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## **Exploring the Relationship between Teacher Spirituality and Teacher Self-efficacy**

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### **Introduction**

Research has demonstrated a positive correlation between teacher effectiveness and student achievement (Birch & Ladd, 1996; Hamer & Pianta, 2001; Selman, 2003). However, growing teacher despondency among the profession has stifled teacher effectiveness, which in turn, has produced a debilitating effect on student achievement (Conduct Problems Prevention Research Group [CPPRG], 1999). There often exists an immense disparity between the idealized goals of classroom teachers and the actual shortcomings of these educators. Teachers often feel ineffective due to matters outside their locus of control, consequently resulting in frustration and growing dissatisfaction in their role as an educator (Cho & Eberhard, 2013; Reese et al., 2004).

In their study on teacher anxiety, Berryhill, Linney, and Fromwick (2009) found many variables that mediated a link between teacher burnout, loss of self-efficacy, and accountability policies. They identified two salient variables that emerged from their investigation of teacher perceptions on educational accountability measures. The two variables were coded as *role conflict* and *teacher efficacy*. According to the study, *role conflict* was described as the incompatibility of two or more job functions (Rizzo, House, & Lirtzman, 1970), while *teacher efficacy*, in keeping with the theoretical framework of "self-efficacy" (Bandura, 1977), was referred to as a teacher's belief regarding his or her effectiveness on student achievement. Since the 1980s, there has been growing interest in the study of teacher efficacy. Dembo and Gibson (1985) defined this phenomenon of teacher efficacy as "the extent to which teachers believe they can affect student learning" (p. 173). Suffice it to say, teacher efficacy is more related to a teacher's beliefs than observable behavior. Dembo and Gibson's definition of teacher self-efficacy is this study's operational definition.

Although teacher effectiveness has served as one of the most salient factors of student achievement, there remains a lack of research analyzing the factors influencing teacher efficacy. It is astounding that there is very little research examining the means by which to raise teacher self-efficacy, knowing that self-efficacy is a predictor of achievement (Bandura, 1977). The research on teacher effectiveness has largely examined the techniques and strategies that equip teachers to become effective in the cognitive domain, but research is virtually non-existent in examining the affective domain of spirituality and its subsequent impact on teacher self-efficacy.

## Significance of the Study

Attention to the spiritual beliefs of teachers can provide valuable insight into the self-efficacy of a teacher. Furthermore, careful examination into the spirituality of teachers can advance the understanding of a teacher's impact on student achievement. There is a degree of difficulty in studying teachers' spirituality, knowing that the topic of spirituality is rather complex and consequently has a tendency to be defined in a plethora of ways. The complexity of the subject of spirituality may be attributed to such factors as definitional quandaries, misconceptions, and religious connotations. Although the researcher has chosen to utilize Underwood's (2011) operational definition of spirituality, "the aspects of personal life that include the transcendent, divine or holy, 'more than' what we can see or touch or hear" (p. 10), the understanding of teacher spirituality is enhanced by a theoretical framework definition that also serves as a continual frame of reference. The researcher borrowed a theoretical framework definition of "spirituality" that is likely to be consistent and acceptable among most educators. The respected educational author Parker Palmer (2000) proposed that spirituality can best be defined as the "human yearning to be connected" (p. 377). Utilizing this definition of spirituality as a theoretical framework, the researcher believes that the majority of educators can relate at some level to this phenomenon of "connecting" and finding purpose in life.

In this study, the independent variable of spirituality is measured by the Daily Spiritual Experience Scale. It contains two constructs, including *connection to God* and *transcendent beliefs regarding life*. The operational definition for the dependent variable of teacher self-efficacy is measured by the Teacher Self-Efficacy Scale. The instrument contains three constructs: *student engagement*, *instructional practices*, and *classroom management*.

## Purpose and Research Questions

The review of literature explored whether a relationship exists between teacher spirituality and teacher self-efficacy. The primary research question guiding the exploration of relationship is as follows: Does spirituality impact teacher effectiveness? If so, then how does spirituality impact teacher self-efficacy? Secondary questions stem from interests in participant demographics, including the topics of (a) level of teaching, (b) ethnicity, and (c) religious affiliation. (For the reader's interest, the author did include the statistical findings of these aforementioned demographics in the appendices).

## Overview of Relevant Literature on Spirituality

Researchers have developed multiple approaches to spirituality that illustrate the variety of ways people integrate spirituality into their lives. Zohar and Marshall (2000) used the terms "spiritual intelligence" and "spiritual quotient" to describe the phenomenon of spirituality, whereby individuals integrate areas of life by recognizing each area's connectedness. As in the case of educators, Zohar and Marshall argued that teachers are able to arrive at a deeper sense of spirituality by connecting who they are with their subject matter and their school community. To the spiritually-minded person, there is no sacred apart from secular; they are one and the same.

Spirituality, though invariably individualistic in its experience and interpretation, is a "relational consciousness" (Hay & Nye, 2006), which culminates in an outward expression and practice toward God and/or other people. Although religions maintain doctrinal distinctives that advocate "personal" commitment and practice, religions often cite that the authenticity of a person's faith is the individual's commitment to live out those tenets of the faith in relationship with other people (i.e., love, faithfulness, upholding justice, etc.). The Scottish Church's Council highlighted the relational and connective nature of spirituality by defining spirituality as "an exploration into what is involved in becoming human . . . an attempt to grow in sensitivity to self, to others, to the non-human creation and to the God who is within and beyond this totality" (McFague 1997, p. 10). Therefore, although it is true that a person's individual beliefs are the foundation in studying the function of spirituality in people's lives, it is imperative to further investigate the outcomes of these beliefs, namely, connection with God and others, to more accurately understand the phenomenon of spirituality.

Spirituality, as it relates to the life of an educator, is the lens a teacher uses to both envision and reflect on classroom connective experiences. The term "spirituality" has been conceptualized in conjunction with the following reflective characteristics: "belief in a power beyond oneself, hope and optimism, meaning and purpose, worship, prayer, meditation, love and compassion, moral and ethical values as well as transcendence" (Jacobs, 2012, p. 239).

Although spirituality may be defined in a plethora of ways, especially as one considers various religious beliefs, one unifying characteristic within nearly every spiritual exercise, belief, practice, or faith, is the emphasis of reflection, whereby there is an attempt to make meaning of life through connections, especially to God. As a result of the unifying theme and significance of “connection” found within much of the literature, I have chosen to adopt the conceptual framework definition of spirituality expressed by Palmer (2000), in which he described spirituality as the “human yearning to be connected” (p. 377). Much of the literature identified spirituality as beliefs and practices grounded in a desire to make meaning of life through connecting with God and other people. It is this conceptual framework definition of spirituality, as posited by Palmer, which guided this study.

Although the researcher implemented Palmer’s (2000) definition of spirituality as a conceptual framework, as Palmer’s definition best summarizes the findings from research, it is necessary to establish an operational definition for the purpose of reflecting the instrument constructs measured in the following study. Due to the researcher’s choice to employ the spirituality instrument (Daily Spiritual Experience Scale, Underwood, 2011) in this study, the researcher adopted Underwood’s (2011) operational definition of spirituality. Although the DSES and its subsequent operational definition do not fully capture the multi-dimensionality of the construct of spirituality, Underwood’s definition does capture the essence of the constructs utilized in the instrument. Underwood defined spirituality as “the aspects of personal life that include the transcendent, divine or holy, ‘more than’ what we can see or touch or hear” (p. 10). Items from the DSES instrument accurately reflect this operational definition for spirituality, and therefore will facilitate discussion of the findings.

### **Overview of Relevant Literature on Teacher Self-Efficacy**

Teacher beliefs about their own efficacy have important implications (Pajares, 1992; Stanley, 2011). In particular, teacher beliefs about their own effectiveness are a salient predictor of student engagement (Martin & Dawson, 2009). The Judeo-Christian scriptures seem to affirm the idea of self-efficacy, stating in Proverbs 23:7, “For as a man thinks within himself, so he is” (NASB). Therefore, teacher beliefs about their ability to be successful ultimately have an impact on how students perform. Teacher beliefs regarding their abilities can consequently have an effect on student motivation and achievement (Martin & Dawson, 2009).

Bandura (1977) developed the framework for the theory of self-efficacy. Bandura explained that there are two classes of expectations related to the effects of beliefs upon behavior and outcomes. The first class he called an *outcome expectation*, defining it as “a person’s estimate that a given behavior will lead to certain outcomes” (p. 191). He labels the second class as *efficacy expectation*, identifying it as the “conviction that one can successfully execute the behavior required to produce the outcome” (Bandura, 1977, p. 193). The difference between the two concepts is that the *outcome expectation* is more “general,” while the *efficacy expectation* is more “personal” (Ashton & Webb, 1986; Gibson & Dembo, 1984; Hoy & Woolfolk, 1990a).

Research has affirmed the validity of the self-efficacy theory (Bandura, 1977) and its positive impact on teacher development (Stanley, 2011). Findings have shown that positive teacher beliefs influence their behaviors in the classroom, which in turn, enable them to maintain their effectiveness in the classroom. The investigation of belief structures is significant because it can yield potential insights to the success of teachers (Ashton, 1990; Ashton & Webb, 1986; Brookhart & Freeman, 1992; Buchmann, 1984; Clark, 1988; Dinham & Stritter, 1986; Feiman-Nemser & Floden, 1986; Fenstermacher, 1979, 1986; Goodman, 1988; Munby, 1982, 1984; Nesper, 1987; Tabachnick, Popkewitz, & Zeichner, 1979; Weinstein, 1988, 1989; Wilson, 1990). Thus, it is incumbent upon schools and educational organizations to engage teachers in staff development that examines and promotes methods to increase teacher efficacy (Bobeck, 2002).

Abundant research has addressed teacher perspectives and beliefs (Clark, 1988; Cole, 1989; Fenstermacher, 1979, 1986; Nesper, 1987; Pintrich, 1990). In following Bandura’s Social Cognitive Theory (1986), researchers have come to view beliefs as the best predictors regarding significant life decisions that people will make throughout their lives (Dewey, 1933; Nisbett & Ross, 1980; Rokeach, 1968). Although there has been a plethora of research investigating teacher beliefs (Clark & Peterson, 1986), there is a lack of consensus among researchers on the relationship between the objects of teacher beliefs and the ways in which these beliefs are thought to be constructed (Clark, 1988; Cole, 1989; Fenstermacher, 1979, 1986; Nesper, 1987; Pintrich, 1990). Due to the inconclusive outcomes regarding the study of beliefs, Pajares (1992) advocated for a foundational definition of beliefs that is consistent with the most prominent researchers within the field of belief structures, thereby providing for conceptual frameworks which can be instituted to further the study of teacher beliefs.

Definitions and explanations for beliefs have been offered by prominent researchers to show a clear connection between social cognitive processes and the outcomes of decision-making and behavior. Sigel (1985) explained how cognitive processes guide behavior, defining beliefs as “mental constructions of experience—often condensed and integrated into schemata or concepts” (p. 351). Other researchers have explained beliefs as an individual’s perception of reality that serves as a compass for truth in guiding thought and behavior (Harvey, 2006). The study of beliefs has revealed multifaceted outcomes that provide a complex, yet comprehensive, structure for understanding the importance of teacher efficacy. Rokeach (1968) suggested that all beliefs possess a cognitive component, an affective component, and a behavioral component, whereby knowledge is represented, emotion is aroused, and action is required, respectively.

Although studies have recommended needed reform efforts that implement research findings based on self-efficacy theory, all in hopes of increasing teacher effectiveness, there remains yet to be significant change to teacher practice (Clark & Peterson, 1986). Pajares (1992) underscored this disparity, stating that “the implicit interest and fascination that educators and researchers have in beliefs have not become explicit, either in educational practice or in research endeavors, and studies aimed at understanding the beliefs of teachers have been scarce” (p. 308).

Due to the impact of beliefs in teaching practices and strategies, it is imperative to recognize the influence of teacher beliefs on teacher behavior, decision-making, and ultimately, their effect on students and learning (Abelson, 1979; Bandura, 1986; Lewis, 1990; Nespor, 1987; Nisbett & Ross, 1980; Posner, Strike, Hewson, & Gertzog, 1982; Rokeach, 1968; Schommer, 1990).

