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School of Social Work
University of Windsor
401 Sunset Avenue
Windsor, Ont.
Canada N9B 3P4
cswedit@uwindsor.ca

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Religiosity, Spirituality, Mindfulness, and Mental Health in Social Work Students

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Yu-Wen Ying¹

¹ University of California

Abstract

Social work education is a disequilibrating experience that is stressful. The literature identifies religiosity, spirituality, and mindfulness as potential resources for coping in the general population. The current study examines their relationship with depressive and anxiety symptoms in social work students. A total of 65 MSW students participated in a paper-pencil survey. Only half claimed a membership in an organized religion. On average, students endorsed spirituality and mindfulness more strongly than religiosity. While religiosity and spirituality were highly correlated, mindfulness was not. Using multivariate analysis, it was discovered that mindfulness significantly reduced anxiety and depressive symptoms while religious strain increased anxiety symptoms. Implications of study findings for social work education are discussed.

Introduction

Adult education entails a disequilibrating experience during which students question and modify pre-existing views of the world and the self (King & Baxter Magolda, 1999; Knowles, 1980). This temporary uncertainty is often accompanied by self-doubt and a sense of inefficacy which may negatively impact student well-being (Gitterman, 2004; King & Baxter Magolda, 1999; Knowles, 1980; Maciuka, Basseches, & Lipson, 1994). Social work students are exposed to significant educational challenges in the classroom and at their fieldwork placement which has been associated with feelings of distress (Deal, 2000; Holman & Freed, 1987; Home, 1997; Ying, 2008a). However, relatively little research has examined potential resources that may be employed in their coping. Informed by Lazarus and Folkman's (1984) theory of stress and coping, the current study examines the relationship of religiosity, spirituality, and mindfulness with well-being in Masters of Social Work students.

Definition of Religiosity, Spirituality, and Mindfulness

A significant empirical literature shows religiosity, spirituality, and mindfulness all promote well-being during stressful situations (Brown & Ryan, 2003; Hawks, Hull, Thalman, & Richins, 1995; Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991; Neff, 2003a; Pargament,

1997). However, their function in social work students has been understudied. Religiosity refers to membership and adherence to the teachings of organized social institutions that offer a coherent worldview and prescribe desirable behavior (Emmons & Paloutzian, 2003). Social work students define it as organized beliefs or doctrines, practice of spirituality/faith such as rituals and worship, personal values and traditions, belief in and experience of God, and belief in and experience in higher power (Hodge & McGrew, 2006). National surveys of social workers estimate 84% (Mattison, Jayaratne, & Croxton, 2000) to 91% (Bergin & Jensen, 1990) to be religious, comparable to the figure of over 90% found in social work students (Hodge & McGrew, 2006).

Unlike religiosity, spirituality is more overarching and encompassing, as it does not necessitate an institutional affiliation, and is more personal and experiential (Roof, 2000). Spirituality has been defined as a belief in and relationship with a higher power, such as God (May, 1982), transcendence of the material (Wong, 1998), a purpose of living (Wong, 1998), and an appreciation for the mystery of life (Hatch, Burg, Naberhaus, & Hellmich, 1998; MacDonald, 2000; Miller, 2004). Similar definitions have been reported by a national sample of 303 social work students (Hodge & McGrew, 2006). Half of them viewed spirituality and religion to be related, a quarter thought they could be related, and only 6% stated no relationship exists (Hodge & McGrew, 2006; see also Csiernik & Adams, 2003).

While both religiosity and spirituality entail specific beliefs, mindfulness is a more process-oriented practice that is found in many religious and spiritual traditions, such as Buddhism, Islam, and Christianity (Walsh & Shapiro, 2006). Its two key components are self-regulation of attention to the present moment, and maintenance of an open, curious, and accepting stance to the experience (Bishop et al, 2004). Both reduce emotional and cognitive reactivity and enhance the ability to approach events with greater reflectivity and acceptance (Bishop et al., 2004; Brown & Ryan, 2003; Neff, 2003a). As such, mindfulness is a non-belief specific spiritual orientation that reduces critical judgment of ourselves and others, and facilitates compassion for self and others (Bishop et al., 2004; Brown & Ryan, 2003; Neff, 2003a).

