Spirituality as a Predictor of Reduced Suicide Risk in a Religiously and Ethnically Diverse Youth Sample

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Abstract

Cross-cultural suicide research on spiritual faith as a protective factor in youth is limited. The aim of this study is to examine spiritual faith as a predictor of passive suicidal ideation in a racially and religiously diverse sample of college-aged youth. Participants (N = 243) completed self-report instruments to assess suicidality, social support, reasons for living as well as existential and religious well-being. Over 50% of the sample reported identifying with a racial group including Asian, Hispanic and Black. Approximately 81% of participants reported they had spiritual beliefs (N = 196) representing a variety of religions, including Catholicism, Judaism and Islam. Analyses of variance were used to assess any mean group differences for race, gender and having a religious affiliation using each of the predictor variables. Although racial group differences were not found significant, the analysis yielded significant results for gender, where females reported more reasons for living than males. And for those with religious affiliation, participants reported higher levels of social support, religious well-being and reasons for living. In the final regression model, over and above the influence of gender and religious affiliation, positive faith-based beliefs along with social support was associated to lower levels of passive ideation. Implications of findings and future research are also discussed.

Introduction

Although suicide rates may differ by country, suicide is a global health crisis. According to the World Health Organization, suicide is the second leading cause of death for adolescents and young adults worldwide (WHO, 2002) and is also the second leading cause of death in the United States (Crosby, Han, Ortega, Parks & Gfoerer, 2011). Furthermore, suicide rates overshadow the depth of suicide risk among youth, especially the number of youth who think about self-harm. For example, these statistics do not include suicide attempts, which are up to 20 times more frequent than completed suicide (WHO, 2002); nor do these numbers include the larger proportion of youth who think about suicide (Gaynes, West, Ford, et al. 2004).

One of the principal goals of cross-cultural psychology is to test the generalizability of existing psychological theories in culturally diverse samples (Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2011). Although suicide exists in almost all cultures and ethnic subgroups (Chu, Goldblum, Floyd, & Bongar, 2010), suicide and protective factors research in cross-cultural youth samples is limited and in particular, the exploration of spiritual faith as a protective factor against suicide. Spiritual faith is embedded in the cultural norms, values and traditions of most ethnic groups (Lun & Bond, 2013). Hence the examination of spiritual faith from a cross-cultural perspective would provide a novel investigation, exploring its deep-rooted connection to culture and its role as a resiliency factor for youth. Therefore the goal of this paper is to examine spirituality as a protective factor in youth, highlighting its role as a sociocultural protective factor in ethnically diverse youth.

Risk and Protective Factors

Suicide risk factors in youth include mood disorders (Esposito, Spirito, Boergers, & Donaldson, 2003), substance use disorders (Patton, Coffey, Sawyer et al., 2009), emotional distress due to life stressors (Hovanesian, Isakov, & Cervellione, 2009), feelings of hopelessness (Brown, Beck, Steer & Grisham, 2000), and a history past attempts (Esposito, Spirito, Boergers, & Donaldson, 2003). In addition, access to pesticides is a risk factor for suicide in Asia and the Indian subcontinent and is a highly lethal method of suicide (Hvistendahl, 2013).

In contrast, protective factors serve as a buffer to the expression of suicide. Protective factors such as high levels of family and social support are associated with lower levels of suicide risk (Compton, Thompson, & Kaslow, 2005) and can include other factors such as spiritual faith (Cotton, Larkin, Hoopes, Cromer, & Rosenthal, 2005) adaptive coping styles (Grosz, Zimmerman, & Asnis, 1995) and access to community supports (Daigle, Pouliot, Chagnon, Greenfield, & Mishara, 2011). In addition, Compas and Reeslund, (2009) indicate that complex association among risk and protective factors in youth, are based upon a dynamic interaction of individual and environmental resiliency factors, ranging from spiritual capacity to community support.

Spiritual Faith and Its Relation to Culture and Protective Factors

Spiritual faith is an overarching term that includes both religiosity and spirituality (Griffin-Fennel & Williams, 2006). For example, religiosity is associated with the adherence to beliefs, doctrines and practices of a given religion, with an emphasis on the individual's relationship with God (Slater, Hall, & Edwards, 2003; Ellison, Burr, & McCall, 1997). Spirituality on the other hand is the internalized aspects of positive faith-based beliefs that support overall life satisfaction (Griffin-Fennel & Williams, 2006). Both are key aspects of spiritual faith, where religiosity is maintained through daily practice; and spirituality is the result of one's life journey along a religious path.

