

BEHAVIORAL CORRELATES OF A SENSE OF RELIGIOSITY AND PURPOSE
WITHIN A SAMPLE OF URBAN, FIFTH GRADE STUDENTS

by

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ABSTRACT OF THE THESIS

Behavioral Correlates of a Sense of Religiosity and Purpose Within a Sample of Urban,
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Research with adults has shown that religiosity and a sense of purpose are associated with positive mental health. Much less is known about whether these findings translate to children and adolescents. The current study sought to illuminate whether preadolescents' written expressions of religiosity and purpose relate to fewer classroom behavioral problems. Exploratory analyses also compared the relative predictive strength of three dimensions (content, voice and word choice) as well as two forms (peak and modal) of expression of religiosity and purpose. This study's data were collected from 151 fifth grade students and their teachers in a low income, urban school district. Results showed that, after accounting for language arts GPA and gender, stronger expressions of purpose on the content and voice dimensions were related to fewer externalizing problem behaviors. Students who expressed religiosity in their essays were more likely to fall below the median for externalizing problem behaviors than students who did not express religiosity. Suggestions for improving methods for assessing and coding essays are discussed. The relative strength in prediction of the content and voice dimensions warrants consideration for future researchers using traditional narrative content analysis procedures that rely wholly on word count procedures.

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BEHAVIORAL CORRELATES OF A SENSE OF RELIGIOSITY AND PURPOSE
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Religiosity and a sense of purpose are qualities shown to have numerous psychological and even physiological benefits (Koenig & Larson, 2001; Mascaro & Rosen, 2005). This cluster of characteristics involves the ability to transcend life's challenges and to identify with a superordinate cause or entity. Overall, these characteristics have historically been neglected in health-related empirical investigation, although a recent upturn in this trend is apparent (Hill & Pargament, 2003; Mascaro & Rosen, 2005). When religiosity and purpose *have* been included in research, they have most often been studied within adult populations that have experienced a major loss or traumatic life event. This is because the attainment of a sense of religiosity and purpose is presumed to be related to maturity and/or reflection on accumulated life experiences. However, emerging research in developmental theory and positive psychology has challenged these assumptions. Recent findings are beginning to show that adolescents' cognitive capacities may not prevent them from comprehending (as well as benefiting from) such abstract and complex concepts as religiosity and purpose (Koenig, McCullough, & Larson, 2001; Mascaro & Rosen, 2005).

This study extends research showing that adults who have faced a major life stress are more likely to have reflected upon these deeper aspects of life than adults who have not faced such extreme challenges (Park, Cohen, & Herb, 1990). Specifically, behavioral correlates of expressed religiosity and purpose were examined among preadolescents exposed to a disproportionate degree of life challenges. It was hypothesized that preadolescents facing the multiplicity of stresses associated with living

in urban poverty who have cultivated a sense of religiosity and purpose would show more positive behavior than their peers in similar circumstances who have not cultivated these awarenesses.

The study of the psychological benefits of religiosity has been riddled by divergent conceptualizations and measurements of this difficult-to-define construct. Initially beset by challenges with interpreting confusing and conflicting results (Batson & Ventis, 1983; Bergin, 1983; Spilka, Hood, & Gorsuch, 1985), the field has become divided over the various dimensions and functions of religiosity. Splintered between numerous theories and definitions of religiosity, the only consensus among researchers seems to be that there is no consensus (Aging, 1999; Hackney & Sanders, 2003; Hill & Pargament, 2003; John E. Fetzer Institute, 1999; Rew & Wong, 2006).

One major area for debate revolves around describing the relationship between concepts of *religiosity* and *spirituality*. Distinct factions have emerged within varying research groups studying these concepts, with some researchers delineating each as separate but overlapping constructs (George, Larson, Koenig, & McCullough, 2000; King & Boyatzis, 2004; Koenig et al., 2001), and others advocating a complete integration of both concepts into a unified field (Hill & Pargament, 2003; Hill et al., 2000; Pargament, 1999). With no broad agreement among social scientists on the definitions of these concepts (Benson, 2004), religiosity will be defined in this study as the commitment to a formalized, institutionally-defined expression of the sacred, distinct from spirituality which is typically viewed as a non-institutionally-bound search for the sacred. This

“bifurcated” approach is chosen for convenience as it allows for a clear demarcation from the construct of purpose, which will also be studied independently here and described later (Benson, Roehlkepartain, & Rude, 2003; Cotton, Larkin, Hoopes, Cromer, & Rosenthal, 2005).

Similarly up for debate among researchers is the appropriate degree of comprehensiveness of measurements used to tap into the essence of religiosity. Comprehensive, multidimensional models of religiosity and spirituality have attempted to include cognitive, emotional, motivational and behavioral components of religiosity (John E. Fetzer Institute, 1999). Recent review articles have made attempts to compare the findings between studies’ varying conceptualizations of religiosity (Hackney & Sanders, 2003; Rew & Wong, 2006; Wong, Rew, & Slaikeu, 2006). Intriguing differences were found between a meta-analysis conducted using adult samples and a similar systematic review of research with adolescents. Hackney and Sanders’ (2003) meta-analysis compared results from studies that defined religiosity in three different ways: 1) “institutional religion” included behavioral and social aspects of religion such as attendance at religious service, 2) “ideological religion” measured beliefs and attitudes about religion such as fundamentalism, and 3) “personal devotion” was defined by the private, internalized feelings and behaviors related to one’s religion such as attachment to God or colloquial prayer. Among adults, Hackney and Sanders (2003) found that “institutional religion” most weakly (or in some cases negatively) related to measures of psychological adjustment, while Wong, Rew and Slaikeau’s (2006) systematic review using these same criteria for distinguishing between measurements of religiosity found that the opposite was true among adolescents. Wong and colleagues defined mental

health as the absence of “negative” mental health indicators (e.g., worry, depression, and negative mood) and/or the presence of “positive” indicators (e.g., quality of life, self esteem, ego strength). Of the twenty articles reviewed by Wong and colleagues, the majority of the studies conceptualized religiosity in only one of the three ways, leaving eight studies to be used in their multivariate comparisons examining the relative strength of the relationship between each definition of religiosity and mental health among adolescents. Five of the six studies using institutional definitions found a positive relationship, while one in five of studies employing personal devotion or ideological measures found a positive relationship. Wong and colleagues concluded that the social influence of the “institutional” measures of religiosity may be more beneficial for adolescents than adults given the primacy of one’s social realm during adolescence. These conflicting findings reflect the underlying challenge of conceptualizing religiosity. With no clear hegemony among these dimensions, this study will incorporate elements of each in its consideration of religiosity.

One final demarcation that needs to be addressed in the current conceptualization of religiosity relates to the degree of “proximity” to measures of physical and mental health. Pargament posits that “proximal” (or “personal”) measures of religiosity (e.g., closeness to God, religious orientation, religious social support and religious coping strategies) are more relevant to the study of religiosity’s relationship to health variables than “distal” measures of religiosity (e.g., religious service attendance, frequency of prayer and self-rated overt religiousness) (Hill & Pargament, 2003; Pargament, 1997). Early research in the study of religiosity primarily utilizing relatively crude and resultantly “distal” measures of religiosity yielded a confusing, contradictory relationship between religiosity

and mental health (for reviews, see Batson & Ventis, 1983; Bergin, 1983; and Spilka et al., 1985). More recent methodologically rigorous studies and current reviews focusing on more conceptually-related aspects of religiosity such as intrinsic religious orientation (Koenig, George, & Peterson, 1998; Payne, Bergin, Bielema, & Jenkins, 1991) and positive religious coping (Ano & Vasconcelles, 2005; Harrison, Koenig, Hays, Eme-Akwari, & Pargament, 2001) have found a more definitive association between these “proximal” aspects of religiosity and positive mental health. A recent review of the adolescent literature comparing proximal and distal measures of religiosity did not reveal the same strength for proximal measures (Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006). Cotton and colleagues concluded that both proximal and distal measures of adolescent religiosity show mixed results in their relationship to mental health. Considering these recent advances in the conceptualization of religiosity, the current study has incorporated proximal aspects of religiousness into its conceptualization.

A considerable amount of research has examined the linkage between religiousness and a wide array of mental health indicators. As previously mentioned, older studies of religiosity utilized global (often single-item) measures of religious involvement (e.g., religious service attendance, prayer frequency or religious affiliation) (Batson & Ventis, 1983; Bergin, 1983; Spilka et al., 1985). Although positive associations have been often found using these measures, especially the robust negative association between religiousness and substance and alcohol abuse found among adults as well as adolescents (Gorsuch & Butter, 1976; Koenig & Larson, 2001; Koenig et al., 2001), interpretation of such findings is not straightforward given that such reviews

combine results from studies using a wide range of religious indicators, mixing, for example, single-item behavioral measures such as religious denomination, with more comprehensive measures, like religious coping. Global measures of religiosity often lack reliability and confuse the unique functions of religion with other psychosocial functions, such as social support (Hill & Pargament, 2003). While more parsimonious measures of religiosity such as perceived closeness to God and religious orientation enable more clear interpretation of the function and mechanism of religiosity, the following review of the relationship between religiosity and problem behaviors will not be limited to these conceptualizations.

Research with adults revealing a consistent negative relationship between religiosity and internalizing symptoms such as anxiety, depressive symptoms and suicidality (Ano & Vasconcelles, 2005; Harrison et al., 2001) has similarly begun to be demonstrated among adolescents as well (Davis, Kerr, & Kurpius, 2003; Donahue, 1995; Greening & Stoppelbein, 2002; Pearce, Little, & Perez, 2003; Rew, Thomas, Horner, Resnick, & Beuhring, 2001). While studies controlling for possible nonreligious confounds of religiosity (e.g., quality of life, social support, medical diagnosis, and change in functional status by Koenig et al., (1998) and cognitive restructuring, social support and locus of control by Tix & Frazier, (1998, 2005)) have primarily been conducted within adult samples, the unique association observed between religiosity and internalizing behaviors among teenagers may be at least partly attributable to its overlap with social support. Pearce et al.'s study found positive interpersonal religious experience to be most strongly related to fewer depressive symptoms when compared to other standard measures of religiosity—religious attendance, private religious practice or self-

rated religiosity (2003). Nevertheless, at least one study with adolescents comparing religiosity with other non-religious psychosocial buffers found that higher levels of commitment to religious beliefs was the single strongest correlate of low self-perceived suicide risk, even after controlling for attribution style, social support and hopelessness (Greening & Stoppelbein, 2002).

Comparable negative correlations have also been found between religiosity and externalizing health-risking behaviors. Studies using more global measures of religiosity have demonstrated a lowered risk for drug and alcohol abuse, premarital sex, smoking and sexual promiscuity among religious adolescents (Benson, Donahue, & Erickson, 1989; Koenig & Larson, 2001; Wills, Yaeger, & Sandy, 2003). A substantial amount of research has shown various dimensions of religiosity to be protective against teenage drug and alcohol use and abuse (for reviews, see Gorsuch & Butter, 1976 and Koenig & Larson, 2001).

Religious variables have been shown to be related to a lower incidence of other externalizing problems such as violence, delinquency, and crime among adolescents. Johnson, Di Li and McCullough's review of this literature revealed that among the "methodologically rigorous" studies reviewed, religiosity was unanimously related to fewer conduct and delinquency problems (2000). Recent research suggests that this relationship may be moderated by demographic constructs such as socioeconomic status and/or disordered neighborhoods. Among adults, other variables highly correlated with SES and disordered neighborhoods have been found to mediate the relationship of religiosity and well-being. Specifically, adult religiosity seems to have a stronger buffering effect among socially marginalized groups (including those of low income, less

education and ethnic minority) (Ellison & Levin, 1998; Pargament, 2002) and those facing serious life stressors (Park et al., 1990). One adolescent twin study found that the positive effect of religiosity on “emotional distress” was moderated by family income, but not ethnicity (Crosnoe & Elder, 2002).

Several studies have found religiosity to be associated with fewer problem behaviors among disadvantaged youth. Powell (1997) showed that a single-item measure of importance of religion was negatively correlated with violence among inner-city adolescents attending schools with a record of violence. Similarly, Johnson, Jang, Larson and Li (2001) found that attitudinal (e.g., importance of religion) as well as behavioral indicators (e.g., religious service attendance) of religiosity related to lower delinquency among at-risk adolescents; this finding remained significant, albeit less so, after controlling for the nonreligious variables of socialization, social control and socioeconomic status. Another study by Johnson’s research team (2000) found that teenagers with frequent church attendance were less likely to be involved in serious crime, but not minor crime. Again, these findings do not appear to be wholly explainable by nonreligious variables (attachment to family or conventional attitudes). This effect was strongest among youth from neighborhoods characterized by higher crime and violence than less “disordered” neighborhoods.

An interesting study by Pearce, Jones, Schwab-Stone, and Ruchkin (2003) utilized a multidimensional measure of religiosity to find protective effects for religiousness on conduct problems among economically disadvantaged teenagers. Overall, Pearce et al. found four dimensions of religiousness protective against conduct problems: 1) religious attendance, 2) private religious practice (e.g., prayer outside place

of worship or watching/listening to religious television/radio), 3) “daily spiritual experience beliefs” (e.g., strength of beliefs about God/transcendence), and 4) self-reported religiousness. However, only private religious practice was significantly associated with a decrease in problem behaviors over a one-year period, even when controlling for the level parental involvement in the adolescents' lives. Intriguingly, separate analyses for youth exposed to higher levels of violence, found that stronger “daily spiritual experience beliefs” was related to more conduct problems over time, while the opposite trend was observed for the other measures of religiosity. The authors conclude that, “it may be that youth who believe that they are in a relationship with God who loves them and provides them with strength and comfort become disillusioned or discouraged after witnessing high levels of community violence... their violent environment may lead them to act out or rebel” (*p.* 1692).

One may wonder whether this unexpected finding may have to do with a possible confounding of positive and negative religious coping strategies included in Pearce et al.'s measure of “daily spiritual experience beliefs.” Perhaps their measure may be tapping more into negative religious coping strategies, such as demonizing the perpetrator, than positive religious coping styles. While this possible interpretation cannot be ruled out entirely, it is probably unlikely as Pearce et al.'s description of their measure appears to incorporate more positive than negative religious coping terminology. Daily spiritual experience beliefs consisted of seven items, measuring students' beliefs about and their interaction with the transcendent, as well as the impact of religion or spirituality on their daily life (e.g., I find strength and comfort in my religion, I feel close to God).

Taking these findings into account, the current study has attempted to minimize potential confounding of our measure of religiosity with negative forms of religious coping.

The current study's conceptualization of religiosity as an open-ended expression of religiousness through content analysis of essays has been examined in a previous study of religiosity's relationship to self-concept and emotional intelligence (Van Dyke & Elias, 2006). Van Dyke and Elias found that the expression of religious content was related to poorer emotional intelligence skills among fifth graders in a low income urban community. Van Dyke and Elias's measure of religiosity was revised for the current study to account for expressions of negative religious coping; the revised measure is described in detail in the Methods section.