Theoretical Framework

The potential function of religiosity, spirituality, and mindfulness in promoting well-being among social work students may be informed by the theory of stress and coping. While stressors are unavoidable in daily living, it is primarily our response that determines our well-being. Lazarus and Folkman (1984) proposed the following steps during the stress and coping process: first, judgment is made about the nature of the event during primary appraisal; second, available coping resources are assessed during secondary appraisal; and both, in turn, mediate the third step of coping responses that are implemented with the aim of either overcoming or tolerating the stressor. As such, effective coping is not primarily dependent upon the magnitude of the external stressor but the individual's appraisal and response (Folkman, 1984). Thus, Adams, Matto, and Harrington (2001) found that it was not clients' distress per se but the clinical social workers' outlook on life and self-perception that predicted effective coping and prevented burnout. Specifically, an appraisal that the stressor is meaningful and that one possesses the capacity to respond, followed by a planful action yielded positive and effective coping (Folkman, 1984; Lazarus & Folkman, 1984). Ample empirical evidence shows effective appraisal and

coping to result in positive mental health (see review by Folkman & Moskowitz, 2000; Gruen, 1993).

The Relationship of Religiosity, Spirituality, and Mindfulness with Mental Health

Religious beliefs and practices may inform the stress and coping process by providing meaning to the stressor during primary appraisal, promoting a belief of personal competence and God's support to solve the problem during secondary appraisal, and the use of coping responses that result in positive outcomes (Pargament, 1997). Thus, empirical research found religiosity to be significantly associated with positive health and well-being (Koenig, 1997; Pargament, 1997; Steger & Frazier, 2005). However, religiosity may also negatively impact coping and outcome. For instance, viewing God/higher power as malevolent and punitive and blaming oneself for the failure to meet religious principles may yield negative appraisal and precipitate negative coping, resulting in anxiety, depression and other negative mental health outcomes (Exline, Yali, & Sanderson, 2000; Pargament, Smith, Koenig, & Perez, 1998; Trentholm, Trent, & Compton, 1998). Some social work students also find religion to be oppressive and suppressive (Hodge & McGrew, 2006). To capture these diverse experiences, two instruments assessing religion are included in the study: a general religiosity measure (Rohrbaugh & Jessor, 1975), and a religious comfort and strain measure (Exline et al., 2000).

Significant literature suggests non-religious spirituality enhances effective coping during stressful situations by promoting meaning making and a sense of personal competence, resulting in effective coping and positive mental health outcomes, such as reduced depression (Fehring, Brennan, & Keller, 1987; Mascaro, Rosen, & Morey, 2004), anxiety (Mascaro et al., 2004), neuroticism (MacDonald, 2000), and general psychopathology (Fehring et al., 1987). Because spirituality is a multidimensional construct (as discussed above), two instruments of general spirituality are included in the current study (Hatch et al., 1998; Miller, 2004).

By reducing internal self-absorption and external distortion, mindfulness increases the capacity for effective coping (Brown & Ryan, 2003; Hodgins & Knee, 2002; Neff, 2003a). Specifically, it enhances clarity and accuracy in the assessment of both the stressor (primary appraisal) and available resources (secondary appraisal), resulting in effective coping responses (Brown & Ryan, 2003; Neff, 2003a; Walsh & Shapiro, 2006). Empirical research supports the positive effect of mindfulness on mental health outcomes in various populations (Kabat-Zinn, 2003; Neff, 2003b), including social and health service providers (Galantino, Baime, Maguire, Szapary, & Farrar, 2005; Shapiro, Astin, Bishop, & Cordova, 2005; Shapiro, Schwartz, & Bonner, 1998). Among social work students in particular, mindfulness has been associated with an enhanced sense of competence and reduced depressive and anxiety symptoms (Ying, 2008a; Ying & Han, 2007). In the professional context, more mindful students reported less emotional contagion (Ying & Han, 2007) and emotional exhaustion (Ying, 2008b). Due to the sparse research on mindfulness in social work students, two measures are included in the current study; one assesses mindfulness in everyday living (Brown & Ryan, 2003), and the other during stressful situations (Neff, 2003b). However, the relative importance of religiosity, spirituality, and mindfulness to social work students' mental health has not been previously studied.

