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Do Spiritual Struggles Predict Poorer Physical/Mental Health Among Jews?

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Although spirituality and religion are generally associated with higher levels of physical and mental well-being, spiritual struggles, which involve tension in regard to spiritual issues, have been identified as a risk factor for poorer physical and mental health, especially among individuals with greater levels of personal religiousness. However, studies in this area have utilized predominantly Christian samples and the importance of spiritual struggles to Jews is not known. We proposed and tested two competing models in an adult Jewish community sample: (a) the Universal Effects model in which spiritual struggles were proposed to be associated with decreased levels of physical/mental health, and *more* problematic for more religious Jews, and (b) the Differential Effects model in which spiritual struggles were proposed to be generally unrelated to the physical/mental health of Jews, and even *less* impactful on religious Jews. We found some support for both models. Spiritual struggles were modestly associated with lower levels of physical/mental health in the sample as a whole, even after controlling for demographic covariates. However, at the highest levels of spiritual struggle, Orthodox Jews exhibited an *increase* in physical and mental health whereas non-Orthodox Jews' health continued to decrease.

A substantial body of research has indicated that religiousness and spirituality are associated with elevated levels of physical and mental health (Koenig, McCullough, & Larson, 2001). Specifically, religious/spiritual beliefs and practices have been tied to decreased incidence of physical disability (Idler & Kasl, 1992, 1997a, 1997b), chronic pain (Kabbat-Zinn, Lipworth, & Burney, 1985), hypertension (Walsh, 1998), mortality (McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000; Strawbridge, Cohen, Shema, & Kaplan, 1997), and greater levels of social functioning (Oman & Reed, 1998) and vitality (Astin, 1997). Spirituality and religiousness have also been linked to decreased levels of anxiety (Koenig, Ford, George, Blazer, & Meador,

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1993) and depression (Smith, McCullough, & Poll, 2003), and increased levels of happiness, life satisfaction, and well-being (Ellison, 1991; see Koenig et al., 2001, for a review). In addition, religious methods of coping have been found to be not only highly prevalent in the general population but also helpful to individuals dealing with stressful life events (see Pargament, 1997, for a review).

Although religion and spirituality appear to be generally helpful to people, recent research suggests that religion and spirituality can also be a source of struggles. Spiritual struggles reflect tension and strain about spiritual issues within oneself, with other people, and with the divine (Pargament, Murray-Swank, Magyar, & Ano, 2005). From a functional point of view, these struggles can be seen as “efforts to conserve or transform a spirituality that has been threatened or harmed” (Pargament et al., 2005, p. 247). Three types of spiritual struggles have been identified: interpersonal, intrapersonal, and Divine (Pargament et al., 2005). Interpersonal spiritual struggles involve spiritually bound conflicts with others (e.g., disagreements with fellow congregants); intrapersonal spiritual struggles involve questions/doubts about spiritual and religious issues; and Divine spiritual struggles involve emotional tension in one’s relationship with God (e.g., anger toward God, arguing with God, feeling punished by God). Although less common than positive forms of spirituality and religiousness (McConnell, Pargament, Ellison, & Flannelly, 2006; Tarakeshwar & Pargament, 2001), spiritual struggles have been linked to lower levels of physical health, including increased physical symptoms (Magyar, Pargament, & Mahoney, 2000), poorer recovery from illness (Fitchett, Rybarczyk, DeMarco, & Nicholas, 1999; Trevino et al., in press), and greater risk of mortality after controlling for confounding factors (Pargament, Koenig, Tarakeshwar, & Hahn, 2001). Spiritual struggles also have been consistently tied to psychological difficulties; a recent meta-analysis of more than 49 independent studies found struggles to be related to anxiety and negative affect (Ano & Vasconcelles, 2005). Spiritual struggles specifically have been linked to depression and suicidality (Exline, Yali, & Sanderson, 2000), general anxiety, phobic anxiety, obsessive-compulsiveness, paranoid ideation, and somatization (McConnell et al., 2006). Recent evidence has also indicated that spiritual struggles are especially problematic for more religious individuals. For example, one study found that spiritual struggles were more strongly related to decreased levels of well-being among Presbyterian clergy compared to members and lay leaders (Pargament, Tarakeshwar, Ellison, & Wulff, 2001).

