Abstract

The current study examined how college students’ social justice beliefs associate with levels of trait anxiety symptoms and religiosity. Secondary education differences were also analyzed. The sample consisted of 126 undergraduate college students from a private Christian university from the southern US. Participants completed a questionnaire that included the Social Justice Scale, the State-Trait Inventory for Cognitive and Somatic Anxiety, and the Intrinsic, Extrinsic, and Quest Religiosity Measures. Results suggested a significant positive relationship between social justice and intrinsic religiosity, and a negative relationship between religiosity and LGBT support. Additionally, significant differences on social justice between public and private schooled students were found. Post-hoc analyses also found significant relationships among other variables. Although most of these findings are consistent with previous literature, further studies should investigate factors associated with social justice beliefs in order to advance the field.
Factors Associated with Social Justice Beliefs among Undergraduate College Students

Social justice is a pertinent worldwide psychological and political issue that affects everyone across micro, meso, and macro-levels (i.e. individual, group, and organization/system-levels). Existing literature has conveyed the ubiquitous nature of social justice, through extending the topic across a multitude of disciplines and cultures, and creating varied definitions (Sabbagh, 2003; Miller et al., 2009; Maschi, Baer & Turner, 2011). Nevertheless, social justice remains in common regard, as the goal-directed process of securement and redistribution in aspiration of achieving a society in which all members have physical and psychological fairness (Vera & Speight, 2003; Maschi et al., 2011). The prevalence of social justice in academia has highlighted the notion that in order to progress social justice within all fields, it is imperative that college students develop social justice orientations (Miller et al., 2009). Despite this, college students continue to misunderstand or overlook social justice, and the manner in which it relates to them and their surroundings (Chizhik, 2002; Chizhik & Chizhik, 2005; Wernick, 2012).

The topic of social justice relates directly to college students as trait anxiety, or physical and psychological feelings of anxiety across all life situations, have rapidly increased within the young-adult population (Ree, French, MacLeod & Locke, 2008; Lowery & Wout 2010; Eaton et al., 2013; ADAA, 2013). This increase in trait anxiety has been attributed to an increase in young-adults who experience social injustices, such as discrimination and stereotyping (Fischer & Holz, 2007). Although experiencing social injustices as a young-adult can stimulate more anxiety, it has also been shown to increase commitment to social justice (Caldwell & Vera, 2010; Yet-Mee, Cai-Lian & Teck-Heang, 2013). To further complicate things, stronger social justice values have also been shown to decrease trait anxiety symptoms (Markowitz, Goldberg, Ashton, & Lee, 2012; Avdeyeva & Church, 2005). Thus, it is clear that past research has presented mixed
findings and clarifying such is an aim of the current study. Furthermore, past research has primarily focused on how a person’s social justice beliefs relate interpersonally to another person’s level of anxiety, and not how it relates to their own anxiety (Sheppard, 2002). Studies that have had this focus, looked at professional populations of counselors, educators, and employees, rather than typical college age students (Baines, 2006; Bradley, Werth, Hastings & Pierce, 2012; Bobocel, 2013). Therefore, the current study also aims to fill these gaps in research by examining whether college students’ personal social justice beliefs are related to their personal levels of trait anxiety symptoms.

In contrast to the scarcity of knowledge on micro-level associations between young-adult social justice and trait anxiety, an abundance of literature has supported a strong relationship between trait anxiety and religiosity, or religiousness, as well as trait anxiety and intrinsic religiosity, such that as one is high, the other is low, or vice versa (Ji, Pendergraft & Perry, 2006; Lavric & Flere, 2010). Intrinsic religiosity is a construct of religiosity, which is embodied by individuals who are religious for personal or internal reasons (Maltby & Lewis, 1996). This association appears to be strongest among Christian populations (Lavric & Flere, 2008). Thus, research has supported religiosity to be an effective strategy to help lessen or cope with anxiety for some individuals and groups, which can be seen as an inherent way to implement social justice (Vera & Shin, 2006; Clements & Ermakova, 2012; Walker & Longmire-Avital, 2012).