Research Questions

Informed by the above literature, the current study examined three questions: Are social work students religious, spiritual, and mindful? Second, are religiosity, spirituality, and mindfulness distinctive constructs among social work students? While religiosity and spirituality entail overlapping beliefs and practices (Hodge & McGrew, 2006; Scott, 2001), their association with mindfulness in social work students is unknown. Third, do religion, spirituality and mindfulness predict well-being in social work students? In light of the existing literature, positive religiosity, spirituality and mindfulness were hypothesized to enhance while negative religiosity was postulated to diminish it.

Methods

Sample

A convenience sample of 65 Masters of Social Work (MSW) students was recruited at a public university in the western United States. As the study site does not offer a part-time program, all participants were full-time students. Table 1 presents the samples demographic characteristics. Non-European American consisted of Asian, African, Latino, and bi/multiracial individuals. The sample did not vary from the study population (94 first and 94 second year MSW students) on available characteristics of age, gender, ethnicity, and specialization. With regard to current religion, 49.2% reported an affiliation and the rest did not.

Measures

Religiosity was assessed in several ways. In addition to a demographic question on membership in an organized religion that inquired, "Your current religious affiliation is...", two instruments of religiosity were used. The first is the 7-item Religiosity Scale (Rohrbaugh & Jessor, 1975) that examines religious involvement in terms of ideology, ritual practice, and influence on daily living. They are scored on a 5-point Likert type scale, with higher scores reflecting greater endorsement. In the current sample, the scale's internal consistency was .92. In support of its construct validity, religious students scored higher than those without a religious affiliation ($M = 3.41$, $SD = 1.03$ vs. $M = 2.28$, $SD = .90$, $t(63) = 4.74$, $p < .001$, two-tailed).

In addition, the Religious Comfort and Strain Scale (Exline et al., 2000) assesses the degree to which religiosity provides comfort and causes strain. It includes a 7-item comfort subscale and 13-item strain subscale. Responses were scored on a 4-point Likert-type scale, with higher scores indicating stronger agreement. In the current sample, internal consistency was .91 for religious comfort and .81 for religious strain. Their construct validity is demonstrated by the significantly stronger endorsement by religious versus non-religious participants (for religious comfort: $M = 1.84$, $SD = .85$ versus $M = .88$, $SD = .67$, $t(63) = 4.05$, $p < .001$, two-tailed; for religious strain: $M = .92$, $SD = .47$ versus $M = .66$, $SD = .45$, $t(63) = 2.24$, $p = .03$, two-tailed). Furthermore, as Table 3 shows, the three religion scales were significantly correlated ($r = .45$ to $.91$, $p < .001$), supporting their convergent validity.

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Spirituality was also assessed by two instruments. The Spiritual Involvement and Beliefs Scale (Hatch et al., 1998) is a 26-item measure that examines purpose of life, belief in an external power, spiritual practices such as prayer, humility, and the application of spiritual principles in daily life. Responses are coded on a 5-point Likert-type scale with higher scores reflecting greater endorsement. Its predictive validity was supported by its significant positive association with spirituality as measured by the Spiritual Well-Being Scale ($r=.79$, Hatch et al., 1998). In the current sample, its internal reliability is .89.

The second spirituality instrument is the Miller Measure of Spirituality (Miller, 2004). It consists of 31 items which, when factor analyzed, yielded two dimensions: prosocial beliefs and importance of a higher being. Responses are coded on a 5-point Likert-type scale, with higher scores indicating stronger agreement. Among college students, its convergent validity was supported by an association with altruism (Miller, 2004). In the current sample, internal reliability is .81 for prosocial beliefs and .95 for importance of a higher being. As Table 3 shows, the three spirituality scales were significantly correlated ($r=.61$ to $.86$, $p<.001$), supporting convergent validity.

Mindfulness was measured by two instruments. The Mindful Attention Awareness Scale (Brown & Ryan, 2003) consists of 15 items that assess mindfulness and attention across “cognitive, emotional, physical, interpersonal, and general domains” (Brown & Ryan, 2003, p. 825). Items are scored on a 6-point Likert-type scale, with higher score reflective of greater mindfulness. In our sample, its Cronbach alpha reliability is .84.