Although research on spiritual struggles highlights this construct as a risk factor for a host of physical and mental health concerns, existing studies in this area have utilized predominantly Christian samples. Knowledge about the implications of spiritual struggles for other religious populations is therefore lacking (Ano, Vasconcelles, & Agrawal, 2002), although there have been a few exceptions. In one study of a Hindu sample, spiritual struggles were linked with elevated levels of depressed mood and lower levels of marital and life satisfaction (Tarakeshwar, Pargament, & Mahoney, 2003). In a study of Muslims, spiritual struggles were associated with lower levels of physical health, sense of purpose in life, and life satisfaction, as well as increased levels of depressed mood, anger, and alcohol use (Abu Raiya, Pargament, Mahoney, & Stein, in press). Surprisingly, we were unable to locate a single study examining spiritual struggles among Jews. Jews do represent only a small minority of the U.S. and world populations (DellaPergola, Rebhun, & Tolts, 2005; Kosmin & Lachman, 1993). Nevertheless, it is important to examine this construct specifically among Jews as it is possible that spiritual struggles may operate differently in this population than among other religious groups.

In comparison to other religious doctrines that stress the importance of mental states such as thoughts, feelings, and intentions, Jewish doctrine tends to give more emphasis to behaviors and actions (Cohen, Siegel, & Rozin, 2003). In an important series of studies, Cohen and colleagues found that this difference in doctrinal value placed upon thoughts/feelings versus behaviors/actions has significant implications for different manifestations of religiousness between Jews and Christians. Although Jews and Christians are equally likely to rate specific acts as moral or immoral (e.g., cheating on a test, committing adultery) equally, Christians are more likely than Jews to (a) judge an individual who experiences thoughts about committing such acts in a negative light (Cohen & Rankin, 2004; Cohen & Rozin, 2001), (b) see such thoughts as more likely to lead to action (Cohen, 2003), and (c) believe that the occurrence of such thoughts is tantamount to committing immoral actions (Siev & Cohen, 2007). Extrapolating from these findings, it is possible that spiritual struggles are neither salient for Jews nor predictive of physical and psychological problems, as both intrapersonal and Divine struggles primarily involve internal questions and emotions. Furthermore, more religious Jews may be particularly protected against the physical and mental health dangers that have been associated with spiritual struggles, as dialogue and debate are central to traditional Jewish religious study (Blum-Kulka, Blondheim, & Hacohen, 2002), and questioning religious tenets is therefore a normative and valued practice. Spiritual struggles may further be irrelevant to religious Jews, as they may be seen as inconsequential in comparison to remaining steadfast in religious observance in the midst of internal turmoil. This notion is articulated in the following story that is said to have occurred in the Nazi death camp Auschwitz:

Three great Jewish scholars—masters of Talmud, Halakhah (Jewish law), and Jewish jurisprudence—put God on trial, creating in that eerie place a rabbinic court of law to indict the Almighty. The trial lasted several nights. Witnesses were heard, evidence was gathered, conclusions were drawn, all of which issued finally in a unanimous verdict: The Lord God Almighty, Creator of Heaven and Earth, was found *guilty* of crimes against creation and humankind. And then . . . the Talmudic scholars looked at the sky and said “It’s time for the evening prayers,” and the members of the tribunal recited the evening service. (Brown, 1995, p. vii)

Moreover, spiritual struggles may even be perceived as signs of spiritual and/or intellectual acumen in the religious Jewish community, in light of prominent accounts of Jewish patriarchs arguing with God in the Hebrew Bible (e.g., Abraham arguing on behalf of the people of Sodom in Genesis 18; Moses’ offering pleas on behalf of the Jewish people in Exodus 33).

This discussion raises two possibilities. The effect of spiritual struggles may be universal. In this case, we would expect that higher levels of spiritual struggles would be associated with poorer physical and psychological health among Jews as has been demonstrated with Christians, Hindus, and Muslims. We would further expect that spiritual struggles would be particularly problematic for more religious individuals within the Jewish community. Alternatively, by virtue of their normative value within Jewish culture and doctrine, spiritual struggles may affect Jews to a lesser extent than other religious groups. If this were the case, we would expect spiritual struggles to show little if any relationship to physical and emotional well-being among Jews. We would further expect spiritual struggles to predict distress to a *lesser* degree among more religious than less religious Jews.

