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Anxiety, depression and students' religiosity

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Many studies have examined the protective factors associated with religion and mental illness. In some studies, religiosity had an inverse relationship to mental health problems, whereas in other studies, religiosity has no effect. The current study examines the relationship between religious beliefs, anxiety, and depression in college students. The Beck Anxiety Inventory and the Beck Depression Inventory were administered as well as questions about religious beliefs and religiosity. No difference was found between Catholic and other Christian denominations in rates and levels of depression and anxiety. Self-reported religious influence and self-reported religiosity were significantly related to depression but not anxiety. Religious service attendance was negatively correlated with both anxiety and depression. These results suggest that certain aspects of religiosity may play a more influential role in the protection against depression, indicating these aspects of religion play different roles in individual's mental health.

Keywords: Affective disorders; religion and psychology; college students

Many studies have examined the protective factors associated with religion and mental illness. Results of such studies have been mixed, with indications of Catholicism providing greater protection against mental illness (Ellison, Burr, & McCall, 1997), less protection (Bankston, Allen, & Daniel, 1983), or no difference when compared to Protestants (Bainbridge & Stark, 1981). Among 101 studies that examined the correlation between religiosity, regardless of denomination, and level of depression, approximately two-thirds found lower rates of depression and/or anxiety among subjects that claimed to be more religious (Koenig, McCullough, & Larson, 2001). Furthermore, five out of eight studies dealing with religious interventions on depression found that patients suffering from depression who received religious interventions recovered faster than patients who either received a secular intervention or no intervention at all (Azhar & Varna, 1995; Propst, 1980; Propst, Ostrom, Watkins, Dean, & Mashburn, 1992; Razali, Hasanah, Aminah, & Subramaniam, 1998; Toh & Tan, 1997). Additionally, there is a demonstrated positive relationship between religious beliefs and practices and greater life satisfaction (Koenig et al., 2001). In a study of college students, Exline, Yali, and Sanderson (2000) determined that participants generally found their religious beliefs to be a source of more comfort than strain or conflict in their lives. However, religious strain was found to be associated with greater levels of depression in the participants. This indicates that though the college

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students generally found their religious beliefs to be a comfort, conflict or strain in these beliefs can be associated with negative mental health outcomes.

The current study further examines these mixed results through surveying Christian denomination, religious beliefs, and mental health in college students. Measures of depression and anxiety were administered as well as questions about religious beliefs and religiosity.

Method

Sample

Participants were 430 college students from a large university in the Midwestern United States. They were recruited through an undergraduate research pool within their Introductory Psychology courses. Their mean age was 19.66 ($SD = 2.5$; range = 18–47) and 66% ($n = 285$) were female. A majority of participants identified themselves as Caucasian (80.9%). The sample also included African-Americans (13.0%), Latinos/as (2.1%), Asian Americans (1.6%), individuals who are biracial or multiracial (1.2%), and a small number of individuals identified themselves as ''other'' (0.9%). Of participants, 49.3% identified themselves as Catholic Christian and 50.7% as Protestant Christians.

Questionnaires

Participants completed a packet of questionnaires that included a demographic questionnaire, religious beliefs and influence questionnaire, the Beck Anxiety Inventory (BAI; Beck, 1990), and the Beck Depression Inventory (BDI; Beck, 1987). Information obtained from the religious beliefs and influence questionnaire included participant's religious affiliation, self-report of religious influence on their lives (how much influence does religion have on your life?), self-reported level of religiosity (how religious are you?), and rate of church attendance (how often do you attend church?). Religious influence and religiosity were rated on a 4-point Likert scale ranging from ''not at all'' to ''very.'' Church attendance was measured as a continuous variable with anchors including: never, once or twice a year, once every two to three months, once a month, two or three times a month, and once a week or more. The latter three questions were summed to form an overall religiosity score for each participant that ranged from 3 to 14.

Results

To examine whether Catholic and Protestant Christians differed in levels of depression and anxiety, an independent samples *t*-test was conducted to compare the mean scores on the BAI (Catholic $M = 9.62$, $SD = 7.81$; Protestant $M = 9.52$, SD = 7.58) and BDI (Catholic $M = 9.07$, $SD = 7.66$; Protestant $M = 9.06$, $SD = 8.22$). Results indicated that there were not significant differences between the groups in levels of depression ($t(428) = 0.008$, $p > 0.05$) or anxiety ($t(428) = 0.127$, $p > 0.05$).

Participants were divided into quartiles based on level of overall religiosity. By using quartiles rather than a mean or median split, only those individuals who scored as ''high religiosity'' or ''low religiosity'' were included. This method eliminated those participants who fell within the middle 50% of the sample, considered moderate religiosity. Those participants who scored in the upper 73% on the overall religiosity variable were considered high religiosity and those participants who scored in the lower 25% were

Table 1. Analysis of variance for religiosity.

Source	*df*	*F*	*p*
BAI	3	2.334	0.073
BDI	3	7.588**	0.000

*$p < 0.05$.
**$p < 0.01$.

Table 2. Analysis of variance for religious influence.