The second measure is the 4-item Mindfulness Subscale of the Self-Compassion Scale (Neff, 2003b). It assesses the ability to keep painful thoughts and emotions in balance. Responses are scored on a 5-point Likert-type scale, with higher scores reflecting greater endorsement. In our sample, its internal consistency is .75. As Table 3 shows, the two mindfulness scales were significantly associated ($r=.34$, $p<.01$), suggesting convergent validity.

Mental health was measured by anxiety and depressive symptoms. The Spielberger Trait Anxiety Inventory (STAI, Spielberger, Gorsuch, & Lushene, 1970) assesses proneness to anxiety across time. Since its creation, this 20-item measure has been widely used (Marteau & Bekker, 1992). All questions are scored on a 5-point Likert-type scale, with higher scores suggesting greater anxiety. The STAI's internal consistency is .91 (Marteau & Bekker, 1992), and its validity is supported by its association with depression and other personality measures (Dobson, 1985). In the current sample, the Cronbach alpha is .89.

Depressive symptoms were assessed by the California Psychological Inventory (CPI) – Depression Scale (Gough, 1987; Jay & John, 2004). This 33-item CPI subscale examines depressive personality traits that develop over an extended period of time, including depressed mood, lack of interest, worthlessness, hopelessness, limited concentration, fatigue, and vegetative signs. All items are scored as “true” (coded as 1) or “false” (coded as 0). Higher scores indicate more depressive symptoms. In the current sample, its Cronbach alpha is .80. As Table 2 shows, anxiety and depressive symptoms were highly correlated ($r=.78$, $p<.001$), converging to measure mental health symptoms.

Procedure

Upon receiving approval from the study sites Committee for the Protection of Human Subjects, all MSW students were invited to participate in a study on “Orientation to Living in Social Work Students” via mass email and an invitation letter placed in their student mailboxes. For easy access, blank consent forms and surveys were placed above their mailboxes. During the data collection period of the first six weeks of the semester, three reminder e-mails were sent to all students to encourage participation. Also, a doctoral level research assistant attended a required class to answer questions and encourage participation. Respondents signed the consent form and completed the survey at a time and place of their choosing. When they submitted the completed survey to the doctoral level research assistant, participants received \$10 in subject payment. The participants’ identity was known to the research assistant but not the principal investigator. The research assistant kept a key of the participants’ name and study ID number for the purpose of future follow-up.

Results

Are social work students religious, spiritual, and mindful?

As Table 1 illustrates, approximately one half (49.2%) of the sample identified with an organized religion, 43.1% had no religious affiliation, and the remainder (16.8%) were atheist, agnostic, spiritual or adhered to a yoga practice or a 12-step program. Since more than one response could be given, the total percentage exceeded 100. As Table 2 demonstrates, for the other three religiosity variables, the participants’ mean fell below the midpoint, representing neutrality, on the range of possible scores. In contrast, the three mean spirituality scores surpassed the midpoint of their respective scales, suggesting this sample endorsed spirituality more than religiosity. With regard to mindfulness, the students scored slightly above the two scales’ midpoints. Finally, the sample scored well below the midpoint of the anxiety and depressive symptom scales.

Are religiosity, spirituality, and mindfulness distinct constructs in social work students?

As hypothesized, responses to the religiosity and spirituality measures were significantly correlated (see Table 3), supporting the constructs’ overlap in content. In contrast, the two measures of mindfulness were not significantly associated with any of the religiosity or spirituality measures (see Table 3), supporting its conceptual distinctiveness.

Are religiosity, spirituality, and mindfulness associated with mental health in social work students?

This research question was first assessed using a correlation analysis and the results are in the last two columns of Table 3 (in bold). The construct of mindfulness is most significantly associated with mental health; with both mindful attention awareness and Neff’s mindfulness scale significantly negatively associated with anxiety and depressive symptoms. Furthermore, religious strain showed a modest positive association with anxiety, while the other religiosity measures and spirituality were not related with mental health outcomes.