THE PRESENT STUDY

The present study examined the relationship between spiritual struggles and physical and mental health in an exclusively Jewish sample. More specifically, we evaluated whether the relationship of spiritual struggles to physical and mental health was dependent on religiousness. Over the past two centuries, the Jewish community has divided into a number of Jewish denominations that differ substantially in both religious beliefs and practices, ranging from more traditional (e.g., Orthodox) to more secular (e.g., Conservative, Reform). We therefore used religious affiliation (Orthodox vs. Non-Orthodox) as a marker of religiousness for the purpose of our analyses. We proposed two competing models as hypotheses: the Universal Effects Model and the Differential Effects Model. Under the Universal Effects Model we hypothesized that spiritual struggles would be associated with distress among Jews as with other religious groups. Specifically, spiritual struggles would predict decreased levels of physical and mental health in the sample and be more problematic for Orthodox than non-Orthodox Jews. Under the Differential Effects Model, we hypothesized that spiritual struggles would be generally unrelated to physical and mental health among Jews. Furthermore, under this latter model, we expected that Orthodox Jews would be affected by spiritual struggles to a *lesser* extent than non-Orthodox Jews.

METHOD

Measures

Demographics. Three demographic variables assessed for participant's age, gender, and education.

General religiousness. Three items measured religious affiliation (i.e., Orthodox, Non-Orthodox), frequency of synagogue attendance (How often did you attend any Jewish services in the past year?), and importance of religion (How important is religion in your life today?)

Spiritual struggles. Five items relating to Jewish spiritual struggles were adapted from a measure of religious coping for Jewish adolescents (Dubow, Pargament, Boxer, & Tarakeshwar, 2000). Item phrasings were changed to reflect the educational level of an adult sample. Two additional items were created based on a review of the religious coping literature and interviews with rabbis and religious educators. The responses to the seven candidate items were subjected to a principal components factor analyses. A single factor with an eigenvalue of 2.5 was derived, accounting for 35.45% over the variance. Items with factor loadings of less than .40 were dropped, resulting in the elimination of two items. The resulting five-item measure demonstrated a satisfactory level of internal consistency ($\alpha = .71$). A copy of the measure with instructions and response anchors is provided in Table 1.

Physical and mental health. Physical and mental health were measured by the Short Form 36 Health Survey (SF-36; Ware, Snow, Kosinski, & Gandek, 1993), a widely employed

TABLE 1
Spiritual Struggles Measure

Dealing with stress: This questionnaire asks about different ways in which you might rely on religion to deal with stress. Choose the answer that best describes how often you do the following things when you have a stressful problem.

Response Anchors: Never, Hardly Ever, Sometimes, Most of the Time, Always

WHEN I HAVE STRESSFUL PROBLEMS:

- 1) I get mad at G-d.
- 2) I argue with G-d
- 3) I question whether G-d can really do anything.
- 4) I wonder if G-d cares about me
- 5) I question my religious beliefs, faith and practices.

36-item measure of physical and mental health status. The SF-36 contains the following eight subscales: Physical Functioning (PF; 10 items measuring limitations in physical activities because of health problems), Physical Role Limitations (PR; 4 items assessing limitations in role activities because of physical health problem), Bodily Pain (BP; 2 items assessing the presence of pain and limitations due to pain), General Medical Health (GH; 5 items assessing self-evaluation of personal health), Vitality (VT; 4 items assessing energy and fatigue), Social Functioning (SF; 2 items assessing limitations in social activities), Emotional Role Limitations (RE; 3 items assessing limitations in role activities because of emotional problems), and General Mental Health (MH; 5 items assessing psychological well-being and distress). To simplify interpretation of scores, the PF, PR, BP, and GH subscales combine to form a summary measure of physical health and the VT, SF, RE, and MH subscales combine to form a summary measure of mental health. Although the SF-36 utilizes three, five, and six-anchor responses and a number of reverse scored items, all items (and subscale/summary measures) were converted to a 0-to-100 scale with higher scores denoting elevated levels of health in accordance with established scale instructions (Ware & Sherbourne, 1992). The SF-36 has been shown to possess excellent reliability and validity in large-scale epidemiological studies (Bowling, Bond, Jenkinson, & Lamping, 1999; Brazier et al., 1992).

Participants and Procedure

The sample was comprised of 468 Jewish individuals ranging in age from 15 and 97 years, with a mean age of 47.8 ($SD = 15.1$). Female participants comprised 58.5% of the sample. The majority of participants (85.6%) had a college degree or higher level of education. The religious affiliation of sample was fairly diverse (35.8% Orthodox; 16.2% Conservative; 36.2% Reform; 11.8% Other/Unspecified) but more religiously involved compared to national norms (National Jewish Population Survey, 2003). Nearly half the sample (44.2%) reported weekly or greater synagogue attendance. An additional 34.4% of participants reported attending synagogue once or more each month, and the remaining 19.9% of participants reported attending synagogue less than once each month (e.g., only for weddings, Bar Mitzvahs, and high holidays). Almost

all participants indicated that religion is either important (23.2%) or very important (73.6%) in their lives.

