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Prayer and Subjective Well-Being: An Examination of Six Different Types of Prayer

Brandon L. Whittington and Steven J. Scher

Abstract: Participants (N = 430) were recruited online and completed a measure of six prayer types (adoration, confession, thanksgiving, supplication, reception, and obligatory prayer). Measures of subjective well-being (self-esteem, optimism, meaning in life, satisfaction with life) were also administered. Three forms of prayer (adoration, thanksgiving, reception) had consistently positive relations with well-being measures, whereas the other three forms of prayer had negative or null relations with the well-being measures. The prayer types having positive effects appear to be less ego-focused, and more focused on God, whereas the negative types have an opposite nature. These results highlight the role of psychological meaning as a part of the process whereby prayer impacts psychological well-being.

According to William James (1902/1994), prayer is “the very soul and essence of religion” (p. 505). Nearly 90% of adult Americans pray (Poloma & Gallup, 1991) and 72% pray on a daily basis (Gallup Report, 1993). Moreover, prayer plays an important role in both physical and psychological well-being (e.g., Ai, Peterson, Bolling, & Koenig, 2002; Ai, Tice, Peterson, and Huang, 2005; Poloma & Pendleton, 1991; Salsman, Brown, Brechting, & Carlson, 2005).

Prayer is an attempt to create a meaningful relationship with a deity. Thus, it plays an important role in the religious meaning system (Park, 2005; Silberman, 2005). Different forms of prayer add different things to this meaning system. However, little attention has been paid to the differing psychological experiences that people attempt to create for themselves during prayer. Rather, the majority of current research views prayer as an undifferentiated concept. We expect that not all types of prayer will have positive effects on well-being.

In the current study, we used a more nuanced measure of prayer (Laird, Snyder, Rapoff, & Green, 2004), which measures five prayer types: adoration, confession, thanksgiving, supplication, and reception. Furthermore, we assess obligatory prayer, which plays an important role in Islam and Orthodox Judaism. We seek to examine the relationship of these six prayer types with psychological well-being.

To our knowledge, only one other study (Ai, Tice, Huang, Rodgers, & Bolling, 2008) has looked at how different prayer types affect psychological outcomes. In their study of postoperative coping they found petitionary prayers predicted optimism and in turn well-being, whereas conversational prayers predicted higher levels of stress. However, their study used Poloma and Gallup’s (1991) somewhat limited measure of prayer types. This measure uses single-item dichotomous measures of each prayer type, rather than more psychometrically sound measures. Moreover,

whereas two of Poloma and Gallup's prayer types (ritual and petitionary prayer) are similar to those used in our study (obligation and supplication), the other two types of prayer in Poloma and Gallup's typology (conversational and meditative prayer) seem to combine various aspects of prayer types.

SIX TYPES OF PRAYER

We measure six types of prayer in the current study. Five of these are embodied in the original Laird, Snyder, Rapoff, and Green (2004) prayer scale. Prayers of adoration are prayers focused on the worship of God, without any reference to circumstances, needs, or desires (Foster, 1992; Laird et al, 2004; Lewis, 1964). Prayers of thanksgiving are expressions of gratitude towards God, made in reference to specific positive life experiences. Supplication "taps requests for God's intervention in specific life events for oneself or others" (Laird et al., 2004, p. 252). Prayers of confession involve the admission of negative behaviors, and a request for forgiveness. With prayers of reception, "one more passively awaits divine wisdom, understanding, or guidance" (Laird et al., 2004, p. 252). Baesler (2002) described receptive prayer as "characterized by a contemplative attitude of openness, receptivity, and surrender, resulting in experiences ranging from peaceful/quiet to rapture/ecstasy" (p. 59).

Although Laird et al.'s (2004) framework presents a much needed inventory with which to assess prayer, we have added an additional component: obligatory prayers. These prayers represent an important component of some religions, such as Orthodox Judaism and Islam, where followers are required to pray three and five times a day, respectively. These required prayers consist primarily of fixed prayers repeated at each worship time.