This question was further assessed using multivariate regression analysis. Due to the problem of multicollinearity, stepwise regression was employed. Table 4 shows the results are consistent with those of the bivariate correlations. In the anxiety model, mindful attention awareness emerged as significant in the first step, followed by Neff's mindfulness in step 2, and religious strain in the third step. In the depressive symptoms model, mindful attention awareness again emerged as significant in the first step, followed by Neff's mindfulness in the second step.

Discussion

The study findings are further discussed below by research questions, followed by study limitations, and implications for social work education.

Are social work students religious, spiritual, and mindful?

As these social work students scored well above the midpoint on the spirituality measures, slightly above it on the mindful measures, but below it on the religiosity measures, they may be described as more spiritual and mindful than religious. Only half of the social work students currently embraced an organized religion. This is significantly lower than the 84% and more found in social workers nationally (Bergin & Jensen, 1990; Mattison et al., 2000). This raises questions about the external validity of this finding which will be discussed further under Study Limitations. Also, a significant number of students reported no longer affiliating with the religion in which they were raised. This decline is particularly noticeable among Protestants (from 35.4% to 15.4%) and Catholics (from 27.7% to 16.9%), suggesting students brought up in these predominant religious traditions were likely to question their parents' faith. Religious exploration often occurs during adolescence and may partially represent an effort to separate and individuate from parents (Erikson, 1963). Additionally, this may be due to sample selection bias or be unique to the students at the study site, as will be addressed in Study Limitations.

In contrast to religiosity, social work students are more involved with spirituality and endorsed prosocial beliefs, but expressed neutrality about the importance of a higher being (a spiritual dimension that overlaps with religion). This finding is not surprising as the profession of social work is likely to attract students who feel a sense of interconnection with fellow human beings and espouse the profession's mission to serve and empower the vulnerable and oppressed (National Association of Social Workers, 1997).

Finally, the sample was, on average, moderately mindful, scoring comparably to college students [for mindful attention awareness, our mean = 3.83 as compared to 3.72 in Brown & Ryan's (2003) sample; for Neff's mindfulness, our mean = 3.52 as compared to her sample mean of 3.39 (Neff, 2003b)]. These findings are also consistent with previous research that suggests a natural variation in the level of mindfulness due to temperament and personality makeup (Brown & Ryan, 2004),

Are religiosity, spirituality, and mindfulness distinct constructs in social work students?

Consistent with the existing literature (Hodge & McGrew, 2006; Scott, 2001), religiosity and spirituality were highly correlated in social work students, suggesting these are overlapping

constructs. In contrast, neither was associated with mindfulness which entails no beliefs per se, but a moment-to-moment attentiveness to one's experiences without judgment (Brown & Ryan, 2003; Neff, 2003a). As such, it appears mindfulness may be practiced without interfering with pre-existing religious and spiritual beliefs.

Are religiosity, spirituality, and mindfulness associated with mental health in social work students?

Mindfulness enhanced while religious strain diminished mental health in social work students. As discussed above, mindfulness is a process-oriented practice that assists with the maintenance of equanimity and acceptance, thereby protecting against depressive and anxious affect, cognitions and behaviors (Brown & Ryan, 2003; Neff, 2003a). In contrast, religious strain (such as self-blame about moral failures and fear of God's punishment) entails harsh negative judgment of the self and a higher power, resulting in heightened anxiety (Exline et al., 2000). Inconsistent with the existing literature, religious involvement and comfort, and spirituality were not significantly associated with mental health in this sample of social work students. There are several plausible explanations. First, religiosity and spirituality are more content-oriented and involve specific belief systems that, in principle, would inform behavior. However, it is possible to hold certain beliefs but not act accordingly in every day living. Second, only half of the students claimed an affiliation with an organized religion, and the sample's generally modest endorsement of religiosity and religious comfort suggest religiosity may simply not be relevant to this particular group. Additionally, the lack of association between spirituality and mental health may be due to the limited variability in responses on the spirituality measures (see Table 2). The latter two explanations may reflect sample selection bias and suggest limited external validity. This and other study limitations are discussed below.

