Research Article

ASSOCIATION BETWEEN PROTESTANT RELIGIOSITY AND OBSESSIVE–COMPULSIVE SYMPTOMS AND COGNITIONS

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There is evidence that religion and other cultural influences are associated with the presentation of obsessive–compulsive symptoms, as well as beliefs and assumptions presumed to underlie the development and maintenance of these symptoms. We sought to further examine the relationship between Protestant religiosity and (1) various symptoms of obsessive–compulsive disorder (OCD) (e.g., checking, washing) and (2) OCD-related cognitions. Using self-report questionnaires, we compared differences in these OCD-related phenomena between highly religious Protestants, moderately religious Protestants, and atheist/agnostic participants drawn from an undergraduate sample. Highly religious versus moderately religious Protestants reported greater obsessional symptoms, compulsive washing, and beliefs about the importance of thoughts. Additionally, the highly religious evinced more obsessional symptoms, compulsive washing, intolerance for uncertainty, need to control thoughts, beliefs about the importance of thoughts, and inflated responsibility, compared to atheists/agnostics. Results are discussed in terms of the relationship between religion and OCD symptoms in the context of the cognitive–behavioral conceptualization of OCD. Depression and Anxiety 20:70–76, 2004. © *2004 Wiley-Liss, Inc.*

Key words: *obsessive–compulsive disorder; religiosity; cognition; Protestantism*

INTRODUCTION

The cardinal features of obsessive–compulsive disorder (OCD) include (1) recurrent intrusive thoughts, urges, doubts, or images that, although perceived as senseless, evoke anxiety (obsessions); and (2) repeated urges to perform excessive overt or covert rituals to neutralize the anxiety. Although a definitive etiological theory of this condition has yet to be determined, cognitive–behavioral models have received serious consideration in recent years. Specifically, the cognitive–behavioral formulation [Rachman, 1998; Salkovskis, 1999] proposes that OCD develops from unpleasant, yet harmless, intrusive thoughts that are normally experienced by 90% of the population [Rachman and de Silva, 1978]. When such cognitions are misappraised as overly significant (i.e., having catastrophic consequences), they produce anxiety and motivate efforts to reduce this distress via neutralizing behaviors (e.g., rituals) that are negatively reinforced by the reduction in distress they engender.

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An international group of researchers recently proposed six domains of cognition relevant to current cognitive–behavioral formulations of OCD [Obsessive–Compulsive Cognitions Working Group, 1997, 2001].

Inflated responsibility. An excessive sense of personal responsibility related to unwanted or upsetting thoughts. This includes responsibility for acts of omission (failing to prevent harm) as well as for acts of commission (causing harm).

Beliefs about the importance of thoughts. Believing that the mere presence of an unwanted or distressing thought means that the thought is important and meaningful. One variation of this belief is the idea that thoughts can influence the external world (e.g., "I can make an accident happen by thinking about it"). Another variation is that thinking about a behavior is in some sense equivalent to the behavior itself (e.g., "thinking about committing adultery is as bad as actually committing adultery").

Beliefs about the importance of controlling one's thoughts. The belief that complete control over one's thoughts is both necessary and possible.

Overestimation of threat. Exaggerated estimates of the probability and costs of aversive events.

Intolerance of uncertainty. The assumption that certain situations or stimuli are dangerous unless one has complete (100%) assurance of safety. This is often associated with avoidance, difficulty making decisions or excessive reassurance seeking in situations others would consider an acceptable level of risk.

Perfectionism. The belief that mistakes or imperfection is intolerable. This may relate to external stimuli, such as a need to fill out a form without making a single mistake; or to internal stimuli, such as a need to repeat a routine action until it feels "just right."

If, as Rachman and de Silva [1978] found, practically everyone experiences intrusive upsetting thoughts and doubts, why do some people misappraise such cognitions while others do not? That is, what factors lead to the development of the kinds of beliefs and assumptions that might make one vulnerable to developing OCD symptoms? Rachman [1997] proposed that "people who are taught, or learn, that all their value-laden thoughts are of significance will be more prone to obsessions—as in particular types of religious beliefs and instructions (p. 798)." This theoretical assertion led to research on the relationship between religiosity and OCD-related cognitive biases. For example, Abramowitz et al. [2002] found that highly religious Protestants evidenced greater fear of God and fear of sinful thoughts than Catholics, Jews, and less religious Protestants. Similarly, Sica et al. [2002a] found that Catholics with a high or moderate degree of religiosity showed higher scores on measures of OCD-related cognitions relative to less religious Catholics. Rassin and Koster [2003] found that compared to Catholics, Atheists, and members of other religions, Protestants evidenced stronger religiosity and a greater tendency to believe that their thoughts were morally equivalent to actions (i.e., moral thought–action fusion) [Shafran et al., 1996]. Moreover, this cognitive bias was more strongly related to OCD symptoms among Protestants ($r = .71$) than among other religious groups (range = −.26–.42). These studies indicate that both religious affiliation and strength of devotion are associated with cognitive biases thought to underlie the development and maintenance of OCD symptoms.