Data for this study were collected as part of a larger study investigating the links between facets of Jewish religiousness and physical/mental health and illness. The entire survey questionnaire contained 153 items assessing for demographic, general religiousness, religious beliefs and practices, Jewish attitudes, and physical/mental health variables. Data collection was conducted in two major phases between April 2004 and September 2006. Questionnaires were mailed to 95 rabbis in New York and New Jersey in 2004, who were asked to distribute them to their congregants. Completed questionnaires were returned to The Healthcare Chaplaincy, using preaddressed, postage-paid envelopes. This procedure resulted in the collection of 251 completed questionnaires from 27 congregations. An additional 33 surveys were collected through informal means from two congregations in New York City and one in a medium-size Midwestern city (population approximately 300,000). For the second phase of the study, the questionnaire was converted to an electronic format and posted at a Jewish community-based Web site dedicated to psychological research (www.jpsych.com) during the summer of 2006. The Web-based survey generated 184 completed questionnaires yielding a total sample size of 468 participants. Participants were not compensated monetarily or otherwise for completing the survey.

RESULTS

Preliminary Analyses

Means and standard deviations for the spiritual struggles measure as well as the SF-36 subscales and summary scales can be found in Table 2. Consistent with previous research (e.g., McConnell et al., 2006), spiritual struggle scores were somewhat positively skewed in the sample (Skewness = 0.30); that is, low scores were more common than high scores. All SF-36 subscale and summary measures means fell within one standard deviation of the mean for scale norms (Bowling, Bond, Jenkinson, & Lamping, 1999).

Table 3 contains zero-order correlations between demographics (age, gender, and education), general religiousness (Orthodox affiliation, frequency of synagogue attendance, and importance of religion), spiritual struggles, and all SF-36 scales (subscales and summary measures). Greater age was associated with lower levels of physical and mental health, college education was associated with higher levels of physical and mental health, and gender was unrelated to health. Both age and level of education were modestly correlated with greater spiritual struggle. Items measuring general religiousness (Orthodoxy, frequency of synagogue attendance, and importance of religion) were moderately negatively correlated with spiritual struggles. However, these general indices of religion were unrelated to any measure of physical or mental health, with the exception of Orthodoxy being modestly tied to lower vitality. Spiritual struggles were significantly related to lower levels of health as measured by all SF-36 subscales and both summary measures, although the correlations were of modest magnitude.

Spiritual Struggles and Physical/Mental Health

To determine the relationship of spiritual struggles to physical and mental health in the sample after controlling for potentially confounding demographic variables, regression analyses were

TABLE 2
Descriptive Statistics for Primary Measures in Sample

<i>Measure</i>	<i>M</i>	<i>SD</i>	<i>Norms^a</i> <i>M (SD)</i>
SF-36 Physical Health subscales			
Physical Functioning	88.1	19.1	89.6 (19.3)
Role Limitations (Physical)	87.2	21.1	84.2 (32.7)
Bodily Pain	77.4	22.6	82.5 (24.8)
General Medical Health	71.1	20.0	74.0 (21.9)
Summary Measure	80.9	17.3	n/a
SF-36 Mental Health subscales			
Vitality	60.4	17.4	64.7 (20.8)
Social Functioning	86.5	19.7	89.0 (20.8)
Role Limitations (Emotional)	84.9	20.9	88.0 (29.1)
General Mental Health	71.5	16.9	76.6 (18.3)
Summary Measure	75.9	15.6	n/a
Spiritual struggles			
Orthodox	10.0	3.7	n/a
Non-Orthodox	11.4	3.1	n/a
All participants	10.9	3.4	n/a

Note. $n = 468$. SF-36 = Short Form 36 Health Survey.

^aThese norms for the SF-36 are based on a randomized sample of the population of Britain conducted by the Office for National Statistics in 1992 (Bowling, Bond, Jenkinson, & Lamping, 1999).

conducted on the SF-36 subscale and summary measures. Beta weights for each predictor variable as well as indices of variance accounted for by each model are presented in Table 4. In Model 1, age and education were entered as predictors. Gender was not entered as it was correlated with neither spiritual struggle nor SF-36 summary measures (see Table 3), and synagogue attendance and importance of religion were not added as these variables were seen to be part and parcel of Orthodox affiliation. In Model 2, spiritual struggle was added to examine for the presence of a main effect on physical and mental health. Model 1 (age and education) was a significant predictor of physical functioning, physical role limitations, bodily pain, the SF-36 physical health summary measure, as well as vitality, social functioning, emotional role limitations, and the mental health summary measure. After controlling for these variables, spiritual struggle (in Model 2) emerged as a significant predictor of all SF-36 subscales and both summary measures, with two exceptions (GH and MH). More specifically, spiritual struggle was modestly associated with poorer physical and mental health.