Study Limitations and Direction for Future Research

The study has several limitations which deserve attention in future research. First is sample selection bias. While all MSW students at the study site were invited to participate, only one third did so. Thus, the study findings may not generalize to other students. Also, as the study was implemented at a highly liberal public university in Northern California, it may have limited external validity. Most notably, less than 50% of this sample identified a religious affiliation as compared to over 80% of social workers nationwide (Mattison et al., 2000). Furthermore, among Hodge and McGrew's (2006) national sample of social work students, 35% were Protestant, 24% were Catholic, and 8% had no faith, as compared to 15.4% Protestant, 16.9% Catholic, and 43.1% without a religious affiliation in the current sample. Thus, future research is needed to assess the protective function of religiosity and spirituality against mental health problems in social work students in other parts of the country.

Another limitation concerns measurement. The content validity of the religiosity and spirituality measures may be limited. As noted previously, these constructs are multi-dimensional. However, existing measures tend to be informed by Christian beliefs that pre-dominate in this country. Thus, their relevance to non-Christian religious individuals is questionable. Also, as noted above, the variability in spirituality was limited in the current sample. Given our nation's growing religious/spiritual diversity, assessment instruments need to be developed to more fully capture

the various forms of practices of Americans. Recently, Wong and Vinsky (2008) criticized social work's binary view of religion and spirituality where non-Christian ethnic minorities' religious beliefs are seen as culture-bound, while Westerners' spirituality is believed to be superior, surpassing cultural boundaries. The development of valid measures of religion and spirituality measures across traditions will contribute to the determination of their true relationship across populations. Third, while the use of self-report is currently the most common method to assess the constructs under study, they may be biased. All of these factors may contribute to the lack of association of religiosity, spirituality, and mental health. Future research should employ non-self report methods, such as unobtrusive observation, observer reports or physiological measures to enhance validity (Hill & Pargament, 2003).

Fourth, the study utilized a cross-sectional design. As such, it is not possible to draw definitive conclusions regarding causal relationships. While, conceptually, it is likely that religiosity, spirituality and mindfulness precede mental health, this should be empirically demonstrated using a longitudinal design. Finally, future research should also explicitly examine the moderating and protective function of mindfulness during stressful situations.

Implications for Social Work Education

A significant pre-existing literature suggests that religiosity (Pargament, 1997), spirituality (Mascaro et al., 2004), and mindfulness (Brown & Ryan, 2003; Neff, 2003a) serve as important resources that enhance well-being in the general population. However, no prior research has examined their utility in social work students who face significant academic and fieldwork challenges. The current study found this sample of students endorsed spirituality most strongly, followed by mindfulness and religiosity. While religiosity and spirituality are highly intercorrelated, they are independent of mindfulness. Of the three, mindfulness alone was significantly negatively associated with depressive and anxiety symptoms in social work students, and supports the importance of interventions to promote this state.

One way to enhance mindfulness is through meditation, defined as a "self-regulation practice that focus(es) on training attention and awareness in order to bring mental processes under greater voluntary control and thereby fosters...specific capacities such as calm, clarity, and concentration" (Walsh & Shapiro, 2006, pp. 228-229). Although meditation is often associated with Zen Buddhism, its practice does not necessitate adherence to Buddhist dogma and is therefore not in conflict with existing religious and spiritual beliefs (Batchelor, 1997; Walsh & Shapiro, 2006). In fact, practices that enhance awareness and reflectivity are found across all major religious and cultural traditions, such as Christian contemplation (Walsh & Shapiro, 2006). In support, while over 10 million Americans currently practice meditation (Deurr, 2004), the total number of American Buddhists is only 1.5 million (Kosmin et al., 2001).

Furthermore, the development of mindfulness through meditation is consistent with the aim of social work education to promote professional competence. Specifically, the Educational Policy and Accreditation Standards of the Council on Social Work Education (2003, p. 35) state that students should acquire knowledge and skills in "engaging clients in an appropriate working relationship, identifying issues, problems, needs, resources, and assets; collecting and assessing information; and planning for service delivery." In support of these objectives, meditation

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enhances attentiveness, engagement, and effectiveness in social workers and other social service providers (Brenner & Homonoff, 2004; Galantino et al., 2005; Keefe, 1986; Shapiro et al., 1998, 2005). Additionally, social work students have expressed a desire to learn meditation in order to enhance self-care and manage stress (Gelman, 2004). Thus, it is recommended that mindfulness practice be incorporated into the social work curriculum, and its effectiveness in enhancing students' well-being, coping with educational challenges, and professional competence be empirically assessed.