A number of studies have found that adult and adolescent females report higher levels of religious beliefs and behaviors (Ellison & Levin, 1998; Gallup & Bezilla, 1992; Koenig et al., 1998; Pargament, 2002). A recent review of adolescent religiosity found that of the ten studies reviewed that examined gender differences of religiosity, eight found that females were higher in religiosity (as measured by a range of behavioral, cognitive and motivational dimensions), while the remaining two studies found no significant gender differences (Rew & Wong, 2006). Of further interest is how the observed gender discrepancy relates to adolescents' mental health. While one might hypothesize that the higher levels of religious involvement among females would be related to more positive mental health among females relative to males (Pearce, Little et al., 2003), the opposite interaction effect shows more support—at least among low income, at-risk adolescents. Another recent review found that of seven studies that had

examined gender as a moderator of religiosity's relationship to adolescent mental health, four found that the relationship between religiosity and mental health was stronger for males than females, one found the opposite and two reported no gender interaction (Wong et al., 2006). Both of the studies (Cotton et al., 2005; Pearce, Little et al., 2003) that failed to find a gender interaction examined samples of relatively low risk. Specifically, Pearce et al. (2003) found no evidence of a gender effect of religiosity on depression among a predominantly middle-class sample (N=134), while Cotton et al. (2005) did not find support for a differential gender effect on health risk behaviors among a sample (N=744) that was almost entirely Caucasian (95%) and well educated (60% of mothers had completed college). One compelling study lending support to the gender by SES interaction hypothesis is Davis et al.'s (2003) study of a sample of predominantly (65%) minority students who were considered at risk for a variety of reasons, including low SES and lack of parental support. Davis et al. found that among males, anxiety was negatively correlated with intrinsic religiosity, while no relationship was found among females. This was particularly interesting because these significant results were found despite a relatively small sample size (N=45), as compared to the much larger samples of the middle-class and Caucasian adolescents which did not show any evidence for a gender effect.

It seems likely that gender may be an important demographic to consider when examining the relationship of religiosity among at-risk adolescents. While females may be more likely to endorse stronger levels of religiosity, males may seem to benefit more when they do become religiously involved. Impoverished males are at especially high risk for conduct problems and conduct problems have been shown to be at least partially

mediated by association with delinquent peers. Thus, it seems that at-risk adolescent boys may be especially helped by an association with positive role models and peers that would likely arise from an involvement in a religious organization.

As with religiosity, the conceptualizations of purpose have changed both across time and among researchers. Viktor Frankl is often credited as the forefather of psychology's interest in life purpose. A Nazi prison camp survivor, he firmly believed, "it did not really matter what we expected from life, but rather what life expected from us" (1959, *p.* 98). Frankl used the concepts of meaning and purpose interchangeably in his writings, conceiving of meaning and purpose as a unique, dynamic, ever-changing motivation that "differs from man to man, from day to day and from hour to hour" (*p.* 113) and drives individuals to seek his or her "own specific vocation or mission in life" (*p.* 113).

Later researchers who began to operationalize this concept of meaning or purpose for empirical study began to discriminate between the two concepts, albeit in many divergent ways. Baumeister's model of personal meaning is often cited as a comprehensive approach (1991). Baumeister proposes four needs for meaning—purpose, efficacy, value and self-worth (1991). Purpose, as defined by Baumeister, includes the need to set and meet objective goals for oneself and the drive to experience a sense of fulfillment. Reker and Wong have also posited a model for the construction of meaning (1988). Their concept of meaning includes three interrelated components. The primary component is cognitive and includes beliefs and schemas. The latter two are born out of

the first and include emotional and motivational factors. The emotional factors are the feelings of satisfaction and fulfillment brought about by establishing a set of beliefs (cognitive component) and/or by the striving for a goal or achievement (motivational component). Similarly, the motivational factors are conceived of through the cognitive or motivational components, or both.

Both Baumeister's and Reker and Wong's theoretical models discuss meaning as broader, more inclusive concept than purpose. Both tend to view purpose as the motivational aspect that interacts with other components to create a comprehensive sense of meaning in life. Thus, purpose will be defined here as including a sense of internal drive to seek higher-level, far-reaching goals in life.

Damon, Menon and Cotton Bronk's (2003) more recent, parsimonious definition of purpose follows from this interpretation and was incorporated into the present study's definition of purpose as "a stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self" (*p.* 121). Damon et al. go on to make an important distinction between noble and ignoble purposes, noting the divergence in their desire for promotion or destruction of humanity. A purpose which is marked by moral commitment, as defined by Colby and Damon (1992) was therefore used in the current research.

As with the definitional challenges related to religiosity, similar confusion arises in the defining of purpose due to its overlap with the constructs of spirituality and religiosity. The concept of spirituality emphasizes transcendence and a sense of connection to nature/universe as well as oneself, while religiosity is the level of commitment to an institutionalized religious tradition (Van Dyke & Elias, In press). Both

religiosity and spirituality *can* lead to a sense of purpose, but they do not constitute the *only* routes to a sense of purpose. Purpose is defined in the present study as being broader in scope than either spirituality or religiosity, with its uniqueness stemming from the focus on the extent to which a person recognizes that their life has meaning. This recognition is reflected in a future-orientation in which one becomes inspired by the virtues of a role model, strives for a goal, discovers his/her “calling” after a significant life event (Van Dyke & Elias, 2006), *or* defines their place in life by a unifying connection with all things (spirituality) or an attachment to a particular religious worldview (religiosity). As Fry defined the search for meaning among adolescents, “personal meaning... must balance not only present satisfactions and hopes for the future, but must also balance the commitments to the self versus commitments to a somewhat larger sphere of influence (i.e. the family or community)” (2000 , *p.* 106). Thus, the operational definition used here correspondingly emphasizes a sense of purpose as being 1) future or goal-oriented and 2) a moral attempt to connect to something larger than oneself.

As with the religiosity literature review, the following review is not limited to the aforementioned operational definition as doing so would severely limit the scope of the findings. Unfortunately, the relationship of a sense of purpose to mental health have been relatively understudied in comparison to religiosity, so less appears to be known about this relationship and its mediators.

Among adults, numerous studies have found a linkage between personal meaning and psychological well-being (Crumbaugh & Maholick, 1969; Debats, 1996; French &

Joseph, 1999; Reker, Peacock, & Wong, 1987; Reker & Wong, 1988; Wong, 1989). Conversely, a lack of meaning has been linked to numerous negative outcomes such as drug involvement (Coleman, Kaplan, & Downing, 1986; Noblejas de la Flor, 1997), alcoholism (Schlesinger, Susman, & Koenigsberg, 1990) and anger (Sappington & Kelly, 1995).

Several researchers have hypothesized that meaning acts as a buffer against stressful life events (Lazarus & DeLongis, 1983; Newcomb & Harlow, 1986). Partial support for this theory was found by Newcomb and Harlow; their results showed that among older adolescents, purpose mediated the relationship between major, uncontrollable stressful life events and substance use (1986). However, Zika and Chamberlain found that purpose did not moderate the relationship between daily stressors (hassles) and subjective well-being among young adults (1987). In fact, their data showed that purpose improved well-being independently of the level of daily stressors. While further research on this topic is clearly warranted, it seems that purpose may be necessary to ward off health-risking behavior after a major life event but that a sense of purpose is less critical in the face of more chronic, “low-level” stress.

Purpose has also been found to be negatively associated with depressive symptoms and negative affect (Harlow, Newcomb, & Bentler, 1986; Zika & Chamberlain, 1992). More recently, Mascaro and Rosen (2005) found that college students’ sense of meaning predicted levels of hope and depressive symptoms two months later beyond variance explained by baseline levels of hope, depression, social desirability, and the Big Five personality factors. Heisel and Flett found that meaninglessness predicted suicide ideation, beyond the variance explained by depressive

symptoms and life satisfaction (2004), while Harlow, Newcomb and Bentler found that purpose in life mediated the relationship between depression and suicidal ideation (1986).

Two studies were found that examined the association between purpose and substance use and abuse among younger adolescent populations (middle and high school students) (Minehan, Newcomb, & Galiag, 2000; Sayles, 1995), with both finding a significant negative association. These results were consistent across ethnicities (African American, Hispanic and Caucasian) and gender.

Overall, the literature seems to reveal a negative association between purpose and internalizing symptoms, at least among adults. With regard to externalizing behaviors, a stronger sense of purpose seems to be a protective effect against substance abuse, which has been replicated for adolescents. Yet, much less seems to be known about how an adolescents' sense of purpose relates to other dimensions of externalizing behavior such as aggression, delinquency and crime. While researchers interested in youth's sense of purpose have theorized that purposelessness can lead to social problems such as antisocial behavior (Damon, 1995), this relationship has yet to be documented in the literature.

Given that researchers have been unable to settle on a consensual working definition for either the constructs of religiosity or purpose, measuring such ill-defined variables is a continual challenge. The previously discussed complications of measuring religiosity due to varying emphases on different domains, dimensions, and functions of religiosity is similarly observed in the measurement of purpose. Reker and Chamberlain (2000) concluded that the multiple components, varying sources, and breadth and depth

of meaning attached to the construct of purpose pose significant challenges to its measurement. Given the complexity of these constructs, it seems unavoidable that in using standardized quantitative measures to tap into these constructs, one inherently imposes limits on their conceptualization. One example of this can be seen in the harsh critique of the Purpose in Life Test (Crumbaugh, 1968), the most commonly used quantitative measure of purpose, as essentially being a measure of depression (Dyck, 1987). One way of addressing the definitional challenges found in the use of quantitative measures of religiosity and purpose is to use more open-ended, qualitative measures that allow for an individualized articulation of one's personal definition of religiosity or purpose.

The call for the application of more qualitative measures within the study of religiosity has been voiced by several scholars (Cotton et al., 2006; Hill & Pargament, 2003). Hill and Pargament describe a need for alternatives to standard paper and pencil measures of religiosity, especially within younger samples, who many struggle with comprehending the concepts and language used in the scales. Standardized measures of religiosity and spirituality have been shown to be biased by social desirability (Batson, Schoenrade, & Ventis, 1993); thus, more unobtrusive measures of these constructs are clearly warranted. One such measure proposed by Hill is the use of implicit methods that analyze response time as a means of tapping into the salience of one's religious beliefs (1994). Within younger populations, open-ended measures such as analyses of children's drawings of God and themselves have also been employed (Pendleton, Cavilli, Pargament, & Nasr, 2002).

In studying the presence and impact of purpose and religiosity among children and adolescents, one cannot neglect the parallels that can be drawn to the process of identity development. Consolidation of life experiences with one's future goals and sense of self within the larger world are a part of developing an identity. Many researchers have studied this process by examining narratives people have written about their lives and experiences. Positioning oneself within the larger context of the time and space is part of Roehlkepartain, Benson, King and Wagener's conceptualization of the development of spirituality in children and adolescents, as described below (2005, *p.* 9):

One way to think about this core developmental dimension is to focus on the human capacity (and inclination) to create a narrative about who one is in the context of space and time. Persons are active participants in creating this narrative, working with "source" material that comes from and is handed down by family and social groups, but superimposing on this material a great deal that emerges from personal experience and personal history.

A narrative framework for studying the lives of individuals has also been utilized extensively by McAdams in his theory of "selfing" as the narration of one's experience to create a unified identity (1996). In an attempt to understand one's life story across the broad contexts and changes inherent in maturation, McAdams posits that the process of consolidating life experiences into a coherent story must begin early in life. He theorizes that life experiences and the interpretation of those experiences during childhood and adolescent lay the groundwork for the later formulation of an enduring sense of identity

(McAdams, 2006). Writing about important personal and stressful life experiences has also been shown to lead to positive mental health benefits (Pennebaker, 1997; Pennebaker & Seagal, 1999). Pennebaker and colleagues have proposed that deriving meaning from stressful events is a critical element to successful adjustment. One can conclude from these studies that narrative writing facilitates the establishment of identity and perception of meaning through the interpretation of one's life events. This meaning-making process of writing forms the impetus for the current study's analysis of essays to measure preadolescents' sense of religiosity and meaning, offering another variation in the development of unobtrusive measures of religiosity and purpose.

James Pennebaker has pioneered a new direction in the study of narrative writing by delving into quantitative research that has uncovered the characteristics of personal writing samples that lead to positive health benefits among adults. With a focus on word choice, Pennebaker has found that a high number of positive emotion words, a moderate number of negative emotion words, an increased usage of causal words (e.g., because, cause, reason) and insight words (e.g., realize, know, understand) can lead to positive psychological health outcomes (Pennebaker & Seagal, 1999). Pennebaker's research is facilitated by a sophisticated text-analysis software program that counts the usage of words within specific categories (Pennebaker, Francis, & Booth, 2001). While this technique has certainly yielded innovative findings in the relationship between linguistic and psychological markers, this method of studying text is unable to tap the content of the writings. Presumably, analysis of other dimensions of the writing such as the theme(s) and voice used by the writer could also provide insight into the psychological state of the writer.

The current study extends the analysis of expressive writing as set forth by Pennebaker by examining linguistic markers of a younger sample of writers. In addition to examining the dimension of word choice, this study explores several additional dimensions of expressive writing that have not been previously studied. Specifically, I examine the content and voice *dimensions* of writing. Additionally, I compare how “peak” and “modal” *forms* of expressions relate to one another and to psychological health. Peak expressions are defined as the single strongest expression of a theme within an essay, while the modal expression is the overall, “take away” message of the writing. By beginning to examine and compare the numerous components of personal expression, this study sheds light on the aspects of writing which are most predictive of positive mental health.

The existing literature shows that children and adolescents who possess a sense of religiosity and purpose exhibit fewer problem behaviors (Davis et al., 2003; Donahue, 1995; Greening & Stoppelbein, 2002; Pearce, Little et al., 2003; Rew et al., 2001). Religiosity appears to be especially helpful among disenfranchised groups such as those living in poverty and/or of ethnic minority status (Ellison & Levin, 1998; Pargament, 2002) and a sense of purpose has been shown to be particularly benefit psychological health among those who have experienced stressful life events (Newcomb & Harlow, 1986). This study extends previous research within a sample of low-income, urban minority preadolescents’ who have presumably experienced disproportionate levels of stressful events.

Late childhood and adolescence is defined by youth's struggle with forming a cohesive identity; attending to these specific characteristics of younger populations, this study has derived a unique measure of preadolescents' salience of religiosity and purpose within essays written about the personal values by which they are attempting to live their lives. The essay codings yield a rich picture of how religiosity and purpose contribute to positive classroom behavior among disadvantaged preadolescents.

Stronger expressions of religiosity and purpose were hypothesized to be related to fewer internalizing and externalizing symptoms. Gender was also hypothesized to moderate the relationship between religiosity and externalizing problem behaviors such that boys are expected to exhibit a stronger negative relationship of religiosity to externalizing problems relative to girls. Finally, exploratory analyses were conducted to compare the relative impact of three dimensions (content, voice and word choice) as well as two forms (peak and modal) of expression of religiosity and purpose on children's problem behaviors.