In addition, spiritual faith is filtered through a cultural lens and impacts culture by bolstering cultural traditions and strengthening cultural identity, where the church serves as informal meeting places for help seeking during time of stress (Goldston et al., 2008). In the United States, different cultural groups utilize spiritual faith to the same end, and that is to help manage adversity and increase interpersonal relating among cultural group members. For example, in the Black community, the church is a place of shared connectedness, fostering supportive relationships amongst the members of their cultural group who may be experiencing similar stressors (Molock, Puri, Matlin, & Barksdale, 2006). The Black church is a powerful psychological symbol, representing strength and their ability to endure during times of stress. Similarly, in both the Latino and Asian communities, the church provides a meeting place but more importantly a connection to one's cultural group and also reinforces the ties among tightknit families (Peña et al., 2011; Wong, Uhm, & Li, 2012). For all cultural groups spiritual faith bolsters a powerful human need to connect to others (Baumeister & Leary, 1995).

On an individual level, spiritual faith also empowers its members to search for personal meaning through prayer that can be restorative in the face of adversity (Ebstyne King, & Roeser, 2009). Along with personal meaning, spiritual faith can foster hope for the future especially during times of uncertainty, such as during the course of an illness or a pending divorce. By using prayer and other religious activities, conducted within a cultural context, individuals can use these faith–based practices to enhance coping with stressful life events by reducing fear, loneliness and guilt (Wachholtz & Sambamoorthi, 2011). In addition, a lack of personal meaning or belonging can promote feelings of loneliness, hopelessness, isolation and sadness that are associated with negative outcomes such as depression and suicide (Stellrecht, et al., 2006; Wang, Richard Lightsey, Pietruszka, Uruk, & Wells, 2007).

Purpose of the Present Study

Spiritual faith is embedded in the cultural traditions across ethnic groups (Lun & Bond, 2013) and the exploration of spiritual faith in a cross-cultural context would provide a novel investigation of its association to race, gender and suicide risk. As referenced earlier, racial and ethnic groups are dissimilar in their use of a variety of resiliency factors (Goldston, Molock, Whitbeck, Murakami, Zayas, & Hall, 2008). Moreover, these cultural groups may differ in their exposure to risk based on their socio-economic status, neighborhood and family violence, leading some to hypothesize that different cultural or racial cultural groups experience risk and protective factors in varying degrees (Kaslow et al., 2005). In addition to racial disparity, there is a gender disparity in levels of risk and the use of protective factors, where females tend to utilize their support networks when distressed verses males who have ridged gender roles that allow little flexibility or support for help-seeking (Griffin-Fennel & Williams, 2006). Both groups may use spiritual faith differently; men may tend to choose a private relationship with God versus women who may seek the comfort of shared experiences in church with other cultural group members.

Each domain of spiritual faith, religiosity, and spirituality, may provide its own means of assuaging suicide risk in youth that are universal across all faiths and cultural groups. Although spiritual faith has been found to be a protective factor against suicide risk in adults, it is unclear if these findings translate to racially diverse youth samples. Therefore, the aim of the current study is to examine the role of spiritual well-being and its ability to protect youth against thoughts of self-harm. More specifically, the following research question guided the design of the current study: Over and above the influence of gender, race and religious affiliation, can having spiritual faith lessen the probability of suicidal ideation? In order to address this question and generalize the study's findings, a cross sectional design will be employed, using self-report surveys in a diverse sample of youth.

Method

Participants

Participants ($N = 243$) were recruited from an online subject pool for introductory psychology undergraduate students at an urban university in the United States. Participants had the option of selecting this study among several being offered via the online subject pool and were offered course credit for participation. In order to provide consent, all participants were 18 years or older and their ages ranged from 18 to 56 ($M = 21.14$, $SD = 6.00$) and the most common age was 19 years. Sixty-one percent of participants were female ($n = 148$) and 39% were male ($n = 95$). In terms of race, approximately 33% of participants identified themselves as white ($n = 81$), 27% self-identified as Asian ($n = 66$), 19% self-identified as Hispanic ($n = 47$), and about 8% self-identified as Black ($n = 19$). Approximately 81% of participants reported that they had spiritual beliefs ($n = 196$). In addition, over 83% of the sample self-identified with a religious group ($n = 203$), such as Catholic (30%), Jewish (17%), Muslim (6%), Hindu or Buddhist (4%); and 17% reported no religious affiliation ($n = 40$). Over 39% of the sample ($n = 96$) was born outside the United States, with the highest proportion of participants' from China, Russia and the Middle East.

Procedure

All potential participants were at least 18 years old and provided informed consent. Participants completed a comprehensive battery of self-report instruments chosen to assess the following variables: suicidality, social support, spiritual well-being, and reasons for living. This research study was part of a larger study; for a complete review of the procedures, see Kyle (2013).