Poloma and Gallup (1991) examined a similar concept of "ritualistic" prayer, which was positively associated with negative affect. However, their study did not include Orthodox Jews and Muslims, the population for whom obligatory prayers appear most relevant. Furthermore, their definition was narrow and did not allow for original obligatory prayers, only recited ones. Our study aims to look more deeply into obligatory prayer and further the understanding of the elements at play.

Overall, our study aims to measure prayer in a way that appreciates its complexity, using measures with adequate psychometric properties. This measurement will allow us to see how different types of prayer relate to well-being.

METHOD

Participants

Four hundred thirty participants were recruited from religiously oriented Listservs and e-mail lists. All questionnaires were completed online.¹ Although the majority of participants were U.S. natives (75%), participants also came from the Middle East,

including North Africa (7.7%), Europe (5.8%), and Asia (5.1%). The remaining participants were from Scandinavia, Australia, Canada, the rest of Africa, Central and South America, and the Caribbean. Further demographic characteristics, including basic religious breakdown, are reported in Table 1.

TABLE 1
Demographics

| | <i>N</i> | % | | <i>N</i> | % |
|------------------|----------|------|-----------------------------------|----------|------|
| Religion | | | Marital status | | |
| Atheist/Agnostic | 50 | 11.6 | Single | 127 | 29.9 |
| Buddhist | 5 | 1.2 | Married | 268 | 63.1 |
| Catholic | 46 | 10.8 | Divorced | 30 | 7.1 |
| Hindu | 3 | .7 | Income level | | |
| Jewish | 39 | 9.2 | Less than \$25,000 | 105 | 24.4 |
| Mormon | 9 | 2.1 | \$25–50,000 | 112 | 26 |
| Muslim | 63 | 14.7 | \$50–75,000 | 96 | 22.3 |
| Protestant | 131 | 30.5 | \$75–100,000 | 53 | 12.3 |
| Other Christian | 25 | 5.8 | Above \$100,000 | 54 | 12.6 |
| Other | 17 | 4.0 | Not reported | 10 | 2 |
| Not reported | 39 | 9.1 | Highest level of education | | |
| Gender | | | Graduate degree | 164 | 38.7 |
| Male | 175 | 41.0 | Bachelor's degree | 160 | 37.7 |
| Female | 252 | 59.0 | Junior college | 34 | 8.0 |
| Ethnicity | | | Trade/Technical school | 10 | 2.4 |
| Caucasian | 341 | 80.0 | High school | 53 | 12.5 |
| African American | 10 | 2.3 | Less than high school | 3 | 0.7 |
| Hispanic | 7 | 1.6 | | | |
| Asian American | 20 | 4.7 | | | |
| Other | 48 | 11.3 | | | |

Note. Percentages may not add up to 100% due to rounding errors.

Materials

Participants completed six self-report inventories.

1. The Multidimensional Prayer Inventory (MPI; Laird et al., 2004), a 20-item scale measuring frequency of five distinct types of prayer: adoration, confession, thanksgiving, supplication, and reception, as well as overall frequency of prayer and belief in prayer. Items are assessed on 7-point Likert scales. We supplemented the MPI with four questions chosen to measure obligatory prayer:

“I prayed to fulfill obligations as required by my religion”; “I prayed at set times during the day as dictated by my religion”; “I recited composed prayers based on religious guidelines”; “I followed a prayer schedule as dictated by my religion.”

2. The 12-item spiritual support scale (Ai et al., 2005).

3. The Life Orientation Test, a 10-item measure of optimism and pessimism (Scheier,

Carver, & Bridges, 1994).

4. The Meaning in Life Questionnaire (Steger, Frazier, Oishi, & Kaler, 2006), 10 items scored on a Likert scale with values ranging from 1 to 7.

5. The five-item Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Items are scored on a Likert scale ranging from 1 to 7.

6. The 10-item Rosenberg Self-Esteem Scale (Rosenburg, 1965). Responses are given on a 4-point Likert scale.

RESULTS

Table 2 reports alpha reliability, summary statistics, and intercorrelations for all variables.