The data for this study were collected in the spring of 2001 as part of the evaluation of a comprehensive character education (CE) / social-emotional learning (SEL) program within a low-income, urban, public school district. A primary component of the CE/SEL program being evaluated involved the implementation of the Laws of Life essay contest (described below) during the fifth grade. This study examined Laws of Life essays written by fifth grade students from four elementary schools in a central New

Jersey school district designated as in need of special financial assistance. Only those participants who met writing sample submission criteria and for whom teachers reported perceptions of their classroom behavior were included. The sample consisted of 151 African-American (79%) or Latino (21%) youth aged 9 to 12 ($M=10.34$, $SD=0.73$), 62% of which were female. Approximately 65% of the students receive free or subsidized lunch, however, many more likely qualified for this assistance.

Participants' parents were informed about the purpose and voluntary nature of the study by letters sent home in English and Spanish. Passive consent procedures were implemented in which parents were given the opportunity to withdraw consent by submitting a mail-in form or contacting the district by telephone. This procedure was used because the assessments were part of an evaluation of district-mandated educational programs and it was essential to get a broad sampling of recipients to appropriately judge effectiveness. No participants chose to withdraw from the study.

Teacher Survey Administration. Reports of students' problem behaviors were obtained by surveys administered to classroom teachers. Teachers completed the ratings on their own time, and were monetarily compensated for their time.

Laws of Life Essay Contest. The Laws of Life essay contest, created by philanthropist Sir John Templeton (John Templeton Foundation, 2006), was a component of the CE/SEL program in the school district. In their English classes, students were prepared for the contest through the assignment of brief writing prompts designed to orient students toward discovering their own law of life. The prompts invited students to think about a role model, life experience, event, and/or piece of literature or art that helped shape their

perspective on life. Teachers provided feedback to students' responses to the prompts as well as multiple drafts of the essay over the course of a semester. The preparatory process also encouraged group and family discussion of students' laws of life. Participants submitted their final essays to contest judges, individuals within the community who evaluated the writings using rubrics to score for content, voice and word choice. The rubrics measure uniqueness, effort and sincerity, as well as grammar, fluency, and organization. Essay writers and their teachers were honored at an awards banquet, at which winners received prizes donated by the community. English teachers submitted essays that met minimum criteria for coherency to the research project for further analysis of the program evaluation.

Demographic Information. Information regarding student's age, gender, and ethnicity, and socio-economic status were collected from district records.

Expression of Religiosity and Purpose. Measurement of both predictor variables was accomplished through the use of a coding manual developed from a previous study to determine the presence and intensity of these concepts within student essays (Van Dyke & Elias, 2006). Operational definitions as defined earlier in this research and used in the aforementioned study were used to derive codings for each predictor variable. Modeled after the scoring rubrics used to judge essay contest winners, the manual similarly measured each construct along three construct-specific dimensions: content, voice, and word choice (see Appendix 1). The content dimension evaluated the explicit and implicit religious/purposeful messages found in the essays. The voice dimension evaluated the degree of sincerity and genuineness conveyed about religiosity or purpose. The word

choice dimension measured usage of specific construct-related words. Within each construct (religiosity and purpose) and dimension (content, voice and word choice), peak (“optimal”) and modal (“average”) scores were also created. The peak score represented the degree of religiosity and purpose expressed within the part of the essay with the strongest conveyance of each construct; for example, if religiosity or purpose was not a major theme of the essay but mentioned briefly in one section of the essay or within the context of another story, the peak score focused on the content, voice and word choice used in that subsection of the essay. The modal score captured the overall, combined level of the content, voice, and word choice presented in the essay, and represented the degree to which the construct was a major, consistent theme within the essay.

All scores were evaluated on a scale ranging from 1 to 4. High religiosity content scores represented an expression of an explicit, positive and intrinsic religious orientation; infrequent references to negative forms of religious coping (e.g., demonizing the perpetrator or viewing God as a punisher) were flagged to examine separately. High purpose content scores represented an expression of an explicit, intrinsically-motivated sense of purpose which connected to something larger than the self (see Appendix A). Low scores on religiosity and purpose content revealed no mention of religiosity or purpose within the essay. High scores on the voice dimension of religiosity and purpose represented a sincere and genuine expression of religiosity and purpose, respectively. Low scores on the voice dimension typically represented no expression of religiosity or purpose; rare instances of insincere expressions of religiosity or purpose were flagged for separate analysis. High scores of the word choice dimensions of religiosity and purpose signified a proper understanding and usage of specific words related to religiosity (e.g.,

God, prayer, church, etc.) and purpose (e.g., calling, goal, aspiration), while low scores represented the absence of these words. Four example essays depicting a high and a low essay for both religiosity and purpose can be found in Appendix B.

The manual was developed through a process whereby the manual creators independently coded two hundred essays and compared scores to inform the development and revision of examples, criteria for codes, and coding guidelines included in the manual. Two undergraduate coders were then trained on the use of the manual and coded the majority of the essays used in the current dataset. Interrater reliabilities for religiosity subscales ranged from percentage agreements of 85 to 90% and Cohen's kappas ranged from .57 to .70 (Table 1). For purpose, percentage agreement ranged from 48% to 76% and kappa's ranged from .27 to .54 (Table 2). Where the new coders had discrepancies of two or more points on the scale, a master coder determined the proper score.

Internalizing and Externalizing Problem Behaviors. The *Social Skills Rating Scale* [SSRS-T] was completed by teachers to assess students' problem behaviors. The SSRS-T is a version of the SSRS that includes only the primary items loading most highly on each subscale. It consists of three scales: social skills, problem behaviors, and academic competence. Only the problem behaviors scale will be discussed here. The problem behaviors score is generated by summing the answers of the relevant items in which teachers rate each student's behavior on a three-point frequency scale (never, sometimes, very often). The problem behaviors scale produces three subscales using 4 items per subscale: Externalizing problems (such as aggressive acts and poor temper control, and arguing), Internalizing problems (such as anxiety, sadness, loneliness, and low self esteem), and Hyperactivity (such as excessive movement and impulsive acts). Gresham

and Elliott (1990) report coefficient for the SSRS – T ranging from .78 to .95, with the Problem Behaviors subscale at .88. Test-retest reliability for the SSRS – T was found to be adequate at $r = .84$ for the Problem Behaviors scale.

Preliminary analyses examined descriptive statistics, intercorrelations, and frequency distributions. Descriptive statistics and mean comparisons of the dependent variables are reported, along with comparisons with the larger population of students for whom essays were not available. Correlational analyses measuring multicollinearity as well as testing for demographic confounds are then reported, as well as frequency distributions assessing the skewedness of the predictor variables.

The main analyses investigate the relationship between expressions of purpose and religiosity and teacher-rated problem behaviors by linear regression and chi-square tests. Exploratory analyses examining the relative predictive abilities of the various subscales of religiosity and purpose were also conducted.

Means and standard deviations. The means and standard deviations for study variables are reported in Table 2 and reveal that teachers perceived students to exhibit below average levels of both internalizing ($M=2.22$, $SD=2.92$) and externalizing problem behaviors ($M=2.63$, $SD=3.68$). All religiosity subscale means are very low, averaging around 1.50, conveying that expression of religiosity was rather infrequent. Purpose subscale means were substantially higher, indicating that students were more likely to express purpose than religiosity in their essays.

Mean Comparisons. A series of independent samples t-tests were conducted to determine if the study variables were significantly different by gender, ethnicity or SES. Table 3 reveals the results by gender, showing that religiosity is significantly higher among females. Table 4 conveys the summaries by ethnicity, revealing that African American students were more likely to be rated as exhibiting more problem behaviors than Hispanic students. No significant differences were found for socioeconomic status, presented in Table 5.

Another set of independent samples t-tests were conducted comparing students whose essays were submitted for the Laws of Life contest (and used in the primary analyses of this study) to students in the district whose essays were not submitted for the contest. Table 6 summarizes the results which show that females were more likely to submit an essay than males. No significant differences were found between the essay submitters and non-submitters in their ethnicity, socioeconomic status and language arts GPA.

Friedman Rank Order Test. To examine whether there were differences between teachers on their students' likelihood of expressing religiosity and purpose, a Friedman's Rank Order Test was conducted. Using rankings of each teacher's students' mean ratings for religiosity and purpose content and word choice, significant differences were found between teachers $\chi^2(21, N=4)=35.21, p<.05$. Removing the two outliers within the dataset (teachers with the highest and lowest ranks), the differences are reduced to a non-significant level $\chi^2(20, N=4)=29.15, p=.09$.

Frequency Distributions. Before further analyses were conducted, frequency distributions of predictor variables were examined. The religiosity variables' distributions are

presented in Table 7. Overall, approximately 75% of essays did not include any mention of religiosity, revealing a significant positive skew (skewness=1.97, kurtosis=2.58). A log transformation was conducted, resulting in a slightly lessened but still significantly skewed data distribution (skewness=1.67, kurtosis=1.17). To account for the highly skewed nature of these data, non-parametric analyses will be used for the religiosity variables.

The purpose frequency distributions show a much more even distribution of codings across the four levels of expression for all subcategories of purpose expression (Table 8). Examination of skewedness analyses did not reveal a significant skew within these data.

Pearson's product moment correlation analyses were conducted to examine the degree of multicollinearity among the predictor variables of religiosity and purpose (Table 9). Examination of the intercorrelation among the subscales revealed that the word choice dimension appears to be somewhat distinct from the voice and content dimensions. Religiosity content and voice were very highly intercorrelated with r 's between .89 to .99, while word choice was slightly less strongly correlated with content and voice with r 's between .78 to .92. Similarly, purpose content and voice intercorrelated with r 's between .83 to .91, while word choice was correlated with content and voice with r 's between .64 to .72. Although all intercorrelations are highly significant ($p < .001$), content and voice will be collapsed to create a composite score and word choice will be analyzed as a separate dimension on all subsequent analyses. Although there is an acknowledged degree of multicollinearity between the content-voice and word choice categories, the

categories are conceptually distinct and allow for a comparison between previous research that emphasizes word choice (i.e., Pennebaker, 2001) and an alternative method for content analysis.

Pearson's product moment correlation analyses were conducted to examine the relationship between gender, ethnicity, socioeconomic status and language arts GPA and the independent and dependent variables. Overall correlations are displayed in Table 10, while Tables 11 and 12 display correlation matrices for girls and boys separately.

In accord with previous research, internalizing and externalizing problem behaviors were highly correlated ($r=.49, p<.001$); this finding remained significant for both boys and girls separately. Similarly documented by previous research, externalizing problem behaviors were significantly correlated with gender ($r=.17, p<.05$), revealing that boys were more likely to be perceived by their teachers as having more externalizing problem behaviors than girls. Language arts GPA was correlated with SES ($r=-.26, p<.01$) overall, but when examining the correlations separately by gender, only girls' SES was related to language arts GPA ($r=-.35, p<.01$). Language arts GPA was also correlated with externalizing problem behaviors overall ($r=-.33, p<.001$) and among boys ($r=-.45, p<.01$), but not among girls. Ethnicity was correlated with externalizing problem behaviors overall ($r=.17, p<.05$), with Hispanic students being less likely to be perceived by their teachers as exhibiting externalizing problem behaviors compared to their African American counterparts. The ethnicity correlation disappeared when the analyses were conducted separately by gender.

Correlations with the predictor variables revealed a few significant correlations. Religiosity peak scores were significantly correlated with gender (content/voice: $r=-.21$, $p<.05$; word choice: $r=-.18$, $p<.05$), revealing that girls were more likely to have expressed religiosity in their essays than boys this finding has been demonstrated by previous research as well. Purpose was negatively correlated with externalizing problem behaviors overall ($r=-.20$, $p<.05$) and among boys ($r=-.28$, $p<.05$), but not among girls; the negative correlation reveals that stronger expressions of purpose are related to fewer externalizing problem behaviors, at least among boys.

Based on these results, subsequent analyses will control for language arts GPA, ethnicity and gender to reduce the effects of these potential confounding variables.

A series of linear regressions was conducted to test the hypothesis that stronger levels of purpose would be related to fewer teacher-reported problem behaviors.

Because ethnicity was found to be significantly correlated with externalizing problem behaviors, initial analyses included ethnicity within the first block of the regression (with gender and language arts GPA) to test whether ethnicity contributed unique variance to the prediction of problem behaviors. All analyses found that neither ethnicity nor the interaction of ethnicity with predictor variables added unique variance to the final model; therefore, ethnicity was omitted from the final analyses presented below.

To examine the relationship between purpose and problem behaviors, linear regressions were performed with Language Arts GPA and gender entered into the first block, and both the purpose content-voice composite and purpose word choice variable in the second block. The analyses were conducted separately for both modal and peak

scores and each was performed for the prediction of both internalizing and externalizing problem behaviors.

For internalizing problem behaviors, neither the peak nor the modal purpose regression analyses yielded a significant model. The results showed that neither gender nor language arts GPA significantly predicted internalizing problem behaviors.

For externalizing problem behaviors, both the peak and modal purpose voice-content composite measure accounted for a significant amount of the variance over and above gender and language arts GPA, while the word choice variables did not significantly improve either of the prediction models. Tables 13 and 14 summarize these results which reveal that stronger expressions of purpose were related to fewer externalizing problem behaviors. The final modal purpose prediction model for externalizing problem behaviors accounts for 16% of the variance ($F(4, 93) = 4.32, p < .01$). The final peak purpose prediction model for externalizing problem behaviors accounts for 15% of the variance ($F(4, 93) = 4.22, p < .01$).

Regression analyses were not performed with the religiosity predictor variables because of the strong positive skew present within these data. Nonparametric analyses were conducted in lieu of the regression analyses.

The relationship between expression of religiosity and problem behaviors was examined through a series of chi square analyses. The internalizing and externalizing problem behaviors data were divided into high and low categories based upon a median split. Religiosity data were also split into categories based upon whether or not religiosity

was mentioned in the essay. Table 15 summarizes the frequency distributions among these high-low groups used in the chi square analyses.

Because the large majority of students (75%) reported no religiosity, interpreting the relationship of religiosity and problem behaviors through the 2 X 2 chi square analysis would be challenging. Therefore, individual 2 X 1 chi-square analyses were conducted separately for the high religiosity and the low religiosity groups. Frequency distributions for the high and low internalizing groups were found to be comparable both among the high religiosity group and among the low religiosity group. For externalizing problem behaviors, the low religiosity group showed expected distributions between the high and low externalizers, but the high religiosity group showed a marginally greater proportion of low externalizers (N=24) than high externalizers (N=13), $\chi^2(1, N=37)=3.27$, $p=.07$. Analyzing separately by gender, girls maintained the marginal effect within high religiosity girls with a marginally lower than expected proportion of higher externalizers (N=10) than low externalizers (N=20), $\chi^2(1, N=30)=3.33$, $p=.07$. No effect was found among high religiosity boys (N=7).

