	.26	-.01	.46	.646	.05	.09	3.91	< .001	.20
SE	3	.00	.14	.893	.21	.07	2.82	.006	.13	.01	.72	.474	.14	.02	1.11	.270	.22

Note: HLM provides unstandardized coefficients. Effect sizes, $r_w^{(f1v)}$, were calculated following recommendations by Rights and Sterba (2019). The $r_w^{(f1v)}$ statistic is defined as the proportion of variance explained by within-person predictors via fixed slopes and random slope variation/covariation. This is similar to a measure of proportion reduction in variance (Hox, 2002; Kreft & de Leeuw, 1998; Raudenbush & Bryk, 20002).

Supplemental Table 12. Specific emotions predict corresponding prayer type.

Predictors		**Outcome Measures**			
			Supplication		
Specific Emotion	**Study**	***b***	***t***	***p***	$r_w^{(f1v)}$
Envy	1	.05	1.48	.141	.19
Envy	2	.02	.70	.486	.06
Envy	3	.07	3.69	< .001	.12
			Thanksgiving		
	Study	***b***	***t***	***p***	$r_w^{(f1v)}$
Gratitude	1	.16	6.16	< .001	.34
Gratitude	2	.20	6.74	< .001	.37
Gratitude	3	.07	3.00	.004	.27
			Confession		
	Study	***b***	***t***	***p***	$r_w^{(f1v)}$
Guilt	1	.12	4.20	< .001	.39
Guilt	2	.18	5.96	< .001	.35
Guilt	3	.04	1.45	.149	.30
			Adoration		
	Study	***b***	***t***	***p***	$r_w^{(f1v)}$
Awe	1	.09	3.38	.001	.32
Awe	2	.12	5.09	< .001	.25
Awe	3	.05	2.55	.013	.25

Note: HLM provides unstandardized coefficients. Effect sizes, $r_w^{(f1v)}$, were calculated following recommendations by Rights and Sterba (2019). The $r_w^{(f1v)}$ statistic is defined as the proportion of variance explained by within-person predictors via fixed slopes and random slope variation/covariation. This is similar to a measure of proportion reduction in variance (Hox, 2002; Kreft & de Leeuw, 1998; Raudenbush & Bryk, 20002).

Supplemental Table 13. Lagged relationships between prayer types and well-being.

	Supplication						**Thanksgiving**					
	Lag from Supplication			**Lag to Supplication**			**Lag from Thanksgiving**			**Lag to Thanksgiving**		
Well-being	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***
PA	.01	.62	.537	-.00	-.20	.842	-.02	-1.02	.306	.02	1.44	.149
PD	-.04	2.05	.041	-.01	-.67	.505	-.05	-2.46	.014	.01	.69	.494
NA	.06	3.08	.002	.03	1.98	.049	.06	2.35	.019	.01	1.13	.260
ND	.03	1.27	.204	.01	0.47	.638	0.05	2.23	.026	.01	.63	.530
SWL	-.03	1.50	.134	-.02	-1.26	.210	-.06	-2.49	.013	.01	.67	.503
ML	-.01	-0.51	.610	-.03	-1.71	.088	-.05	-1.86	.063	.01	.62	.536
SE	-.01	0.51	.613	-.00	-0.19	.853	-.04	-1.98	.049	-.00	-.20	.843

	Confession						**Adoration**					
	Lag from Confession			**Lag to Confession**			**Lag from Adoration**			**Lag to Adoration**		
Well-being	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***	***b***	***t***	***p***
PA	.02	-.55	.585	.00	-.14	.888	-.00	-.03	.974	-.00	-.31	.754
PD	.03	.92	.356	.01	.64	.523	-.06	-2.09	.037	.00	.05	.957
NA	.03	.96	.337	.00	.46	.646	.06	1.96	.050	.01	1.32	.189
ND	.01	.40	.686	.02	1.94	.054	.02	0.84	.400	.01	0.80	.425
SWL	.02	.69	.491	-.01	-1.53	.126	-.04	-1.43	.154	-.01	-1.09	.276
ML	.02	.93	.350	-.02	-2.10	.037	-.04	-1.14	.251	-.01	-1.49	.139
SE	-.00	-.10	.918	-.03	-2.87	.004	-.06	-2.47	.014	-.01	-1.20	.230

Note: PA = positive activate affect, PD = positive deactivated affect, NA = negative activated affect, ND = negative deactivated affect, SWL = satisfaction with life, ML = meaning in life, SE = self-esteem.

Supplemental Table 14. Prayer frequency moderates lagged relationships between prayer types and well-being.

	Supplication					Thanksgiving				
	Interaction Coefficient			Estimates		Interaction Coefficient			Estimates	
Well-being	***b***	***t***	***p***	**low**	**high**	***b***	***t***	***p***	**low**	**high**
PA	.05	.84	.400	-.02	.03	.01	.11	.909	-.03	-.02
PD	.07	1.49	.136	-.05	.02	.01	.17	.865	-.05	-.04
NA	-.06	1.06	.290	.07	.01	-.16	2.19	.028	.08	-.08
ND	.03	.64	.525	.02	.06	-.05	.95	.344	.06	.01
SWL	.13	1.91	.056	-.05	.08	.12	1.93	.054	-.08	.04
ML	.03	.64	.519	-.01	.02	.04	.57	.571	-.05	-.01
SE	.08	1.44	.150	-.02	.06	.16	3.19	.002	-.07	.10

	Confession					Adoration				
	Interaction Coefficient			Estimates		Interaction Coefficients			Estimates	
Well-being	***b***	***t***	***p***	**low**	**high**	***b***	***t***	***p***	**low**	**high**
PA	.01	.16	.874	-.02	-.01	.07	.85	.396	-.02	.05
PD	.02	.37	.710	.02	.04	.06	.81	.418	-.07	-.01
NA	-.09	1.36	.175	.07	-.02	-.10	1.62	.105	.08	-.02
ND	-.04	.63	.526	.03	-.01	-.10	1.85	.065	.05	-.05
SWL	.08	1.33	.183	-.01	.07	.15	2.05	.041	-.09	.06
ML	-.02	.38	.706	.03	.01	-.01	.22	.822	-.03	-.05
SE	.07	1.39	.165	-.03	.04	.14	2.77	.006	-.09	.04

Note: The interaction coefficient indicates whether the lagged effect from prayer to well-being on the following day differs significantly between people who did not pray every day and people who prayed every day. The estimates of the unstandardized coefficients of the lagged relationships among people who did not pray every day (low) and people who prayed every day (high) are presented in the columns next to the interaction coefficients. These effects show that the lagged effects from prayer to well-being are more detrimental to well-being among people who do not pray every day than they are among those who pray consistently every day. PA = positive activate affect, PD = positive deactivated affect, NA = negative activated affect, ND = negative deactivated affect, SWL = satisfaction with life, ML = meaning in life, SE = self-esteem, low = people who did not pray every day, high = people who prayed every day.