Instruments

Harkavy Asnis Suicide Scale. The Harkavy Asnis Suicide Scale (HASS) was designed to collect information on current and past suicidal behavior (Harkavy-Friedman & Asnis, 1989). For the purpose of this study, participants completed the first section (HASS-I), capturing demographic information, the frequency of current passive suicidal ideation as well as past history of suicidal ideation and attempts. Regarding internal consistency, the coefficient alpha was obtained from clinical and non-clinical samples ranging from 0.897 to 0.915 (Harkavy-Friedman & Asnis, 1989).

Young Adult Social Support Inventory. The Young Adult Social Support Inventory (YA-SSI) assessed social support in college-age youth noting the amount of support received from a variety of sources such as parents or siblings (McCubbin & Thompson, 1989). The Young Adult Social Support Inventory has eleven subscales and yields subscale scores as well as a total scale score by summing items. However, for the purpose of this study, participants completed the following subscales of the YA-SSI: Parents, Siblings, College Friends, Spiritual Faith, and Church. Participants rated the social support received by responding either no, yes or yes a lot. A total score was obtained by summing the participants' responses. For each of the subscales, the reliability data (Cronbach's alpha) are as follows: Parent = .95, Sibling = .95, Spiritual Faith = 91, College Friends = 91, Church/Synagogue Groups = .90. The overall internal reliability was .89 (Cronbach's alpha) and the test-retest reliability was .90 (McCubbin & Thompson, 1989).

Spiritual Well-Being Scale. The Spiritual Well-Being Scale (SWBS) measures participants' spiritual life and has two subscales, religious and existential well-being (Paloutzian & Ellison, 1982). The Religious

Well-Being subscale provided an assessment of the participants' relationship with God and the Existential Well-Being Subscale gave an assessment of the participants' life purpose and satisfaction. Using a 6-point Likert scale, participants were asked to rate their agreement with statements about life satisfaction and their relationship with God. The scale has twenty items and yielded three scores: religious well-being (10 items), existential well-being (10 items) and a total scale score for spiritual well-being (20 items). For the purpose of this study, only the subscales were used in the final regression model. The test-retest reliability data are as follows: Spiritual Well-Being Scale = .93, Religious Well-Being = .96, Existential Well-Being Subscale = .86. For each of the sub-scales, the internal consistency data (Cronbach's alpha) are as follows: Spiritual Well-Being Scale = .89, Religious Well-Being = .87, Existential Well-Being Subscale = .78 (Paloutzian & Ellison, 1982).

College Student-Reasons for Living Inventory. The College Student-Reasons for Living scale was designed to ascertain the reasons a college student may have for choosing life over suicide (Westefeld, Cardin, & Deaton, 1992). Using a 6-point Likert scale, participants were asked to rate their agreement with life affirming statements, e.g., "I believe I can cope with my problems" or "It is against my religious beliefs to commit suicide." The College Student-Reasons for Living inventory yielded a total scale score by summing the five subscales including Survival & Coping, Future-related Concerns, Moral Objections, Responsibility to Friends & Family and Fear of Suicide. The internal consistency of the scale is robust at .91 (Westefeld, Cardin, & Deaton, 1992). Reliability data (Cronbach's alpha) for the total scale ranged from .91 to .93 (Westefeld, Badura, Kiel, & Scheel, 1996; Westefeld, Cardin, & Deaton, 1992).

Research Design and Statistical Analysis

In order to make inferences about the larger population of diverse youth at risk for suicide, the research design is a cross sectional and used self-report surveys to explore spirituality and its relation to suicide risk. Descriptive statistics were computed for all variables, including means, standard deviations and correlations for suicidal ideation and the predictor variables, including social support, spiritual well-being and reasons for living (see Table 1). Using the three dichotomous categorical variables, i.e., race, gender and religious affiliation, a series of Oneway Analyses of Variance were conducted for each categorical variable comparing the mean group differences on each of the predictor variables, including spiritual well-being, social support, and reasons for living as well as the criterion variable, passive suicidal ideation. Variables yielding significant associations to the predictor variables were then loaded into regression analysis.

Table 1

Summary of Correlations for Criterion and Predictor Variables Including Means & Standard Deviations

	PI	E. WB	R.WB	SS	RL	Mean	SD
Passive Ideation	1					3.38	3.55
Existential Well-Being	-.125	1				34.07	4.14
Religious Well-Being	.008	.390**	1			35.07	5.35
Social Support	-.372**	-.077	-.318**	1		25.68	9.82
Reasons for Living	-.219**	-.064	-.284**	.447**	1	193.56	30.30

PI = Passive Ideation; E.WB = Existential Well-Being; R.WB = Religious Well-Being; SS = Social Support; RL = Reasons for Living **$p < .01$

For this study, the hierarchical regression analyses were performed in order to determine whether the predictor variables could be used to predict a continuous dependent variable (Cohen, Cohen, West, & Aiken, 2003). After controlling for dichotomous cohort variables, participant's totals scores on the predictor variables, including social support, spiritual well-being and reasons for living were used to predict participant's current level of passive suicidal ideation.