There is also evidence that religion and other cultural influences affect, at least in part, the *presentation* of OCD symptoms [Sica et al., 2002b]. For example, Rasmussen and Tsuang [1986] observed that strictly religious patients often had religious themes to their obsessional thoughts and compulsive rituals. Steketee et al. [1991] also found that patients with religious obsessions and compulsions were more religious than were patients without these kinds of symptoms. On a more specific level, Khanna and Channabasavanna [1988] noted a large proportion of symptoms related to contamination and washing among Hindus with OCD, and commented that Indian culture emphasizes issues of purity and cleanliness. Others have described similar relationships between the presentation of OCD symptoms and religious practices/beliefs in orthodox Jews [Greenberg, 1984] and Muslims [Okasha et al., 1994]. These findings suggest that membership in a particular religious denomination may influence the themes of obsessions and compulsions. It may also be important to know the extent to which strength of religious devotion, not simply one's denomination, relates to OCD phenomena.

Although the research reviewed above is informative, there remain gaps in the literature. First, because of how culture influences psychopathology [Tseng, 1997], the results found in previous studies conducted in Italy [Sica et al., 2002], Turkey [Tek and Ulug, 2001], Belgium, and the Netherlands [Rassin and Koster, 2003] might not generalize to individuals in other countries such as the United States. Second, although Sica et al. [2002] examined relationships between OCD and religiosity among Catholics, differences have been found between Catholics and Protestants on measures of OCD-related cognitions [Abramowitz et al., 2002; Rassin and Koster, 2003]. In concert with the fact that Protestant Christianity is the majority religion in the United States (56% of the population) [United States Census Bureau, 2001], these findings highlight the importance of studying the relationship between Religiosity and OCD among Protestants in the United States. Thus, the purpose of the present study was to elucidate the relationship between Protestant religiosity and (1) various kinds of OCD symptoms (e.g., checking, washing) and (2) OCD-related cognitions. Specifically, we compared differences in these OCD-related phenomena across groups of highly religious,

moderately religious, and less religious Protestants[1]. One limitation of previous studies is that they did not include groups of individuals describing themselves as atheist or agnostic (i.e., nonbelievers). Thus, an additional aim of the present study was to examine differences in OCD-related phenomena between Protestants and nonbelievers. To increase the generalizability of our findings and capitalize on a wide range of religiosity and OCD-related phenomena, we elected to investigate these issues in a large, unscreened sample of university students. We hypothesized that highly religious Protestants would (1) show more severe obsessional symptoms compared to less religious Protestants and nonbelievers, and (2) report higher levels of over importance of thoughts, importance of controlling one's thoughts, and responsibility compared to less religious Protestants and nonbelievers. To control for the possibility that observed group differences are due to the presence of anxious or depressive symptoms, we included measures of anxiety and depression in the present study.

PARTICIPANTS AND METHODS

PARTICIPANTS

Institutional review board approval was obtained before data were collected. Participants in the present study were drawn from a larger sample of 1,005 undergraduate students enrolled in introductory psychology classes at a large university in the southeastern United States. Of these individuals, 753 (74.9%) were female and 252 (25.1%) were male. The mean age of the sample was 18.99 years ($sd = 1.85$). Data were collected as part of the scale development process for an unrelated measure of cognitive biases that is currently undergoing psychometric testing. In addition to a demographics questionnaire and the self-report inventories described below, participants completed numerous other measures and a large pool of items for the scale under development. Thus, participants were blind to the nature of the study that we report here.