Exploratory analyses were conducted to determine which dimension(s) of religiosity and purpose best predicted children's problem behaviors. Backwards regression analyses were conducted predicting internalizing and externalizing problem behaviors from categories of purpose and religiosity. Analyses were conducted to determine the best predictors among the purpose and religiosity variables separately, as well as combined to determine the degree of overlap between the purpose and religiosity variables. Because of the high degree of intercorrelation between peak and modal scores,

these analyses were conducted separately. As in the main regression analyses, content and voice dimensions were collapsed to reduce multicollinearity. Gender, ethnicity and language arts GPA were also entered simultaneously into all models.

Predicting internalizing problem behaviors, none of the variables entered for the purpose nor for the religiosity models were significant. The final model for both analyses did not include any of the variables entered.

Predicting externalizing problem behaviors, a significant model was found with both purpose peak ($F(3, 94) = 6.50, p < .0001$) and purpose modal variables ($F(2, 95) = 8.57, p < .0001$). For the purpose peak model, ethnicity ($B = -.17, t = -1.73, p = .09$), language arts GPA ($B = -.27, t = -2.80, p = .006$), and purpose peak content-voice ($B = -.22, t = -2.31, p = .02$), were retained in the final model. The final purpose modal model retained language arts GPA ($B = -.30, t = -3.20, p = .002$), and purpose modal content-voice ($B = -.22, t = -2.27, p = .03$). For the purpose peak model, Hispanic ethnicity was associated with fewer externalizing problem behaviors. For both peak and modal purpose, higher language arts GPA and stronger expressions of purpose content-voice were related to fewer externalizing problem behaviors. Tables 17 and 18 include the complete backward regression for each of the aforementioned models.

None of the backwards regression models including religiosity variables as predictors found the religiosity variables to be significant. Predicting externalizing problem behaviors from both religiosity and purpose variables yielded final models identical to the regressions which included only purpose variables. Tables 18 and 19 show the full backward regression analyses for the peak and modal analyses that included both the religiosity and purpose variables.

The primary objective of this study was to investigate whether preadolescents who possess a sense of religiosity and purpose also exhibit fewer problem behaviors in the classroom. Additionally, this study sought to uncover which dimensions (content, voice or word choice) of religiosity and purpose expression are most predictive of problem behaviors. Neither expressions of purpose nor religiosity were found to be related to teacher-rated internalizing problem behaviors. After accounting for language arts GPA and gender, stronger expressions of purpose on the content and voice dimensions were related to fewer externalizing problem behaviors. Students who expressed religiosity in their essays were marginally more likely to fall below the median for externalizing problem behaviors than students who did not express religiosity in their essays. Exploratory analyses suggest that the content and voice dimensions of purpose are most predictive of externalizing problem behaviors.

Given the unobtrusive methodology used to examine religiosity, it is not surprising that religiosity was rarely expressed within the essays, with only 25% of the students in the sample mentioning religiosity of any form. One can assume that religiosity was not likely a topic explicitly elicited for discussion by teachers during the brainstorming phase of the Laws of Life contest, given the separation of church and state mandate present in public schools. Contrasted with the more neutral topic of purpose, which was mentioned in 75% of essays, it is more likely that teachers might focus on discussing purpose than religiosity during the essay contest implementation.

Given the limited pool of students available for studying religiosity within the current dataset, statistical power was severely limited in all analyses conducted with religiosity. While it may be that the expression of religiosity bears little relationship with

problem behaviors within preadolescents, the diminished sample of students under investigation limits the degree to which this hypothesis could be adequately tested in the current study. Future studies should use a larger sample size to ensure a greater subsample of students who express religiosity within their essays. Also, more direct methods for assessing religiosity should be explored, such as the inclusion of specific prompts for students to reflect upon religiosity during the Laws of Life preparation.

Preliminary analyses showed that the purpose and religiosity essay codings for students of two teachers were significantly outside the expected range for the given dataset. It is impossible to know whether these two teachers may have biased their students in some way to have produced essays so much above and below what would be expected in comparison to other teachers, or whether the scores of their students' essays reflected a genuine difference among students in their classes. Re-analyzing the main analyses excluding the students of the two outlying teachers does indeed change the significance levels of the findings but does not change the pattern of relationships. This makes sense because whatever bias might have influenced purpose and religiosity scores would be unlikely to also have a correlated impact on externalizing behaviors, the primary dependent variable for which findings were obtained.

Without more information about the circumstances of the essay implementation and the personal characteristics of the teachers in the current dataset, one cannot readily deduce the reasons for the wide variations in their students' codings. If future studies replicate these findings showing that expression of purpose and religiosity are in fact related to fewer classroom behavior problems, then understanding how the teacher in this dataset was able to greatly increase the presence of these themes in his/her students

essays would be important to know. Examining the relative influence different teachers have over the degree that these themes are expressed by their students could help to inform the essay contest preparation if such themes are desired. Future research should take into account more information about teacher characteristics and essay contest implementation to determine which factors influence variations across classrooms in the expressions of Laws of Life themes.

Overall, no significant results were found for the prediction of internalizing problem behaviors on any of the main analyses. It seems likely that this could be due to the difficulty in using observational measures for a mostly covert phenomenon. While externalizing behaviors lend themselves more easily to measurement by an observer, internalizing problem behaviors may be less likely to be detected given that the observer is not typically privy to the inner experiences of the observed. Previous research has found a lower correspondence for internalizing than externalizing problem behaviors among child, parent and teacher ratings (Kolko & Kazdin, 1993). Thus, it is recommended that future research utilize alternative measures for internalizing problem behaviors such as child- or parent-reported behaviors.

Students who expressed religiosity within their essays were marginally less likely to be rated by their teacher as exhibiting externalizing problem behaviors within the classroom. Much previous research has found religiosity to be associated with fewer problem behaviors among adolescents (for a review, see Johnson, Li, Larson & McCullough, 2000). However, some contradictory findings do exist. Certain forms of religiosity may be associated with lower emotional intelligence (Van Dyke & Elias, 2006) and more conduct problems for youth exposed to high levels of violence (Pearce,

Jones, Schwab-Stone, & Ruchkin, 2003). These conflicting findings may be in part due to the variation in the way researchers define religiosity. Pearce and colleagues (2003) found that a behavioral indicator (private religious practice) was more predictive over time of decreased conduct problems while a cognitive indicator (daily spiritual experience beliefs) was associated with more conduct problems among those exposed to high levels of violence. Thus, it seems that the measure used in the current study, which blends both the cognitive and behavioral dimensions of religiosity, may have diluted potential differences among the various forms of religiosity.

A review of the relative importance of behavioral, cognitive, emotional and motivational factors of religiosity among adolescents suggests that behavioral indicators may be of primary importance, in contrast to adult research which shows that behavioral factors are of least importance. Wong, Rew and Slaikeau (2006) found that “institutional religion” which included behavioral and social aspects of religion such as attendance at religious service was most predictive of positive outcomes among adolescents relative to “ideological religion,” a more cognitive measure, and “personal devotion,” a more emotional measure. It seems that importance of these dimensions may fluctuate with development as younger populations may not possess the necessary cognitive reasoning to be able to integrate written expressions of religious beliefs or emotions into their behavior (or vice versa). Following this line of reasoning, future research should take the differentiations between the cognitive, emotional, behavioral and motivational dimensions of religiosity into consideration when designing studies among adolescents.

A preliminary examination into the frequency and the relative importance of these dimensions within the writings of the 38 students that expressed religiosity was

conducted. The author coded each essay for the presence or absence of each dimension within the essay. Cognitive religiosity was defined as the expression of one's belief in religious doctrine or the admiration of a role model with religious beliefs (e.g., belief in God or spirits). Motivational religiosity was defined as the expression of intention to continue one's religious beliefs or practices as well as the encouragement of others to practice or believe in religion (e.g., "You should trust in God"). Emotional religiosity was conceived of as the experience of any emotion (positive or negative) as a result of or in reference to religious practice or belief (e.g., loving or fearing God). Behavioral religiosity contained expressions of religious behavior such as prayer or church attendance. Analyses revealed that the cognitive dimension was most frequently mentioned in the essays (74%), behavioral (55%) and emotional (53%) were mentioned consistently, and motivational aspects mentioned the least frequently (10%). Examining the correlation between each of these four dimensions and internalizing and externalizing problem behaviors among students who expressed religiosity revealed that behavioral religiosity was the only dimension significantly correlated with problem behaviors ($r = -.40, p < .05$). However, this correlation was with internalizing problem behaviors, not externalizing, which is curious given that overall, this study found stronger effects for externalizing than internalizing behaviors. Without interrater reliability and with such a small sample ($N=38$), little can be concluded as to the significance of this effect. Simply, these preliminary analyses indicate the importance of future research taking into account the distinction between these various dimensions.

Consistent with previous research, this study found that girls were more likely than boys to convey stronger expressions of religiosity (e.g., Rew & Wong, 2006).

However, while previous research has suggested that within low-income urban populations, boys may benefit more than girls from stronger religiosity, this could not be corroborated within this study. Expressed religiosity was marginally related to fewer teacher-rated externalizing problem behaviors among girls but could not be sufficiently examined within boys alone due to the infrequency in boys' expression of religiosity.

Stronger expressions of purpose were found to be related to fewer teacher-rated externalizing problem behaviors. Specifically, the results indicate that the content and voice dimensions of purpose remained significant even after removing the variance explained by gender and language arts grade point average. Accounting for language arts grades is important because this shows that the findings cannot be attributed to better writing skills but rather to the content of the writing. The significance of the dimensions of content and voice over word choice are of particular interest and will be discussed in detail below, but it should also be noted that the significant correlation between purpose word choice peak and language arts grade point average suggests that word choice may be confounded with writing ability. Therefore, it seems evident that content and voice are distinct constructs measuring something different than word choice, which seems more a reflection of writing ability. Previous research has found that a stronger sense of purpose is related to lower rates of drug and alcohol use among adolescents, but no previous study has found purpose to be related to fewer conduct problems, which is a unique contribution of this study. Furthermore, nearly all of the aforementioned studies measure purpose through questionnaires which may be biased by the experimenter or the participants' level of social desirability. This study extends existing research by

measuring purpose in an unobtrusive, voluntary manner, minimizing the biases often inherent in questionnaire data collection.

This study found that the purpose dimensions of content and voice were related to externalizing problems, while word choice was not. The relative importance of these dimensions is noteworthy as no known research has evaluated narrative writing in this way. The leading researcher in narrative content analysis, Pennebaker, focuses on frequency of word usage (i.e., word choice) to evaluate narrative writing, but the inclusions of content and voice have not been seen within previous research of this kind. While the advantage to using a word count statistical program as Pennebaker does allows one to analyze a greater volume of writing with no additional labor, there appears to be some benefit from manually reading and coding essays for themes and emotions that are not captured by such a software program. Future research should directly compare the agreement and predictive ability of computer-generated narrative content codes and manually derived codes.

As noted earlier, the infrequency of expression of religiosity within the essays was the primary limitation and remedies have been described.

Another significant limitation of the current study is the low degree of inter-rater reliability on the coding measures. Although the final codings used were the reflection of at least three independent coders' ratings and discussions among two of the coders, it seems that acting individually, coders still managed to overlook numerous nuances within the essays that the collaborative pair of coders uncovered as a team. Despite practicing and discussing over fifty essays together and reporting reading each coded essay a

minimum of three times, the individual coders were still unable to detect many of the finely embedded examples of purpose and religiosity within many essays.

It may be that the coding manual is best implemented in a coding-pair system whereby two independent pairs of coders code essays and collaborate on their codings, creating one set of independent codes from each collaborative pair. Future research should establish ways to better train coders and increase inter-rater reliability, exploring alternative methods which may include modifying the word choice dimension into a computer-generated score.

The findings presented in this study suggest that students who write about purpose exhibit fewer problem behaviors in the classroom. Because the current study is cross-sectional, no inference as to causality can be inferred; therefore while it may be that students who possess a sense of purpose then become motivated to improve their classroom behavior, it may also be that students who have good classroom behavior are more likely to write about purpose. Further research is needed to determine if writing exercises which encourage students to reflect upon their purpose and goals in life may improve students' classroom conduct. Actively writing about plans for the future may serve to motivate students towards better behavior class in order that they may succeed in their stated goals.

This study also has implications for improving the measurement of purpose and religiosity. Notwithstanding the aforementioned limitations of the current study's coding procedures, this research does add to the collective repertoire of alternative measures that can be used to assess purpose and religiosity while avoiding the weaknesses associated with the use of standardized surveys.

Finally, this research suggests the need for researchers utilizing narrative content analysis to consider additional dimensions beyond word choice in their measurement of constructs and themes. The dimensions of content and voice may provide a deeper, richer assessment of the writer's feelings about and commitment to the concepts conveyed by their choice of words.

Table 1. Inter-rater Percentage Agreement and Reliabilities.

	Percentage Agreement	Cohen's Kappa
Religiosity Content Peak	88.1%	.66
Religiosity Content Modal	90.1%	.70
Religiosity Voice Peak	85.1%	.57
Religiosity Voice Modal	90.1%	.69
Religiosity Word Choice Peak	88.0%	.69
Religiosity Word Choice Modal	88.0%	.64
Purpose Content Peak	62.9%	.41
Purpose Content Modal	54.5%	.37
Purpose Voice Peak	58.4%	.44
Purpose Voice Modal	47.5%	.27
Purpose Word Choice Peak	70.3%	.54
Purpose Word Choice Modal	76.4%	.44

Table 2. Descriptive statistics for study variables.

	N	Mean	Std. Deviation	Minimum	Maximum
Internalizing Problem Behaviors	151	2.24	2.92	0	10.5
Externalizing Problem Behaviors	150	2.63	3.68	0	12
Religiosity Content Peak	151	1.46	0.94	1	4
Religiosity Content Modal	151	1.28	0.72	1	4
Religiosity Voice Peak	151	1.42	0.90	1	4
Religiosity Voice Modal	151	1.27	0.69	1	4
Religiosity Word Choice Peak	151	1.63	1.14	1	4
Religiosity Word Choice Modal	151	1.38	0.83	1	4
Purpose Content Peak	151	2.65	1.05	1	4
Purpose Content Modal	151	2.05	0.96	1	4
Purpose Voice Peak	151	2.52	1.11	1	4
Purpose Voice Modal	151	1.98	0.98	1	4
Purpose Word Choice Peak	151	2.37	1.21	1	4
Purpose Word Choice Modal	151	1.99	1.13	1	4

Table 3. Mean Comparisons by Gender.