Results

Descriptive analyses of the HASS Demographics scale indicate that over one third ($n = 78$) of the sample reported a lifetime history of suicidal ideation and for some participants beginning as early as age 8. Only 2.5%

of the sample (n = 6) reported a history of suicide attempts and most participants reported only one suicide attempt. In addition, analysis of the Harkavy Anis Suicide Scale indicated that 78% of participants (n = 189) reported current passive suicidal ideation within past two weeks, e.g., thought that they would be better off dead.

Using a Oneway Analysis of Variance to compare differences across all five racial groups found no significant difference in the mean scores for the predictor variables, including existential and religious well-being, social support, reasons for living and passive ideation (Table 2). However, for gender there was a statistically significant difference at the $p < .05$ level in mean scores for reasons for living: $F(1, 242) = 6.711$, $p = .01$. Although statistically significant, the actual difference in means was very small, for females (M = 197.55, SD = 30.219) and males (M = 187.35, SD = 29.523). The effect size, calculated by eta squared, was .03.

Table 2

Summary of Analysis of Variance Comparing Participants' Self-Identified Racial Groups Using the Predictor and Criterion Variables (N = 243)

	Sum of Squares	*df*	Mean Square	*F*	Sig.
Passive Ideation	58.491	4	14.623	1.166	.326
	2958.389	236	12.536		
Existential Well-Being	76.181	4	19.045	1.116	.349
	4060.765	238	17.062		
Religious Well-Being	95.145	4	23.786	0.827	.509
	6841.522	238	28.746		
Spiritual Well-Being	100.281	4	25.070	0.394	.813
	15154.962	238	63.676		
Social Support	879.846	4	219.962	2.332	.057
	22449.117	238	94.324		
Reasons for Living	6029.036	4	1507.259	1.659	.160
	216166.849	238	908.264		

A One-way Analysis of Variance was used to examine whether participants who were affiliated with a religious group differed from those without a religious affiliation with respect to their scores on the predictor variables including social support, existential and religious well-being, reasons for living and passive ideation (Table 3). Comparing the group means for those with and without religious affiliation found no statistical difference in mean scores for passive ideation and existential well-being. However, for social support, there was a statistically significant difference at the $p < .05$ level in mean scores for those with and without religious affiliation: $F(1, 242) = 22.584$, $p < .001$ indicating that for those without religious affiliation (M = 19.40, SD = 8.270) reported less social support than those with religious affiliation (M = 26.99, SD = 9.624). Although statistically significant, the actual difference in means was small and the effect size, calculated by eta squared, was .09.

Table 3

Summary of Analysis of Variance Comparing Participants With and Without Religious Affiliation Using Passive Ideation, Existential Well-being and Social Support Variables (N = 243)

		Sum of Squares	*df*	Mean Square	*F*	Sig.
Passive Ideation	Between Groups	31.338	1	31.338	2.509	.115
	Within Groups	2985.542	239	12.492		
	Total	3016.880	240			
Existential Well-Being	Between Groups	3.633	1	3.633	0.212	.646
	Within Groups	4133.313	241	17.151		
	Total	4136.947	242			
Social Support	Between Groups	1998.864	1	1998.864	22.584	.000
	Within Groups	21330.099	241	88.507		
	Total	23328.963	242			

Although previous analysis indicated the data were statistically normal, the Levene's *F* test revealed that the homogeneity of variance assumption was not met for religious well-being ($p = .030$) and reasons for living ($p = .040$). As such, the Welch's *F* test was used. The Oneway Analysis of Variance of participant's average score on the measure of religious well-being revealed a statistically significant main effect, Welch's $F(1, 85.161) = 32.608$, $p < .001$, indicating that for those without religious affiliation ($M = 34.41$, $SD = 5.43$) reported less religious well-being than those with religious affiliation ($M = 38.26$, $SD = 3.60$). The estimated omega squared ($\omega^2 = .12$) indicated that approximately 12% of the total variation in average score on students' measure of religious well-being is attributable to differences in religious affiliation. Similarly, the one-way Analysis of Variance of participant's average score on the reasons for living measure revealed a statistically significant main effect, Welch's $F(1, 78.145) = 25.901$, $p < .001$, indicating a group difference in the average score on the reasons for living measure. For those with religious affiliation ($M = 197.10$, $SD = 30.631$) reporting higher levels of reasons for living than those without religious affiliation ($M = 176.60$, $SD = 22.045$). The estimated omega squared ($\omega^2 = .09$) indicated that approximately 9% of the total variation in average score on the reasons for living measure is attributable to differences in religious affiliation.