We intended to form four groups on the basis of responses to a series of items about religious affiliation. Specifically, participants were first asked to identify their religious affiliation from a list of over 20 religious denominations (including atheist and agnostic). Of the 1,005 participants, 144 (14.3%) did not indicate their religious affiliation. Of the 861 individuals who did answer this item, the majority (644 participants; 74.8%) belonged to a Protestant denomination (e.g., Baptist, Methodist), 144 (16.7%) were Catholic, and 73 (8.5%) were Atheist or Agnostic. Next, three items assessed participants' (1) strength of religious affiliation, (2) strength of religious beliefs, and (3) strength of agreement with the teachings of that particular religion. Participants responded to these items on a scale from 1–5 with the following anchors: 1 = not at all strong, 3 = somewhat strong, and 5 = very strong.

To create homogeneous groups we included only those individuals who gave consistent responses to each of the three items described above. Participants in the Highly Religious group (HR; $n = 132$) were those who identified themselves as belonging to a Protestant religious denomination and had responses of "5" (very strong) to each of the three questionnaire items described above. Participants in the Moderately Religious group (MR; $n = 37$) were those who identified their religious affiliation as Protestant and responded with "3" (somewhat strong) to each of the three items described above. We intended to create a Low Religious group that included participants with responses of "1" (not at all) to each of the three questionnaire items; however, only eight participants satisfied this criterion. Because of the unreliability associated with the small group size, this group was not included in the analyses presented below. The third group consisted of individuals identifying themselves as atheist or agnostic with respect to religious affiliation (AA; $n = 51$).

MEASURES

Obsessive Beliefs Questionnaire. The Obsessive Beliefs Questionnaire (OBQ) [Obsessive Compulsive Cognition Working Group, 2001] is an 87-item self-report measure that assesses six domains of cognition thought to be important in OCD [Obsessive Compulsive Cognition Working Group, 1997]: (1) responsibility; (2) importance of thoughts; (3) control of thoughts; (4) threat estimation; (5) tolerance for uncertainty; and (6) perfectionism. Participants rate their agreement with each item from 1 (disagree very much) to 7 (agree very much). Data suggest that the OBQ possesses good internal consistency (α for subscales across samples, range = .71–.93) and test–retest reliability (range = .75–.90 across subscales) [Obsessive Compulsive Cognition Working Group, 2001]. Moreover, the OBQ subscales are correlated with the Yale–Brown Obsessive Compulsive Scale (r range = .38–.63 [Obsessive Compulsive Cognition Working Group, 2001].

Obsessive–Compulsive Inventory-Revised. The Obsessive–Compulsive Inventory-Revised (OCI-R) [Foa et al., 2002] is an 18-item self-report questionnaire based on the earlier 84-item OCI [Foa et al., 1998]. Participants rate the degree to which they are bothered or distressed by OCD symptoms in the past month on a five-point scale from 0 (not at all) to 4 (extremely). The OCI-R assesses OCD symptoms across six factors: (1) washing, (2) checking/doubting, (3) obsessing, (4) mental neutralizing, (5) ordering, and

[1]We recognize that Protestantism includes many distinct denominations; however, to conform with previous research [Cohen and Rozin, 2001] we consider them as a group.

(6) hoarding. Preliminary data suggest that the OCI-R possesses good internal consistency for the total score (α range = .81–.93 across samples), although internal consistency was less strong for certain subscales in non-clinical participants (.34 for mental neutralizing and .65 for checking). Test–retest reliability was adequate (.57–.91 across samples).

Center for Epidemiological Studies-Depression Scale. The Center for Epidemiological Studies-Depression Scale (CES-D) [Radloff, 1977] is a 20-item measure that assesses the frequency of depressive symptoms experienced during the past week. It has demonstrated good internal consistency in both general and clinical populations (α = .85 and .90, respectively) [Radloff, 1977] and correlates strongly with the Beck Depression Inventory (r = .87) [Santor et al., 1995].

Self-Rating Anxiety Scale. The Self-Rating Anxiety Scale (SAS) [Zung, 1971] is a 20-item measure developed to assess the frequency of anxiety symptoms. The scale consists primarily of somatic symptoms and has demonstrated adequate internal consistency and test–retest reliability [Jegede, 1977; Michelson and Mavissakalian, 1983].

PROCEDURE

Participants completed all assessment items on a web site created for the study and received course credit for their participation. Informed consent was obtained electronically via clicking a web link as proxy for signature. After completing the measures, participants' data were submitted electronically to a database that was read into a statistical software package (SPSS) for analysis. Participants were informed that their responses would be kept confidential and that they were free to withdraw from the study at any time.