	Gender	Mean	Std. Deviation	N	<i>t</i>
Internalizing Problem Behaviors	Female	2.03	2.66	94	-1.03
	Male	2.54	3.30	56	
Externalizing Problem Behaviors	Female	2.16	3.56	94	-1.53
	Male	3.43	4.21	56	
Religiosity Content Peak	Female	1.59	1.03	94	2.39*
	Male	1.25	.71	57	
Religiosity Content Modal	Female	1.37	.82	94	2.20*
	Male	1.14	.48	57	
Religiosity Voice Peak	Female	1.54	1.01	94	2.50*
	Male	1.21	.62	57	
Religiosity Voice Modal	Female	1.35	.79	94	2.05*
	Male	1.14	.48	57	
Religiosity Word Choice Peak	Female	1.82	1.26	94	2.96**
	Male	1.32	.83	57	
Religiosity Word Choice Modal	Female	1.48	.91	94	1.96
	Male	1.23	.66	57	
Purpose Content Peak	Female	2.71	1.09	94	.96
	Male	2.54	.98	57	
Purpose Content Modal	Female	2.11	.98	94	.99
	Male	1.95	.93	57	
Purpose Voice Peak	Female	2.57	1.17	94	.73
	Male	2.44	1.02	57	
Purpose Voice Modal	Female	2.00	.97	94	.32
	Male	1.95	.99	57	
Purpose Word Choice Peak	Female	2.41	1.25	94	.57
	Male	2.30	1.15	57	
Purpose Word Choice Modal	Female	2.06	1.14	94	.98
	Male	1.88	1.12	57	

* $p < .05$, ** $p < .01$, *** $p < .001$ _a as per the Levene's Test for Equality of Variance equal variances could not be assumed

Table 4. Descriptive Statistics by Ethnicity.

	Ethnicity	Mean	Std. Deviation	N	t
Internalizing Problem Behaviors	African American	2.30	2.92	121	0.85
	Hispanic	1.86	2.96	29	
Externalizing Problem Behaviors	African American	2.97	3.78	121	3.19***
	Hispanic	1.24	2.89	29	
Religiosity Content Peak	African American	1.59	1.03	94	.26
	Hispanic	1.25	.71	57	
Religiosity Content Modal	African American	1.37	.82	94	.07
	Hispanic	1.14	.48	57	
Religiosity Voice Peak	African American	1.54	1.01	94	.02
	Hispanic	1.21	.62	57	
Religiosity Voice Modal	African American	1.35	.79	94	-.04
	Hispanic	1.14	.48	57	
Religiosity Word Choice Peak	African American	1.82	1.26	94	-.32
	Hispanic	1.32	.83	57	
Religiosity Word Choice Modal	African American	1.48	.91	94	.03
	Hispanic	1.23	.66	57	
Purpose Content Peak	African American	2.71	1.09	94	.55
	Hispanic	2.54	.98	57	
Purpose Content Modal	African American	2.11	.98	94	.29
	Hispanic	1.95	.93	57	
Purpose Voice Peak	African American	2.57	1.17	94	-.34
	Hispanic	2.44	1.02	57	
Purpose Voice Modal	African American	2.00	.97	94	-.54
	Hispanic	1.95	.99	57	
Purpose Word Choice Peak	African American	2.41	1.25	94	1.50
	Hispanic	2.30	1.15	57	
Purpose Word Choice Modal	African American	2.06	1.14	94	.69
	Hispanic	1.88	1.12	57	

$p < .05$, $**p < .01$, $***p < .001$ _a as per the Levene's Test for Equality of Variance equal variances could not be assumed

Table 5. Descriptive Statistics by SES.

	SES	Mean	Std. Deviation	N	<i>t</i>
Internalizing Problem Behaviors	No Free or Reduced Lunch or Never Applied	2.18	3.16	55	.03
	Free or Reduced Lunch	2.24	2.79	95	
Externalizing Problem Behaviors	No Free or Reduced Lunch or Never Applied	2.53	3.74	55	-.27
	Free or Reduced Lunch	2.69	3.66	95	
Religiosity Content Peak	No Free or Reduced Lunch or Never Applied	1.52	1.03	56	.61
	Free or Reduced Lunch	1.42	0.88	95	
Religiosity Content Modal	No Free or Reduced Lunch or Never Applied	1.36	0.84	56	.95
	Free or Reduced Lunch	1.24	0.63	95	
Religiosity Voice Peak	No Free or Reduced Lunch or Never Applied	1.46	0.97	56	.49
	Free or Reduced Lunch	1.39	0.85	95	
Religiosity Voice Modal	No Free or Reduced Lunch or Never Applied	1.32	0.79	56	.68
	Free or Reduced Lunch	1.24	0.63	95	
Religiosity Word Choice Peak	No Free or Reduced Lunch or Never Applied	1.80	1.26	56	1.39
	Free or Reduced Lunch	1.53	1.06	95	
Religiosity Word Choice Modal	No Free or Reduced Lunch or Never Applied	1.50	0.97	56	1.23
	Free or Reduced Lunch	1.32	0.73	95	
Purpose Content Peak	No Free or Reduced Lunch or Never Applied	2.68	1.10	56	.26
	Free or Reduced Lunch	2.63	1.03	95	
Purpose Content Modal	No Free or Reduced Lunch or Never Applied	2.09	0.92	56	.42
	Free or Reduced Lunch	2.02	0.99	95	
Purpose Voice Peak	No Free or Reduced Lunch or Never Applied	2.54	1.16	56	.11
	Free or Reduced Lunch	2.52	1.09	95	
Purpose Voice Modal	No Free or Reduced Lunch or Never Applied	2.07	1.01	56	.88
	Free or Reduced Lunch	1.93	0.96	95	
Purpose Word Choice Peak	No Free or Reduced Lunch or Never Applied	2.57	1.29	56	1.52
	Free or Reduced Lunch	2.25	1.15	95	
Purpose Word Choice Modal	No Free or Reduced Lunch or Never Applied	2.21	1.25	56	1.77
	Free or Reduced Lunch	1.86	1.05	95	

$p < .05$, $**p < .01$, $***p < .001$ _a as per the Levene's Test for Equality of Variance equal variances could not be assumed

Table 6. Comparisons Between Students With Essays Submitted and Without Essays Submitted.

	% Free/ Reduced Lunch	% Female**	% African American	Mean Language Arts GPA
Study Sample (Essay Submitted)	64%	62%	80%	2.80
Comparison Sample (No Essay Submitted)	64%	47%	83%	2.43

$p < .05$, ** $p < .01$, *** $p < .001$ _a as per the Levene's Test for Equality of Variance equal variances could not be assumed

Table 7. Frequency Distribution of Religiosity Variables.

	Questions to Consider	4	3	2	1
<p>“Peak” Religiosity</p> <p><u>CONTENT</u></p> <p>The single strongest message found in the essay.</p>	At its strongest point, does the essay reveal a sense of religiosity in the writer? At this point, does the essay suggest that religion is important in the life of the writer? Is a sense of religiosity implicitly or explicitly conveyed at this point in the essay? Does the writer express negative aspects of religiosity at this point in the essay?	11 (7.3%)	14 (9.3%)	7 (4.6%)	118 (78.1%)
<p>“Peak” Religiosity</p> <p><u>VOICE</u></p> <p>The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	If the writer were reading his or her entire essay aloud, would the reader walk away from this essay convinced that the writer was sincere? Is the writer consistently motivated by religion? Is the writer energetic about and emotionally connected to his or her religion?	10 (6.6%)	12 (7.9%)	8 (5.3%)	120 (79.5%)
<p>“Peak” Religiosity</p> <p><u>WORD CHOICE</u></p> <p>Words used in the essay.</p>	At the strongest point in the essay, does the writer’s choice of words communicate a sense of religiosity ? At this point, does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit words/statements found in this part of the essay that convey religiosity?	22 (14.6%)	11 (7.3%)	4 (2.6%)	113 (74.8%)
<p>“Modal” Religiosity</p> <p><u>CONTENT</u></p> <p>The many different implicit messages found in the essay.</p>	Does the overall gist of the essay reveal a sense of religiosity in the writer? In addition to the proposed Law of Life, does the essay suggest that religion is important in the life of the writer? Is a sense of religiosity implicitly or explicitly found in the essay? Does the writer express negative aspects of religiosity?	5 (3.3%)	6 (4%)	13 (8.6%)	126 (83.4%)
<p>“Modal” Religiosity</p> <p><u>VOICE</u></p> <p>The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	If the writer were reading his or her entire essay aloud, would the reader walk away from this essay convinced that the writer was sincere? Is the writer consistently motivated by religion? Is the writer energetic about and emotionally connected to his or her religion?	6 (4%)	5 (3.3%)	14 (9.3%)	125 (82.8%)
<p>“Modal” Religiosity</p> <p><u>WORD CHOICE</u></p> <p>Words used in the essay.</p>	Does the writer’s overall choice of words communicate a sense of religiosity ? Does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit statements found in the essay?	6 (4%)	15 (9.9%)	8 (5.3%)	121 (80.1%)

Table 8. Frequency Distribution of Purpose Variables.

	Questions to Consider	4	3	2	1
<p>“Peak” Purpose:</p> <p><u>CONTENT</u> The single strongest message found in the essay.</p>	At its strongest point, does the essay reveal a sense of purpose in the writer? At this point, does the essay suggest that having purpose is important in the life of the writer? Is this sense of purpose implicitly or explicitly found in the essay?	36 (23.8%)	53 (35.1%)	32 (21.2%)	29 (19.2%)
<p>“Peak” Purpose:</p> <p><u>VOICE</u> The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	If the writer were reading the section of the essay with the strongest conveyance of purpose aloud, would his or her tone of voice convey a sense of sincerity that purpose is important in his or her life? In this section of the essay, does the writer sound motivated by his or her purpose? Is the writer energetic about and emotionally connected to his or her purpose in this section?	35 (23.2%)	47 (31.1%)	29 (19.2%)	39 (25.8%)
<p>“Peak” Purpose:</p> <p><u>WORD CHOICE</u> Words used in the essay.</p>	At the strongest point in the essay, does the writer’s choice of words communicate a sense of purpose ? At this point, does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit words/statements found in this part of the essay that convey purpose?	40 (26.5%)	25 (16.6%)	34 (22.5%)	51 (33.8%)
<p>Modal Purpose:</p> <p><u>CONTENT</u> The overall message found in the essay.</p>	Does the overall gist of the essay reveal a sense of purpose in the writer? In addition to the proposed Law of Life, does the essay suggest that having purpose is important in the life of the writer? Is a sense of purpose implicitly or explicitly found in the essay?	13 (8.6%)	33 (21.9%)	51 (33.8%)	53 (35.1%)
<p>Modal Purpose:</p> <p><u>VOICE</u> The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	If the writer were reading this entire essay aloud, would the reader walk away from this essay convinced that the writer was sincere? On the whole, does the tone of this essay convey a sense of sincerity that purpose is important in his or her life? Is the writer motivated by his or her purpose? Is the writer energetic about and emotionally connected to his or her purpose?	10 (6.6%)	39 (25.8%)	38 (25.2%)	63 (41.7%)
<p>Modal Purpose:</p> <p><u>WORD CHOICE</u> Words used in the essay.</p>	Does the writer’s overall choice of words communicate a sense of purpose ? Does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit words/statements found in the essay that convey purpose?	24 (15.9%)	21 (13.9%)	33 (21.9%)	72 (47.7%)

Table 9. Intercorrelations Among all Religiosity and Purpose Variables.

		Relig. Content Peak	Relig. Content Modal	Relig. Voice Peak	Relig. Voice Modal	Relig. Word Choice Peak	Relig. Word Choice Modal	Purpose Content Peak	Purpose Content Modal	Purpose Voice Peak	Purpose Voice Modal	Purpose Word Choice Peak	Purpose Word Choice Modal
Relig. Content Peak	<i>r</i>	1.00	.90(**)	.97(**)	.89(**)	.92(**)	.90(**)	0.01	0.04	-0.01	0.03	-0.03	-0.02
	Sig.		0.00	0.00	0.00	0.00	0.00	0.92	0.67	0.93	0.70	0.74	0.85
	N	151	151	151	151	151	151	151	151	151	151	151	151
Relig. Content Modal	<i>r</i>	.90(**)	1.00	.93(**)	.99(**)	.79(**)	.90(**)	0.06	0.10	0.07	0.11	0.06	0.07
	Sig.	0.00		0.00	0.00	0.00	0.00	0.44	0.24	0.39	0.17	0.45	0.41
	N	151	151	151	151	151	151	151	151	151	151	151	151
Relig. Voice Peak	<i>r</i>	.97(**)	.93(**)	1.00	.92(**)	.90(**)	.89(**)	0.02	0.05	0.03	0.06	0.00	0.01
	Sig.	0.00	0.00		0.00	0.00	0.00	0.79	0.57	0.74	0.50	0.96	0.91
	N	151	151	151	151	151	151	151	151	151	151	151	151
Relig. Voice Modal	<i>r</i>	.89(**)	.99(**)	.92(**)	1.00	.78(**)	.88(**)	0.06	0.10	0.07	0.11	0.06	0.07
	Sig.	0.00	0.00	0.00		0.00	0.00	0.48	0.22	0.37	0.19	0.45	0.39
	N	151	151	151	151	151	151	151	151	151	151	151	151
Relig. Word Choice Peak	<i>r</i>	.92(**)	.79(**)	.90(**)	.78(**)	1.00	.89(**)	0.06	0.06	0.02	0.05	-0.01	0.02
	Sig.	0.00	0.00	0.00	0.00		0.00	0.44	0.43	0.83	0.52	0.90	0.82
	N	151	151	151	151	151	151	151	151	151	151	151	151
Relig. Word Choice Modal	<i>r</i>	.90(**)	.90(**)	.89(**)	.88(**)	.89(**)	1.00	0.08	0.09	0.05	0.09	0.06	0.07
	Sig.	0.00	0.00	0.00	0.00	0.00		0.34	0.25	0.56	0.26	0.49	0.37
	N	151	151	151	151	151	151	151	151	151	151	151	151
Purpose Content Peak	<i>r</i>	0.01	0.06	0.02	0.06	0.06	0.08	1.00	.89(**)	.90(**)	.83(**)	.721(**)	.679(**)
	Sig.	0.92	0.44	0.79	0.48	0.44	0.34		0.00	0.00	0.00	0.00	0.00
	N	151	151	151	151	151	151	151	151	151	151	151	151
Purpose Content Modal	<i>r</i>	0.04	0.10	0.05	0.10	0.06	0.09	.89(**)	1.00	.83(**)	.88(**)	.71(**)	.712(**)
	Sig.	0.67	0.24	0.57	0.22	0.43	0.25	0.00		0.00	0.00	0.00	0.00
	N	151	151	151	151	151	151	151	151	151	151	151	151
Purpose Voice Peak	<i>r</i>	-0.01	0.07	0.03	0.07	0.02	0.05	.90(**)	.83(**)	1.00	.89(**)	.69(**)	.64(**)
	Sig.	0.93	0.39	0.74	0.37	0.83	0.56	0.00	0.00		0.00	0.00	0.00
	N	151	151	151	151	151	151	151	151	151	151	151	151
Purpose Voice Modal	<i>r</i>	0.03	0.11	0.06	0.11	0.05	0.09	.83(**)	.88(**)	.89(**)	1.00	.68(**)	.68(**)
	Sig.	0.70	0.17	0.50	0.19	0.52	0.26	0.00	0.00	0.00		0.00	0.00
	N	151	151	151	151	151	151	151	151	151	151	151	151
Purpose Word Choice Peak	<i>r</i>	-0.03	0.06	0.00	0.06	-0.01	0.06	.72(**)	.71(**)	.69(**)	.68(**)	1.00	.90(**)
	Sig.	0.74	0.45	0.96	0.45	0.90	0.49	0.00	0.00	0.00	0.00		0.00
	N	151	151	151	151	151	151	151	151	151	151	151	151
Purpose Word Choice Modal	<i>r</i>	-0.02	0.07	0.01	0.07	0.02	0.07	.68(**)	.72(**)	.64(**)	.68(**)	.90(**)	1.00
	Sig.	0.85	0.41	0.91	0.39	0.82	0.37	0.00	0.00	0.00	0.00	0.00	

