

Religious Strength and Posttraumatic Growth: Examining the Effect of Alcohol Consumption in College Students

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Abstract

The goal of the present study was to demonstrate the relationships and the predictive qualities of religious strength and alcohol consumption on the five domains of PTG. The hypotheses were (1) highly religious individuals would consume less alcohol than individuals with little/no religious strength and (2) alcohol consumption and religious strength would predict each domain of the PTGI. In undergraduate students ($N = 439$), a significant inverse relationship between religious strength and alcohol consumption was revealed. Multiple regression analyses demonstrated significant findings in the Spiritual Change domain and Appreciation of Life domain. Religious strength was a significant predictor of growth, while alcohol consumption was not, suggesting the hypotheses were partially supported.

Introduction

Posttraumatic Growth (PTG) is a term used to define positive psychological changes that can occur after struggling with a stressful life event (Tedeschi & Calhoun, 1996). This construct is fairly new in terms of research, and the majority of PTG related studies, thus far, have attempted to discover variables that influence or predict growth, for example: cognitive processing (Tedeschi & Calhoun, 1995); religious affiliation (Pargament, Smith, Koenig, & Perez, 1998); and demographic characteristics (Meyerson, Grant, Carter, & Kilmer, 2011). Identifying the variables involved in the process of growth is paramount because it allows for a better understanding of the context in which growth is possible, leading to substantial clinical implications like increasing clinicians' abilities to provide a healthier outlook on life to their clients who have experienced trauma (e.g., helping to create an environment that fosters growth and ameliorates psychological distress).

As noted above, religious affiliation is one such variable that has been shown to influence PTG (Gerber, Boals, & Schuettler, 1998; Schultz, Tallman, & Altamaier, 2010; Abu-Raiya, Pargament, & Mahoney, 2011). Researchers have suggested that an increase in religiousness tends to occur after experiencing a traumatic event (Park, Cohen, & Murch, 1996). The traumatic event seems to spur a more religious outlook, with the consequence being one avenue through which growth can be facilitated. Abu-Raiya, Pargament, and Mahoney's (2011) findings showcase this. They state that religious affiliation facilitates positive coping mechanisms such as seeking assistance from others or prayer. Behaviors like these could be labeled as self-disclosure, a variable that had been found to encourage growth. While the abovementioned studies looked strictly at religion in general, we venture to postulate that examining religious strength will provide even more definitive answers about the relationship between religion and PTG. Thus, it

is hypothesized that , individuals that report having high religious strength will experience more growth after trauma than those that are not as religious or have no religious affiliation.

Alcohol consumption is another variable that has been posited to influence growth; although, the relationship between alcohol consumption and PTG has not been as heavily studied. Despite limited empirical studies, researchers have drawn some conclusions. Milam's (2006) findings illustrated that alcohol use is inversely associated with PTG. Connections can then be drawn between religion and alcohol use. Drerup, Johnson, and Bindl (2011) found that religious individuals who did not experience any form of religious struggle tend to consume less alcohol than those that are not as religious or report no religious affiliation. We, therefore, predict that the inverse relationship of alcohol consumption and PTG is the result of the religious strength, and while Milam examined alcohol consumption as an outcome variable we propose that instead alcohol consumption is a predictor variable. Thus, the second hypothesis is that more alcohol consumption will decrease the likelihood of experiencing growth.

In summation, this study will aim to reveal that 1) individuals with high religious strength will experience less alcohol consumption than individuals with little/no religious strength and 2) both religious strength and alcohol consumption will be predictors of PTG on each of its five domains (Appreciation of Life, New Possibilities, Personal Change, Relating to Others, and Spiritual Change).

Methods

Participants

The sample was comprised of undergraduate students from Oakland University located in Rochester, Michigan ($N = 439$; freshman = 226, sophomore = 119, junior = 65, senior = 28, other = 1). The mean age of this sample was 19.57 ($SD = 3.81$) years old. The gender, ethnicity, religious affiliation, religious strength, and alcohol consumption of the sample can be found in Table 1.

Table 1

Demographic Characteristics of the Sample

Demographic Characteristics	Frequency	Percentage	$M (SD)$
Gender			
Male	116	26.20%	
Female	323	72.90%	
Unreported/other	4	.9%	
Religious Affiliation			
Christianity	343	77.40%	
Islam	7	1.60%	
Non-religious	65	14.25%	
Other	20	4.10%	
Religious Strength			2.75 (1.04)
Unsure	23	5.20%	
Not religious at all	76	17.20%	

Somewhat religious	152	34.30%
Religious	138	31.20%
Strongly religious	47	10.60%
Alcohol Consumption		1.29 (.96)
Not at all	98	22.10%
Monthly or less	155	35.00%
Two to four times a month	129	29.10%
Two to three times a week	41	9.30%
Four or more times a week	4	.90%

Measurement

Alcohol Consumption.

The amount of alcohol consumed was determined from an item: “how often do you have a drink containing alcohol?” on the Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, de la Fuente, & Grant, 1993). Responses to this question were based off of a 0-4 scale with 0 (never) to 4 (four or more times per week).

Religious Strength.

Participants were asked to rate the degree to which their religious strength corresponded the best. Responses were on a 1-4 scale ranging from 1(strongly religious)to 4(not religious at all) .

Posttraumatic Growth.

PTG was assessed with Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), a 21- item questionnaire measures growth, after trauma, across five domains (Appreciation of life, New Possibilities, Personal Strength, Relating to Others, Spiritual Change)

Procedure

As a part of Melanie Phillip’s study, Participants were enrolled in introductory psychology courses and received partial course credit for their participation. Before beginning the study all participants were given a consent form that outlined all the potential risks of participating and also explained where they could obtain help if they experienced any psychological distress due to their participation. Once consent forms were read and signed, participants were administered a questionnaire that evaluated demographic characteristics (i.e., age, gender, religious affiliation/strength, etc.) and also included the PTGI, AUDIT, and other health-related items.