In order to address the study's key aim, hierarchical multiple regression was used to assess the ability of the independent variables, existential and religious well-being, social support, and reasons for living to predict levels of passive ideation, after controlling for the influence of cohort variables, gender and religious affiliation (see table 4). Entering the predictors on different steps of the regression was based on earlier analysis of gender and religious affiliation, which suggested a significant association between these variables and the other predictor variables. Preliminary analyses were conducted to ensure no violations of the assumption of normality, linearity, multicollinearity, and homoscedasticity. Gender was entered at step 1, explaining 7.6 % of the variance in passive suicidal ideation. After entry of religious affiliation at Step 2, religious affiliation explained an additional 5.5% of the variance in passive suicide ideation. After the predictor variables, existential and religious well-being, social support and the reasons for living were loaded at step 3, the total variance explained by the model as a whole was 18.2%, $F(6, 240) = 8.691$, $p < .001$. The independent variables explained an additional 16.5% of the variance in level of passive ideation, after controlling for the influence of gender and religious affiliation, *R* squared change = .165, *F* change $(4, 234) = 11.808$, $p < .001$. In the final model, only the existential well-being and social support were statistically significant, with social support recording a higher beta value ($\beta = -.348$; $t = 5.287$, $p < .001$) than existential well-being ($\beta = -.137$; $t = -2.095$, $p <. 05$).

Table 4

Summary of Hierarchical Regression Analysis Predicting Passive Ideation Using Cohort Variables, Gender and Religious Affiliation, and the Predictor Variables, Social Support, Spiritual Well-Being, Reasons For Living (N = 243)

							95% CI for *b*	
		b	Std. Error	beta	*t*	Sig.	Lower	Upper
1	Gender	-.552	.469	-.076	-1.177	.241	-1.475	0.372
2	Gender	-.600	.468	-.083	-1.283	.201	-1.522	0.321
	Religious affiliation	-.999	.601	-.107	-1.663	.098	-2.182	0.184
3	Gender	-.748	.438	-.103	-1.708	.089	-1.610	0.115
	Religious affiliation	.020	.595	.002	0.034	.973	-1.151	1.192
	Existential well-being	-.116	.055	-.135	-2.095	.037	-0.225	-0.007
	Religious well-being	-.051	.047	-.077	-1.095	.275	-0.143	0.041
	Reasons for living	-.012	.008	-.105	-1.541	.125	-0.028	0.003
	Social support	-.131	.025	-.364	-5.287	.000	-0.180	-0.082

Discussion

This study sought to examine the role of spirituality as a protective factor against suicide risk in a sample of ethnically and religiously diverse youth. For youth, spiritual well-being and social support are associated with reduced levels of suicide risk; specifically existential well-being was associated with reduced likelihood of a participant reporting passive suicidal ideation. These findings suggest that spiritual faith may operate via the internalization of positive, faith-based beliefs; and thereby enhance the youth's ability to cope, possibly assuaging the progression from passive ideation to ideation with intent. In addition, spirituality may resonate with youth who have internalized the positive life values from their faith-based beliefs (Mattis, 2000), and therefore rely on the faith-based coping to reframe stressful events.

In addition to faith-based beliefs, social support provided by family, peers and their spiritual faith were also associated with reduced risk of passive ideation. Youth may use interpersonal supports such as friends or family relations to stave off feelings of loneliness and stress. In addition, females reported more reasons for living than males suggesting that social belonging and connection with others may comfort females (Griffin-Fennel & Williams, 2006) and therefore they tend to report more reasons for living. The positive protective effect of social relationships is well supported in the literature on suicide (Joiner, 2005). During times of stress, youth who report spiritual faith may find solace in their relationship with family or fellow worshipers as a means of reducing stress and moderating risk. Spirituality may resonate with ethnically diverse youth due to early experiences in the family that centered on religious and cultural traditions. During rituals and faith-based practice, youth experienced the positive aspects of faith such as enhanced coping and connecting to other members of their family, cultural and religious groups.

Furthermore, those with religious affiliation to organized religion reported significantly higher levels of social support and religious well-being than those without any affiliation. This is also supported by previous research. For example, Saroglou (2011) exploring the four major religions including Christianity, Islam, Hinduism and Buddhism, found that social belonging was a robust factor across all faiths. Belonging not only provides a means of connecting among worshipers, but also allows one to connect with a higher power. Youth, who identify with a particular religious group, are more likely to cite their relationship with God as important to their overall well-being.