In view of reciprocal influences, a plethora of research has provided knowledge on the manner in which an individuals’ religiosity, relates to their own social justice beliefs (Parikh, Post & Flowers, 2011). An association between high social justice values and high levels of religiosity has overwhelmingly resulted due to the similarity in fundamental ideals as “love thy neighbor” (Perkins, 1992; Gladson, 2002; Hodge, 2007; Aranda, 2008; Edwards, 2012; Shen,
Haggard, Strassburger & Rowatt, 2013). An association between high intrinsic religiosity and high social justice beliefs has also been overwhelmingly found, as well as deemed more consistent than the relationship between religiosity and social justice (Leak & Fish, 1989; Gordon et al., 2008; Ji, Ibrahim, & Kim, 2009; Puffer, 2013). Despite all this, abundant inconsistencies still exist with this relationship. Studies show that highly religious individuals score high on social justice measures that ask for their general support of social justice for “all individuals.” However, when these individuals are asked how much they support social justice for specific groups, such as Lesbian, Gay, Bisexual, and Transgender (LGBT) individuals, they tend to contradict themselves through indicating a lack of support (Ji, Pendergraft, & Perry, 2006; Shen et al., 2013). This contradiction has been attributed to how LGBT and other out-groups (e.g. atheists) violate the religious doctrines and belief systems of conservatively religious people (Allport & Ross, 1967; Ji et al., 2006; Johnson et al, 2011; Shen et al., 2013).

In order to advance the field of social justice across systemic levels, it is evident that further research provides clarity. Therefore, the current study aims to investigate the manner in which social justice beliefs relate to trait anxiety symptoms and religiosity among undergraduate college students across micro and meso-levels. Secondly, to progress knowledge of social justice for a particular marginalized meso-group, this study will also examine associations between LGBT support and religiosity. Furthermore, to investigate macro-level influences on development, group differences by secondary education will also be explored.

The current study hypothesized: (1) intrinsic religiosity to be positively correlated with social justice, (2) trait anxiety symptoms to be negatively correlated with social justice, (3) religiosity to be negatively correlated with self-reported LGBT support, (4) religiosity to be negatively correlated with trait anxiety symptoms, (5a) there will be a difference on social justice
when comparing home-schooled, public schooled, and private schooled college students, (5b)

there is a difference on religiosity when comparing home-schooled, public schooled, and private
schooled college students, (5c) there is a difference on trait anxiety symptoms when comparing
home-schooled and public schooled college students.

Method

Participants

A convenience sample of 126 undergraduate students attending Houston Baptist
University in Houston, Texas participated in the current study for no compensation. The sample
consisted of 76 (60.3%) females and 50 (39.7%) males. The mean age of participants was 19.99
years (SD = 3.18) and ages ranged from 17 to 38 years old. The sample was ethnically diverse as
it consisted of 45 (35.7%) Caucasians, 23 (18.3%) African Americans, 30 (23.8%) Hispanics, 14
(11.1%) Asian Americans/Pacific Islanders, 4 (3.2%) Multiracials, 3 (2.4%) South Asians, and 6
(4.8%) “Others.” Participants were 17.5% (n = 22) Catholics, 31.7% (n = 40) Baptists, 2.4% (n =
3) Lutherans, 2.4% (n = 3) Methodists, 3.2% (n = 4) Presbyterians, 2.4% (n = 3) Orthodox,
23.8% (n = 30) Non-Denominational Christian, 6.3% (n = 8) Other Christian, 2.4% (n = 3)
Muslim, 1.6% (n = 2) Buddhist, 2.4% (n = 3) Agnostic, 1.6% (n = 2) Atheist, and 2.4% (n = 3)
“Other.” Regarding secondary education, 104 (82.5%) of participants were public-schooled, 2
(1.6%) were home-schooled, and 19 (15.1%) were private-schooled. Regarding academic
standing, 44.4% (x = 56) of participants were freshman, 31% (x = 39) were sophomores, 15.1%
(x = 19) were juniors, and 9.5% (x = 12) were seniors. Participants had an average GPA of 3.25
(SD = .523).