### **Methodology and Methods**

A quantitative exploratory study analyzing potential correlation between teacher spirituality and teacher self-efficacy was conducted. The study explored the relationship spirituality may have with teacher self-efficacy. Due to the complexity and subjective nature of the term “spirituality,” the researcher was very intentional in selecting instruments that reflected a theoretical framework consistent with the purpose of this particular study. Although spirituality may use many different mediums for expression, the researcher was most interested in the nature of beliefs surrounding spirituality, namely the way a person thinks about his or her connection to God and with other people. As a result of the focus of the study, the researcher adopted a theoretical framework for spirituality distinguished by Parker Palmer, which he explains as the “human yearning to be connected” (Palmer, 2000, p. 377).

Self-efficacy, as a conceptual framework, was introduced and has been most influenced by the ideas of Bandura (1977). The researcher borrowed from Bandura’s second classification of self-efficacy known as *efficacy expectation* to serve as a conceptual framework, having been defined as the “conviction that one can successfully execute the behavior required to produce the outcome” (Bandura, 1977, p. 193). The *efficacy expectation* is more “personal” (Ashton & Webb, 1986; Gibson & Dembo, 1984; Hoy & Woolfolk (1990) and better overlaps with the theme of “making connections,” as reflected in much of the literature. This particular classification of Bandura’s work was the basis of Dembo and Gibson’s work (1985) on teacher self-efficacy. Dembo and Gibson defined teacher self-efficacy as “the extent to which teachers believe they can affect student learning” (p. 173). In other words, teacher self-efficacy is more related to teachers’ beliefs than their observable behavior. Dembo and Gibson’s definition will serve as the study’s operational definition for *teacher self-efficacy*.

### **Research Design**

#### ***Description***

A correlation study, which is a study of “the relationship between one or more quantitative independent variables and one or more quantitative dependent variables” (Lebow, Chambers, Johnson, & Christensen, 2012, p. 44), was conducted to measure the possibility of a statistically significant effect of teacher spirituality upon teacher self-efficacy. Quantitative data were collected through survey. Path analysis was then performed to analyze the data.

#### ***Rationale***

A correlation framework was selected as the research design to understand the effect spirituality has on teacher self-efficacy. The term “spirituality” was chosen, rather than “religion” or “faith,” because of the literature’s emphasis on making connections in life and finding purpose in life, which is a primary interest of the researcher.

Moreover, the term “spirituality” was selected because it appears more inclusive in matters of beliefs and practices. Unlike “religion” which holds to an ascribed set of theological beliefs that may or may not inform an individual about his or her awareness of self in relation to God and others, the use of the term “spirituality,” as framed here in the study, explains a teacher’s “personal understanding” of how he or she connects to God and others. Consequently, the study maintained a broad use of the term “spirituality,” without ascribing to one particular religion or practice.

As described, strengths of the study include the use of the term “spirituality” in a broad sense. In utilizing the term “spiritual” in a broad sense, people of all religious beliefs could be included in the study. Inclusion of participants with a variety of religious beliefs increased the generalizability of the relationship between teacher spirituality and teacher self-efficacy. A second strength of the study is that the data on spirituality were self-reported, and therefore, the investigation on spirituality was from an individual perspective rather than simply from a prescribed set of theological beliefs adopted from the religious community that may or may not have been “personal” in nature. Another strength may be found in the multiple ways in which the study’s findings affirm previous research on the relationship between spirituality and education.

## **Population Sample**

### ***Description***

The target population included K-12 teachers from two school districts in southern California. The researcher received initial permission to collect data from the two school districts and then contacted school principals who were willing to allow the researcher to come to an individual school site to collect research. Survey instruments were distributed to teachers representing twelve K-5 schools, five middle schools, and two high schools. Teachers’ years of experience within the districts ranged from less than 1 to 35 years. Teachers of various subjects and grade levels served as participants.

### ***Rationale***

The sample of participants was chosen because of accessibility for the researcher. The researcher works in one of the school districts, and is in close proximity to the other school district.

## **Instrumentation/Measures/Protocols**

Two survey instruments were disseminated to participating school sites, namely those schools that held staff meetings and welcomed the researcher to conduct the study. One instrument, The Daily Spiritual Experience Scale (Underwood, 2011), asked participants to identify the impact of spirituality and connectedness. The second instrument, Teacher Self-Efficacy Scale (Schwarzer et al., 1999) investigated teacher perceptions of their teaching self-efficacy. Data were collected and analyzed based on self-reported scores. Mean values of each item and total mean value of entire survey were recorded and analyzed in SPSS.

### ***The Daily Spiritual Experience Scale***

The instrument asked participants to consider the role of spirituality in making connections within their lives. The Daily Spiritual Experience Scale (DSES) was developed by L. Underwood (2011). In its original use in qualitative research, the DSES included constructs such as awe, gratitude, mercy, sense of connection with the transcendent, and compassionate love. The survey also included constructs relating to awareness of discernment/inspiration and a sense of deep inner peace. In its use in the present quantitative study, exploratory factor analysis revealed two constructs: *connection to God* and *transcendent beliefs regarding life*.

The reliability of the instrument is evidenced in its use in over 70 published studies. Cronbach’s alpha scores ranging from 0.89 to 0.97 have been demonstrated in several languages and ethnic populations. Cronbach’s alphas for the scale in English and in translation have been consistently high, 0.89 and above. Variability was assessed as adequate by the item distribution and skew. Furthermore, test-retest results have shown added reliability by Pearson’s correlation of 0.85 over a 2-day period.

### ***Teacher Self-Efficacy Scale***

The Teacher Self-Efficacy Scale (TSES) was constructed following Bandura’s social cognitive theory (Bandura, 1977; Jerusalem & Schwarzer, 1992; Schwarzer, 1993). The constructs, including *student engagement*, *instructional strategies*, and *classroom management*, which were observed through factor analysis, are indicative of teacher performance standards from the California Standards for the Teaching Profession (CSTP, 2009), devised by the California Commission on Teacher Credentialing.

The TSES revealed factor loadings ranging from 0.60 to 0.85. The instrument contains three teacher efficacy subscales (*student engagement, instructional strategies, and classroom management*) as conducted by principal-axis factoring. Factor analysis of the 24-item instrument demonstrated one strong factor exhibiting 75% of the variance. Cronbach's alpha of 0.94 revealed strong reliability of the TSES. Item analysis of the instrument was conducted in relation to like-items used on other related instruments. Items of the TSES were positively related to both the personal teaching efficacy (PTE) factor of the Gibson and Dembo (1984) measure ( $r = 0.64; p < 0.01$ ) and the general teacher efficacy (GTE) factor ( $r = 0.16; p < 0.01$ ), as well as the Rand items ( $r = 0.18$  and  $0.53, p < 0.01$ ).

### **Rationale**

Previous studies utilizing the DSES and the TSES (independent of one another) revealed Cronbach's alpha over the .70 acceptability rate, signifying that the instruments are reliable. Psychometrics for validity also demonstrated that the instruments are valid for research inquiry. Thus, the instruments are understood as suitable and appropriate for data collection.

**Table 1: Demographic Characteristics of Participants (N = 333)**

Characteristic	n	%
Level of Teaching		
Elementary School	179	54
Middle School	105	32
High School	49	15
Ethnicity		
Unknown	1	0
White	194	59
Black or African-Am	10	3
Hispanic	74	22
Asian	44	13
Other	10	3
Religion		
Buddhism	5	2
Christianity	266	80
Hinduism	0	0
Islam	0	0
Folk religions	0	0
Other	14	4
Unaffiliated	48	14

*Note.* Totals of percentages are not 100 for every characteristic because of rounding.

### **Multiple Regression**

#### **Connection to God and Transcendent Beliefs Regarding Life Predicting the Three Domains of Teacher Self-Efficacy**

Three simultaneous multiple regressions were conducted to determine whether *connection to God* and *transcendent beliefs regarding life* are predictive of *student engagement, instructional strategies; and classroom management*. Regression results of the independent variables *connection to God* and *transcendent beliefs regarding life* on the dependent variable *student engagement* indicate that the overall model significantly predicts teacher self-efficacy,  $R^2 = .059, F(2, 330) = 10.314, p < .01$ . This model accounts for about 5.9% of the variance in teacher self-efficacy. A summary of regression coefficients is presented in Table 2. *Transcendent beliefs regarding life* is a significant predictor of *student engagement* ( $B = .286, p < .01$ ).

Regression results of the independent variables *connection to God* and *transcendent beliefs regarding life* on the dependent variable *instructional strategies* indicate that the overall model significantly predicts teacher self-efficacy,  $R^2 = .047, F(2, 330) = 8.170, p < .01$ . This model accounts for about 4.7% of the variance in teacher self-efficacy.

A summary of regression coefficients is presented in Table 3. Only *transcendent beliefs regarding life* significantly contributed to the model. At the predictor level, Table 3 shows that *transcendent beliefs regarding life* is a significant predictor of *instructional strategies* ( $B = .292, p < .01$ ).

Regression results of the independent variables *connection to God* and *transcendent beliefs regarding life* on the dependent variable *classroom management* indicate that the overall model significantly predicts teacher self-efficacy,  $R^2 = .026, F(2, 330) = 4.375, p < .01$ . This model accounts for about 2.6% of the variance in teacher self-efficacy. A summary of regression coefficients is presented in Tables 4. *Transcendent beliefs regarding life* is a significant predictor of *classroom management* ( $B = .193, p < .01$ ).

**Table 2: Regression Analysis Summary for Connection to God Measure and Transcendent Beliefs Regarding Life Measure Predicting Student Engagement**

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>T</i>	<i>P</i>
1.Connection to God	-.014	.047	.021	-.302	.763
2.Transcendent Beliefs Regarding Life	.286	.078	.255	3.675	<.001

**Table 3: Regression Analysis Summary for Connection to God Measure and Transcendent Beliefs Regarding Life Measure Predicting Instructional Strategies**

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>T</i>	<i>P</i>
1.Connection to God	-.054	.048	-.080	-1.140	.255
2.Transcendent Beliefs Regarding Life	.292	.079	.259	3.709	<.001

**Table 4: Regression Analysis Summary for Connection to God Measure and Transcendent Beliefs Regarding Life Measure Predicting Classroom Management**

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>T</i>	<i>P</i>
1.Connection to God	-.046	.042	-.079	-1.112	.267
2.Transcendent Beliefs Regarding Life	.193	.069	.199	2.818	.005

### Path Analysis

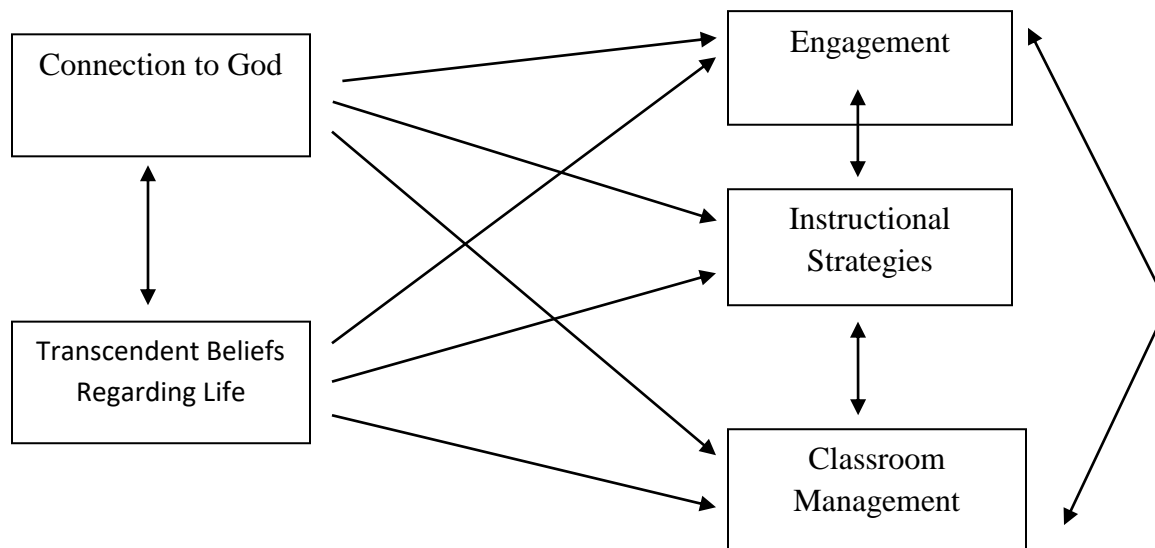
A path analysis was conducted to simultaneously examine the relationships among the exogenous variables of *connection to God* and *transcendent beliefs regarding life*, and the endogenous variables of *student engagement*, *instructional strategies*, and *classroom management*. This type of regression examines the various patterns of relationship between variables and then compares the findings from this statistical analysis technique to see if it fits the underlying theory of the researcher (Aron, Aron, & Coups, 2006). The following statistical outcomes illustrate the purpose in conducting a path analysis, which is to reveal both the direct and indirect relationships between exogenous and endogenous variables.