Previous research using the Spiritual Well-Being Scale and Reasons for Living Inventory found positive correlation between Religious Well-Being sub-scale and the Reasons for Living Inventory (Ellis & Smith,

1991), which was not found in this study. However, existential well-being was associated with reduce suicide risk and was found inversely related to reasons for living. This suggests that youth may have internalized the positive aspects of spiritual faith versus the faith-based prohibitions against suicide. The positive aspects of spiritual faith, such as coping may be more salient in the lives of youth, providing an anchor as they weather daily stressors. In a recent study published by the Pew Forum on Religion and Public Life (2010) found that youth from the United States attended church in lower numbers but yet reported higher levels of spirituality. Although youth identified with a particular religion, this finding confirms that youth tend to be more spiritual rather than religious.

Further, when examining the correlations among the predictor variables, the spirituality factors had no relation to passive suicidal ideation. However, when all the predictor variables were loaded into the final model, only existential well-being and social support were predictive of reduced risk of passive ideation. This suggests that existential well-being may be capturing a unique facet of youth's experience of spiritual faith that is protective above and beyond the College Student-Reasons for Living Inventory. The Reasons for Living Inventory as well as the College Student-Reasons for Living Inventory are well-established measures of protective beliefs about suicide. In addition, the College Student-Reasons for Living Inventory was normed using university students in United States (Westefeld, Cardin, & Deaton, 1992) and recent research has shown promise with ethnically diverse samples (Richardson-Vejlgaard, Sher, Oquendo, Lizardi, & Stanley, 2009). However, there are very few studies, if any that have used the College Student-Reasons for Living Inventory with religiously diverse samples that included Muslim and Hindu participants. For these groups, there may be variability in the religious and cultural definitions of suicide and associated protective beliefs that have yet to be measured.

As reported by earlier studies, the College Student-Reasons for Living Inventory (CS-RFLI) was found inversely related to risk (Malone, Oquendo, Haas, Ellis, Li, & Mann, 2000). Although students were having thoughts of passive ideation, the total CS-RFLI did not predict suicide risk in this youth sample and do not factor into the overall model. Although this is an interesting finding, this may simply be the product of using a non-clinical sample and participants who were not currently in crisis. In addition, reasons for living may have been overshadowed by social support in the final model; And the overall significance of existential well-being in the final model may be attributable to the large amount of variance accounted for by social support over and above reasons for living, thus nullifying its association to passive suicidal ideation. These findings suggest dynamic associations among risk and protective variables, where one variable may moderate another and its association to risk.

Unexpectedly, the comparisons of mean scores on the predictor variables across all racial groups were not significant. This may have been an artifact of the relatively small number of participants per group. Or the within group variability may have been large overshadowing the smaller between groups differences. This large within group variability may suggest that suicide is a universal phenomenon. In a cross-cultural study of suicide notes from Turkish and American youth, Leenaars et al. (2010) reported that the notes from Turkish students expressed ambivalence in their intent to die. Although ambivalence about death is common phenomenon prior to an attempt, the authors reasoned that ambivalence reflects the youth's internalization of the stigma of suicide from the surrounding culture, a collectivistic society that emphasized relatedness versus individualism and free will. Therefore, the meaning ascribed to the suicidal act was based on the cultural context in which suicide occurs. In this case, the shame was shared by all cultural group members and further reinforced the culture's stigmatization of suicide. Therefore the focus of suicide research in culturally diverse youth may benefit from comparing the differences in the cross-cultural meaning of the suicidal act.

Future Directions

Although existential wellbeing was found related to reduced risk of passive ideation, research on the universality of protective and risk factors remains problematic. For example, Colucci and Martin (2007) found conflicting results after conducting an exhaustive analysis of the available research on cross-cultural youth suicide, leading the authors to conclude that further research is needed. However, an cultural perspective on suicide may be best served by underscoring that risk as well as protective factors may be present in varying

amounts cross-culturally and the meaning of suicide will vary with cultural context which it occurs. Therefore, research should begin to understand the influence of individual and environmental-level protective factors on suicide risk in a cultural context.

In addition, spiritual faith and its cultural referents can be integrated into psychotherapy (Comas-Diaz, 2008) serving as a source of restorative healing. But spiritual faith may also serve as an avenue for community outreach and suicide prevention. For example, the African-American community traditionally underutilizes mental health services and in an effort to conduct community outreach Molock, Matlin, Barksdale, Puri, and Lyles (2008) have used the Black church and the authoritative power of the church pastor to conduct outreach to those who are less likely to seek out those services outside of their church or community.

References

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*, 497-529.

Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross-cultural psychology: Research and applications*. New York, NY: Cambridge University Press.

Brown, G. K., Beck, A. T., Steer, R. A., & Grisham, J. R. (2000). Risk factors for suicide in psychiatric outpatients: A 20-year prospective study. *Journal of Consulting and Clinical Psychology, 68*, 371-377.