** Correlation is significant at the 0.01 level (2-tailed).

Table 13. Summary of Linear Regression Analysis for Purpose (Modal) Predicting Externalizing Problem Behaviors.

n = 151	B	SE	β	<i>t</i> value	$p \leq$	R^2
Model 1						
Language Arts GPA	-1.49	.48	-.32	-3.26	.002	.11
Gender	.44	.79	.05	.55	.581	
Model 2						
Language Arts GPA	-1.49	.48	-.31	-3.12	.002	.16
Gender	.32	.78	.04	.41	.684	
Purpose Voice-Content Modal	-.56	.28	-.25	-2.04	.045	
Purpose Word Choice Modal	.25	.49	.07	.52	.606	

Table 14. Summary of Linear Regression Analysis for Purpose (Peak) Predicting Externalizing Problem Behaviors.

n = 151	B	SE	β	<i>t</i> value	<i>p</i> ≤	<i>R</i> ²
Model 1						
Language Arts GPA	-1.52	.47	-.32	-3.26	.002	.11
Gender	.44	.79	.05	.55	.581	
Model 2						
Language Arts GPA	-1.47	.48	-.31	-3.10	.003	.15
Gender	.33	.78	.041	.43	.671	
Purpose Voice-Content Modal	-.51	.24	-.267	-2.10	.039	
Purpose Word Choice Modal	.38	.44	.11	.86	.391	

Table 15. Overall Frequency Distribution of High-Low Religiosity and Median-Split Internalizing and Externalizing Problem Behaviors for Chi Square Analysis.

	Observed N	Expected N	Residual
Low Median Split Internalizing Problem Behaviors & Low Religiosity	50	37.8	12.3
Low Median Split Internalizing Problem Behaviors & High Religiosity	21	37.8	-16.8
High Median Split Internalizing Problem Behaviors & Low Religiosity	63	37.8	25.3
High Median Split Internalizing Problem Behaviors & High Religiosity	17	37.8	-20.8
Low Median Split Externalizing Problem Behaviors & Low Religiosity	56	37.5	18.5
Low Median Split Externalizing Problem Behaviors & High Religiosity	24	37.5	-13.5
High Median Split Externalizing Problem Behaviors & Low Religiosity	57	37.5	19.5
High Median Split Externalizing Problem Behaviors & High Religiosity	13	37.5	-24.5

Table 16. Backward Regression Analysis Predicting Externalizing Problem Behaviors from Purpose Peak Variables.

Model		B	SE	β	<i>t</i> value	<i>p</i> ≤	<i>R</i> ²	Adjusted <i>R</i> ²
1	Language Arts GPA	-1.32	0.48	-0.28	-2.72	0.01	.17	.14
	Gender	0.19	0.78	0.02	0.24	0.81		
	Ethnicity	-1.56	1.06	-0.15	-1.47	0.15		
	Purpose Peak Word Choice	0.15	0.46	0.05	0.33	0.74		
	Purpose Peak Content-Voice	-0.47	0.24	-0.25	-1.93	0.06		
2	Language Arts GPA	-1.33	0.48	-0.28	-2.78	0.01	.17	.15
	Ethnicity	-1.60	1.05	-0.16	-1.52	0.13		
	Purpose Peak Word Choice	0.15	0.46	0.04	0.32	0.75		
	Purpose Peak Content-Voice	-0.47	0.24	-0.25	-1.95	0.05		
3	Language Arts GPA	-1.29	0.46	-0.27	-2.80	0.01	.17	.16
	Ethnicity	-1.71	0.99	-0.17	-1.73	0.09		
	Purpose Peak Content-Voice	-0.42	0.18	-0.22	-2.31	0.02		

Table 17. Backward Regression Analysis Predicting Externalizing Problem Behaviors from Purpose Modal Variables.

Model		B	SE	β	<i>t</i> value	<i>p</i> ≤	<i>R</i> ²	Adjusted <i>R</i> ²
1	Language Arts GPA	-1.34	0.48	-0.28	-2.76	0.01	.18	.13
	Gender	0.17	0.78	0.02	0.22	0.83		
	Ethnicity	-1.49	1.04	-0.15	-1.43	0.16		
	Purpose Modal Word Choice	0.03	0.51	0.01	0.05	0.96		
	Purpose Modal Content-Voice	-0.50	0.28	-0.23	-1.81	0.07		
2	Language Arts GPA	-1.33	0.46	-0.28	-2.88	0.00	.18	.14
	Gender	0.17	0.77	0.02	0.22	0.83		
	Ethnicity	-1.51	0.99	-0.15	-1.53	0.13		
	Purpose Modal Content-Voice	-0.49	0.21	-0.22	-2.34	0.02		
3	Language Arts GPA	-1.34	0.46	-0.28	-2.95	0.00	.18	.15
	Ethnicity	-1.54	0.98	-0.15	-1.58	0.12		
	Purpose Modal Content-Voice	-0.50	0.21	-0.22	-2.38	0.02		
4	Language Arts GPA	-1.45	0.45	-0.30	-3.20	0.00	.18	.14
	Purpose Modal Content-Voice	-0.48	0.21	-0.22	-2.27	0.03		

Table 18. Backward Regression Analysis Predicting Externalizing Problem Behaviors from Purpose and Religiosity Peak Variables.

Model		B	SE	β	t value	$p \leq$	R^2	Adjusted R^2
1	Language Arts GPA	-1.39	0.48	-0.29	-2.88	0.00	.20	.14
	Gender	-0.07	0.80	-0.01	-0.09	0.93		
	Ethnicity	-1.69	1.06	-0.16	-1.60	0.11		
	Purpose Peak Content-Voice	-0.44	0.24	-0.23	-1.82	0.07		
	Purpose Peak Word Choice	0.13	0.46	0.04	0.29	0.77		
	Religiosity Peak Content-Voice	0.78	0.51	0.36	1.52	0.13		
	Religiosity Peak Word Choice	-1.48	0.84	-0.43	-1.77	0.08		
	2	Language Arts GPA	-1.39	0.48	-0.29	-2.91		
Ethnicity	-1.68	1.05	-0.16	-1.61	0.11			
Purpose Peak Content-Voice	-0.44	0.24	-0.23	-1.83	0.07			
Purpose Peak Word Choice	0.13	0.46	0.04	0.29	0.77			
Religiosity Peak Content-Voice	0.77	0.51	0.36	1.52	0.13			
Religiosity Peak Word Choice	-1.47	0.82	-0.43	-1.79	0.08			
3	Language Arts GPA	-1.35	0.46	-0.28	-2.95	0.00	.20	.16
Ethnicity	-1.78	0.98	-0.17	-1.81	0.07			
Purpose Peak Content-Voice	-0.40	0.18	-0.21	-2.17	0.03			
Religiosity Peak Content-Voice	0.77	0.51	0.36	1.53	0.13			
Religiosity Peak Word Choice	-1.47	0.82	-0.43	-1.80	0.08			
4	Language Arts GPA	-1.33	0.46	-0.28	-2.87	0.01	.18	.15
	Ethnicity	-1.66	0.99	-0.16	-1.69	0.10		
	Purpose Peak Content-Voice	-0.40	0.18	-0.21	-2.16	0.03		
	Religiosity Peak Word Choice	-0.33	0.33	-0.09	-1.00	0.32		
5	Language Arts GPA	-1.29	0.46	-0.27	-2.80	0.01	.17	.15
	Ethnicity	-1.71	0.98	-0.17	-1.73	0.09		
	Purpose Peak Content-Voice	-0.42	0.18	-0.22	-2.31	0.02		

Table 19. Backward Regression Analysis Predicting Externalizing Problem Behaviors from Purpose and Religiosity Modal Variables.

Model		B	SE	β	<i>t</i> value	<i>p</i> ≤	<i>R</i> ²	Adjusted <i>R</i> ²
1	Language Arts GPA	-1.35	0.49	-0.28	-2.76	0.01	.18	.12
	Gender	0.08	0.80	0.01	0.10	0.92		
	Ethnicity	-1.45	1.06	-0.14	-1.37	0.17		
	Purpose Modal Content-Voice	-0.47	0.28	-0.22	-1.68	0.10		
	Purpose Modal Word Choice	0.02	0.52	0.01	0.05	0.96		
	Religiosity Modal Word Choice	-0.23	0.97	-0.05	-0.24	0.81		
	Religiosity Modal Content-Voice	-0.04	0.60	-0.01	-0.07	0.95		
2	Language Arts GPA	-1.35	0.47	-0.28	-2.89	0.01	.18	.13
	Gender	0.08	0.79	0.01	0.10	0.92		
	Ethnicity	-1.47	1.00	-0.14	-1.47	0.15		
	Purpose Modal Content-Voice	-0.47	0.22	-0.21	-2.15	0.03		
	Religiosity Modal Word Choice	-0.23	0.96	-0.05	-0.24	0.81		
	Religiosity Modal Content-Voice	-0.04	0.60	-0.01	-0.07	0.95		
	3	Language Arts GPA	-1.35	0.46	-0.28	-2.90		
Gender		0.08	0.79	0.01	0.11	0.92		
Ethnicity		-1.47	0.99	-0.14	-1.48	0.14		
Purpose Modal Content-Voice		-0.47	0.22	-0.21	-2.17	0.03		
Religiosity Modal Word Choice		-0.29	0.46	-0.06	-0.63	0.53		
4		Language Arts GPA	-1.35	0.46	-0.28	-2.96	0.00	.18
	Ethnicity	-1.48	0.98	-0.14	-1.51	0.14		
	Purpose Modal Content-Voice	-0.47	0.21	-0.21	-2.19	0.03		
	Religiosity Modal Word Choice	-0.30	0.45	-0.06	-0.66	0.51		
	5	Language Arts GPA	-1.34	0.46	-0.28	-2.95	0.00	
Ethnicity		-1.54	0.98	-0.15	-1.58	0.12		
Purpose Modal Content-Voice		-0.50	0.21	-0.23	-2.38	0.02		
6	Language Arts GPA	-1.45	0.45	-0.30	-3.20	0.00	.15	.14
	Purpose Modal Content-Voice	-0.48	0.21	-0.22	-2.27	0.03		

Appendix A. Purpose and Religiosity Essay Scoring Rubrics

“MODAL” Purpose Rubric

	Questions to Consider	4	3	2	1
<p><i>Modal Purpose:</i></p> <p>CONTENT</p> <p>The overall message found in the essay.</p>	<p>Does the overall gist of the essay reveal a sense of purpose in the writer? In addition to the proposed Law of Life, does the essay suggest that having purpose is important in the life of the writer? Is a sense of purpose implicitly or explicitly found in the essay?</p>	<p>The overall sense of purpose conveyed in the essay is explicit in the writer’s desire to make a difference in the world, to teach or contribute to a younger generation, to dedicate him- or herself to something or someone, to think about matters larger than the self (e.g., poverty, world peace), or to fulfill his or her potential in an area that could affect persons/things/events beyond the self. The writer may admire, learn from, or be inspired by a role model and is able to personally apply or connect the experience to his or her own life. The writer must also explicitly or implicitly convey a future/goal-orientation which may be expressed as striving for a goal or feeling a responsibility, showing determination/ perseverance to accomplish something that is meaningful to the self and to others and/or an institution/cause larger than themselves.</p> <p>The writer conveys, either explicitly or implicitly, that his or her sense of purpose is (at least partly) intrinsic and comes from within. The writer may also include extrinsic reasons behind his or her sense of purpose, but the reader’s central focus is the writer’s conveyance of some intrinsic source of motivation.</p>	<p>The overall sense of purpose conveyed in the essay is explicit in the writer’s desire to make a difference in the world, to teach or contribute to a younger generation, to dedicate him- or herself to something or someone, to think about matters larger than the self (e.g., poverty, world peace), or to fulfill his or her potential in an area that could affect persons/things/events beyond the self. The writer may admire, learn from, or be inspired by a role model and is able to personally apply or connect the experience to his or her own life. The writer must also explicitly or implicitly convey a future/goal-orientation which may be expressed as striving for a goal or feeling a responsibility, showing determination/ perseverance to accomplish something that is meaningful to the self and to others and/or an institution/cause larger than themselves.</p> <p>The writer either makes no mention of an intrinsic or extrinsic motivation associated with the development of his or her sense of purpose, or the writer mentions only extrinsic pressures associated with the development of his or her sense of purpose (e.g., living up to another’s expectations or standards, gaining external rewards such as money or power, feeling outside pressures to succeed).</p>	<p>The overall sense of purpose conveyed in the essay is implicit in the writer’s general orientation toward the future, toward others or toward a larger cause.</p> <p>The writer may speak of matters larger than the self without translating them into his or her own unique sense of purpose, mention past lessons learned that imply an impact on their goals/future, mention that he/she admires a role model without connecting it personally or in a future-oriented sense, vaguely express a desire to live life with a meaningful goal in mind, or mentions a highly specific goal (e.g., not to do drugs) without connecting it to something larger than themselves.</p>	<p>The content of the essay is irrelevant to the expression of purpose, and so there is no implicit or explicit mention of goals, making a difference, or thinking beyond the self.</p>