Measures
A questionnaire was administered to participants that included psychometric measures of social justice, anxiety, and religiosity. The questionnaire also consisted of an informed consent, a demographic section, and three self-report questions. The informed consent described the subject of the study as “Students’ well-being and attitudes.” The informed consent also generally described the study’s purpose, procedure, risks and benefits, liability policy, participants’ right to refuse and/or withdraw, and the researcher’s contact information for further details.

The questionnaire included three self-report questions that were developed for research hypotheses. The first self-report question was used to assess general anxiety (i.e., “To what extent do you consider yourself an anxious or worried person?”). The second self-report question was used to assess prejudice towards lesbian, gay, bisexual, and transgendered individuals (i.e., “To what extent do you support equal marriage rights for lesbian, gay, bisexual, and transgender individuals?”). The third self-report question was used to assess self-perceived general religiosity (i.e. “To what extent do you consider yourself a religious person?” (based on research by Johnson et al., 2011). High scores indicated higher levels of constructs measured on all self-report questions.

Social justice orientation was measured by the Social Justice Scale (SJS; Torres-Harding, Siers & Olson, 2012), a scale designed to measure constructs that predict likelihood to engage in social justice-related behaviors. The SJS consisted of four subscales (i.e. social justice attitudes, social justice perceived behavioral control, social justice subjective norms, social justice behavioral intentions) and 24 items answered on a 7-point Likert type scale ranging from 1 to 7, with 1 = disagree strongly, 4 = neutral, and 7 = strongly agree. The SJS was sum scored with high scores indicating high levels of social justice values. Participants were instructed to indicate the extent they agreed with each statement. The SJS contains good reliability, as Cronbach’s
alpha’s ranged from .82 to .95 for the entire 24-item scale. Additionally, the SJS demonstrated good validity, as all four subscales were negatively correlated to external scales that measured opposing constructs (SJS; Torres-Harding et al., 2012).

Trait anxiety was measured by the independent Trait scale of the State-Trait Inventory for Cognitive and Somatic Anxiety (STICSA; Ree, French, MacLeod, & Locke, 2008), a scale designed to measure cognitive and somatic dimensions of anxiety at the state and trait levels. The current study only utilized the trait scale, which was designed to measure the tendency of an individual to perceive and display elevations in cognitive and somatic state anxiety. The STICSA trait scale consisted of two subscales and 21 items answered on a 4-point Likert type scale ranging from 1 to 4, with 1 = not at all, 2 = a little, 3 = moderately, and 4 = very much so. One subscale contained 10 items designed to measure cognitive anxiety symptoms, such as hyperventilation and sweating. The other subscale contained 11 items designed to measure somatic anxiety symptoms, such as worrying and intrusive thoughts. All 21 items were presented in the same fixed random order. The STICSA trait scale was sum scored with high scores indicating high levels of anxiety. The trait scale instructed participants to “circle the number which best indicated how often, in general, the statement is true of you.” The STICSA has demonstrated reliability and validity in nonclinical populations. The trait scale indicates a high level of reliability as the coefficient for the trait somatic scale is .94 and .95 for the trait cognitive scale. Additionally, the STICSA-trait exhibits strong convergent and discriminant validity, as STICSA-trait cognitive and somatic scales were strongly correlated to external scales that measure anxiety than those that measure depression. (Ree et al., 2008)

Religiosity and intrinsic religiosity were measured by the Intrinsic, Extrinsic, and Quest Religiosity Measures (IEQ; Reitsma, Scheepers, & Jannssen, 2007), a scale designed to measure
these three different dimensions of religiosity that together encompass religiosity as a whole. The IEQ consisted of three subscales and 28 items answered on a 5-point Likert-type scale ranging from 1 to 5, with 1 = does not apply to me at all and 5 = completely applies to me. The three subscales correspond with the three dimensions of religiosity. The intrinsic religiosity subscale, designed to measure individuals who “live” their religion, contained nine items and was used independently for testing the first hypothesis. The IEQ is sum scored where high scores indicating high levels of religiosity. The present study presented all 28 items in the same fixed order. Participants were instructed to indicate to what extent each statement applied to them. For church members and non-members, all IEQ items has shown sufficient convergent validity or reliability and discriminant validity, as confirmatory factor analysis computed substantial loadings for all items on their theoretical three-factors (Reitsma et al., 2007). The IEQ contains strong reliability and validity for populations of religious people, which corresponds to the sample of the current study from a Christian university, in which all undergraduates, despite religious affiliation are required to attend church and learn about Christianity (Reitsma et al., 2007).