RESULTS

DEMOGRAPHIC CHARACTERISTICS

Demographic characteristics of the three participant groups are presented in Table 1 with the results of between group comparisons on demographic variables. The majority of the sample was female, yet the number of females in the AA group was significantly lower than that in the other two groups. The HR group reported fewer depressive symptoms compared to the other two groups. There were also differences in the frequencies of specific religious denominations between the HR and MR groups.

BETWEEN GROUP DIFFERENCES IN OBSESSIVE–COMPULSIVE SYMPTOMS

To ascertain the relationship between religiosity and the severity of obsessive–compulsive symptoms we compared the three groups on each of the six OCI-R subscales. Means and standard deviations for each group are presented in Table 2. Because we found between group differences in depressive symptoms, analyses of covariance (ANCOVA) were carried out using CES-D scores as the covariate. The results of these analyses (also presented in Table 2) indicated that the highly religious group evidenced more severe obsessional symptoms on the OCI-R compared to the less religious groups (P = .02). Because six ANCOVA were carried out, we set alpha (the significance level) to .05/6, or .008. The difference on the obsessions subscale was not significant at this more conservative alpha level. A significant difference on the washing subscale was detected at the corrected alpha level. Post hoc LSD tests showed that the HR group reported more severe compulsive washing symptoms relative to the MR and AA groups. No other significant differences were detected.

TABLE 1. Demographic characteristics by group

Variable	Highly religious	Moderately religious	Agnostic/atheist	χ^2 or F (P)[a]	Post-hoc test result
n	132	37	51		
Females, *n* (%)	111 (84.1)	32 (86.5)	35 (68.6)	6.59 (.03)	HR, MR > AA
Mean age, years (*sd*)	18.8 (0.9)	19.3 (1.5)	19.3 (3.1)	1.84 (.16)	—
Caucasian, *n* (%)	91 (68.9)	30 (81.1)	44 (86.3)	6.77 (.03)	AA > HR
CES-D	12.44 (8.98)	16.62 (11.51)	15.71 (9.96)	3.86 (.02)	MR, AA > HR
SAS	31.89 (6.56)	34.43 (5.67)	33.41 (7.69)	2.49 (.09)	—
Protestant denomination, *n* (%)					
Baptist	73 (55.3)	7 (19.4)		14.58 (>.001)	HR > MR
Methodist	22 (16.7)	12 (33.3)		4.87 (.03)	MR > HR
Presbyterian	13 (9.8)	5 (13.9)		0.48 (.49)	—
Episcopalian	8 (6.1)	7 (19.4)		6.23 (.01)	MR > HR
Pentecostal	9 (6.8)	3 (8.3)		0.10 (.75)	—
Other denominations	7 (5.3)	2 (5.6)		0.01 (.84)	—

[a]Degrees of freedom for all F tests were 2, 219.

TABLE 2. Assessment measures by group

Measure and subscales	Highly religious	Moderately religious	Agnostic/Atheist	F (P)[a]	Post-hoc test result
OCI-R					
Checking	2.23 (2.58)	1.87 (1.97)	1.75 (1.96)	3.06 (.05)	—
Hoarding	3.47 (2.61)	3.08 (2.18)	3.04 (2.01)	2.31 (.10)	—
Neutralizing	1.12 (1.92)	0.87 (1.65)	0.96 (1.78)	1.53 (.22)	—
Obsessions	2.05 (2.31)	1.65 (2.19)	1.65 (2.28)	3.95 (.02)	HR > MR, AA
Ordering	3.21 (2.90)	2.81 (2.64)	2.57 (3.00)	2.38 (.10)	—
Washing	1.98 (2.81)	0.78 (0.16)	0.90 (1.45)	10.16 (<.001)	HR > MR, AA
OBQ					
Tolerance for uncertainty	38.73 (13.44)	38.14 (11.43)	34.53 (12.37)	6.24 (.002)	HR > AA
Threat estimation	33.41 (16.76)	35.97 (12.93)	31.63 (15.49)	2.94 (.06)	—
Control of thoughts	36.47 (14.87)	34.16 (12.30)	24.08 (11.24)	10.79 (<.001)	HR > AA
Importance of thoughts	33.52 (13.83)	28.35 (9.47)	24.08 (11.24)	18.72 (<.001)	HR > MR, AA
Responsibility	51.43 (16.80)	48.78 (14.59)	44.92 (16.77)	7.04 (.001)	HR > AA
Perfectionism	45.36 (18.22)	48.05 (16.57)	45.16 (20.78)	0.74 (.48)	—

[a]ANCOVA controlling for CES-D. Degrees of freedom for all F tests were 2, 220.
OCI-R, Obsessive-Compulsive Inventory-Revised; OBQ, Obsessional Beliefs Questionnaire.