Interaction of Spiritual Struggles and Orthodox Affiliation on Physical/Mental Health

Additional regression analyses were conducted on the SF-36 subscale and summary measures to examine the presence of an interaction between Orthodox affiliation and spiritual struggles on physical and mental health. In Model 3, Orthodox Affiliation (dummy coded as

TABLE 3
Zero Order Pearson Correlations Between Demographics, General Religiousness, and Physical/Mental Health

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Gender																	
2. Age	.00																
3. Education	.02	-.41**															
4. Orthodoxy	.00	-.11*	-.05	.42**													
5. Syn. Attend.	-.14*	-.05	-.05	.25**	.30**												
6. Impic Relig.	.08	.11*	.10*	-.19**	-.18**	-.16**											
7. Struggles	-.08	-.36**	.11*	.02	-.01	-.03	-.11*										
8. SF-36PF	-.08	-.15**	.12*	-.03	.07	-.07	-.11*	.70**									
9. SF-36BP	-.04	-.18*	.10*	.01	-.01	-.03	-.11*	.65**	.63**								
10. SF-36GH	-.06	-.04	.11*	-.06	-.03	-.02	-.16**	.57**	.56**	.55**							
11. SF-36VT	-.04	.11*	.10*	-.10*	-.04	-.01	-.16**	.43**	.42**	.40**	.49**						
12. SF-36SF	-.05	.04	.13**	-.04	-.03	.04	-.10*	.33**	.33**	.30**	.46**	.55**					
13. SF-36RE	.00	.02	.12**	-.05	-.04	.04	-.12*	.33**	.49**	.40**	.40**	.53**	.69**				
14. SF-36MH	-.05	.10*	-.01	-.06	.00	.08	-.22**	.21**	.25**	.24**	.40**	.68**	.58**	.56**			
15. SF-36PHYS	-.07	-.19**	.14**	-.04	-.04	-.01	-.14**	.86**	.86**	.85**	.79**	.49**	.57**	.45**	.33**		
17. SF-36MENT	-.04	.06	.10*	-.06	-.03	.06	-.19**	.39**	.51**	.42**	.51**	.81**	.85**	.86**	.84**	.55**	
M	.59	47.8	.88	.36	.45	3.7	10.9	88.1	87.2	77.4	71.1	60.4	86.5	84.9	71.5	80.9	75.9
SD	.49	15.1	.32	.48	.49	.52	3.4	19.1	21.1	22.6	20.0	17.4	19.7	20.9	16.9	17.3	15.6

Note. Sample sizes range from 442 to 469 (missing values not replaced and cases excluded pairwise). Gender coded as 0 = Male, 1 = Female; Education coded as 0 = some college or less, 1 = college degree or more; Orthodoxy coded as 0 = non-Orthodox, 1 = Orthodox; Syn. Attend. (Synagogue Attendance) coded as 0 ≤ 1 time/week, 1 ≥ 1 time/week; Impic. Relig. (Importance of Religion) coded 1 = not important at all, 2 = not very important, 3 = somewhat important, 4 = very important. See text for information about coding of Struggles (Spiritual Struggles). The eight Short Form 36 Health Survey (SF-36) subscales are Physical Functioning (PF), Physical Role Limitations (PR), Bodily Pain (BP), General Medical Health (GH), Vitality (VT), Social Functioning (SF), Emotional Role Limitations (RE), General Mental Health (MH). The two SF-36 summary measures are PHYS (mean of PF, PR, BP, & GH) and MENT (mean of VT, SF, RE, and MH).