Procedures

Houston Baptist University granted the researcher permission to conduct a supervised research study on campus. Emails were sent to seven professors requesting permission to survey students in class, from which permission was granted by six professors. In each classroom, the researcher provided a self-introduction, explained the questionnaire as coursework, the students’ right to refuse participation, and the importance of thoroughly reading the informed consent. Students were administered a questionnaire and prompted to first complete the informed consent form on the top page so the researcher could collect prior to the questionnaire. Due to these
procedures, questionnaires were anonymous and voluntary. All questionnaires were completed in approximately 10 minutes. The researcher collected completed questionnaires and cordially left the class after thanking the participants and professor for their voluntary participation. In conclusion, scores were computed manually and then analyzed for all hypotheses.

Results

All data was analyzed using parametric tests (e.g. Pearson correlation and t-test for independent samples) by utilizing the Statistical Package for Social Sciences (SPSS) version 20.0. All tests were run using a significance level of $p \leq 0.05$.

To test the first hypothesis, a one-tailed Pearson product-moment correlation coefficient, $r$, was utilized to analyze whether conversely high levels of social justice indicated high levels of intrinsic religiosity. After exclusion of data from one participant due to insufficient completion of the IEQ scale, measuring intrinsic religiosity, statistically significant findings resulted in support of the first hypothesis, $r = .354, p < .001$, at the .05 level. Therefore, this study suggests a positive association between social justice and intrinsic religiosity.

To test the second, third, and fifth hypotheses, a separate one-tailed Pearson product-moment correlation coefficient, $r$, was utilized. For the second hypothesis data from two participants were excluded due to insufficient completion of the STICSA scale. For the third hypothesis, data from two participants were excluded due to insufficient completion of the IEQ scale. For the fourth hypothesis, data from three participants were excluded due to insufficient completion of one or both the IEQ and STICSA scales. However, all three of these hypotheses resulted in the absence of statistically significant findings: hypothesis 2 ($r = -.003, p = .487$), hypothesis 3 ($r = .032, p = .361$), hypothesis 4 ($r = .038, p = .338$). Therefore, this study fails to suggest a negative correlation between scores of social justice and trait anxiety symptoms, a
negative correlation between self-reported LGBT support and religiosity scores, and a negative correlation between scores of trait anxiety symptoms and religiosity. Although this study intended to use a two-tailed ANOVA with post-hoc analyses Tukey to test hypotheses 5a, 5b, and 5c, due to insufficient power for home-schooled students, a two-tailed independent samples t-test was utilized. These tests compared the means of each relevant construct score to analyze whether there was a difference among groups. Analyses resulted in statistically significant findings for hypothesis 5a, $t_{(121)} = -1.945, p = .054$, at the .05 level. Therefore, this study suggests a difference in mean scores of social justice between public-schooled and private-schooled college students, such that private-schooled participants scored higher on social justice than public-schooled participants. However, hypotheses 5b and 5c resulted in the absence of statistically significant findings: hypothesis 5b ($t_{(119)} = -.364, p = .716$, at the .05 level) and hypothesis 5c ($t_{(119)} = .746, p = .457$, at the .05 level). Therefore, this study fails to suggest a difference in mean scores of trait anxiety symptoms, as well as religiosity levels between public-schooled and private-schooled college students.