BETWEEN GROUP DIFFERENCES IN OBSESSIVE–COMPULSIVE COGNITIONS

To examine the relationship between religiosity and OCD-related cognitions, we conducted a similar set of analyses comparing the three religious groups on each of the six OBQ subscales. Group means and standard deviations on the OBQ subscales are presented in Table 2 along with the results of ANCOVAs using CES-D as the covariate. Post hoc tests (LSD tests) were carried out when omnibus tests of group differences were significant below the Bonferroni corrected value ($\alpha = .008$). The HR group had significantly higher scores than the AA group on the following OBQ subscales: tolerance for uncertainty, control of thoughts, importance of thoughts, and responsibility. The MR group had significantly lower scores than did the HR group on the importance of thoughts subscale. Although the MR group scored higher than the AA group on each OBQ subscale, none of these differences were significant at the Bonferroni corrected value.

DISCUSSION

The results of the present study suggest a relationship between Protestant religiosity and OCD-related phenomena. Our first hypothesis regarding the association between religiosity and obsessions received partial support. Highly religious Protestants evidenced more severe obsessional symptoms compared to both the moderately religious and the atheist/agnostic groups; though this relationship was not significant at the highly conservative Bonferroni corrected level of .008. We also found that highly religious participants reported more severe contamination fears/washing rituals than less religious Protestants and nonbelievers. Although these were the only significant findings on the OCI-R, it is of note that the highly religious group reported the most severe symptoms on all of the OCI-R subscales. Our second hypothesis, that highly religious Protestants would report higher levels of certain OCD-related cognitions compared to less religious Protestants and nonbelievers, received strong support. Highly devout Protestants endorsed more strongly held beliefs about the importance, need to control, and responsibility for their thoughts relative to nonbelievers. Moreover, the highly religious individuals reported significantly more intolerance of uncertainty than did nonbelievers. Our findings are consistent with previous research on Catholic samples [Sica et al., 2002a].

Our results suggest that devout Protestantism is associated with the tendency to interpret one's thoughts as highly significant in a number of ways, such as that one can and should control certain thoughts because of the possibility of disastrous consequences. Moreover, it appears such individuals would consider even a slight risk of feared consequences of intrusive thoughts as unacceptable. One plausible explanation for this finding is that Protestantism fosters such beliefs about thoughts; indeed Protestant doctrine explicitly states that certain thoughts are sinful. For example, in the *Sermon on the Mount*, Jesus cautions, "You have heard that it was said 'you shall not commit adultery'; but I say to you, that everyone who looks on a woman to lust for her has committed adultery with her already in his heart" (Matthew 5:27–28; New American Standard Version). This passage exemplifies the Protestant position that thoughts and actions are morally equivalent. Empirical research suggests that Protestants incorporate this doctrine into their belief system. For example, Cohen and Rozin [2001] found that Protestants rated thoughts about personally unacceptable behavior as highly immoral, equivalent to the intent to perform such behavior, and therefore likely to be acted upon.

Moreover, Protestants were found to believe that such thoughts can and should be controlled.

The cognitive biases found in highly religious Protestants resemble those proposed to lead to the development and maintenance of OCD [Obsessive Compulsive Cognition Working Group, 1997, 2001; Salkovskis et al., 1999]. Cognitive–behavioral models of OCD [Rachman, 1998; Salkovskis, 1999] posit that obsessional problems develop when normal intrusive, upsetting thoughts are misinterpreted as highly significant or having implications for responsibility for harm. For example, studies [Shafran et al., 1996; Amir et al., 2001; Abramowitz et al., 2003] have found a relationship between OCD symptoms and the tendency to equate thoughts and actions on a moral as well as a likelihood dimension (e.g., "thinking about harming my spouse is as bad as actually harming her" and "if I think about my child being in a car accident, it is more likely to happen"). These misinterpretations lead individuals to feel threatened when such thoughts occur, and engage in strategies to reduce anxiety and the probability of negative outcomes (i.e., neutralizing). For example, in response to unacceptable thoughts about harming one's child, a parent might engage in attempts to suppress these thoughts. Unfortunately, these strategies not only fail to control unwanted thoughts [Tolin et al., 2002b] but also lead to increased preoccupation and internal negative attributions (e.g., "I am mentally weak;") [Tolin et al., 2002a], thus maintaining the obsessional problem.