The research question driving the inquiry and formulating the initial model of exploratory study was: Does spirituality impact teacher effectiveness? If so, then how does spirituality impact teacher self-efficacy? The initial model, presented in Figure 1, includes 10 paths. Model A (Figure 1) is the most saturated model, involving all possible connections between the variables. This most generalized model is exploratory in nature, and thus, served to test the hypothesis.

The model accounted for multiple interrelations between all variables. However, this initial model (A) was not consistent with the empirical data. *Connection to God* lacked any statistically significant relationship with the endogenous variables of *student engagement*, *instructional strategies*, and *classroom management*.

Analysis performed using LISREL 9.2 displays Gamma ( $\gamma$ ) scores for the endogenous variables: *student engagement*, *instructional strategies*, and *classroom management*. Path coefficients between *student engagement* and the exogenous variables of *connection to God* and *transcendent beliefs regarding life* are  $-.021$  and  $.0255$ , respectively. *T* values for *student engagement* are  $-.303$  and  $3.686$ ,

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**Figure 1. Model A.**

respectively. A  $t$  value  $> +/-1.96$  reveals statistical significance. Therefore, with a  $t$  value of 3.686, there is statistical significance using path analysis between *transcendent beliefs regarding life* and *student engagement*, but not so with *connection to God*.

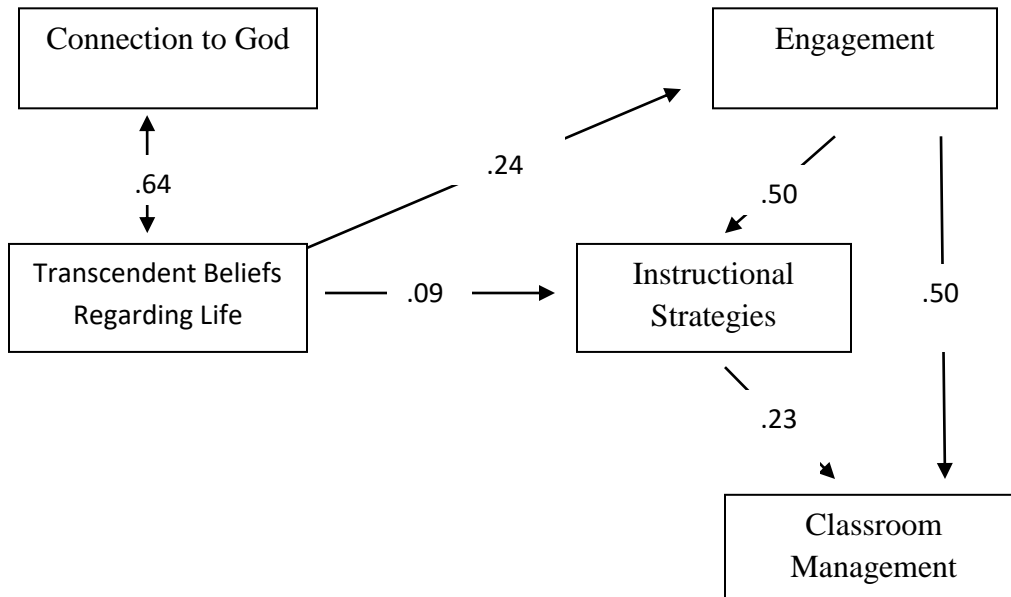
In path analysis between *instructional strategies* and the exogenous variables of *connection to God* and *transcendent beliefs regarding life*, LISREL reported path coefficients of -0.069 and 0.131, respectively.  $T$  values for these exogenous variables were -1.144 for *connection to God* and 2.129 for *transcendent beliefs regarding life*. Only the path for *instructional strategies* and *transcendent beliefs regarding life* revealed a  $t$  value showing statistical significance.

LISREL revealed path coefficients for the exogenous variables and the third endogenous variable labeled *classroom management*. The path coefficient for *classroom management* and *connection to God* was -.050, while the path coefficient for *classroom management* and *transcendent beliefs regarding life* was 0.013.  $T$  values for these exogenous variables were -.917 for *connection to God* and 0.234 for *transcendent beliefs regarding life*. Neither path for *classroom management* revealed a  $t$  value showing statistical significance. Due to the lack of statistical significance conducted through path analysis, there was need for further replication. Therefore, a revised model was generated and is presented in Figure 2 (Model B).

Recomputation of reproduced paths further indicate a significant change in path coefficients. Path analysis dropped *connection to God* as a statistically significant path relationship with all endogenous variables. *Transcendent beliefs regarding life* and *student engagement* showed a path coefficient of .242.  $T$  value for path coefficient is 4.545. Therefore, because the  $t$  value is greater than 1.96, the path of *student engagement* and *instructional strategies* demonstrated a significant direct effect. The gamma ( $\gamma$ ) coefficient between the variables is .24.

Model B reveals a path coefficient between *instructional strategies* and *transcendent beliefs regarding life* at .087.  $T$  value for path coefficient is 1.810;  $\gamma = .09$ . Therefore, because the  $t$  value is less than 1.96, the path of *instructional strategies* and *transcendent beliefs regarding life* is not statistically significant. The path demonstrates





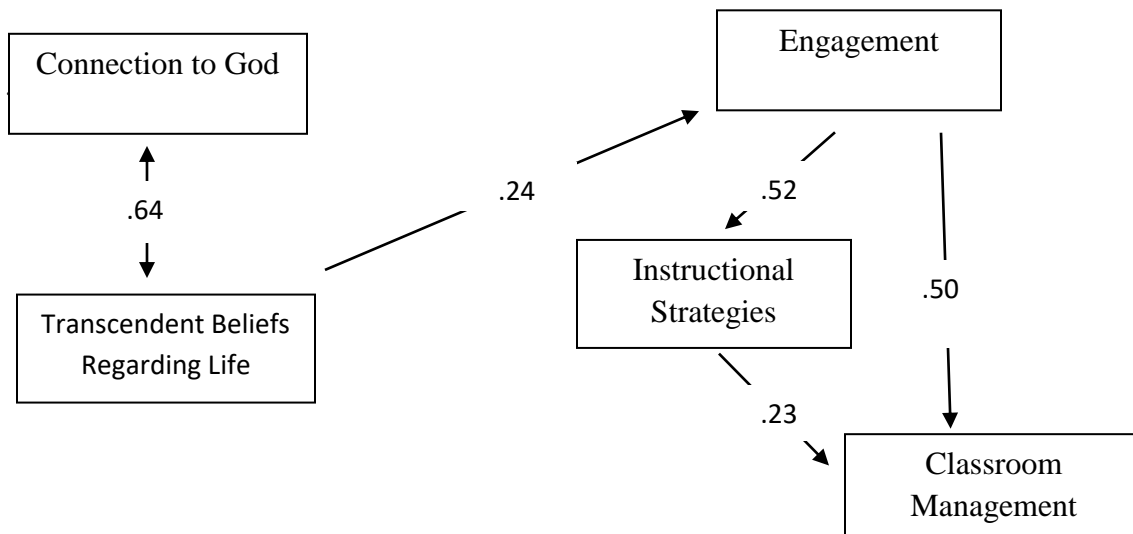
**Figure 2. Model B.**

that there is not a significant direct effect of *transcendent beliefs regarding life* upon *instructional strategies*. The maximum likelihood ratio is  $\chi^2(4, N = 333) = 2.44, p = .65485$ .

The model dropped *classroom management* as a statistically significant relationship with *transcendent beliefs regarding life*. To reiterate, Model B shows good fit in that there is statistical significance using path analysis between *transcendent beliefs regarding life* and *student engagement*.

The model also reveals several significant indirect effects between variables. It is noted that an *indirect effect* transpires when another variable influences an endogenous variable (DV) by its impact on a corresponding variable (Agresti & Finlay, 2009). Model B shows that *transcendent beliefs regarding life* has a significant indirect upon *instructional strategies* through the variable *student engagement* ( $\beta = .50$ ). *Transcendent beliefs regarding life* is also indirectly related to *classroom management* through the variable of *student engagement* ( $\beta = .50$ ). Furthermore, it should be noted that although Model B shows that *connection to God* does not directly affect the endogenous variables, *connection to God* is positively related with its partner exogenous variable, *transcendent beliefs regarding life* ( $\phi = .64$ ).

Model B is not significant because of the lack of significant direct effect of *transcendent beliefs regarding life* upon *instructional strategies*. It was suggested that further replication be accomplished. Therefore, recomputation of reproduced paths for a revised model were conducted. Figure 3 shows significant path coefficients for *student engagement* and *transcendent beliefs regarding life*. Figure 3 shows that the path model contains the significant direct and indirect path coefficients for student engagement.



**Figure 3. Model C.**

The revised model dropped the path between *transcendent beliefs regarding life* and *instructional strategies*, demonstrating that there is not a significant direct effect. Path coefficient between *student engagement* and *transcendent beliefs regarding life* was revealed at 0.24. *T* value for the path coefficient is 4.545. Therefore, because the *t* value is more than 1.96, the path of *student engagement* and *transcendent beliefs regarding life* is statistically significant.

Model C also contains several significant indirect effects. As was the case with Model B, *transcendent beliefs regarding life* is indirectly related to *classroom management* through the variable of *student engagement* ( $\beta = .50$ ). *Classroom management* is positively related to its fellow endogenous variable, *instructional strategies* ( $\beta = .23$ ). *Instructional strategies* is also indirectly related to *transcendent beliefs regarding life* through *student engagement* ( $\beta = .52$ ). Once again, it should be noted that although Model B shows that *connection to God* does not directly affect the endogenous variables, *connection to God* is positively related with its partner exogenous variable, *transcendent beliefs regarding life* ( $\phi = .64$ ).

Model C seems to be the best fit model of explanation for relationship between variables. The model is significant in all pathways and is consistent with the literature. The structural model fits well; the maximum likelihood ratio  $\chi^2(5, N = 333) = 5.71, p = .33501$ . The GFI, AGFI, CFI, and RMSEA are .993, .980, .998, and .021, respectively.

## RESULTS

The study was driven by an investigation into the relationship between teacher spirituality and teacher self-efficacy. The research question guiding this study was: Does spirituality impact teacher effectiveness? If so, then how does spirituality impact teacher self-efficacy?

Factor analysis revealed two constructs of the teacher spirituality instrument entitled, Daily Spiritual Experience Scale (DSES). The researcher labeled the two constructs as *connection to God* and *transcendent beliefs regarding life*. Cronbach's  $\alpha$  was .957 for the entire measure. Previous research using factor analysis of the Teacher Self-Efficacy Scale (TSES) revealed three constructs: *student engagement*, *instructional strategies*, and *classroom management*. With the exception of *connection to God*, all constructs had a *SD* of less than 1.

Multiple regression was performed to show correlation between the variables. With the exception of the correlation between *connection to God* and the dependent variables of *instructional strategies* and *classroom management*, all other correlations revealed a significant correlation of  $p < .01$ . That is, regression analysis revealed that both *connection to God* and *transcendent beliefs regarding life* significantly contributed to *student engagement*, while only *transcendent beliefs regarding life* contributed to the models measuring regression with the dependent variables of *instructional strategies* and *classroom management*.