Two separate post-hoc analyses of one-tailed Pearson product-moment correlation coefficient, $r$, were utilized to further investigate the underlying prediction in hypothesis three, a negative association between religiosity and LGBT support. The first analyzed whether conversely high levels of intrinsic religiosity indicated low levels of self-reported LGBT support and after exclusion of data from one participant, analyses resulted in statistically significant findings, $r = -.352, p < .001$. Subsequently, the second analyzed conversely whether high levels of self-reported religiosity indicated low levels of self-reported LGBT support and after exclusion of data from one participant, analyses resulted in statistically significant findings, $r = -.235, p = .004$. Therefore, this study suggests a negative association exists between self-reported
LGBT support and intrinsic religiosity as well as reported LGBT support and self-reported religiosity.

**Discussion**

A positive association was hypothesized and found between college students’ levels of social justice and intrinsic religiosity. These findings support previous findings (Leak & Fish, 1989; Gordon et al., 2008; Ji et al., 2009; Puffer, 2013) that suggested values of social justice and intrinsic religiosity correlate due to sharing inherent pro-social characteristics. The utilization of the IEQ to measure intrinsic religiosity can be seen as a strength, as it specifically has shown strong reliability and validity among religious populations, such as the sample population.

Definitions for beliefs in religion and social justice are implied as inherently the same or with large overlap and it is likely that individuals who essentially and naturally embody one concept will automatically embody the other, even without conscious knowledge or thought. These findings imply that intrinsically religious college students should be a group of focus and utilization for implementing educational and experiential learning experiences, aimed to foster positive outcome expectations in social justice behaviors. This corresponds to past research that indicated such learning experiences to be most efficacious when utilized on students with already established interest in social justice (Miller et al., 2009; Caldwell & Vera, 2010). Future research should find purpose in applying this implication and investigating whether empirical evidence supports this suggestion.

The current study found that public and private schooled students do notably differ in relation to social justice beliefs, such that undergraduate college students’ whom were previously privately-schooled indicated having higher social justice beliefs in comparison to their publicly-schooled counterparts. This is consistent with literature (Miller et al., 2009; Caldwell & Vera,
that suggested social justice orientations develop through early life, educational, and learning experiences and provides meaningful insight into the development and advocacy of social justice. Individual development of social justice values are greatly influenced through their adolescent experiences within the macro-level institutions that govern them, and the education and learning experiences that these institutions provide. Secondly, private school institutions may be stronger oriented in social justice than public school institutions. Thirdly, perhaps the experiences one has in public school creates increased susceptibility to lessened social justice values than the experiences one has in private school. Future research should further investigate the manner in which private schooling fosters stronger social justice interest in comparison to public schooling, to provide new insight in how public school institutions and methods of teaching can foster social justice values.

A negative association between LGBT support and religiosity was not found, and this contradicted past literature (Ji et al., 2006; Johnson et al, 2011; Shen et al., 2013). This could be due to how the current study utilized a less powerful methodology of bivariate correlation, while previous research utilized more powerful methodologies of multivariate path analyses. However, this result is likely due to assessing the relationship between social justice and religiosity, with the IEQ as a three dimensional whole (i.e. intrinsic, extrinsic, and quest religiosity) because significant findings from two post-hoc analyses indicated that LGBT support had a notable negative relationship with intrinsic religiosity and self-reported general religiosity. Thus, post-hoc findings correspond to previous research (Ji et al., 2006; Johnson et al, 2011; Shen et al, 2013) that found highly religious individuals were less likely to support LGBT individuals due to value-violating beliefs. Research and practical implementations that address and facilitate this
fundamental devaluing of social justice for all individuals that conservatively religious individuals tend to possess, is a required, in order to facilitate social justice and mental health.

A negative association between college students’ social justice beliefs and trait anxiety symptoms was not found. As previous research suggested mixed findings of either a positive (Ratts & Wood, 2011) or negative (Markowitz et al., 2012; Avdeyeva & Church, 2005) relationship between social justice and anxiety levels, the current study was, in one way, consistent with past research. As this researcher was unable to find any previous studies that specifically analyzed associations between one’s own social justice beliefs and anxiety symptoms, this hypothesis was formed through results from studies that analyzed associations between variables of related constructs. Thus, the attempt to provide new insight and suggestion on the within-group association between levels of social justice and anxiety was disappointing. Secondly, since social justice beliefs were supported by some literature (Ratts & Wood, 2011), as having an association with state anxiety (i.e. anxiety due to a specific situation), rather than trait anxiety, a limitation of the current study was failure to examine state anxiety. Future research should include measurement of state anxiety symptoms.