Highly religious Protestants evidenced more severe obsessional symptoms than did less religious individuals in the present study. The cognitive–behavioral model of OCD described above predicts that this relationship is influenced by the fact that these individuals believe their thoughts are important and controllable, and that they are responsible for any associated negative outcomes. In addition, the model predicts that in response to unwanted thoughts, highly religious Protestants would use counterproductive neutralization strategies, such as thought suppression and excessive praying rituals, that paradoxically serve to increase the frequency of such thoughts. Indeed, Protestant doctrine encourages believers to view themselves as inherently sinful and to pray for forgiveness for their sins, including sinful thoughts. Although we did not directly assess strategies to cope with unwanted thoughts in the present study, it is possible that highly religious Protestants are more likely to utilize neutralization strategies that exacerbate their obsessional symptoms. Future studies that assess neutralization strategies may provide a fuller account of the manner in which Protestant religiosity is related to OCD-related phenomena.

Although our findings suggest a relationship between strength of religiosity and OCD phenomena among Protestants, our methodology prohibits causal inferences. Indeed, it is possible that people with preexisting cognitive biases implicated in OCD subsequently affiliate more strongly with their religion. In addition, there could be "third variables" that account for the relationship between religiosity and OCD-related phenomena. For example, childhood experiences leading to the development of an inflated sense of responsibility [Salkovskis et al., 1999] might foster both increased religious affiliation as well as discomfort with "immoral" thoughts. It should be noted that although this article focuses on potentially detrimental aspects of religion, many individuals derive substantial emotional benefits from their religious faith and from healthy forms of prayer. For example, we found that despite having more OCD-related cognitions and symptoms, the highly religious Protestant group was significantly less depressed than the other groups. Perhaps characteristics of being highly religious (e.g., social support, belief in the afterlife) serve as protection against depressive symptoms such as overly negative cognitions about the self, world, and future (hopelessness). Given that most highly religious Protestants do not have obsessional problems, it is likely that the relationship between Protestantism and OCD involves a complex interaction between characteristics of both the individual and their religion that should be the focus of future research.

Whether or not our results with a non-treatment-seeking sample generalize to individuals pursuing treatment for OCD, the existing literature in this area has potential clinical implications. Although it is important for treatment providers to inquire about patients' religious background during the initial consultation, a more detailed assessment is warranted for individuals with OCD. In particular, it would be useful to ask such patients how their religious education or upbringing may influence how they appraise their unwanted intrusive thoughts. As part of OCD consultations in our clinic, we briefly review various hypotheses proposed to explain the causes of OCD (e.g., neurobiology, environmental factors). We mention that one theory holds that being taught very strict rules about *how to* think and behave, and *how not to* think and behave, could lead to obsessions and compulsions, especially if these rules are impossible to follow and if there is the threat of punishment for breaking the rules. It goes without saying that clinicians should proceed with sensitivity to differences in how various religions regard the occurrence of unwanted thoughts.

Several limitations of the present study should be noted. First, the proportion of Protestant denominations differed among the highly and moderately religious groups. As a result, it is possible that our findings for the highly religious group may have been influenced by the greater preponderance of Baptists. Second, the sample was predominantly female, which may also limit generalizability. Third, we did not examine differences between Protestant denominations on OCD-related phenomena. Given the heterogeneity in doctrines across denominations, it is possible that

OCD-related phenomena are more strongly associated with some denominations than with others. Fourth, the geographical location where this study was conducted (Southeastern United States), and the fact that participants were college students, limit generalizability to the Protestant population as a whole. Fifth, the fact that only self-report data were included raises the possibility that relationships between study variables were inflated as a result of questionnaire-specific method variance. Several recommendations for future research include: (1) more specific examination of cognitions linked to religiosity [Abramowitz et al., 2002], (2) replication in clinical samples, (3) replication with different religious groups in diverse geographical settings, (4) examination of how culture and ethnicity might interact with religion in contributing to OCD, and (5) examination of a broader range of OCD-related phenomena including neutralization strategies and attitudes about responsibility.

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