Path analysis, conducted by LISREL 9.2, reflected similar findings. Three models were reviewed by the researcher, each producing Gamma scores. *T* values for all paths in the original hypothesized model were considered. Path analysis revealed *connection to God* was not a significant path in any of the models. Conversely, in Model B, *transcendent beliefs regarding life* showed *t* values > 1.96, indicating a significant path with both *student engagement* and *instructional strategies*. However, with an additional recomputation, Model C indicated that *transcendent beliefs regarding life* showed a significant direct path with only *student engagement*. The consistent statistical analysis results find that *transcendent beliefs regarding life* is a significant predictor of a teacher's self-efficacy as it relates to the endogenous variable of *student engagement*.

## DISCUSSION

This study contributes to the exploration of teacher spirituality by investigating its predictive role on teacher self-efficacy, encompassing such themes as student engagement, instructional strategies, and classroom management. Tschannen-Moran and Woolfolk Hoy (2001) conducted several studies identifying the constructs of student engagement, instructional strategies, and classroom management as indicators of self-efficacy.

The study of teacher beliefs is paramount to both better understanding and improving teacher effectiveness. Teacher beliefs, such as the topic of spirituality in this study, are instrumental in influencing teacher decisions, which in turn, affect student achievement in the classroom. Perrone et al. (2006) found that teachers believed themselves to be more effective when they believed there was spiritual connectedness with the work they performed in the classroom. Spirituality, as a component of teacher beliefs, can impact multiple areas of educational practice. These teacher beliefs consequently impact a teacher's sense of efficacy in conducting such educational practices. According to Porter and Freeman (1986), pedagogy, curriculum, and the function of school community are just a few of the areas of teacher beliefs that impact teacher self-efficacy.

Study findings are consistent with the previous studies on the impact of teacher beliefs, including teacher spirituality. It is important to note that teacher beliefs are not merely one among many of the factors that can affect teacher decisions, but is rather a bedrock foundation for teaching practices. Pajares (1992) posited that teaching practices themselves are only subject to improvement by a change in a teacher's belief system. Therefore, it was both necessary and advantageous to have conducted the present study on the relationship between the spiritual beliefs and self-efficacy of a teacher.

In general, the findings about the relationship between teacher spirituality and teacher self-efficacy are consistent with prior research (e.g., Coladarci, 1992; Long, 2008; Palmer, 2000; Stanley, 2011). Perrone et al. (2006) posited that teachers who recognize a spiritual connectedness with their work also perceive themselves as more effective. The Daily Spiritual Experience Scale (Underwood, 2011) included items that were either directly or indirectly related to the concept of "connection." The survey design itself closely measured the conceptual framework of "spirituality" in the present study. The researcher adopted Parker Palmer's definition of spirituality, "the human yearning to be connected." It is interesting that participants' responses seemed to underscore the emphasis of "connection" identified in Palmer's definition. This is evidenced by the fact that four of the top five mean-values were associated with the concept of "connection." For example, mean scores for item 2 ("connecting to all of life"), item 11 ("touched by the beauty of creation"), item 12 ("I feel thankful for my blessings"), and item 13 ("I feel a selfless caring for others") indicate a value on transcendence and relational consciousness (Hay & Nye, 2006), or "connection." Mean scores for the items were 4.55, 4.62, 5.18, and 4.59, respectively. Connectedness, whether to God or to others, was a central theme of the DSES scale.

Factor analysis was conducted to reveal two constructs within the DSES, both of which reflected the common theme of "connection." Constructs were transformed and labeled as *connection to God* and *transcendent beliefs regarding life*. The fact that the DSES measured spirituality as a person's connection to God seems to affirm the findings from the literature on the subject of spirituality. Kanarek and Lehman (2013) identified prayer as one of the three salient ways a teacher attempts to connect with students. The authors explained that connecting to God through prayer empowers teachers to connect to their students because the teachers felt more invested in students' lives after having prayed for their students. Furthermore, the impact of connecting to God upon teacher effectiveness is also recognized in the work of Walvoord (2008), who highlighted the teacher's role in engaging students in spiritual formation by helping students relate the course to their own spiritual and religious lives.

A second component of spirituality is the connection made with other people and things. After factor analysis, this second component of the DSES was labeled by the construct *transcendent beliefs regarding life*. This construct, too, was largely reflective of Palmer's (2000) definition of spirituality. Most of these items solicited participants' beliefs about how they relate to other people, as well as their feelings in relationship to experiences in life. This spiritual ability to see oneself in relationship to others is highlighted in the work of Hay and Nye (2006) by the phrase "relational consciousness." Zohar and Mitchells (2000) participants reported high efficacy and scores reflecting high spirituality. The authors explained that the participants' high spirituality was demonstrated to the degree individuals were able to recognize life's connectedness. The DSES consists of six items to measure this construct of spirituality, whereby participants reported their understanding of their connection to other people and things.

### **Relationship between Exogenous Variables *Transcendent Beliefs***

#### ***Regarding Life and Connection to God***

The path analysis in this study revealed a direct relationship between the exogenous variables of *transcendent beliefs regarding life* and *connection to God* ( $\phi = .64$ ). It is imperative to discuss the importance of this relationship between the variables because there are several implications. First, it should be noted that a relationship between the variables is consistent with the literature. Conceptually, spirituality is a combination of the two constructs and, specifically, a "connection" between the two constructs. The Scottish Church's Council defined spirituality as "an exploration into what is involved in becoming human . . . an attempt to grow in sensitivity to self, to others, to the non-human creation and to the God who is within and beyond this totality" (McFague 1997, p. 10). Furthermore, Jacobs (2012) explained that spirituality can be conceptualized as an integration of many things, including belief in a higher power, prayer, and even transcendence. Beauregard and O'Leary (2007) reiterated the connection between the constructs in the use of RSMs in which practices like prayer, long drives, and even time with others are indicative of the relationship between the study's exogenous variables of *transcendent beliefs regarding life* and *connection to God*.

It is no surprise that the constructs *connection to God* and *transcendent beliefs regarding life* are interrelated. In the design of her instrument entitled DSES, Underwood (2011) explained this shared relationship between the constructs. She clarified the design of the instrument, highlighting the inclusive nature of "connection" both to God and others:

The scale is relational in construction, and it is not surprising that scores on the scale have correlations with our relationships with others in concrete ways. The compassionate love items describe moments when people stretch out to those around them in care and acceptance and the two love perception items describe moments that perceived care flows in from a transcendent source either directly or through individuals. Although beliefs that "God loves us," or that one ought to love others are both important, the DSES measures a felt sense of this love as it touches daily life, and might affect our decisions, attitudes and actions. The DSES provides the opportunity to examine how transcendent love and care may help to fuel love and care for others. (p. 44)

It may well be argued that the dimensions of the two constructs are mutually inclusive. That is, there can hardly be one without the other. They are both necessary for spiritual growth. Perhaps the Christian scriptures capture it best in illustrating the connection between loving others and knowing God. "Dear friends, let us love one another, for love comes from God. Everyone who loves has been born of God and knows God. <sup>8</sup>Whoever does not love does not know God, because God is love" (I John 4:7-8).

#### **Relationship between *Connection to God* and Self-Efficacy**

Statistical analysis of the independent variable *connection to God* revealed no significant correlation with either of the dependent variables *instructional strategies* or *classroom management*. Neither multiple regression nor path analysis yielded a statistically significant effect. Moreover, path analysis did not reveal any significant path between *connection to God* or any endogenous variable. This is not to say that *connection to God* does not have any effect at all. Both Models B and C demonstrated that *connection to God* is significantly correlated with the other exogenous variable, *transcendent beliefs regarding life*. Therefore, *connection to God* shows a significant indirect effect on *student engagement*. The findings regarding the impact of spirituality on teacher self-efficacy are consistent with much of the literature regarding spiritual development in the life of the teacher.

A word of caution should be noted at this point. Although *connection to God* did not have a direct effect on the endogenous variables, its direct positive relationship with *transcendent beliefs regarding life* and its indirect effect on *student engagement* should be carefully analyzed. There may be several reasons *connection to God* did not have a significant direct effect. It is possible that there are discrepancies in participants' understanding of items related to *connection to God* in the DSES instrument. That is, most of the questions lend themselves to how a participant "feels" (all items with the exception of items 11, 14, and 15). Feelings are not always a reliable indicator of what is true according to many religious beliefs and doctrines. That is, theology and doctrine are a foundation of truth for many religious people by which to live life, rather than a feeling that may arbitrarily change with time and circumstances. Furthermore, many religions advocate a humble view of the individual, thereby dismissing any idea that an individual can live a life that has attained the highest level. Therefore, it may be difficult for some religious people to answer item 16 of the DSES with the response that they are "as close as possible with God," because it would imply that the participant has arrived at a particular pinnacle of spiritual attainment. Perhaps it is possible that participants' responses were lower for these items in *connection to God*, thereby skewing the results. It is recommended that careful item analysis be conducted, quite possibly including the use of a different instrument to measure *connection to God*. An additional observation and recommendation should be noted here as well. Nearly all the items within the DSES are related to a "positive" incident, but some religious people may argue that authentic spiritual growth is also evidenced in times of difficulty, loss, and suffering. It is possible that had the items related to *connection to God* addressed a participant's desire to connect to God in life's troublesome times, participant responses may have yielded different descriptive statistics. Given the researcher's interest in how spirituality enables teachers to both overcome and thrive in their profession, it might have been advantageous to include items measuring such spiritual emphasis. Again, it is conceivable that these aforementioned observations may explain the lack of statistical significant direct effect in *connection to God* on the endogenous variables.

### **Relationship between *Transcendent Beliefs Regarding Life* and Self-Efficacy**

In this study, the relationship of teacher spirituality was investigated, as identified by the constructs of *transcendent beliefs regarding life* and *connection to God*, with the constructs identified in the Teacher Self-Efficacy Scale (TSES), including *student engagement*, *instructional strategies*, and *classroom management*. The operational definition of teacher self-efficacy was borrowed from the work of Dembo and Gibson (1985) who defined teacher efficacy as "the extent to which teachers believe they can affect student learning" (p. 173). Although research was conducted in the area of teacher self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2001), this study was original in that it explored the relationship between the variables to determine if any relationship exists.

### **Relationship between *Transcendent Beliefs Regarding Life* and *Student Engagement***

Upon statistical analysis using both multiple regression and path analysis, the construct of *transcendent beliefs regarding life* seemed to reveal significant relationships with the study's dependent variables. In particular, path analysis revealed that a teacher's spirituality involving *transcendent beliefs regarding life* predicts a teacher's self-efficacy with regard to *student engagement* ( $t$  value = 4.545). The consistency of *transcendent beliefs regarding life* as a predictor of teacher self-efficacy associated with *student engagement* supports previous research findings that affirm the impact of teacher spiritual development and the benefits of student holistic engagement in the learning process (Martin & Dawson, 2009; Silvern, 2006).

These findings are consistent with literature whereby spirituality can enable teachers and students to better "connect" and "engage" with their subject matter and school community (Zohar & Marshall, 2011). As Silvern (2006) maintained, a spiritually inclined teacher is likely to view life holistically, thus becoming better equipped to engage students in the learning process. King (2008) posited that a classroom founded upon spiritually grounded pedagogy will enable students to make connections between everyday life and what they are learning in the classroom. This ability to make connections is what Crick and Jelfs (2004) labeled as "learning power." The present study's findings suggesting a relationship between a teacher's spiritual beliefs and student engagement seem to support the results of previous research, which argued that the more a teacher is spiritually adept, the greater the students will engage in the classroom.