<p>Modal Purpose:</p> <p>VOICE</p> <p>The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	<p>If the writer were reading this entire essay aloud, would the reader walk away from this essay convinced that the writer was sincere? On the whole, does the tone of this essay convey a sense of sincerity that purpose is important in his or her life? Is the writer motivated by his or her purpose? Is the writer energetic about and emotionally connected to his or her purpose?</p>	<p>Overall, the writer consistently comes across as very sincere and genuine in his or her assertion that purpose is indeed meaningful in his or her life.</p> <p>The writer is unafraid to boldly and honestly state his or her convictions and does so in an emotionally connected and energetic manner.</p>	<p>Overall, the writer consistently comes across as somewhat sincere and genuine that purpose is meaningful in his or her life.</p> <p>The writer seems honest in his or her convictions, but lacks energy and emotional connectedness to his or her purpose.</p>	<p>Overall, the writer's level of sincerity and genuineness seems ambiguous to the reader.</p> <p>The reader feels uncertain whether or not the writer is consistently being sincere and genuine in his/her expression of purpose.</p>	<p>There is no mention of purpose in the essay.</p>
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<p>Modal Purpose:</p> <p>WORD CHOICE Words used in the essay.</p>	<p>Does the writer’s overall choice of words communicate a sense of purpose? Does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit words/statements found in the essay that convey purpose?</p>	<p>Overall, the writer consistently chooses to include in his or her essay one or more words that describe purpose, such as a purpose, calling, goal, dream, ambition, potential, aspiration, determination, inspiration, dedication, perseverance, admiration, responsibility, intention, promise, vow, or plan, as well as a desire to serve, to work/try/strive for success or accomplishment, to contribute to the world, to see connections in the world beyond of him- or herself, to be like a role model/hero, to “be the best one can be,” “to do the right thing,” and/or to fulfill a mission. The writer may also express a belief that he or she is “here for a reason.”</p> <p>The writer uses these words within a context that conveys his or her personal sense of purpose.</p>	<p>The writer includes in his or her essay one or more words that describe purpose, such as a purpose, calling, goal, dream, ambition, potential, aspiration, determination, inspiration, dedication, perseverance, admiration, responsibility, intention, promise, vow, or plan, as well as a desire to serve, to work/try hard/strive for success or accomplishment, to contribute to the world, to see the world not only in terms of themselves, to be like a role model/hero, to “be the best one can be,” “to do the right thing,” and/or to fulfill a mission. The writer may also express a belief that he or she is “here for a reason.”</p> <p>The writer uses these words within the context of another story or in another sense that is not directly connected to the purpose of the writer.</p>	<p>The writer does not include any words that explicitly convey a sense of purpose, but from the general wording of the essay, the reader is uncomfortable claiming that the essay lacks purpose. The wording that the writer chooses is ambiguous concerning his or her sense of purpose, and it leaves the reader questioning its implicit presence in the essay.</p>	<p>The writer does not use any specific words to convey a sense of purpose, and from the general wording of the essay, the reader feels comfortable stating that the essay lacks purpose.</p>
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“PEAK” Purpose Rubric

	Questions to Consider	4	3	2	1
<p>Peak Purpose:</p> <p><u>CONTENT</u></p> <p>The single strongest message found in the essay.</p>	<p>At its strongest point, does the essay reveal a sense of purpose in the writer? At this point, does the essay suggest that having purpose is important in the life of the writer? Is this sense of purpose implicitly or explicitly found in the essay?</p>	<p>The single strongest conveyance of purpose in the essay is explicit in the writer’s desire to make a difference in the world, to teach or contribute to a younger generation, to dedicate him- or herself to something or someone, to think about matters larger than the self (e.g., poverty, world peace), or to fulfill his or her potential in an area that could affect persons/things/events beyond the self. The writer may admire, learn from, or be inspired by a role model and is able to personally apply or connect the experience to his or her own life. The writer must also explicitly or implicitly convey a future/goal-orientation which may be expressed as striving for a goal or feeling a responsibility, showing determination/ perseverance to accomplish something that is meaningful to the self and to others and/or an institution/cause larger than themselves.</p> <p>In the single strongest conveyance of purpose in the essay, the writer either explicitly or implicitly that his or her sense of purpose is (at least partly) intrinsic and comes from within.</p>	<p>The single strongest conveyance of purpose in the essay is explicit in the writer’s desire to make a difference in the world, to teach or contribute to a younger generation, to dedicate him- or herself to something or someone, to think about matters larger than the self (e.g., poverty, world peace), or to fulfill his or her potential in an area that could affect persons/ things/ events beyond the self. The writer may admire, learn from, or be inspired by a role model and is able to personally apply or connect the experience to his or her own life. The writer must also explicitly or implicitly convey a future/goal-orientation which may be expressed as striving for a goal or feeling a responsibility, showing determination/ perseverance to accomplish something that is meaningful to the self and to others and/or an institution/ cause larger than themselves.</p> <p>In the single strongest conveyance of purpose in the essay, the writer either makes no mention of an intrinsic or extrinsic motivation associated with the development of his or her sense of purpose, or the writer mentions only extrinsic pressures associated with the development of his or her sense of purpose (e.g., living up to another’s expectations or standards, gaining external rewards such as money or power, feeling outside pressures to succeed).</p>	<p>The single strongest conveyance of purpose in the essay is implicit in the writer’s general orientation toward the future, toward others or toward a larger cause.</p> <p>The writer may speak of matters larger than the self without translating them into his or her own unique sense of purpose, mention past lessons learned that imply an impact on their goals/future, mention that he/she admires a role model without connecting it personally or in a future-oriented sense, vaguely express a desire to live life with a meaningful goal in mind, or mentions a highly specific goal (e.g., not to do drugs) without connecting it to something larger than themselves.</p>	<p>The content of the essay is irrelevant to the expression of purpose, and so there is no implicit or explicit mention of goals, making a difference , or thinking beyond the self.</p>

<p>Peak Purpose:</p> <p>VOICE</p> <p>The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	<p>If the writer were reading the section of the essay with the strongest conveyance of purpose aloud, would his or her tone of voice convey a sense of sincerity that purpose is important in his or her life? In this section of the essay, does the writer sound motivated by his or her purpose? Is the writer energetic about and emotionally connected to his or her purpose in this section?</p>	<p>In the single strongest conveyance of purpose, the writer comes across as very sincere and genuine in his or her assertion that purpose is indeed meaningful in his or her life.</p> <p>The writer is unafraid to boldly and honestly state his or her convictions expressed in this part of the essay and does so in an emotionally connected and energetic manner.</p>	<p>In the single strongest conveyance of purpose, the writer comes across as somewhat sincere and genuine that purpose is meaningful in his or her life.</p> <p>The writer seems honest in his or her convictions expressed in this part of the essay, but lacks energy and emotional connectedness to his or her purpose.</p>	<p>The writer's level of sincerity and genuineness seems ambiguous to the reader in this section.</p> <p>The reader feels uncertain whether or not the writer is being sincere and genuine about purpose in this section.</p>	<p>There is no mention of purpose in the essay.</p>
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<p>Peak Purpose:</p> <p><u>WORD CHOICE</u> Words used in the essay.</p>	<p>At the strongest point in the essay, does the writer’s choice of words communicate a sense of purpose? At this point, does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit words/statements found in this part of the essay that convey purpose?</p>	<p>At the strongest point in the essay, the writer chooses to include one or more words that describe purpose, such as a purpose, calling, goal, dream, ambition, potential, aspiration, determination, inspiration, dedication, perseverance, admiration, responsibility, intention, promise, vow, or plan, as well as a desire to serve, to work/try/strive for success or accomplishment, to contribute to the world, to see connections in the world beyond him- or herself, to be like a role model/hero, to “be the best one can be,” “to do the right thing,” and/or to fulfill a mission. The writer may also express a belief that he or she is “here for a reason.”</p> <p>At the strongest point in the essay, the writer uses these words within a context that conveys his or her personal sense of purpose.</p>	<p>At the strongest point in the essay, the writer includes one or more words that describe purpose, such as a purpose, calling, goal, dream, ambition, potential, aspiration, determination, inspiration, dedication, perseverance, admiration, responsibility, intention, promise, vow, or plan, as well as a desire to serve, to work/try hard/strive for success or accomplishment, to contribute to the world, to see the world not only in terms of themselves, to be like a role model/hero, to “be the best one can be,” “to do the right thing,” and/or to fulfill a mission. The writer may also express a belief that he or she is “here for a reason.” At the strongest point in the essay, the writer uses these words within the context of another story or in another sense that is not directly connected to the purpose of the writer.</p>	<p>At the strongest point in the essay, the writer does not include any words that explicitly convey a sense of purpose, but from the general wording of this section, the reader is uncomfortable claiming that this portion of the essay lacks purpose.</p> <p>The wording that the writer chooses is ambiguous concerning his or her sense of purpose, and it leaves the reader questioning its implicit presence in the words chosen for this portion of the essay.</p>	<p>The writer does not use any specific words to convey a sense of purpose, and from the general wording of the essay, the reader feels comfortable stating that the essay lacks purpose.</p>
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“MODAL” Religiosity Rubric

	Questions to Consider	4	3	2	1
<p>“Modal” Religiosity</p> <p><u>CONTENT</u></p> <p>The many different implicit messages found in the essay.</p>	<p>Does the overall gist of the essay reveal a sense of religiosity in the writer? In addition to the proposed Law of Life, does the essay suggest that religion is important in the life of the writer? Is a sense of religiosity implicitly or explicitly found in the essay? Does the writer express negative aspects of religiosity?</p>	<p>The overall sense of the essay conveys that religion is a very important dimension of the writer’s life. From this essay, the reader can conclude that religion has strong personal significance for the writer</p> <p>Religion is explicitly or implicitly presented in the essay in MORE than one of the following ways: cognitively (e.g., Belief in God or reference to God's existence/influence) motivationally (e.g., desire to be close to God or follow his will), behaviorally (e.g., attending church or watching religious TV/reading religious books) or emotionally (e.g., feeling comforted, safe, protected by God; feeling love for God). <i>One religious reference may include more than one of these dimensions—for example, “I look forward to attending church every week” would be both motivational and behavioral.</i></p> <p>The essay may reveal that the writer considers him/herself to be religious, prays often, believes in God or a higher power, regularly attend religious services/activities sponsored by a religious institution, possesses strong faith, asserts his or her strong belief in the existence of a heaven or in the idea that souls live</p>	<p>The overall sense of essay conveys that religion is a somewhat important dimension of the writer’s life.</p> <p>Religion is explicitly or implicitly presented in the essay in at least one of the following ways: cognitively (e.g., Belief in God or reference to God's existence/influence) motivationally (e.g., desire to be close to God or follow his will), behaviorally (e.g., attending church or watching religious TV/reading religious books) or emotionally (e.g., feeling comforted, safe, protected by God; feeling love for God).</p> <p>The may essay reveal that the writer believes in God or a higher power, attends religious services/activities sponsored by a religious institution, possesses faith, asserts his or her belief in the existence of a heaven or in the idea that souls live on after death, may mention an event at a religious service in passing, or express praying only in a time of extreme distress (e.g., sickness/illness of a family member).</p> <p>The writer either makes no mention of an intrinsic or extrinsic motivation associated with the development of his or her sense of</p>	<p>The overall sense of alludes to the presence of some aspect(s) of religiosity without necessarily delving into its personal significance. For example, the writer may describe angels in the sky or attend a religious funeral.</p> <p>The writer may mention some aspect of religiosity in the context of another tangential story (but not as part of the essay’s main theme) or may only very briefly refer to something religious while making it apparent from the reference that religion is not necessarily important to him/her (e.g., responding “Oh My God!” in response to a unexpected event).</p>	<p>There is no implicit or explicit mention of religion anywhere in the essay.</p>

		<p>on after death, claims to have a personal relationship with God or a Higher Being, feels that his/her religion motivates him/her to be a better person.</p> <p>The writer conveys, either explicitly or implicitly, that his or her religiosity is (at least partly) intrinsic and comes from within.</p> <p>The writer may also include extrinsic reasons behind his or her sense of purpose, but the reader's central focus is the writer's conveyance of some intrinsic source of motivation.</p>	<p>religiosity, or the writer mentions only extrinsic pressures associated with the development of his or her sense of purpose (e.g., living up to another's expectations or standards, gaining external rewards such as money or power, feeling outside pressures to succeed).</p>	<p>The reader is left questioning the significance of religion to the writer.</p>	
		<p>The overall sense of the essay makes strong mention of a negative form of religion such as demonizing the perpetrator (i.e., attributing supernatural evil traits to a perpetrator), viewing God as a punisher (i.e., viewing an event as punishment from God) or demonic reappraisal (i.e., seeing events as acts of the devil).</p>	<p>The overall sense of the essay alludes to negative form(s) of religion such as demonizing the perpetrator (i.e., attributing supernatural evil traits to a perpetrator), viewing God as a punisher (i.e., viewing an event as punishment from God) or demonic reappraisal (i.e., seeing events as acts of the devil).</p>		

<p>“Modal” Religiosity</p> <p>VOICE</p> <p>The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	<p>If the writer were reading his or her entire essay aloud, would the reader walk away from this essay convinced that the writer was sincere? Is the writer consistently motivated by religion? Is the writer energetic about and emotionally connected to his or her religion?</p>	<p>Overall, the writer consistently comes across as extremely sincere and genuine in his or her assertion that religion is indeed very meaningful in his or her life.</p> <p>The writer is unafraid to boldly and honestly state his or her convictions and does so in an emotionally connected and energetic manner.</p>	<p>Overall, the writer consistently comes across as reasonably sincere and genuine that religion is meaningful in his or her life.</p> <p>The writer seems honest in his or her convictions, but lacks emotional connectedness and energy to religion.</p>	<p>Overall, the writer’s level of sincerity and genuineness seems ambiguous to the reader.</p> <p>The reader feels uncertain whether or not the writer is consistently being sincere and genuine about religion.</p>	<p>There is no mention of religion in the essay.</p>
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<p>“Modal” Religiosity</p> <p><u>WORD CHOICE</u> Words used in the essay.</p>	<p>Does the writer’s overall choice of words communicate a sense of religiosity? Does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit statements found in the essay?</p>	<p>Overall, the writer consistently chooses to include in his or her essay one or more words that describe religion (either a specific tradition or in general), religious services, youth group/religious classes, prayer, God/Supreme Being/Allah/Creator/Holy Spirit, faith, worship, Bible/Gospel/Torah/Qur’an, Pastor/Minister/Priest/ Rabbi/Iman, heaven/life after death, etc.</p> <p>The writer uses these words within a context that conveys his or her religiosity and/or personal connectedness to religion.</p>	<p>The writer includes words in the essay that describe religion (either a specific tradition or in general), religious services, youth group/religious classes/mass, prayer, faith, God/Supreme Being/Allah/Creator/Holy Spirit/the Lord, faith, worship, Bible/Gospel/Torah/Qur’an, Pastor/Minister/Priest/Rabbi/Iman, heaven/life after death, the cross, angel(s), blessing/being blessed, spirit, etc.</p> <p>The writer may use these words within the context of another story or another sense that is not directly related to the religiosity of the writer.</p>	<p>The writer does not include any words that specifically convey religiosity, but from the general wording of the essay, the reader is left questioning its presence and is uncomfortable claiming that the essay lacks religiosity.</p>	<p>The writer does not use any specific words to convey a sense of religiosity, and from the general wording of the essay, the reader feels comfortable stating that the essay lacks religiosity.</p>
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“PEAK” Religiosity Rubric