Psychometrics of the Multidimensional Prayer Inventory

The psychometric properties of the MPI, with our obligatory prayer items added, was confirmed by the alpha reliabilities (Table 2), as well as by comparisons of levels of obligatory prayer scores for those religions where the obligation to pray plays a part. Muslims and Jews reported significantly higher levels of obligatory prayer, and Orthodox Jews indicated a significantly higher level of obligatory prayer than all other Jews. Finally, a factor analysis of the MPI created a simple structure exactly replicating the six predicted factors.

Do All Prayer Types Equally Affect Well-Being?

Table 3 reports the results of regression analyses where each of the six prayer types were simultaneously regressed on psychological outcomes (subjective well being, self-esteem, optimism, meaning in life). These analyses identify thanksgiving as the most consistently effective form of prayer in terms of its effects on these outcomes. Prayers of thanksgiving were significant predictors of subjective well being, of self-esteem, and of optimism. Prayers of reception are also revealed as positive predictors of psychological outcome, with significant effects on self esteem, optimism ($p = .053$),² and meaning of life. Finally, prayers of adoration have positive effects on both optimism and meaning of life ($p = .052$).

However, other prayer types have negative effects (see Magyar-Russell & Pargament, 2006; Thoresen & Harris, 2002, for other suggestions that some aspects of religion or spirituality may be negative). Confession was the most consistent negative predictor, manifesting a negative relationship with subjective well-being ($p = .056$), self-esteem, and optimism. Prayers of supplication had a negative effect on subjective well-being ($p = .063$). Obligation also had negative effects, although only on one of our outcome variables (optimism). Thus, it seems as though there are both

TABLE 2
Correlation Matrix

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-----------------------|----------|-----------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|------|
| 1. Adoration | 5.10 | 1.68 | .859 | | | | | | | | | | | |
| 2. Confession | 3.83 | 1.59 | .500** | .834 | | | | | | | | | | |
| 3. Thanksgiving | 5.12 | 1.43 | .617** | .488** | .815 | | | | | | | | | |
| 4. Supplication | 4.56 | 1.56 | .417** | .548** | .433** | .828 | | | | | | | | |
| 5. Reception | 4.89 | 1.59 | .600** | .520** | .600** | .397** | .903 | | | | | | | |
| 6. Obligation | 3.09 | 2.22 | .426** | .153** | .141* | .118* | .159** | .946 | | | | | | |
| 7. Belief | 5.47 | 2.03 | .459** | .378** | .378** | .412** | .427** | .110 | .918 | | | | | |
| 8. Optimism | 22.42 | 3.85 | .184** | -.007 | .220** | .027 | .212** | -.048 | .112* | .731 | | | | |
| 9. Life meaning | 27.78 | 5.69 | .327** | .169** | .305** | .231** | .342** | .153** | .239** | .386** | .873 | | | |
| 10. Life satisfaction | 25.96 | 5.73 | .153** | -.018 | .220** | -.030 | .137* | -.009 | .056 | .434** | .431** | .835 | | |
| 11. Spiritual support | 33.46 | 9.85 | .487** | .360** | .314** | .375** | .501** | .175** | .788** | .095 | .321** | .093 | .975 | |
| 12. Self-esteem | 31.90 | 4.47 | .075 | -.119* | .195** | -.053 | .179** | -.067 | -.145** | .494** | .349** | .418** | -.111* | .865 |

Note. Cronbach's alpha is on the main diagonal.

* $p < .05$. ** $p < .01$.

positive types of prayer (thanksgiving, reception, adoration) and negative types of prayer (confession, and perhaps supplication and obligation).

Whittington's (2007) analysis of these data provides further evidence of the difference between these two sets of prayer-types. He tested hypothesized causal models of the effects of each prayer type on the various well-being variables. The models for the prayer types that had positive effects on well-being were generally confirmed, whereas the models for the prayer types that had negative or null effect on well-being were not confirmed.