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

TABLE 4
 Spiritual Struggle as a Predictor of Physical and Mental Health: Main Effect and Interaction With Orthodoxy

Predictor Variable	PF	PR	BP	GH	PHYS	VT	SF	RE	MH	MENT
Model 1										
Age										
β	-0.35***	-0.13**	-0.19***	-0.05	-0.20***	0.10*	0.55	0.04	0.10*	0.08
<i>t</i>	-7.76	-2.77	-4.05	-1.10	-4.17	2.08	1.17	0.89	2.15	1.54
Education										
β	0.11**	0.13**	0.09	0.10*	0.13**	0.09	0.14**	0.13*	-0.01	0.10*
<i>t</i>	2.50	2.72	1.88	2.03	2.71	1.80	2.88	2.66	-0.15	1.99
R^2 (Model)	0.13***	0.03***	0.04***	0.01	0.06***	0.02*	0.02**	0.02*	0.01	0.02*
Model 2										
Struggle										
β	-0.08	-0.10*	-0.10*	-0.18***	-0.18***	-0.18***	-0.012*	-0.13**	-0.24***	-0.21***
<i>t</i>	-1.81	-2.09	-2.18	-3.68	-3.88	-3.80	-2.41	-2.71	-5.13	-4.36
ΔR^2 (Model)	0.01	0.01*	0.01*	0.03***	0.02**	.03***	0.01*	0.02**	0.06***	0.04***
Model 3										
Orthodoxy										
β	-0.14**	-0.12*	-0.98	-0.12*	-0.15**	-0.09	-0.05	-0.05	-0.06	-0.07
<i>t</i>	-2.93	-2.30	-1.89	-2.20	-2.82	-1.77	-0.86	-0.96	-1.20	-1.34
ΔR^2 (Model)	0.02**	0.01*	.01	0.01*	0.02**	0.01	0.00	0.00	0.00	0.00
Model 4										
Interaction of Orthodoxy and Struggle										
β	0.37**	0.41**	0.18	0.11	0.29*	0.16	0.42**	0.35*	0.15	0.27*
<i>t</i>	2.65	2.79	1.23	0.73	1.98	1.08	2.73	2.35	1.02	1.87
ΔR^2 (Model)	0.02**	0.02**	0.00	0.00	0.01*	0.00	0.02**	0.01**	0.00	0.01

Note. Sample sizes range from 429 to 447 (missing values were not replaced and cases were excluded pairwise). See text and Table 1 for information about Struggle (Spiritual Struggles) measure.

PF = Short Form 36 Health Survey (SF-36) Physical Functioning subscale; PR = SF-36 Physical Role Limitations subscale; BP = SF-36 Bodily Pain subscale; GH = SF-36 General Medical Health subscale; PHYS = SF-36 Physical Health summary measure (mean of PF, PR, BP, & GH); VT = SF-36 Vitality subscale; SF = SF-36 Social Functioning subscale; RE = SF-36 Emotional Role Limitations subscale; MH = SF-36 General Mental Health subscale; MENT = SF-36 Mental Health summary measure (mean of VT, SF, RE, & MH).

Education coded as 0 = some college or less, 1 = college degree or more; Synagogue Attendance coded as 0 \leq 1 time/week, 1 \geq 1 time/week; Importance of Religion coded 1 = not important at all, 2 = not very important, 3 = somewhat important, and 4 = very important.

* $p < .05$. ** $p < .01$. *** $p < .001$.

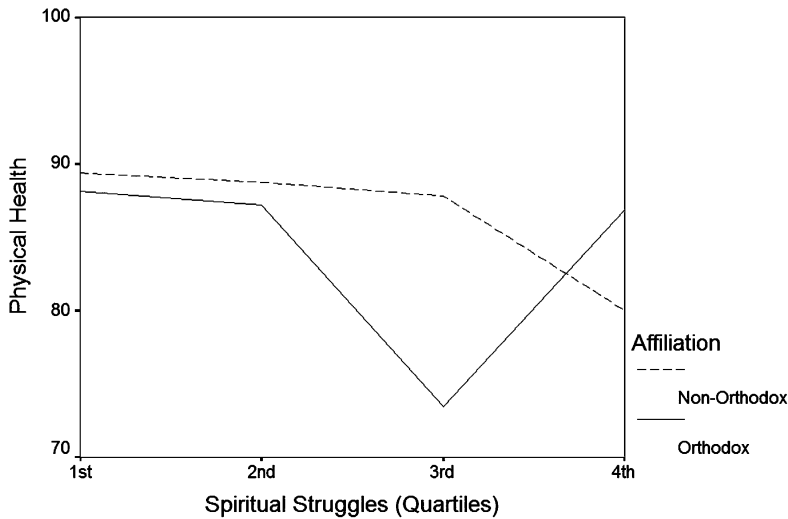


FIGURE 1 Interaction effect of Orthodox affiliation and spiritual struggles on physical health.