### **Relationship between *Transcendent Beliefs Regarding Life and Instructional Strategies***

In one path analysis, Model B indicated that *transcendent beliefs regarding life* revealed a significant path with not only *student engagement*, but also with *instructional strategies*. In this particular model, path coefficients and *t* values indicated a statistically significant relationship between the aforementioned variables. Although recalculation in Model C did not reveal a direct effect between *transcendent beliefs regarding life* and *instructional strategies*, it did show an indirect effect between the variables. Models B and C both demonstrated good fit, revealing all paths as either statistically significant direct or indirect paths. Furthermore, multiple regression revealed a  $p < .01$ , reflecting a statistically significant correlation between the variables.

These findings support previous research that encouraged teachers to develop lessons and practices which assist in making meaningful connections to life (Council for Curriculum Examination and Assessment, 2007; Green, 2009). Deakin (2011) submitted that as teachers engage in spiritual development, they can become more effective in their instruction by implementing practices that facilitate the development of critical thinking skills and the formation of solutions in problem-based learning (as cited in Crick & Jelfs, 2011). Spiritual development in both teacher and student alike can incite critical thought and inquiry, thus showing evidence of effective instructional practices. It is interesting that these findings from both the present study as well as previous research support the foundational goals of the Common Core, including increased rigor and college/career readiness.

As mentioned, path analysis seems to indicate an indirect effect of *transcendent beliefs regarding life* upon *instructional strategies* through the variable *student engagement*. Silvern (2006) explained that as teachers and students are engaged in educating the spirit, student learning will occur at deeper levels of cognition. That is, as teachers use instructional practices that are spiritual in content (as identified in a meta-analysis by Gafoor & Nanee, 2011), the more likely students will engage in the instructional strategies. Moreover, this ability of teachers to connect with and engage students, referred to as “connective pedagogy” or “relational pedagogy” (Bergum, 2003; Boyd et al., 2006; Corbett, 2001a, 2001b; Corbett & Norwich, 1999; Gadow, 1999), is fundamental to effective instruction (Martin & Dawson, 2009). Thus, research seems to affirm the indirect effect *transcendent beliefs regarding life* has on *instructional strategies* through the use of engaging students.

### **Relationship between *Transcendent Beliefs Regarding Life and Classroom Management***

Research has revealed that many educational policies and programs have identified a connection between spiritual development and classroom management. Long (2008) described how teachers have been encouraged to make spiritual connections in the classroom because spiritual growth is critical to a values-driven approach to character education. It is both the teacher’s own spirituality and the development of the student’s spirituality that promotes a focus on character and behavior, which in turn, can facilitate effective classroom management practices. Holt et al. (2011) explained how teacher beliefs are related to classroom management and classroom climate, specifically stating that a teacher’s spiritual beliefs are important in creating a caring classroom.

Studies have revealed the correlation between teacher beliefs and the practice of building caring classroom environments and relationships with students. Linda’s (2002) meta-analysis compared characteristics of spiritually-focused individuals, values identified by the National Council of Educational Research and Training (NCERT, 1981) of teachers who promote values education among their students, and the attributes of academically resilient individuals as enumerated by various researchers (Gafoor & Neena, 2011). The significance of this study is that Linda found the same spiritual attributes demonstrated in spiritually-minded persons are often the same attributes held by academically resilient persons. These transcendent beliefs cited by the study as “caring” and “focused on relationships” are techniques that link spiritually-minded teachers with effective classroom environments, whereby students are both resilient and demonstrate these shared values with the teacher.

Gafoor and Neena’s (2011) meta-analysis identified three areas in which students are affected by an education that encourages both spirituality and academic resiliency: “instruction,” “teacher behavior,” and “school ethos and environment.” Gafoor and Neena found transcendent beliefs affecting practice include developing self-awareness and self-knowledge, developing inner strength and resiliency, enhancing love and relationships, and encouraging reflection on experience. These instructional focus areas proved to be salient contributors in research encouraging both spirituality and resiliency. Due to the saliency of such instructional practices in their meta-analysis, it can be argued that these practices are indicators of effective teaching strategies, thus validating the use of the construct, *transcendent beliefs regarding life* in the current study.

Furthermore, findings from these studies show many shared techniques between “sacred” and “secular” approaches and, therefore, there should be no hesitation in integrating spirituality into everyday life of schools in secular societies.

Although classroom management was not directly affected by the exogenous variables in either path analysis Models B or C, multiple regression between the variables of *transcendent beliefs regarding life* and *classroom management* did reveal a statistically significance relationship ( $p < .01$ ). This was consistent with the author’s hypothesized conceptual framework of Model A. Furthermore, path analysis in Model C revealed a statistically significant indirect effect between *transcendent beliefs regarding life* and *classroom management* via *student engagement*. As noted by Holt et al. (2011), a teacher’s spiritual beliefs can facilitate student engagement, whereby students sense a caring classroom environment. For example, spiritual items such as *a selfless caring for others* (item 13 of the DSES) and *accepting others even when they do wrong* (item 14 of the DSES) make an indirect effect on *classroom management* effectiveness by initially engaging students in a positive manner as described. Although there is some evidence from the literature and DSES item analysis suggesting correlation between teacher spirituality and classroom management, it is still unclear from the study’s advanced statistical analysis exactly how *transcendent beliefs regarding life* indirectly affects *classroom management*. The uncertainty between these findings and the present study’s findings necessitates further investigation.

## CONCLUSIONS

One of the purposes of the study was to show whether the spirituality of the teacher influences a teacher’s ability to both survive and thrive within the profession. As teachers become disillusioned and discouraged regarding the demands of the teaching profession, it has necessitated investigation into the factors related to teacher beliefs about “connection” in their role as an educator and their sense of self-efficacy. Research into belief structures such as spirituality can yield profound results into the dynamics of teacher effectiveness (Ashton, 1990; Ashton & Webb, 1986; Brookhart & Freeman, 1992; Buchmann, 1984; Clark, 1988; Dinham & Stritter, 1986; Feiman-Nemser & Floden, 1986; Fenstermacher, 1979, 1986; Goodman, 1988; Munby, 1982, 1984; Nespor, 1987; Tabachnick et al., 1979; Weinstein, 1988, 1989; Wilson, 1990). The following recommendations are proffered as actions to appropriate the “human yearning to be connected” that facilitate teacher effectiveness.

Findings from this study inform educators of the necessity to formulate a pedagogy that aligns with best teaching practices. Research exploring the affective influence of teachers has served as a catalyst for educational reform efforts, including the establishment of teaching standards that reflect the spiritual sphere (NCTE, 2009). In bringing a more balanced approach to educational practices and pedagogy (Clarken, 2008), educators are being encouraged to be spiritual people (Creighton, 1999; Keyes et al., 1999; Maxwell, 2003; Solomon & Hunter, 2002; Thom, 1984, 2002). As both the literature and the present study seem to affirm, spirituality is a system of beliefs that can enable teachers to both effectively engage and instruct students (Gooden, 2000). Therefore, it is incumbent upon teacher education programs and ongoing professional development, to holistically train teachers in pedagogical development that accentuates the importance of “connecting” with students and making learning transcendent. Because there are many benefits to educational reform emphasizing spirituality, including greater moral productivity (Oberski & McNally, 2007), it can be argued that the topic of the spiritual development of the teacher should be examined and even celebrated in the classroom.

It is interesting that administrators and schools were found to be more successful when they conducted staff development and trainings that focused on the spirituality of both its students and teachers (Grasek, 2005; Guillory, 2002; Hay & Nye, 2006). Therefore, wise are the school district and staff that are not deterred from engaging in spiritual development of both teachers and students (Graham, 2001; Linda, 2002), but rather encourages holistic learning which leads to greater teacher effectiveness and increased student achievement (Bobeck, 2002; Thom et al., 2005). Furthermore, it is recommended that principals and human resource officials in charge of hiring teachers be keen on how to best solicit information from prospective teachers on their pedagogical practices concerning developing “connections” with students. District employees whose responsibility it is to hire teachers must know what it is that “great teachers do.” Therefore, district personnel should develop criteria that will best identify the quality of teacher who can make those connections in the classroom, ultimately predicting which prospective teachers best possess effective practices in student engagement, instructional strategies, and classroom management.

It is the recommendation of the author that teachers take an active interest in their own spirituality. I think it is imperative to remind the reader that spirituality does not simply refer to religious beliefs and practices (Koenig, 2004; Richards & Bergin, 1998). Although spirituality is very closely related to one's beliefs about God and even one's "connection" to God, the items included in the DSES seem to indicate that spirituality is more than mere intellectual beliefs or assent; rather, it involves attitudes and actions that transcend personal existence. Studies have suggested that spiritual development can help teachers overcome adversity, such as stress and anxiety (Pajares, 1992; Stanley, 2011), even empowering teachers to feel more effective in the classroom (Perrone et al., 2006). Due to the influential role of teacher beliefs, such as spirituality, on teacher behavior and its consequent effect on students and learning (Abelson, 1979; Bandura, 1986; Lewis, 1990; Nespor, 1987; Nisbett & Ross, 1980; Posner et al., 1982; Rokeach, 1968; Schommer, 1990), teachers would do well to consider their professional role and development through the lens of a holistic self. Furthermore, teachers would serve their students well to cultivate a classroom environment and utilize instructional strategies that holistically develop the person of the student.

## REFERENCES

- Abelmann, C., Elmore, R., Even, J., Kenyon, S., & Marshall, J. (1999). *When accountability knocks, will anyone answer?* (Research Report No. RR-042). Philadelphia, PA: University of Pennsylvania, Consortium for Policy Research in Education. Retrieved from [http://www.cpre.org/images/stories/cpre\\_pdfs/rr42.pdf](http://www.cpre.org/images/stories/cpre_pdfs/rr42.pdf)
- Abelson, R. (1979) Differences between belief systems and knowledge systems. *Cognitive Science*, 3, 355-366.
- Agresti, A., & Finlay, B. (2009). *Statistical methods for the social sciences: With SPSS from A to Z: A brief step-by-step manual* (4th ed.). Boston, MA: Allyn & Bacon.
- Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Aron, A., Aron, E., & Coups, E. J. (2007). *Statistics for the behavioral and social sciences: A brief course*. Upper Saddle River, NJ: Prentice Hall.
- Ashton, P. T. (1990). Editorial. *Journal of Teacher Education*, 44(1), 2.
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York, NY: Longman.
- Author (2015) [details removed for peer review]
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Upper Saddle River, NJ: Prentice-Hall.
- Beauregard, M., O'Leary, D., & Lawlor, P. (2007). *The spiritual brain*. Old Saybrook, CT: Tantor Media.
- Benhan, B., & O'Brien, L. (2002). Why are experienced teachers leaving the profession? *Phi Delta Kappan*, 84, 24-32.
- Bergum, V. (2003). Relational pedagogy: Embodiment, improvisation, and interdependence. *Nursing Philosophy*, 4, 121-128.
- Berryhill, J., Linney, J. A., & Fromewick, J. (2009). The effects of education accountability on teachers: Are policies too stress provoking for their own good? *International Journal of Education Policy & Leadership*, 4(5), 1-14.
- Birch, S. H., & Ladd, G. W. (1996). Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In J. Juvonen & K. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 199-225). New York, NY: Cambridge University Press.
- Bobeck, B. L. (2002). Teacher resiliency: A key to career longevity. *The Clearing House* (5), 202-205.
- Bochner, A., & Ellis, C. (1996). Talking over ethnography. In C. Ellis & A. Bochner (Eds.), *Composing ethnography* (pp. 13-25). Maryland, CA: AltaMira Press.
- Boyd, R., MacNeil, N., & Sullivan, G. (2006). Relational pedagogy: Putting balance back into students' learning. *Curriculum Leadership: An Electronic Journal for Leaders in Education*, 13. Retrieved from <http://www.curriculum.edu.au/leader/>
- Bracey, G. W. (2003). *On the death of childhood and the destruction of public schools: The folly of today's education policies and practices* (pp. 14-16). Portsmouth, NH: Heinemann.
- Brookhart, S. M., & Freeman, D. J. (1992). Characteristics of entering teacher candidates. *Review of Educational Research*, 62, 37-60.