TABLE 3
Prayer Types Regressed on Well Being Variables

| | <i>Satisfaction With Life</i> | <i>Self-Esteem</i> | <i>Optimism</i> | <i>Meaning of Life</i> |
|--------------|-----------------------------------|--------------------|-------------------|----------------------------|
| Supplication | -.133 ^a | -.088 | -.047 | .107 |
| Thanksgiving | .229* | .251* | .166* | .077 |
| Reception | .056 | .237* | .153 ^b | .239* |
| Adoration | .135 | .012 | .231* | .166 ^c |
| Obligation | -.066 | -.088 | -.134* | .084 |
| Confession | -.147 ^d | -.301* | -.245* | -.159 |

Note. Values are standardized regression coefficients.

^a $p = .063$. ^b $p = .053$. ^c $p = .052$. ^d $p = .056$.

* $p < .05$.

DISCUSSION

Our results confirm the well-established finding that prayer can have positive effects on psychological well-being. However, we also found that only some types of prayer have positive effects: adoration (pure worship of God without reference to specific events or needs), thanksgiving (thanks to God for specific positive outcomes or circumstances), and prayers of reception (prayers focused on opening oneself up to closeness with God).

In contrast to these positive types of prayer, three types of prayer could be classified as negative.³ Prayers admitting one's sins to God (confession), prayers asking God for specific things (supplication), and prayer performed out of a sense of requirement (obligation) all seem to affect psychological outcomes in an undesirable way.

The prayer types that had negative effects—especially supplication and confession—are aimed at getting something from God (material help and forgiveness, respectively). Obligation is motivated by avoiding the consequences of

violating God's commandments. Such extrinsic religious activities may be less likely to contribute to subjective well being (Pargament, 2002).

From a slightly different perspective, however, the different prayer types can be seen as differing in terms of how they relate to the self. Negative prayer types seem to be particularly self-focused, compared to the positive types. Confession and supplication, in particular, require the person praying to focus almost entirely on themselves—either on their past wrongdoing or on their needs and desires. God's role is to supply the praying individual with something (e.g., forgiveness). On the other hand, in adoration, thanksgiving, and reception, the individual who is praying is focused almost entirely on God. To a large extent, these egoless forms of prayer are an attempt to give something to God.

A finding connecting the egoless aspect of prayer to well-being connects prayer to other religious practices. Many religious or spiritual practices do not incorporate prayer—or even a god-figure to whom prayer could be directed. However, many of these non-Abrahamic religions (e.g., Buddhism) do include practices that emphasize the negation of ego. If prayer affects wellbeing predominantly by allowing worshipers to enter into an egoless mode, then it may work by the same mechanism as do other religious practices (e.g., meditation and mindfulness; see, e.g., Brown & Ryan, 2003; Shapiro, Oman, Thoresen, Plante, & Flinders, 2008).

Research on these questions, though, must also address an important shortcoming in our findings. As with virtually all research on the effects of prayer, our research is correlational and cross-sectional. The causal direction that explains the relationship between the various prayer types and well-being cannot be determined with this methodology.

A reverse causal direction is not implausible; those with lower psychological well-being may be more likely to engage in the negative prayer types, and vice versa. Use of alternative methodologies—especially experiments—is needed (not only on this topic, but in almost all areas addressing the role of spirituality or religion on mental health, physical health, and well-being; Thoresen & Harris, 2002).

Religion and Meaning

Our data provide support for the meaning-system perspective on religion (cf. Park, 2005; Silberman, 2005). In addition to the more tangible ways in which religion may contribute to our psychological and physical health, research from this perspective suggests that our attempts to make meaning from our life experiences are enhanced by our religious practices and cognitions, and this enhanced meaning adds to the beneficial aspects of religion.

There is no reason to think that someone whose prayers predominantly take the form of thanksgiving, adoration, or reception should receive more social support or practice better health behaviors (commonly cited causes of the religion/well-being

relationship) than those whose prayers take the form of confession, supplication, or obligation. Rather, it is the content and meaning of the prayers that differentiates these different forms. The fact that these different forms of prayer have different effects on well-being cannot easily be accounted for by differences in other factors.