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Table 1. Sample Demographics (n=65)

Mean Age	28.12 (SD=5.40)
Fathers Education (years)	16.33 (SD=3.63)
Mothers Education (years)	15.69 (SD=3.96)
% First Year	56.9%
% Female	89.2%
% European American	69.2%
% Heterosexual	81.5%
% by Specialization	
Children and Families	32.3%
Community Mental Health	27.7%
Gerontology	13.9%
Health	12.3%
Management and Planning	13.9%
% by Religion While Growing Up	
Protestant	35.4%
Catholic	27.7%
Jewish	12.3%
Hindu	3.1%
Buddhist	1.5%
Atheist	3.1%
Spiritual	1.5%
Yoga	1.5%
None	21.5%
% by Current Religion	
Protestant	15.4%
Catholic	16.9%
Jewish	7.7%
Hindu	1.5%
Buddhist	6.2%
Muslim	1.5%
Atheist	1.5%
Agnostic	4.6%
Spiritual	4.6%
Yoga	4.6%
12-Step	1.5%
None	43.1%

Table 2. Descriptive Statistics for Study Variables (n=65)

Observed (SD)	Possible Range	Mean Range	
<u>Religiosity</u>			
Religious Involvement	2.84 (1.11)	1 – 4.86	1 – 5
Religious Comfort	1.34 (.90)	0 – 3.0	0 – 3
Religious Strain	.79 (.47)	0 – 1.85	0 – 3
<u>Spirituality</u>			
Spiritual Involvement	67.74 (12.74)	32 - 89	19 - 95
Prosocial Beliefs	4.13 (.37)	3.37 – 4.95	1 - 5
Importance of Higher Being	3.05 (.96)	1.33 – 4.75	1 - 5
<u>Mindfulness</u>			
Brown and Ryan's Mindfulness	3.83 (.65)	2.20 – 5.07	1 - 6
Neff's Mindfulness (.70)	3.52	1.50 – 5.00	1 - 5
<u>Mental Health</u>			
Anxiety Symptoms (8.44)	40.69	22 – 62	20 – 80
Depressive Symptoms (4.56)	7.48	0 – 23	0 – 33

Table 3. Correlation of Religiosity, Spirituality, Mindfulness, and Mental Health

2	3	4	5	6	7	8	9	10	
1. Religiosity	.91***	.45***	.82***	.53***	.87***	.05	.19	-.02	-.06
2. Religious Comfort	.49***	.80***	.49***	.90***	.12	.18	-.07	-.12	
3. Religious Strain	.34**	.46***	.50***	-.02	.07	.24*	.12		
4. Spiritual Involvement	.63***	.85***	.09	.23	-.07	-.12			
5. Prosocial Beliefs	.61***	.06	.09	.04	-.04				
6. Importance of Higher Being	.02	.18	.01	-.09					
7. Mindful Attention Awareness	.34**	-.48***	-.50***						
8. Neff's Mindfulness	-.47***	-.42***							
9. Anxiety Symptoms	.78***								
10. Depressive Symptoms	.								

*p≤.05, **p≤.01, ***p≤.001

Table 4. Stepwise Regression Models Predicting Mental Health

Anxiety Symptoms			Depressive Symptoms		
Unstandardized Coefficient (SE)			Unstandardized Coefficient (SE)		
Step 1	Step 2	Step 3	Step 1	Step 2	
Mindful Attention Awareness	-6.29*** (1.44)	-4.78*** (1.43)	-4.60*** (1.36)	-3.50*** (.77)	-2.83*** (.78)
Neff's Mindfulness	-4.16** (1.32)	-4.44*** (1.26)	-1.86*** (.12)		
Religious Strain	4.70** (1.76)				
Adjusted R-Square	.22	.32	.38	.24	.30
F Statistic***	19.14	15.92	14.03	.24	.30

*p≤.05, **p≤.01, ***p≤.001