Chu, J. P., Goldblum, P., Floyd, R., & Bongar, B. (2010). The cultural theory and model of suicide. *Applied and Preventive Psychology*, *14*(1-4), 25–40.

Cohen, J., Cohen, P., West, S., & Aiken, L. S. (2003) *Applied multiple regression/correlation analysis for the behavioral sciences*. New York, NY: Lawrence Erlbaum Associates.

Colucci, E., & Martin, G. (2007). Ethnocultural aspects of suicide in young people: A systematic literature review part one: Rates and methods of youth suicide. *Suicide & Life-Threatening Behavior*, *37*, 197-221.

Comas-Diaz, L. (2008). Latino psychospirituality. In K. J. Schneider (Ed.), *Existential–integrative psychotherapy: Guideposts to the core of practice* (pp. 100-109) New York, NY: Routledge.

Compas, B. E., & Reeslund, K. L. (2009). Processes of risk and resilience during adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 561-585). Hoboken, NJ: John Wiley & Sons Ltd.

Compton, M. T., Thompson, N. J., & Kaslow, N. J. (2005). Social environment factors associated with suicide attempt among low-income African Americans: The protective role of family relationships and social support. *Social Psychiatry and Psychiatric Epidemiology*, *40*, 175-185.

Cotton, S., Larkin, E., Hoopes, A., Cromer, B. A., & Rosenthal, S. L. (2005). The impact of adolescent spirituality on depressive symptoms and health risk behaviors. *Journal of Adolescent Health*, *36*, 529.e7-529.e14.

Crosby, A. E., Han, B., Ortega, L. A. G., Parks, S. E., & Gfoerer, J. (2011). Suicidal thoughts and behaviors among adults aged ≥18 years-United States, 2008-2009. MMWR Surveillance Summaries, 60, (no. SS-13). Available from www.cdc.gov/mmwr/preview/mmwrhtml/ss6013a1.htm?s_cid=ss6013a1_e.

Daigle, M. S., Pouliot, L., Chagnon, F., Greenfield, B., & Mishara, B. (2011). Suicide attempts: prevention of repetition. *Canadian Journal of Psychiatry, Revue Canadienne de Psychiatrie*, *56*, 621-629.

Ebstyne King, P., & Roeser, R. W. (2009). Religion and spirituality in adolescent development. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 435-478). Hoboken, NJ: John Wiley.

Ellis, J., & Smith, P. (1991). Spiritual well-being, social desirability and reasons for living: Is there a connection? *The International Journal of Social Psychiatry*, *37*, 57-63.

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

Esposito, C., Spirito, A., Boergers, J., & Donaldson, D. (2003). Affective, behavioral, and cognitive functioning in adolescents with multiple suicide attempts. *Suicide & Life-Threatening Behavior*, *33*, 389-399.

Gaynes, B. N., West, S. L., Ford C, Frame, P., Klein, J., & Lohr, K. N. (2004). *Screening for suicide risk: A systematic evidence review for the U.S. preventive services task force*. Systematic Evidence Reviews, No. 32. Rockville, MD: Agency for Healthcare Research and Quality.

Goldston, D. B., Molock, S. D., Whitbeck, L. B., Murakami, J. L., Zayas, L. H., & Hall, G. C. (2008). Cultural considerations in adolescent suicide prevention and psychosocial treatment. *The American Psychologist*, *63*, 14-31.

Griffin-Fennell, F. & Williams, M. (2006). Examining the complexities of suicidal behavior in the African American community. *Journal of Black Psychology*, *32*, 303-319.

Grosz, D., Zimmerman, J., & Asnis, G. (1995). Suicidal behavior in adolescents: A review of risk and protective factors. In J. Zimmerman & G. Asnis (Eds.), *Treatment approaches with suicidal adolescents* (pp. 17–43). Oxford, England: John Wiley & Sons.

Harkavy-Friedman, J., & Asnis, G. (1989). Assessment of suicidal behavior: A new instrument. *Psychiatric Annals, 19, 382-387.*

Hovanesian, S., Isakov, I., & Cervellione, K. L. (2009). Defense mechanisms and suicide risk in Major Depression. *Archives of Suicide Research*, *13*, 74-86.

Hvistendahl, M. (2013). In rural Asia, locking up poisons to prevent suicides. *Science*, *341*, 738-739.

Joiner, T. (2005). *Why people die by suicide.* Cambridge, MA: Harvard University Press.

Kaslow, N. J., Sherry, A., Bethea, K., Wyckoff, S., Compton, M. T., Bender Grall, M., et al. (2005). Social risk and protective factors for suicide attempts in low income African American men and women. *Suicide & Life-Threatening Behavior*, *35*, 400-412.

Kyle, J. (2013). Spirituality: Its role as a mediating protective factor in youth at risk for suicide. *Journal of Spirituality in Mental Health*, *15*, 47-67.