	Questions to Consider	4	3	2	1
<p>“Peak” Religiosity</p> <p><u>CONTENT</u></p> <p>The single strongest message found in the essay.</p>	<p>At its strongest point, does the essay reveal a sense of religiosity in the writer? At this point, does the essay suggest that religion is important in the life of the writer? Is a sense of religiosity implicitly or explicitly conveyed at this point in the essay? Does the writer express negative aspects of religiosity at this point in the essay?</p>	<p>The single strongest conveyance of religion conveys that religion is a very important dimension of the writer’s life. From this essay, the reader can conclude that religion has strong personal significance for the writer</p> <p>Religion is explicitly or implicitly presented in this part of the essay in MORE than one of the following ways: cognitively (e.g., Belief in God or reference to God's existence/influence) motivationally (e.g., desire to be close to God or follow his will), behaviorally (e.g., attending church or watching religious TV/reading religious books) or emotionally (e.g., feeling comforted, safe, protected by God; feeling love for God). <i>One religious reference may include more than one of these dimensions—for example, “I look forward to attending church every week” would be both motivational and behavioral.</i></p> <p>This part of the essay may reveal that the writer considers him/herself to be religious, prays often, believes in God or a higher power, regularly attend religious services/activities sponsored by a religious institution, possesses strong faith, asserts his or her strong belief in the existence of a</p>	<p>The single strongest conveyance of religion conveys that religion is a somewhat important dimension of the writer’s life.</p> <p>Religion is explicitly or implicitly presented in this part of the essay in at least one of the following ways: cognitively (e.g., Belief in God or reference to God's existence/influence) motivationally (e.g., desire to be close to God or follow his will), behaviorally (e.g., attending church or watching religious TV/reading religious books) or emotionally (e.g., feeling comforted, safe, protected by God; feeling love for God).</p> <p>This part of the essay may reveal that the writer believes in God or a higher power, attends religious services/activities sponsored by a religious institution, possesses faith, asserts his or her belief in the existence of a heaven or in the idea that souls live on after death, may mention an event at a religious service in passing, or express praying only in a time of extreme distress (e.g., sickness/illness of a family member).</p> <p>At this part of the essay, the writer either makes no mention of an intrinsic or extrinsic motivation associated with the development of</p>	<p>The single strongest conveyance of religion alludes to the presence of some aspect(s) of religiosity without necessarily delving into its personal significance. For example, the writer may describe angels in the sky or attend a religious funeral.</p> <p>This part of the essay may mention some aspect of religiosity in the context of another tangential story (but not as part of the essay’s main theme) or may only very briefly refer to something religious while making it apparent from the reference that religion is not necessarily important to him/her (e.g., responding “Oh My God!” in response to a</p>	<p>There is no implicit or explicit mention of religion within this portion of the essay.</p>

		<p>heaven or in the idea that souls live on after death, claims to have a personal relationship with God or a Higher Being, feels that his/her religion motivates him/her to be a better person.</p> <p>At this part of the essay, the writer conveys, either explicitly or implicitly, that his or her religiosity is (at least partly) intrinsic and comes from within. The writer may also include extrinsic reasons behind his or her sense of purpose, but the reader's central focus is the writer's conveyance of some intrinsic source of motivation.</p>	<p>his or her sense of religiosity, or the writer mentions only extrinsic pressures associated with the development of his or her sense of purpose (e.g., living up to another's expectations or standards, gaining external rewards such as money or power, feeling outside pressures to succeed).</p>	<p>unexpected event).</p> <p>The reader is left questioning the significance of religion to the writer within this part of the essay.</p>	
		<p>The single strongest conveyance of religiosity makes strong mention of a negative form of religion such as demonizing the perpetrator (i.e., attributing supernatural evil traits to a perpetrator), viewing God as a punisher (i.e., viewing an event as punishment from God) or demonic reappraisal (i.e., seeing events as acts of the devil).</p>	<p>The single strongest conveyance of religiosity alludes to negative form(s) of religion such as demonizing the perpetrator (i.e., attributing supernatural evil traits to a perpetrator), viewing God as a punisher (i.e., viewing an event as punishment from God) or demonic reappraisal (i.e., seeing events as acts of the devil).</p>		

<p>“Peak” Religiosity</p> <p><u>VOICE</u></p> <p>The degree of sincerity and genuineness in the feelings and convictions of the writer.</p>	<p>If the writer were reading his or her entire essay aloud, would the reader walk away from this essay convinced that the writer was sincere? Is the writer consistently motivated by religion? Is the writer energetic about and emotionally connected to his or her religion?</p>	<p>In the single strongest conveyance of religiosity, the writer comes across as extremely sincere and genuine in his or her assertion that religion is indeed very meaningful in his or her life.</p> <p>The writer is unafraid to boldly and honestly state his or her convictions expressed in this part of the essay and does so in an emotionally connected and energetic manner.</p>	<p>In the single strongest conveyance of religiosity, the writer comes across as reasonably sincere and genuine that religion is meaningful in his or her life.</p> <p>The writer seems honest in his or her convictions expressed in this part of the essay, but lacks emotional connectedness and energy to religion.</p>	<p>In the single strongest conveyance of religiosity, the writer’s level of sincerity and genuineness seems ambiguous to the reader.</p> <p>The reader feels uncertain whether or not the writer is being sincere and genuine about religion in this part of the essay.</p>	<p>There is no mention of religion in the essay.</p>
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<p>“Peak” Religiosity</p> <p><u>WORD CHOICE</u> Words used in the essay.</p>	<p>At the strongest point in the essay, does the writer’s choice of words communicate a sense of religiosity? At this point, does the writer mention any of these terms without necessarily making them the central message of the essay? What are the explicit words/statements found in this part of the essay that convey religiosity?</p>	<p>In the single strongest conveyance of religiosity, the writer chooses to include in his or her essay one or more words that describe religion (either a specific tradition or in general), religious services, youth group/religious classes, prayer, God/Supreme Being/Allah/Creator/Holy Spirit, faith, worship, Bible/Gospel/Torah/Qur’an, Pastor/Minister/Priest/ Rabbi/Iman, heaven/life after death, etc.</p> <p>At the strongest point in the essay, the writer uses these words within a context that conveys his or her religiosity and/or personal connectedness to religion.</p>	<p>In the single strongest conveyance of religiosity, the writer includes words in the essay that describe religion (either a specific tradition or in general), religious services, youth group/religious classes/mass, prayer, faith, God/Supreme Being/Allah/Creator/Holy Spirit/the Lord, faith, worship, Bible/Gospel/Torah/Qur’an, Pastor/Minister/Priest/Rabbi/Iman, heaven/life after death, the cross, angel(s), blessing/being blessed, spirit, etc.</p> <p>At the strongest point in the essay, the writer may use these words within the context of another story or another sense that is not directly related to the religiosity of the writer.</p>	<p>At the strongest point in the essay, the writer does not include any words that specifically convey religiosity, but from the general wording of this portion of the essay, the reader is uncomfortable claiming that this portion of the essay lacks religiosity.</p> <p>The wording that the writer chooses is ambiguous concerning his or her expression of religiosity, and it leaves the reader questioning its implicit presence in the words chosen for this portion of the essay.</p>	<p>The writer does not use any specific words to convey a sense of religiosity, and from the general wording of this part of the essay, the reader feels comfortable stating that this part of essay lacks religiosity.</p>
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Appendix B. Example Essays

High Religiosity Example Essay

Faith

I believe that faith gives people lots of hope. I think faith is a very powerful word for someone to say. Some people say, “I have faith in you because you can do it! I trust you.” It’s something that you cannot see with your eyes nor can touch with your hands. It’s something you learn to respect.

I remember a time when my brother couldn’t breathe and he had to go to the hospital. I had faith in God because I knew that my brother would be healed and would start breathing again. This proved to me the power of my faith. I believe faith is a word that goes along with God. He takes part of his faith and gives it to us. I know it’s better to have faith than to have anger when things go wrong.

My family and I unite together at church. There we hold hands and pray. We pray for more faith, respect, and love. Also, we have to believe in ourselves and in other people. Faith helps us to rely on ourselves and on others. It creates courage and confidence within us.

Sometimes when people are sick, they need faith to be healed. We want to live happy and exciting lives, and in order to do that you have to believe in faith for every problem that we have. Faith is the only way to help solve problems. The reason why I’ve chosen faith as my law of life is because it gives me power to help myself, my family and my friends to keep on living and to be happy.

Religiosity Content Peak	Religiosity Content Modal	Religiosity Voice Peak	Religiosity Voice Modal	Religiosity Word Choice Peak	Religiosity Word Choice Modal
4	4	4	4	4	4

Purpose Content Peak	Purpose Content Modal	Purpose Voice Peak	Purpose Voice Modal	Purpose Word Choice Peak	Purpose Word Choice Modal
4	3	4	4	2	2

Low Religiosity Example Essay

Losing A Love One

Have you ever lost a love one? I have, when I was three years old my grandfather had a cancer called bone cancer. Bone cancer is disease that causes the bones of your body to get weaker until you can't walk or move any parts of your body. That day all my aunts and uncles went to visit him, I went too. At that moment, while everyone cried I knew that they were all thinking of a special moment with him, and so was I.

I was thinking of when I was born. His face was the first gentle face I touched he taught me how to ride a bike. My grandmother was divorced from my grandfather so I did not visit him much.

When we got home my grandmother was crying, I went to her and hugged her. Then she told me a story. When I was born, my grandfather took me to a small town that was the smallest town in El Salvador. He took me to every store, and bought me the nicest and cutest clothes. She also told me that when my dad left my mom and me, my grandfather was there to support us.

The next day the house was filled with sadness, it was very quiet with my grandfather being sick because he brought happiness, joy and excitement. No one talked that day. Later it began to rain but that did not stop my grandmother to visit my grandfather's house.

From that day on, we always visit him. The family had missed him; he was a very important family member. All night and all day we cried, every Sunday we go to church we all prayed and prayed that he would get better. It took a long time for my family and me to accept my grandfather's sickness. A week later after my grandfather's death my mom and I came to the United States. Now I am far away from my grandfather. My grandmother and my family members know that although my grandfather is gone he is still in my heart.

Religiosity Content Peak	Religiosity Content Modal	Religiosity Voice Peak	Religiosity Voice Modal	Religiosity Word Choice Peak	Religiosity Word Choice Modal
3	2	2	2	3	2

Purpose Content Peak	Purpose Content Modal	Purpose Voice Peak	Purpose Voice Modal	Purpose Word Choice Peak	Purpose Word Choice Modal
1	1	1	1	1	1

High Purpose Example Essay

Helping Others and Goals

It's what keeps me going. It helps shine way in my wrong turns in life. It helps keep me optimistic. It helps me look to the bright side of a dilemma. It allows me to be good in darkness and without it I would fail. It is called helping others and it keeps me alive.

What truly makes a person happy? Is it living to see another day or, spending time with their family? Is it eating, sleeping, maybe getting or giving. What does it take? Well, all of these things are nice but to me it is helping others and that is what truly makes me happy. It makes me feel good as a person. Whether it's doing a small task or a big favor I don't care. I just want to make a serious impact on the world. I want to show the world what sharing and caring can do for it. Personally, I think it could do a lot.

I am a lazy person and very ashamed of it but by me wanting to help others motivates me to help my mom wash dishes or do some other chore. I take out the garbage, or go buy things at the store for my mom, and do a lot of other chores. Whenever I put my mind to something I do it because I truly believe in my law all the way.

My mom is very encouraging to my ideas no matter how stupid they may seem. She also helps me by sacrificing her time to care for me when I am sick. There are a variety of ways my mom helps me and these are only tiny portion of what she has done for me. She raised me to be kind and reliable and to be person of my word. The respect for others she has taught me helps me to be honest and trustworthy. My mom models my law everyday.

I have a saying; 'You can't help others until you have helped yourself.' I say this because if your problems get in the way your goals cannot be achieved. That is why two of my goals is to be more responsible and organized. If I am not responsible now I won't be in the future. I wouldn't be able to keep up with my important papers and I would always lose my personal belongings. If I wasn't organized I would experience the same problems but ten times worse. If I work towards being better at my problems then my main goal will be achieved.

When I grow up I will try to improve the world. I would be out, open and very active in my community also. I would work hard to carry out my goal. If I have children in the future I wouldn't want them to be the kind of people that would not put down others. They would be manner able and respectful and most of all they would help others. I am confident that my kids would be taught to be kinds always. It is my responsibility to teach them like my mom taught me.

Some people call me push over, a softie I just want to know what's wrong with liking to share? Have you ever had this light in your heart that just wouldn't flicker off? Has your conscience just totally regulated your thoughts? Have you experienced these feelings before? One thing is certain, I have.

The world has a heart, a big heart that has strong blood and deep feelings within it. We are its heart its blood and energy, its life. Our kindness powers it. I don't know

about you but I want to be the one who powers it the most and if you join me it will be worth it. Your children and your children's children will say, 'Thanks to you I live in a better world.'" To me, there is no greater gift than the gift to give.

Religiosity Content Peak	Religiosity Content Modal	Religiosity Voice Peak	Religiosity Voice Modal	Religiosity Word Choice Peak	Religiosity Word Choice Modal
1	1	1	1	1	1

Purpose Content Peak	Purpose Content Modal	Purpose Voice Peak	Purpose Voice Modal	Purpose Word Choice Peak	Purpose Word Choice Modal
4	4	4	4	4	4

Low Purpose Example Essay

Kindness

I chose kindness as my law of life. When I was ten I would always help this lady by getting her groceries because she could barely walk and talk. When I first met her she told me that she would like it if I helped her with her groceries. She told me that if I helped her with the groceries that she would pay me, but I said, “No.” I know that I would not help her for money. I would do this out of kindness. I began going to the store for her if she needed and continued to help her with her groceries.

Whenever I left after helping with the groceries, I would begin to think of the things that could have happened to her if I was not there to help her. I think that helping people is a good deed. When I think of the way that I helped her I knew that it was a good thing to do beside it was fun. I had taught myself to be kind. A few days later my neighbor said that the lady became very ill and died. I cried for days after I heard that she died. A few weeks later I was told that her house was sold. My memories of her are she was a real nice lady and she didn’t ask for much. She never left her house much either but she was still just like everyone else. The one thing that I will always have in my heart and my soul is that one lady. I really liked her. I know kindness and good deeds pay off. I bet she is smiling down at me from heaven and saying, “everything will be okay!”

My lesson learned is that being kind is important, especially when you can help people in need. This is my law of life essay. Starting today, make sure to include kindness in your world.

Religiosity Content Peak	Religiosity Content Modal	Religiosity Voice Peak	Religiosity Voice Modal	Religiosity Word Choice Peak	Religiosity Word Choice Modal
2	1	2	1	3	2

Purpose Content Peak	Purpose Content Modal	Purpose Voice Peak	Purpose Voice Modal	Purpose Word Choice Peak	Purpose Word Choice Modal
3	2	3	2	2	1

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