- Brown, C. A., & Cooney, T. J. (1982). Research on teacher education: A philosophical orientation. *Journal of Research and Development in Education*, 15(4), 13-18.
- Buchmann, M. (1984). The use of research knowledge in teacher education and teaching. *American Journal of Education*, 93, 421-439.
- Cavanagh, S. L. (2001). The pedagogy of the pastor: The formation of the social studies curriculum in Ontario. *Canadian Journal of Education*, 26, 401-417.
- Chwalisz, K., Altmaier, E. M., & Russell, D. W. (1992). Causal attributions, self-efficacy cognitions, and coping with stress. *Journal of Social and Clinical Psychology*, 11, 377-400.
- Cho, J. (2000). *Curriculum implementation as lived teacher experience: Two cases of teachers* (Unpublished doctoral dissertation). Ohio State University, Columbus, OH.
- Cho, J., & Eberhard, B. (2013). When Pandora's box is opened: A qualitative study of the intended and unintended impacts of Wyoming's new standardized tests on local educators' everyday practices. *Qualitative Report*, 18(10).
- Clark, C. M. (1988). Asking the right questions about teacher preparation: Contributions of research on teaching thinking. *Educational Researcher*, 17(2), 5-12.
- Clark, C. M., & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 255-296). New York, NY: Macmillan.
- Clarcken, R. H. (2008, March 24-28). *Developing spiritual potentialities, principles and practices of leadership: A self study in teacher education*. Paper presented at the American Educational Researcher Association Annual Meeting, New York, NY.
- Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *The Journal of Experimental Education*, 60, 323-337.
- Cole, A. L. (1989, April). *Making explicit implicit theories of teaching: Starting points in preservice programs*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Conduct Problems Prevention Research Group. (1999). Initial impact of the Fast Track prevention trial for conduct problems: II. Classroom effects. *Journal of Consulting and Clinical Psychology*, 67, 648.
- Conley, D. T., & Goldman, P. (1995). Reactions from the field to state restructuring legislation. *Educational Administration Quarterly*, 31, 512-538.
- Corbett, J. (2001a). *Supporting inclusive education: A connective pedagogy*. London, UK: Routledge-Falmer.
- Corbett, J. (2001b). Teaching approaches which support inclusive education: A connective pedagogy. *British Journal of Special Education*, 28, 55-59.
- Corbett, J., & Norwich, B. (1999). Learners with special educational needs. In P. Mortimore (Ed.), *Understanding pedagogy and its impact on learning* (pp. 115-136). London, UK: Paul Chapman.
- Council for Curriculum Examination and Assessment. (2007). *Curriculum support and implementation box at key stages 1-2*. Belfast, Ireland: Northern Ireland Curriculum Council.
- Covey, S. (1989). *7 habits of highly effective people*. New York, NY: Free Press.
- Covey, S. (1992). *Principle centered leadership*. New York, NY: Fireside.
- Covey, S. (2004). *The 8<sup>th</sup> habit*. New York, NY: Free Press.
- Creighton, T. (1999). Spirituality and the principalship: Leadership for the new millennium. *International e Journal for Leadership in Learning*, 3(11).
- Crick, R. D., & Jelfs, H. (2011). Spirituality, learning and personalisation: Exploring the relationship between spiritual development and learning to learn in a faith-based secondary school. *International Journal of Children's Spirituality*, 16(3), 197-217.
- Darling-Hammond, L. (1990). Teachers and teaching: Signs of a changing profession. In W. R. Houston, M. Haberman, & J. Sikula (Eds.), *Handbook of research on teacher education* (pp. 267-290). New York, NY: Macmillan.
- DeKlerk, J. J. (2005). Spirituality, meaning in life, and work wellness: A research agenda. *International Journal of Organizational Analysis*, 13(1), 64-68.
- Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *Elementary School Journal*, 86, 173-184.
- Dewey, J. (1933). *How we think*. Boston, MA: D. C. Heath.
- Dinham, S. M., & Stritter, F. T. (1986). Research on professional education. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 952-970). New York, NY: Macmillan.

- Dossey, L. (2002). How healing happens: Exploring the nonlocal gap. *Alternative Therapies in Health and Medicine*, 8(2), 12-16.
- Eraut, M. (1985). Knowledge creation and knowledge use in professional contexts. *Studies in Higher Education*, 10, 117-133.
- Ernest, P. (1989). The knowledge, beliefs and attitudes of the mathematics teacher: A model. *Journal of Education for Teaching*, 15, 13-34.
- Farber, B. A. (1991). *Crisis in education: Stress and burnout in the American teacher*. San Francisco, CA: Jossey-Bass.
- Feiman-Nemser, S., & Floden, R. E. (1986). The cultures of teaching. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 505-526). New York, NY: Macmillan.
- Fenstermacher, G. D. (1979). A philosophical consideration of recent research on teacher effectiveness. In L. S. Shulman (Ed.), *Review of research in education* (Vol. 6, pp. 157-185). Itasca, IL: Peacock.
- Fenstermacher, G. D. (1986). Philosophy of research on teaching: Three aspects. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 37-49). New York, NY: Macmillan.
- Fullan, M. (1995). The school as a learning organization: Distant dreams. *Theory into Practice*, 34, 230-235.
- Fullan, M., & Pomfret, A. (1977). Research on curriculum and instruction implementation. *Review of Educational Research*, 47, 335-397.
- Gadow, S. (1999). Relational narrative: The postmodern turn in nursing ethics. *Scholarly Inquiry for Nursing Practice*, 13, 57-70.
- Gafoor, K., & Kottalil, N. K. (2011, July 21-22). *Cultivating the spirit through resilience: Vision of effective schools and mission of caring teachers*. Paper presented at the National Seminar on Spiritual Intelligence—A Paradigm for Holistic Development among Learners, Changanassery, Kerala, India.
- Gafoor, K. A., & Neena, K. K. (2011). Factors fostering academic resilience: A review of literature. *Endeavours in Education* (accepted for publication).
- Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76, 569-582.
- Ginsburg, A., & Hanson, S. (1986). *Gaining ground: Values and high school success*. Washington, DC: U.S. Department of Education.
- Gooden, W. (2000). Confidence under pressure. How faith supports risk taking. In R. Banks & K. Powell (Eds.), *Faith in leadership: How leaders live out their faith in their work and why it matters* (pp. 46-61). San Francisco, CA: Jossey-Bass.
- Goodman, J. (1988). Constructing a practical philosophy of teaching: A study of preservice teachers' professional perspectives. *Teaching & Teacher Education*, 4, 121-137.
- Graham, B. L. (2001). Resilience among American Indian youth: First nations youth resilience study. *Dissertation Abstracts International*, 62(3-B), 1615.
- Graseck, P. (2005). Where's the ministry in administration? Attending to the souls of our schools. *Phi Delta Kappan*, 86, 373.
- Green, A. (2009). Rabbinic training and transdenominationalism: Some personal perspectives. In Z. Heller (Ed.), *Synagogues in a time of change: Fragmentation and diversity in Jewish religious movements*. Herndon, VA: The Alban Institute.
- Guillory, W. A. (2002). *Spirituality in the workplace: A guide for adapting to the chaotically changing workplace*. Salt Lake City, UT: Innovations International.
- Hamer, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625-638.
- Hamer, D. H. (2004). *The God gene: How faith is hardwired into our genes*. New York, NY: Doubleday.
- Harrison, J. (1997). *Implementing a multicultural experiential sociology curriculum: Mutual adaptation and reframing theories of action: Preview*. Chicago, IL: The American Educational Research Association. (ED 412165)
- Hay, D., & Nye, R. (2006). *The spirit of the child*. London, UK: Jessica Kingsley.
- Hoffman, A. J. (2003). Reconciling professional and personal value systems: The e spiritually motivated manager as organizational entrepreneur. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 193-208). Armonk, NY: M.E. Sharpe.

- Holt, C., Hargrove, P., & Harris, S. (2011). An investigation into the life experiences and beliefs of teachers exhibiting highly effective classroom management behaviors. *Teacher Education and Practice*, 24(1), 96-113.
- Hoy, W. K., & Woolfolk, A. E. (1990). Socialization of student teachers. *American Educational Research Journal*, 27, 279-300.
- Hunter, I. (1994). *Rethinking the school: Subjectivity, bureaucracy and criticism*. New York, NY: St. Martin's Press.
- Jackson, P. (1968). *Life in classrooms*. New York, NY: Holt, Rinehart & Winston.
- Jacobs, A. C. (2012). South African teachers' views on the inclusion of spirituality education in the subject life orientation. *International Journal of Children's Spirituality*, 17, 235-253.
- Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 195-213). Washington, DC: Hemisphere.
- Johnson, C. (2015). *Meeting the ethical challenges of leadership: Casting light or shadow* (5th ed.). Los Angeles, CA: Sage.
- Johnston, P. (1998). The consequences and the use of standardized tests. In S. Murphy (Ed.), *Fragile evidence. A critique of reading assessment* (pp. 89-101). Mahwah, NJ: Lawrence Erlbaum.
- Johnston, P., Afflerbach, P., & Weiss, P. (1993). Teachers' evaluation of the teaching and learning of literacy and literature. *Educational Assessment*, 1, 91-117.
- Johnston, P., Guice, S., Baker, K., Malone, J., & Michelson, N. (1995). Assessment of teaching and learning in "literature based" classrooms. *Teaching and Teacher Education*, 11, 359-371.
- Johnston, R., & Badley, G. (1996). The competent reflective practitioner. *Innovation and Learning in Education*, 2, 4-10.
- Kanarek, J., & Lehman, M. (2013). Assigning integration: A framework for intellectual, personal, and professional development in seminary courses. *Teaching Theology & Religion*, 16(1), 18-32.
- Karadağ, E. (2009). Spiritual leadership and organizational culture: A study of structural equation modeling. *Educational Sciences: Theory & Practice*, 9(3).
- Keyes, M. W., Hanley-Maxwell, C., & Capper, G. A. (1999). "Spirituality? It's the core of my leadership": Empowering leadership in an inclusive elementary school. *Educational Administration Quarterly*, 35, 203-237.
- King, U. (2008). *The search for spirituality: Our global quest for a spiritual life*. New York, NY: BlueBridge.
- Koeing, H. (1999). *The healing power of faith*. New York, NY: Simon & Schuster.
- Koenig, H. G. (2004). Religion, spirituality, and medicine research findings and implications for clinical practice. *Southern Medical Journal*, 97, 1194-1200.
- Koenig, H. G. (2008). *Medicine, religion and health: Where science and spirituality meet*. West Conshohocken, PA: Templeton Foundation Press.
- Kopkowski, C. (2008). Why they leave. *NEAToday*, 27(7), 21-25.
- Lebow, J. L., Chambers, A. L., Christensen, A., & Johnson, S. M. (2012). Research on the treatment of couple distress. *Journal of Marital and Family Therapy*, 38(1), 145-168.
- Lee, B. (1997). *The power principle*. New York, NY: Fireside.
- Lee, H. (2017). *Pedagogy of Shalom*. Springer. Verlag, Singapore: Leitch, R., & Day, C. (2000). Action research and reflective practice: Towards a holistic view. *Educational Action Research*, 8(1), 179-193.
- Lewis, H. (1990). *A question of values*. San Francisco, CA: Harper & Row.
- Linda, L. (Ed). (2002). *Schools with spirit: Nurturing the inner lives of children and teachers*. Boston, MA: Beacon Press.
- Long, L. (2008). Narrative autoethnography and the promotion of spiritual well-being in teacher research and practice. *Pastoral Care in Education*, 26(3), 187-196.
- Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.
- Mackley, J. (1997). Looking inwards, looking outwards: Exploring life's possibilities – Teacher handbook (CEM 1851001018) p. 10.
- Maxwell, J. C. (2003). *Leadership promises for everyday: A daily devotional*. Nashville, TN: Countryman.
- Markowski, M. (2008). Teachers in early Christianity. *Journal of Research on Christian Education*, 17(2), 136-152.
- Martin, A., & Dawson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Martin Review of Educational Research*, 79, 327-365.