Source	*df*	*F*	*p*
BAI	3	0.693	0.557
BDI	3	3.335*	0.019

*$p < 0.05$.
**$p < 0.01$.

Table 3. Correlations between anxiety, depression and church attendance.

	BAI	BDI	Church attendance
BAI			
BDI	0.637**		
Church attendance	−0.096*	−0.148*	

*Correlation is significant at $p < 0.05$.
**Correlation is significant at $p < 0.001$.

considered low religiosity. Analyses on individual religion-focussed questions were conducted. Both self-reported religiosity and religious influence were significantly related to scores on the BDI but not the BAI. However, church attendance was negatively correlated with both BAI and BDI scores.

Discussion

Though the common lay perception is that Catholicism holds some protective factor against mental illness, results of the present investigation indicate that this is not the case. In fact, no differences appear to exist in levels of depression and anxiety between Catholic Christians and Protestant Christians. This implies that it is not specific religious affiliation that serves as a protective factor, but rather religiosity *per se*, regardless of affiliation.

Between these two groups, when highly religious people were compared with people who did not view themselves as highly religious, there was a significant difference in levels of depression and anxiety (see Table 1). Thus, it appears that level of religiosity may be a more significant protective factor than any particular religious affiliation. When individual indicators of overall religiosity (how religious are you, how much influence does religion have on your life, and how often do you attend church) were examined, results indicated that these factors impacted depression and anxiety in different ways.

Only depression was significantly different between people who rated themselves as highly religious and people who rated themselves as not religious (see Table 2). Similarly, only depression was significantly different between people who reported religion as having a great deal of influence on their lives and people who did not. This appears to suggest that self-reported religiosity and religious influence may serve as protective factors for depression while not relating to anxiety. However, when examining rate of church attendance both anxiety and depression were negatively correlated, indicating that as church attendance increases both anxiety and depression levels decrease (see Table 3).

Results of the current investigation may not be widely generalisable because of limitations of the sample. For example, the sample consisted mostly of young college-aged students, a convenience sample. This may be problematic as religious views may shift as students adjust to independent living and depression may occur later in life. Additionally, the sample was predominantly Anglo-American females, which may limit the application of the findings to other populations. Finally, only Catholic and Protestant Christians participated in this study, further limiting the generalisability of the study to other religions. Future research should focus on increasing the generalisability by including a wider range of participants. This will be especially important when including individuals with other religious orientations to examine whether similar or different protective factors exist for those with differing beliefs.

Results of this study may hold significant implications for the treatment of anxiety and depression. The current study supports the growing body of literature that reports an association between religious beliefs and mental health. This information regarding which aspect of religiosity appears to be associated with which specific mental illness helps to provide guidance to mental health professionals. These findings also support recommendations made by Koening (2004) which encourage healthcare providers to inquire about religious beliefs and practices to support care of the patient. It appears that some religious factors may serve as protective factors for Christian individuals and thus future investigations should examine whether capitalising on these factors within treatment can increase efficacy.

References

Azhar, M.Z., & Varma, S.L. (1995). Religious psychotherapy in depressive patients. *Psychotherapy & Psychosomatics, 63*, 165–173.

Bainbridge, W.S., & Stark, R. (1981). Suicide, homicide, and religion: Durkheim reassessed. *Annual Review of the Social Sciences, 5*, 33–56.

Bankston, W.H., Allen, D., & Daniel, S.C. (1983). Religion and suicide: A research note on sociology's one law. *Social Forces, 62*, 521–528.

Beck, A. (1987). *Beck Depression Inventory*. San Antonia, TX: Psychological Corporation.

Beck, A. (1990). *Beck Anxiety Inventory*. San Antonia, TX: Harcourt.

Ellison, C.G., Burr, J.A., & McCall, P.L. (1997). Religious homogeneity and metropolitan suicide rates. *Social Forces, 76*(1), 273–299.

Exline, J.J., Yali, A.M., & Sanderson, W.C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology, 56*(2), 1481–1496.

Koenig, H.G. (2004). Religion, spirituality, and medicine: Research findings and implications for clinical practice. *Southern Medical Journal, 97*(12), 1194–1200.

Koenig, H.G., McCullough, M.E., & Larson, D.B. (Eds.). (2001). *Handbook of religion and health*. New York: Oxford University Press.

Propst, L.R. (1980). The comparative efficacy of religious and nonreligious imagery for the treatment of mild depression in religious individuals. *Cognitive Therapy and Research, 4*, 167–178.

Propst, L.R., Ostrom, R., Watkins, P., Dean, T., & Mashburn, D. (1992). Comparative efficacy of religious and nonreligious cognitive-behavior therapy for the treatment of clinical depression in religious individuals. *Journal of Consulting and Clinical Psychology, 60*, 94–103.

Razali, S.M., Hasanah, C.I., Aminah, K., & Subramaniam, M. (1998). Religious-sociocultural psychotherapy in patients with anxiety and depression. *Australian & New Zealand Journal of Psychiatry, 32*, 867–872.

Toh, Y.M., & Tan, S.Y. (1997). The effectiveness of church-based lay counselors: A controlled outcome study. *Journal of Psychology and Christianity, 16*, 260–267.