Leenaars, A. A., Sayin, A., Candansayar, S., Leenaars, L., Akar, T., & Demirel, B. (2010). Suicide in different cultures: A thematic comparison of suicide notes from Turkey and the United States. *Journal of Cross-Cultural Psychology*, *41*, 253-263.

Lun, V. M. C., & Bond, M. H. (2013). Examining the relation of religion and spirituality to subjective well-being across national cultures. *Psychology of Religion and Spirituality*, *5*, 304-315.

Malone, K., Oquendo, M., Haas, G., Ellis, S., Li, S., & Mann, J. J. (2000). Protective factors against suicidal acts in major depression: Reasons for living. *The American Journal of Psychiatry*, *157*, 1084-1088.

Mattis, J. S. (2000). African American women's definitions of spirituality and religiosity. *Journal of Black Psychology*, *26*, 101-122.

McCubbin, H. I., & Thompson, A. I. (Eds). (1989). *Family assessment inventories for research and practice.* Madison, WI: The University of Wisconsin-Madison.

Molock, S. D., Matlin, S., Barksdale, C., Puri, R., & Lyles, J. (2008). Developing suicide prevention programs for African American youth in African American churches. *Suicide & Life-Threatening Behavior*, *38*, 323-333.

Molock, S. D., Puri, R., Matlin, S., & Barksdale, C. (2006). Relationship between religious coping and suicidal behaviors among African American adolescents. *Journal of Black Psychology*, *32*, 366-389.

Patton, G. C., Coffey, C., Sawyer, S. M., Viner, R. M., Haller, D. M., Bose, K., Vos, T., Ferguson, J., Mathers, & Colin D. (2009). Global patterns of mortality in young people: A systematic analysis of population health data. *Lancet*, *374*, 881-892.

Peña, J. B., Kuhlberg, J. A., Zayas, L. H., Baumann, A. A., Gulbas, L., Hausmann-Stabile, C., & Nolle, A. P. (2011). Familism, family environment and suicide attempts among Latina youth. *Suicide & Life-Threatening Behavior*, *41*, 330-341.

Pew Forum on Religion & Public Life. (2010). *Religion among the Millennials less religiously active than older Americans, but fairly traditional in other ways.* Retrieved from http://pewresearch.org/millennials/

Richardson-Vejlgaard, R., Sher, L., Oquendo, M. A., Lizardi, D., & Stanley, B. (2009). Moral objections to suicide and suicidal ideation among mood disordered Whites, Blacks, and Hispanics. *Journal of Psychiatric Research*, *43*, 360-365.

Saroglou, V. (2011). Believing, bonding, behaving, and belonging: The big four religious dimensions and cultural variation. *Journal of Cross-Cultural Psychology*, *42*, 1320-1340.

Slater, W., Hall, T., & Edwards, K. (2003). Measuring religion and spirituality: Where are we and where are we going? In T. Hall & M. McMinn (Eds.), *Spiritual formation, counseling, and psychotherapy* (pp. 235-260). Hauppauge, NY:

Nova Science Publishers.

Stellrecht, N. E., Gordon, K. H., Orden, K. V., Witte, T. K., Wingate, L. R., Cukrowicz, K. C., Butler, M., Schmidt, N. B., Fitzpatrick, K. K., & Joiner, T. E. (2006). Clinical applications of the interpersonal-psychological theory of attempted and completed suicide. *Journal of Clinical Psychology*, *62,* 211-222.

Wachholtz, A., & Sambamoorthi, U. (2011). National trends in prayer use as a coping mechanism for health concerns: Changes from 2002 to 2007. *Psychology of Religion and Spirituality*, *3*, 67-77.

Wang, M. C., Lightsey, O. R., Pietruszka, T., Uruk, A. C., & Wells, A. G. (2007). Purpose in life and reasons for living as mediators of the relationship between stress, coping, and suicidal behavior. *Journal of Positive Psychology*, *2*, 195-204.

Westefeld, J. S., Badura, A., Kiel, J. T., & Scheel, K. (1996). The College Student Reasons for Living Inventory: Additional psychometric data. *Journal of College Student Development, 37,* 348-350.

Westefeld, J. S., Cardin, D., & Deaton, W. L. (1992). Development of the College Student Reasons for Living Inventory. *Suicide and Life-Threatening Behavior, 22,* 442-452.

Wong, Y., Uhm, S. Y., & Li, P. (2012). Asian Americans' family cohesion and suicide ideation: moderating and mediating effects. *American Journal of Orthopsychiatry*, *82*, 309-318.

World Health Organization. (2002) *The World Health Report: Reducing risks, promoting health life*. Retrieved from http://www.who.int/whr/2002/en/.