0 = non-Orthodox, 1 = Orthodox) was added to the regression equation, and a multiplicative interaction of spiritual struggles and Orthodox Affiliation was added in Model 4. Affiliation with Orthodoxy was associated with marginally lower levels of physical health (PF, PR, and GH); however, Orthodox affiliation was not a significant predictor of any mental health measure. The results of Model 4 are the most relevant to the current study. The interaction of spiritual struggles and Orthodox affiliation accounted for unique variance in PF, PR, and the SF-36 physical health summary measure. In addition, this interaction was significantly tied to social functioning and RE. More specifically, low to moderately high levels of spiritual struggle (first to third quartiles) struggles were associated with modest decreases in physical and mental health for both Orthodox and non-Orthodox Jews (see Figures 1 and 2). However, from moderately high to the highest levels of spiritual struggle (third to fourth quartiles) Orthodox Jews' physical and mental health *increased* to levels found at the first and second quartiles of spiritual struggle. By contrast, non-Orthodox Jews' physical and mental health continued to decrease.

DISCUSSION

In this study, we posited two competing hypothetical models of how spiritual struggles would operate in the Jewish community: the Universal Effects model and the Differential Effects model. Under the Universal Effects model, we proposed that spiritual struggles would be linked to physical and mental health among Jews as they are among non-Jews. Specifically, we hypothesized that struggles would be associated with lower levels of physical and mental health in the sample as a whole and more predictive of distress for Orthodox Jews. Under the Differential Effects model, we proposed that spiritual struggles would be generally unrelated to the physical and mental health among Jews. Moreover, we expected that Orthodox Jews

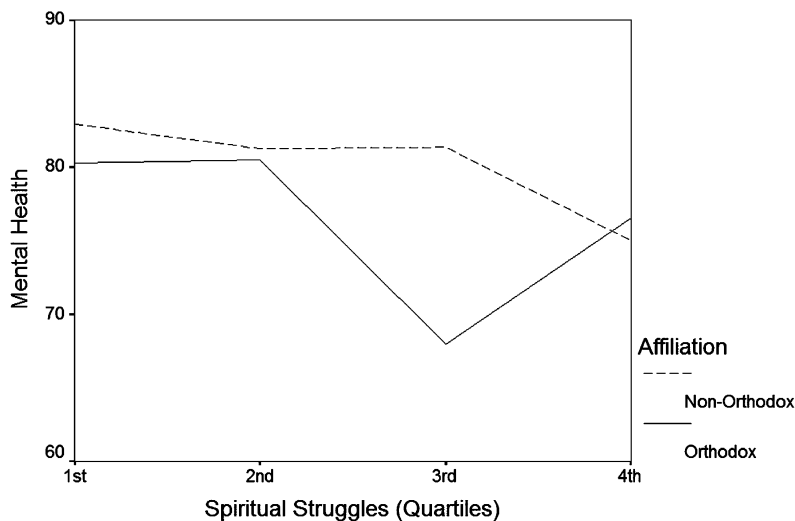


FIGURE 2 Interaction effect of Orthodox affiliation and spiritual struggles on mental health.

would be *less* affected by struggles than their non-Orthodox counterparts. The results of this study offer support for facets of both the Universal and Differential Effects models.

In support of the Universal Effects model, we found significant correlations between spiritual struggles and poorer physical and mental health in the sample, which remained after controlling for relevant demographic factors. Thus, consistent with previous research on non-Jews, it appears that spiritual struggles are predictive of lower levels of health and well-being among Jews overall. However, it is important to note that the correlations between struggles and indices of physical and mental health were modest in this study. While further investigation utilizing uniform measures of spiritual struggles across a religiously diverse sample would be needed to examine this directly, it is possible that the impact of struggles may be smaller among Jews than among non-Jews. Support was also found for the Differential Effects model. Although previous research with Christians has indicated that spiritual struggles are associated with greater levels of distress for more religious individuals (Pargament, Tarakeshwar, et al., 2001), a different and more complex picture of the interaction between spiritual struggles and religiousness emerged from this study of Jews. Across low to moderately high levels of spiritual struggle, struggles were associated with modest declines in physical and mental health among both non-Orthodox and Orthodox Jews. However, at the highest levels of spiritual struggle, measures of physical and mental health increased among Orthodox Jews, whereas they continued to decrease among non-Orthodox Jews.