Prayers of Obligation

Another innovation of our research was the development of a scale to measure obligatory prayer. Although the findings in the current study can only be said to be preliminary, the data support the fact that we have successfully measured obligatory prayer. Those participants who identified themselves as members of the faith traditions that prescribe prayer at certain times (Muslims, Orthodox Jews) reported a much higher level of obligatory prayer than other groups, supporting the validity of our measurement.

Obligatory prayer correlated significantly with all of the other prayer types—particularly with adoration (see Table 2).⁴ It is worth noting, however, that the size of this correlation varies widely among different religions. For example, among Muslims, the Obligation and Adoration correlation is $r = .30$, among Catholics it is $r = .46$, and among all Jews it is $r = .51$; however, among Orthodox Jews, the Obligation-Adoration correlation is only $r = .15$, and among Protestants it is $r = -.15$. This variation shows that it will require further research, situated within specific religious traditions, to understand obligatory prayers. The all too common practice of ignoring religious affiliation of respondents—with the resultant bias toward Protestant Christianity—leads to an incomplete picture of the nature of obligatory prayer (and of religious practice in general).

One important aspect of that nature is its content—or rather, its lack of content. Although the other five prayer types that we have studied are defined by the actual content of the prayers, prayers of obligation are defined by their role in the religion—that is, by their obligatory nature. The specific requirements often include ritual elements (i.e., reciting the text of specific composed prayers or specific verses from holy books such as the Bible or the Qur'an); however, these ritual texts have content. That content most likely mimics aspects of adoration, reception, confession, supplication, and thanksgiving. To the extent that the ritual elements of obligatory prayer do have these other elements, we would expect that the effects of the prayers will mimic the effects of the more content-based prayer types. The negative aspects of obligatory prayer may result for those who pray only out of a sense of obligation. Directions for future research on obligatory prayer, therefore, include examining the emotional/psychological reactions of those who pray through a sense of obligation. An examination of how these individuals view their obligatory prayers, and their emotional reactions to them, would be very informative about how these prayers affect adherents to these religious traditions.

CONCLUSION

The results of this study highlight the complex, multidimensional nature of religion. Our data suggest that these different prayer types have different effects on psychological well-being. These differences in well-being appear to be driven by differences in the meanings that praying individuals give to their relationships with God.

We have suggested that the prayer types which had positive effects on well-being are distinguished by their egoless nature, whereas the prayer types that had negative effects were more ego-focused. This may connect prayer in the Abrahamic faiths to other religious practices such as Buddhist meditation.

We have also validated a scale to measure prayer as an obligatory behavior. Further research on this concept seems highly desirable. That research, however, cannot limit itself to Christian populations, for whom obligatory prayer may seem a foreign concept. This research must explicitly include participants, such as Muslims and Orthodox Jews, who practice obligatory prayer as an important part of their observance.

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FOOTNOTES

1 Most research in the psychology of religion has been conducted using convenience samples. Randomized, representative samples are quite rare. Online research has increased in popularity in recent years and provides us with the opportunity to gather data on a much more diverse sample, especially as regards religion, than most convenience samples used in religion research. Nevertheless, it should be pointed out that our sample is probably more educated than the general population. Approximately 76% of our participants had college educations.

2 Given the fact that this is one of the first studies to look at how individual prayer types affect psychological well-being, we chose to accept effects that were a slightly above the traditional .05 alpha level, rather than miss some effects because of such a small, arbitrary statistical difference.

3 In using the terms "negative prayer" and "positive prayer," we by no means intend to imply a normative or evaluative judgment. We use the terms negative and positive only in the sense of how they affect the psychological outcomes measured in the current research.

4 The same could be said for the other so-called negative prayer types. However, we believe that obligatory prayer is different in an important way (see text), which gives its correlations with other prayer types more import.

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