Results

A simple bivariate correlation and a one-way ANOVA were performed in order to test the hypothesis that individuals with high religious strength will consume less alcohol. Results of a bivariate correlation on religious strength and alcohol consumption were significant, $r(398) = -.215, p < .001$, suggesting that the higher the religious strength an individual has, the less alcohol they are likely to consume. Results of the one-way

ANOVA on alcohol consumption and religious strength was significant as well, $F(3, 394) = 9.25, p < .001$. Descriptive results from the one-way ANOVA on alcohol consumption and religious strength revealed that those that have the “high religious strength” ($n = 44$) consumed the least amount of alcohol ($M = .64, SD = .87$). Those that identified themselves as “religious” ($n = 132$) had the second lowest alcohol consumption ($M = 1.29, SD = .91$). Participants that were identified as being “somewhat religious” ($n = 147$) reported slightly higher scores in alcohol consumption ($M = 1.41, SD = .91$) compared to the abovementioned groups, whereas individuals that reported that they were “not religious at all” ($n = 75$) had the highest alcohol consumption ($M = 1.49, SD = 1.02$). Tukey post-hoc comparisons revealed significant mean differences between alcohol consumption and “high religious strength”. These results demonstrate a relationship between religion and alcohol consumption supporting our first hypothesis.

With the purpose of testing the hypothesis that both alcohol consumption and religious strength will be predictors of posttraumatic growth, five multiple regression analyses on each of the five domains of growth were implemented. The results of the multiple regression for Spiritual Change domain was that overall the predictors accounted for 26.80% of the variance ($R^2 = .27, F(2, 371) = 68.03, p < .001$). However, It was found that alcohol consumption did not significantly predict this domain ($\beta = -.02, p = .62$) while religious strength did ($\beta = .51, p < .001$). The results of the multiple regression for the Appreciation of Life domain was that the predictors accounted for 1.90% of the variance ($R^2 = .02, F(2, 373) = 3.53, p < .05$). It was found that alcohol consumption did not significantly predict this domain ($\beta = .01, p = .88$) and religious strength, again, significantly predicted growth ($\beta = .14, p < .05$). These two domains were the only ones that produced significant results.

Discussion

The results indicated a significant relationship between religious strength and alcohol consumption, such that alcohol consumption decreased as religious strength increased. This finding is consistent with the relationship on alcohol consumption and religion found by Milam (2008) and Drerup, Johnson, and Bindl (2011). Furthermore, individuals that reported being “highly religious” consumed the least amount of alcohol out of the entire sample (this finding was significant), whereas individuals that reported not being religious at all had the highest levels of alcohol consumption. The one-way ANOVA on alcohol consumption and religious strength revealed significant mean differences in the consumption of alcohol amongst the different ratings of religious strength. This finding demonstrates that religion is influential in the consumption of alcohol.

After taking the relationship between alcohol consumption and religion into consideration, further analyses were performed in order to determine if these two variables were significant predictors of posttraumatic growth. Not only do the results from the regression analyses demonstrate that religion is influential predictor to posttraumatic growth, but it also reveals that religion is still influential even when compared to alcohol consumption, which has been shown to influence religion as well.

Research by Mason and Windle (2002) raised an interesting question as to whether religion is actually a contributor to PTG because it is possible that religion could

be associated with confounding variables that may be influencing growth. Presumably, although religion is considered to be influenced of alcohol consumption, religion is still a stronger predictor of growth than alcohol consumption. In this study, alcohol consumption was not strong enough of a predictor of posttraumatic growth, so in this instance, to say that religion is only a contributor of posttraumatic growth because of its other effects (alcohol consumption) is not valid. Although religious individuals tend to consume alcohol less than those that are not religious (Drerup, Johnson, & Bindl, 2011), growth is not higher amongst religious individuals solely because of their less frequent alcohol consumption.

The two domains of posttraumatic growth that had significant relationships with religion and alcohol consumption in the multiple regression analyses were the Appreciation of Life and Spiritual Change domains. In both cases, religious strength was the variable that predicted this model with greater efficiency. These findings demonstrate that being religious probably makes one more likely to experience PTG in these two domains. Individuals that are religious are likely to find that they have a greater appreciation of life and they are also likely to view spiritual changes as growth, possibly because of the environment in which they come to terms with the events of their trauma. People who are religious are more likely to engage in activities like attending church services, praying, or participating in religious community activities. This allows for a strong social support system that perhaps shares their religious outlook and encourages spiritual growth in some capacity.

Religious strength may share a relationship with the Appreciation of Life domain because of particular viewpoints expressed in some religions. Religious people may view their trauma as a test of their strength or a sign that they must learn to appreciate what their life has to offer. This mindset coupled with the contrast of experiencing a traumatic event and comparing it to much worse scenarios may lead to a greater Appreciation of life.

A limitation to this study is that the longitudinal effects were not studied. It is likely that a longitudinal version of this study could have considered the alcohol consumption directly after experiencing a traumatic event, at certain intervals afterwards, and what the role of religious strength was in this process as well. Future directions should include taking into consideration the cross-cultural differences because this was primarily a Christian sample, so targeting areas where the majority of the population is not Christian may be beneficial in gaining a better understanding of the relationship between alcohol consumption, religious strength, and posttraumatic growth. In the future, recruiting that are older in age might be better for the assessment of alcohol consumption.

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