This latter finding may be reflective of a critical dimension of Orthodox Jewish life. Argument and debate play a central role in traditional Jewish religious study, and conflict with God may be quite acceptable or even laudable in certain circumstances. Thus, it is possible that Orthodox Jews, by virtue of their connection to ancient Jewish teachings and practices, perceive struggle to be invigorating and enlightening. Moreover, according to traditional Jewish wisdom, spiritual struggles create an opportunity to demonstrate one's ability to remain steadfast

to ethical and religious conduct while under stress. This principle is perhaps most famously expounded in the story of the “Akeida” or the “Binding of Isaac” (Genesis 22). Given the value placed on faithfulness in traditional Jewish teachings, Orthodox Jews may perceive high levels of spiritual struggle as opportunities for spiritual growth, whereas low to moderate levels of struggle may not afford such opportunities and hence may be perceived as negative. Furthermore, Orthodox Jews’ unwavering commitment to religious practices specifically during times of struggle may lead to spiritual growth and connection. By contrast, non-Orthodox Jews may be less familiar with the tradition of Jewish argument and debate, less likely to remain faithful to religious beliefs and practices when under stress, and less deeply embedded in a system of spiritual and religious practices which help mitigate the impact of struggles. Furthermore, non-Orthodox Jews may be more assimilated to a non-Jewish religious perspective in which spiritual struggles are perceived as negative and threatening regardless of their severity.

The results of this inquiry have a number of practical implications for clinical treatment in the Jewish community. The findings in this study combined with those of previous research suggest that struggles are potentially problematic for theistic groups, including Christians, Muslims, Hindus, and Jews. Therefore, reports of struggles should be taken seriously and assessed thoroughly by clinicians working with individuals from religious backgrounds. One important factor that should be examined specifically, for example, is the duration of spiritual struggles, as chronic struggles have been shown to have long term health implications (Pargament, Koenig, Tarakeshwar, & Hahn, 2004). This study further suggests that specific interventions targeting spiritual struggles may be helpful in reducing physical and mental health concerns. Although research and development of spiritually integrated psychotherapy is in its early stages (Pargament, 2007), a number of existing interventions have been created to identify and resolve spiritual struggles (e.g., Cole, 2005; Murray-Swank & Pargament, 2005), though none have been designed for use with Jews, *per se*. For Jewish individuals, such treatment could draw from traditional Jewish sources to normalize and highlight the potential spiritual benefits of spiritual struggles. For example, the notion that struggles present an opportunity to emulate the paths of the patriarchs by maintaining faithful practice in times of trouble may be a helpful message to Jewish individuals experiencing spiritual struggles. This may promote the reframing of spiritual struggles in a nonthreatening light. Such an approach may be particularly helpful when treating nonreligious Jews, who may not be familiar with these notions.

This study also points to some salient differences between Jews and Christians in the relationship of spiritual struggles to physical and mental health. Although previous findings have demonstrated that spiritual struggles are particularly problematic for *more* religious Christians (Pargament, Tarakeshwar, et al., 2001), our findings indicate that *more* religious Jews are impacted by spiritual struggles to a lesser degree than *less* religious Jews. This speaks to the importance of not making assumptions about how religious and spiritual variables relate to health and well-being in one religious group simply based on research with another. Cultural and religious doctrine, values, and principles are multifaceted and therefore require religion-specific theory and assessment as well as investigation. Furthermore, it is noteworthy in and of itself that this study found spiritual struggles to operate differently among Orthodox and non-Orthodox Jews. Thus, even within one religion, explicit study of subgroups may be necessary to fully appreciate links between spirituality/religiousness and other variables. Although psychology of religion and spirituality research has grown tremendously in recent years (Paloutzian & Park, 2005), the overwhelming majority of psychological investigations in this area have been

conducted with Christian samples (Tarakeshwar, Pargament & Mahoney, 2003), and as a result, current psychological knowledge about Jewish and other populations is lacking. It is therefore hoped that future years will see an increase in studies examining religious constructs in these populations.

This study is limited by the exclusive reliance on self-report methods. In addition, the cross-sectional design leaves unanswered important questions about the direction of influence between spiritual struggles and physical and mental health. Future studies could address these limitations by utilizing longitudinal or perhaps experimental methodologies to explore causal relationships between spiritual struggles and health variables. In addition, Orthodox Jews were overrepresented in the sample compared to national norms, though oversampling was necessary to conduct separate analyses on links between spiritual struggles and health among Orthodox and non-Orthodox Jews. In addition, by virtue of the fact that non-Jews were not included in this study, this study could not evaluate the differential impact of struggles between Jews and non-Jews. One potential challenge to such a study would be the creation of a uniform measure of spiritual struggles that captures the experience of struggles within different religious traditions. Nevertheless, such a methodology would provide valuable information about the impact of spiritual struggles among members of different faiths. Despite these limitations, this study indicates that spiritual struggles are a salient topic of study among Jews, one that deserves further exploration.

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