- Martin, A. J. (2006a). A motivational psychology for the education of indigenous students. *Australian Journal of Indigenous Education*, 35, 30-43.
- Martin, A. J. (2006b). *Pastoral pedagogy: A great composition comprising the song, the singer, and the singing*. Washington, DC: U.S. Department of Education. (ERIC Document Reproduction Service No. ED490483)
- Martin, V. (2000). A person-centered perspective on the marginalising effects of illness and hospitalisation. *Auto/biography*, 8, 19-26.
- Marshall, C. (1998). Bridging the chasm between policymakers and educators. *Theory into Practice*, 27(2), 98-105.
- Mathewes-Green, F. (1997). *Facing east: A pilgrim's journey into the mysteries of orthodoxy*. New York, NY: HarperCollins.
- McFague, S. (1997). *Super, natural Christians*. London, UK: SCM.
- McLuhan, M. (1994). *Understanding media: The extensions of man*. Cambridge, MA: MIT Press.
- Metropolitan Life Insurance Co. (1985). *Former teachers in America*. New York, NY: Author.
- Miller, K. R. (2007). *Finding Darwin's God: A scientist's search for common ground between God and evolution*. New York, NY: Harper Perennial.
- Montessori, M. (1948). *Peace and education*. Wheaton, IL: Theosophical Publishing.
- Munby, H. (1982). The place of teachers' beliefs in research on teacher thinking and decision making, and an alternative methodology. *Instructional Science*, 11, 201-225.
- Munby, H. (1984). A qualitative approach to the study of a teacher's beliefs. *Journal of Research in Science Teaching*, 21, 27-38.
- NCERT, P. E. (1981). *A draft curriculum for Class I to X*. New Delhi, India: Author.
- NCTE. (2009). *National curriculum framework for teacher education*. New Delhi, India: National Council for Teacher Education.
- Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies*, 19, 317-328.
- Newberg, A., & Waldman, M. (2006). *Born to believe: God, science and the origin of ordinary and extraordinary beliefs*. New York, NY: Free Press.
- Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.
- Oberski, I., & McNally, J. (2007). Holism in teacher development: A Goethean perspective. *Teaching and teacher education: An International Journal of Research and Studies*, 23, 935-943.
- Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco, CA: Jossey-Bass.
- Palmer, P. (2000). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco, CA: Jossey-Bass.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62, 307-332.
- Pargament, K. (1997). *The psychology of religion and coping*. New York, NY: Guilford Press.
- Perrone, K. M., Webb, L. K., Wright, S. L., Jackson, Z. V., & Ksiazak, T. M. (2006). Relationship of spirituality to work and family roles and life satisfaction among gifted adults. *Journal of Mental Health Counseling*, 28(6), 252-268.
- Pintrich, P. R. (1990). Implications of psychological research on student learning and college teaching for teacher education. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 826-857). New York, NY: Macmillan.
- Porter, A. C., & Freeman, D. J. (1986). Professional orientations: An essential domain for teacher testing. *Journal of Negro Education*, 55, 284-292.
- Posner, G. J., Strike, K. A., Hewson, P. W., & Gertzog, W. A. (1982). Accommodation of a scientific conception: Toward a theory of conceptual change. *Science Education*, 66, 211-227.
- Ramsey, R. F. (1999). *Suicide intervention handbook*. Calgary, Alberta, Canada: Livingworks Education.
- Reese, M., Gordon, S. P., & Price, L. R. (2004). Teachers' perceptions of high-stakes testing. *Journal of School Leadership*, 14, 464-496.
- Richards, P. S., & Bergin, A. E. (1997). *A spiritual strategy for counseling and psychotherapy*. Washington, DC: American Psychological Association.
- Rinpoche, S. (1995). *The Tibetan book of living and dying: The spiritual classic and international bestseller* (Rev. ed.). San Francisco, CA: Harper Collins.

- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150-163.
- Rokeach, M. (1968). *Beliefs, attitudes, and values: A theory of organization and change*. San Francisco, CA: Jossey-Bass.
- Schommer, M. (1990). Effects of beliefs about the nature of knowledge on comprehension. *Journal of Educational Psychology*, 82, 498-504.
- Schon, D. A. (1983). *The reflective practitioner*. New York, NY: Basic Books.
- Schwarzer, R. (1993). *Measurement of perceived self-efficacy: Psychometric scales for cross-cultural research*. Berlin, Germany: Freie Universität Berlin.
- Schwarzer, R., Schitz, G., & Daytner, G. (1999). *Teacher Self-Efficacy Scale*. Retrieved from <https://www.statisticssolutions.com/teacher-self-efficacy-scale/>
- Selman, R. L. (2003). *The promotion of social awareness: Powerful lessons from the partnership of developmental theory and classroom practice*. New York, NY: Russell Sage Foundation.
- Shulman, L. E. (2001). Models for campus support of the scholarship of teaching and learning. In W. E. Becker & M. L. Andrews (Eds.), *The scholarship of teaching and learning in higher education: Contributions of research universities*. Bloomington, IN: Indiana University Press.
- Sigel, I. E. (1985). A conceptual analysis of beliefs. In I. E. Sigel (Ed.), *Parental belief systems: The psychological consequences for children* (pp. 345-371). Hillsdale, NJ: Erlbaum.
- Silvern, S. B. (2006). Educating mind and spirit: Embracing a confluence of cultures in the education of children. *Childhood Education*, 83(1), 2.
- Smith, M. L. (1991). Put to the test: The effects of external testing on teachers. *Educational Researcher*, 20, 8-11.
- Smith, M. L., Edelsky, C., Draper, K., Rottenberg, C., & Cherland, M. (1991). *The role of testing in elementary schools* (CSE Tech. Rep. No. 321). Los Angeles, CA: Center for the Study of Evaluation, University of California.
- Solomon, J., & Hunter, J. (2002, September). A psychological view of spirituality and leadership. *The School Administrator*. Retrieved from [http://www.aasa.org/publications/sa/2002\\_09/stokley.html](http://www.aasa.org/publications/sa/2002_09/stokley.html)
- Stanley, A. Q. (2011). Benefits of teacher 'connections' in stressful educational settings. *International Journal of Children's Spirituality*, 16(1), 47-58.
- Strike, K. A. (2007). Common schools and uncommon conversations: Education, religious speech and public spaces. *Journal of Philosophy of Education*, 41, 693-708.
- Tabachnick, B. R., Popkewitz, T. S., & Zeichner, K. M. (1979). Teacher education and the professional perspectives of student teachers. *Interchange*, 10(4), 12-29.
- Tabachnick, B. R., & Zeichner, K. M. (1984). The impact of the student teaching experience on the development of teacher perspectives. *Journal of Teacher Education*, 35(6), 28-36.
- Taran, I. N. (2008). On the revival of upbringing in the schools: From one region's experience. *Russian Education & Society*, 50(4), 52-64.
- Tell, C. (2001). Appreciating good teaching: A conversation with Lee Shulman. *Educational Leadership*, 58(5), 6-11.
- Thom, D. J. (1984). The spiritual factor in education administration. *McGill Journal of Education*, 19, 79-93.
- Thom, D. J. (2002). Character and spirituality in educational leadership. *CEA Newsletter*, 502, 1-2.
- Thom, D. J., Ma, Q., & Ho, K. (2005). Educational leadership in the spiritual way: "Whatever will be, will be". *New Horizons in Education*, 52, 117-123.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.
- Underwood, L. (2011). The Daily Spiritual Experience Scale: Overview and results. *Religions*, 2, 29-50.
- Walvoord, B. E. (2008). Students' spirituality and "big questions" in introductory religion courses. *Teaching Theology & Religion*, 11(1), 3-13.
- Weinstein, C. S. (1988). Preservice teachers' expectations about the first year of teaching. *Teaching & Teacher Education*, 4, 31-40.
- Weinstein, C. S. (1989). Teacher education students' perceptions of teaching. *Journal of Teacher Education*, 40(2), 53-60.
- Wilson, S. M. (1990). The secret garden of teacher education. *Phi Delta Kappan*, 72, 204-209.
- Zohar, D., & Marshall, I. (2000). *SQ: Connecting with our spiritual intelligence*. New York, NY: Bloomsbury.

## APPENDIX A

## DAILY SPIRITUAL EXPERIENCE SCALE (DSES)

## Daily Spiritual Experience Scale (DSES)

**Table 1.** Daily Spiritual Experience Scale (with item numbers added). Introduction: “The list that follows includes items you may or may not experience. Please consider how often you directly have this experience, and try to disregard whether you feel you should or should not have these experiences. A number of items use the word ‘God.’ If this word is not a comfortable one for you, please substitute another word that calls to mind the divine or holy for you.”

		Many times a Day	Every day	Most days	Some days	Once in a while	Never or almost
1*	I feel God’s presence.						
2	I experience a connection to all						
3	During worship, or at other times when connecting with God, I feel joy which						
4*	I find strength in my religion or spirituality.						
5*	I find comfort in my religion or spirituality.						
6*	I feel deep inner peace or						
7	I ask for God’s help in the midst of						
8	I feel guided by God in the midst of						
9*	I feel God’s love for me						
10*	I feel God’s love for me through						
11*	I am spiritually touched by the beauty						
12	I feel thankful for my blessings.						
13	I feel a selfless caring for others.						
14	I accept others even when they do						
15*	I desire to be closer to God or in union						
			<b>Not close</b>	<b>Somewhat close</b>	<b>Very close</b>	<b>As close as possible</b>	
16	In general, how close do you feel to God?						

© Lynn Underwood – contact author to register to use scale <http://www.dsescala.org/> or [lynnunderwood@researchintegration.org](mailto:lynnunderwood@researchintegration.org)

**APPENDIX B****TEACHER SELF-EFFICACY SCALE (TSES)**

<b>Teacher Beliefs – TSES</b>										
<i>Directions:</i> Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.		This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.								
1.	How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9
2.	How much can you do to help your students think critically?	1	2	3	4	5	6	7	8	9
3.	How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
4.	How much can you do to motivate students who show low interest in work?	1	2	3	4	5	6	7	8	9
5.	To what extent can you make your expectations clear about student behavior?	1	2	3	4	5	6	7	8	9
6.	How much can you do to get students to believe they can do well in work?	1	2	3	4	5	6	7	8	9
7.	How well can you respond to difficult questions from your students?	1	2	3	4	5	6	7	8	9
8.	How well can you establish routines to keep activities running smoothly?	1	2	3	4	5	6	7	8	9
9.	How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
10.	How much can you gauge student comprehension of what you have taught?	1	2	3	4	5	6	7	8	9
11.	To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
12.	How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
13.	How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
14.	How much can you do to improve the understanding of a student who failing?	1	2	3	4	5	6	7	8	9
15.	How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
16.	How well can you establish a classroom management system with group of students?	1	2	3	4	5	6	7	8	9
17.	How much can you do to adjust your lessons to the proper level for students?	1	2	3	4	5	6	7	8	9
18.	How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
19.	How well can you keep a few problem students from ruining an entire lesson?	1	2	3	4	5	6	7	8	9
20.	To what extent can you provide an alternative explanation or example students are confused?	1	2	3	4	5	6	7	8	9
21.	How well can you respond to defiant students?	1	2	3	4	5	6	7	8	9
22.	How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
23.	How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9
24.	How well can you provide appropriate challenges for very capable students?	1	2	3	4	5	6	7	8	9

**APPENDIX C****DEMOGRAPHIC INFORMATION SURVEY**

Dear Teacher,

Please fill out the demographic information below before completing the attached survey. Check the indicator that best describes you (mark with an **X**). The survey should take you approximately 10 minutes. Your cooperation is greatly appreciated.

1. What level of education do you currently teach?

Elementary school  
 Middle School  
 High School

2. Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific islander, or some other race?

White  
 Black or African-American  
 Hispanic  
 Asian  
 Others

3. With what religious affiliation do you most closely identify?

Buddhism  
 Christianity  
 Hinduism  
 Islam  
 Folk religions  
 Other  
 Unaffiliated



**APPENDIX D****INFORMED CONSENT FORM**

*Exploring the Relationship Between Teacher Spirituality and Teacher Self-Efficacy*

[Author]

[IRB #58-15]

**2014-15 INFORMED CONSENT FORM**

**Voluntary Status:** You are being invited to participate in a research study conducted by the researcher listed above. You are being asked to volunteer since you meet the requirements for enrollment into this study. Your participation is voluntary which means you can choose whether or not you want to participate. You may withdraw any time without penalty. If you decline to continue, any data gathered to that point may be used in data analysis. If you choose not to participate, there will be no loss of benefits to which you are entitled. Before you can make your decision, you will need to know what the study is about, the possible risks and benefits of being in this study, and what you will have to do in this study. The research team is going to talk to you about the study, and they will give you this consent form to read. You may also decide to discuss it with your family or friends. If you find some of the language difficult to understand, please ask the researcher and/or the research team about this form. If you decide to participate, you will be asked to sign this form.