A negative association between college students’ trait anxiety symptoms and religiosity levels was not found. These findings contradict past research that widely suggested individuals with higher levels of trait anxiety symptoms are less likely to have strong religious beliefs (Ji et al., 2006; Lavric & Flere, 2008, 2010; Seidmahmoodi, Rahimi & Mohamadi, 2011; Clements & Ermakova, 2012; Walker & Longmire-Avital, 2012). This unexpected finding could be due to measuring religiosity through the IEQ as a whole rather than with specific religiosity orientations. Due to knowledge that past research suggested a positive association between trait anxiety and quest religiosity (Lavric & Flere, 2010), and this study failed to find significance when
attributing religiosity from the IEQ as a whole, in one way, this finding was consistent with past research.

A possible explanation for all non-significant findings that included the variable, trait anxiety symptoms, can be due to internal validity issues. There was a relative lack of variability in trait anxiety scores as the vast majority scored as having little to moderate anxiety. Perhaps this is due to using a convenience sample as students’ surveyed were not sufferers of persistent somatic and cognitive feelings of anxiety and thus, they do not account for the high percentage of trait anxiety disorder sufferers in the current young adult population. It could also be that the students surveyed were subject to participant bias and viewed anxiety symptoms as socially unacceptable, thus, decided to answer dishonestly. In light of past research that suggested 22 years old as the average age of experiencing an anxiety episode (Eaton et al., 2013; ADAA, 2013), it is possible that since the majority of students’ surveyed were freshman or sophomores and either 18 or 19 years old, they have not yet experienced the perils of college life and developed high levels of trait anxiety symptoms. Lastly, consistent with past research that suggested religion as a resiliency strategy against trait anxiety symptoms (Ji et al., 2006; Lavric & Flere, 2008, 2010; Seidmahmoodi et al., 2011; Clements & Ermakova, 2012; Walker & Longmire-Avital, 2012), lack of significant findings could be due to the reality of this relationship as students’ surveyed were from a religiously oriented institution. Thus, all findings with the variable of trait anxiety should be interpreted with caution.

Lastly, it was hypothesized that type of secondary education experienced by college students would reflect a significant difference on trait anxiety and religiosity scores. The results of the current study found that public and private schooled students did not differ in relation to trait anxiety and religiosity scores. An explanation for failure to find significance for these
findings is in light of the unexamined nature of previous research testing these differences. Although this study did not find support, previous research supported a significant correlation between religiosity and trait anxiety, therefore, the association between these two variables could preclude significant differences on scores among students’ with different types of secondary education. Future research should utilize sounder research methodology, such as mediator/moderator analyses, to investigate whether there are other variables complicating significant findings of differences on anxiety and religiosity scores among types of secondary education. Subsequently and perhaps the most salient is that private schooled students comprised of only a group of nineteen participants, thus lacking sufficient power and likely contributing to the absence in significant findings. Future research should find strong purpose in replicating current methodology across a widely represented sample of private schooled students to confirm findings found on this small sample size. Similarly to trait anxiety, religiosity scores indicated low variance, and although this was expected due to the use of a religiously oriented convenience sample, future research should replicate the current methodology with a more generalizable population of college students.

Despite these limitations, the current study is a facilitation of social justice advocacy and commitment in academia and among many other levels. The results from this study provide several new insights and direction for future studies in social justice. For example, no study thus far has examined specifically social justice values of college students at a religiously affiliated institution and the correlation between trait anxiety and religiosity. Additionally, this study highlights the need for further studies to investigate the relation between social justice values and trait anxiety on an intrapersonal level and the manner in which this relates to previous research (Miller et al., 2009) that determined pathways to social justice commitment. In conclusion, this
research hopes to inspire future research and advocacy efforts on social justice in professional as well as personal practice.
References