**Purpose:** The purpose of this study is to investigate the impact of teacher spirituality on teacher self-efficacy.

**Procedure:** To be a voluntary participant in this study, you will be asked to complete two surveys. One survey is entitled “Daily Spiritual Experience Scale,” which will attempt to measure spirituality. For the purpose of this study, spirituality will be defined as the “human learning to be connected.” The second survey is entitled, “Teacher Sense of Self-Efficacy,” which measures a teacher’s belief of their own effectiveness.

**Commitment and Compensation:** Your total participation in the study will take approximately 10 minutes

**Possible Risks & Benefits:** It is expected that participation in this study will provide you with no more than minimal risk or discomfort which means that you should not experience it as any more troubling than your normal daily life. However, there is always the chance that there are some unexpected risks. The foreseeable risks in this study include an accidental disclosure of your private information, or discomfort by answering questions that are embarrassing. If you feel uncomfortable or distressed, please tell the researcher and he/she will ask you if you want to continue. Because this is research and does not have anything to do with the current services you are receiving, you can withdraw from the study at any time without penalty.

You will not receive any direct benefits from participating in this study; however, your participation in this study will help improve the knowledge about teacher spirituality and teacher self-efficacy. Your participation may also benefit other people with similar concerns.

**Confidentiality & Consent:** No identifying information will be collected.

This document explains your rights as a research subject. If you have questions regarding your participation in this research study or have any questions about your rights as a research subject, please contact the Principal Investigator using the information at the bottom of this form. Concerning your rights or treatment as a research subject, you may contact the Research Integrity Officer at Azusa Pacific University (APU) at (626) 812-3034 or at [dguido@apu.edu](mailto:dguido@apu.edu).

**New Information:** During the course of this study, we may discover information that could be important to you. This includes information that, once learned, might cause you to change your mind about being in the study. We will notify you as soon as possible if such information becomes available.

**Conflict of Interest:** The Principal Investigator has complied with the Azusa Pacific University Potential Conflict of Interest in Research policy.

**Consent:** I understand that my participation in this study is entirely voluntary and that I may refuse to participate or may withdraw from the study at any time without penalty. I understand the procedures described above, and I understand fully the rights of a potential subject in a research study involving people as subjects. My questions have been answered to my satisfaction. I agree to participate in this study. I have received a copy of this consent form.

\_\_\_\_\_  
Participant Name Printed

\_\_\_\_\_  
Participant Name Signed

\_\_\_\_\_  
Date

I have explained the research to the subject or his/her legal representative and answered all of his/her questions. I believe he/she understands the information described in this document and freely consents to participate.

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time

[Signed by researcher or certified assistant after participant has demonstrated understanding of research procedures through questions and answers]

[Author]

**APPENDIX E****TEACHER SENSE OF EFFICACY SCALE (TSES) SUBSCALE MATRIX**

Teacher Sense of Efficacy Scale (TSES) Subscale Matrix

Teacher Sense of Efficacy Scale (Gibson & Dembo, 1994)	Efficacy in Student Engagement	How much can you do to get through to the most difficult students?	1.00
		How much can you do to help your students think critically?	2.00
		How much can you do to motivate students who show low interest in school work?	4.00
		How much can you do to get students to believe they can do well in school work?	6.00
		How much can you do to help your students value learning?	9.00
		How much can you do to foster student creativity?	12.00
		How much can you do to improve the understanding of a student who is failing?	14.00
		How much can you assist families in helping their children do well in school?	22.00
	Efficacy in Instructional Strategies	How well can you respond to difficult questions from your students?	7.00
		How much can you gauge student comprehension of what you have taught?	10.00
		To what extent can you craft good questions for your students?	11.00
		How much can you do to adjust your lessons to the proper level for individual students?	17.00
		How much can you use a variety of assessment strategies?	18.00
		To what extent can you provide an alternative explanation or example when students are confused?	20.00
		How well can you implement alternative strategies in your classroom?	23.00
		How well can you provide appropriate challenges for very capable students?	24.00
	Efficacy in Classroom Management	How much can you do to control disruptive behavior in the classroom?	3.00
		To what extent can you make your expectations clear about student behavior?	5.00
		How well can you establish routines to keep activities running smoothly?	8.00
		How much can you do to get children to follow classroom rules?	13.00
		How much can you do to calm a student who is disruptive or noisy?	15.00
		How well can you establish a classroom management system with each group of students?	16.00
		How well can you keep a few problem students from ruining an entire lesson?	19.00
		How well can you respond to defiant students?	21.00

## APPENDIX F

## AVERAGE SCALE SCORES OF DSES/TSES CONSTRUCTS:

## RELIGION, LEVEL OF TEACHING, AND ETHNICITY

## Average Scale Scores of DSES/TSES Constructs:

## Religion, Level of Teaching, &amp; Ethnicity

DSES and TSES Constructs with Demographics	<i>M</i>	<i>SD</i>	<i>Alpha</i>
<b>Non-Christian Religion (<i>n</i> = 67)</b>			
DSES Connection to God	2.3142	1.46276	.954
DSES Transcendent Beliefs Regarding Life	4.2239	1.05321	.829
TSES Student Engagement	7.0312	.96949	.837
TSES Instructional Strategies	7.5045	.69957	.778
TSES Classroom Management	7.6173	.84464	.886
<b>Christian Religion (<i>n</i> = 266)</b>			
DSES Connection to God	4.4224	1.01766	.950
DSES Transcendent Beliefs Regarding Life	4.7157	.76542	.836
TSES Student Engagement	6.8678	.95782	.859
TSES Instructional Strategies	7.4176	1.01377	.622
TSES Classroom Management	7.5245	.82411	.858
<b>Elementary School Teaching (<i>n</i> = 179)</b>			
DSES Connection to God	4.1855	1.28929	.967
DSES Transcendent Beliefs Regarding Life	4.7135	.81846	.860
TSES Student Engagement	7.0621	.88535	.843
TSES Instructional Strategies	7.4065	.74708	.845
TSES Classroom Management	7.5700	.77304	.853
<b>Middle School Teaching (<i>n</i> = 105)</b>			
DSES Connection to God	3.7574	1.56505	.979
DSES Transcendent Beliefs Regarding Life	4.5127	.92239	.812
TSES Student Engagement	6.9054	.99455	.866
TSES Instructional Strategies	7.5000	.86377	.848
TSES Classroom Management	7.5869	.85890	.886
<b>High School Level of Teaching (<i>n</i> = 49)</b>			
DSES Connection to God	3.8306	1.36297	.969
DSES Transcendent Beliefs Regarding Life	4.4864	.79118	.832
TSES Student Engagement	6.3010	.89119	.813
TSES Instructional Strategies	7.4003	1.62959	.373
TSES Classroom Management	7.3513	.93871	.860
<b>Non-White (<i>n</i> = 138)</b>			
DSES Connection to God	4.2453	1.27723	.960
DSES Transcendent Beliefs Regarding Life	4.6831	.89366	.865
TSES Student Engagement	7.0108	.96596	.853
TSES Instructional Strategies	7.3085	.78903	.855
TSES Classroom Management	7.6164	.77045	.827
<b>White (<i>n</i> = 194)</b>			
DSES Connection to God	3.8213	1.46435	.975
DSES Transcendent Beliefs Regarding Life	4.5692	.82120	.805
TSES Student Engagement	6.8218	.96309	.852
TSES Instructional Strategies	7.5258	1.05624	.548
TSES Classroom Management	7.4907	.86476	.875

## APPENDIX G

## INTERCORRELATION COEFFICIENTS FOR DSES/TSES CONSTRUCTS:

## RELIGION, LEVEL OF TEACHING, AND ETHNICITY

## Intercorrelation Coefficients for DSES/TSES Constructs:

## Religion, Level of Teaching, &amp; Ethnicity

Intercorrelation w/out Demographics	1	2	3	4	5
Non-Christian Religion ( <i>n</i> = 67)					
1.Connection to God	-----				
2.Transcendent Beliefs Regarding Life	.602**	-----			
3. Student Engagement	.376**	.331**	-----		
4. Instructional Strategies	.281*	.347**	.610**	-----	
5.Classroom Management	.148	.305*	.624**	.640**	-----
Christian Religion ( <i>n</i> = 266)					
1.Connection to God	-----				
2.Transcendent Beliefs Regarding Life	.667**	-----			
3. Student Engagement	.185**	.248**	-----		
4. Instructional Strategies	.107	.204**	.512**	-----	
5.Classroom Management	.078	.116	.610**	.463**	-----
Elementary School ( <i>n</i> = 179)					
1.Connection to God	-----				
2.Transcendent Beliefs Regarding Life	.629**	-----			
3. Student Engagement	.168**	.288**	-----		
4. Instructional Strategies	.104	.271**	.635**	-----	
5.Classroom Management	.017	.140	.606**	.513**	-----
Middle School ( <i>n</i> = 105)					
1.Connection to God	-----				
2.Transcendent Beliefs Regarding Life	.686**	-----			
3. Student Engagement	.119	-.061	-----		
4. Instructional Strategies	.107	-.035	.739**	-----	
5.Classroom Management	.161	.029	.664**	.713**	-----
High School ( <i>n</i> = 49)					
1.Connection to God	-----				
2.Transcendent Beliefs Regarding Life	.506**	-----			
3. Student Engagement	.498**	.308*	-----		
4. Instructional Strategies	.262	.311*	.259	-----	
5.Classroom Management	.170	.130	.544**	.267	-----
Non-White ( <i>n</i> = 138)					
1.Connection to God	-----				
2.Transcendent Beliefs Regarding Life	.711**	-----			
3. Student Engagement	.154	.272**	-----		
4. Instructional Strategies	.127	.306**	.709**	-----	
5.Classroom Management	.073	.214*	.628**	.632**	-----
White ( <i>n</i> = 194)					

1.Connection to God	----				
2.Transcendent Beliefs Regarding Life	.596**	----			
3. Student Engagement	.116	.212**	----		
4. Instructional Strategies	.095	.172*	.459**	----	
5.Classroom Management	.019	.098	.601**	.437**	----
** $p < .01$					
* $p < .05$					

**APPENDIX H**

**REGRESSION ANALYSIS SUMMARY COMPARING NON-CHRISTIAN AND CHRISTIAN FOR CONNECTION TO GOD MEASURE AND TRANSCENDENT BELIEFS REGARDING LIFE MEASURE PREDICTING 3 CONSTRUCTS OF TSES**

Regression Analysis Summary Comparing Non-Christian and Christian for Connection to God Measure and Transcendent Beliefs Regarding Life Measure Predicting 3 Constructs of TSES

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>P</i>
Regression for <i>Student Engagement</i>					
Non-Christian ( $n = 67$ )					
1.Connection to God	.178	.092	.277	1.932	.058
2.Transcendent Beliefs Regarding Life	.147	.128	.164	1.146	.256
Regression for <i>Student Engagement</i>					
Christian ( $n = 266$ )					
1.Connection to God	.033	.075	.035	.422	.659
2.Transcendent Beliefs Regarding Life	.280	.100	.224	2.795	.006
Regression for <i>Instructional Strategies</i>					
Non-Christian ( $n = 67$ )					
1.Connection to God	.055	.070	.114	.783	.437
2.Transcendent Beliefs Regarding Life	.184	.097	.278	1.901	.062
Regression for <i>Instructional Strategies</i>					
Christian ( $n = 266$ )					
1.Connection to God	-.052	.081	-.052	-.639	.523
2.Transcendent Beliefs Regarding Life	.316	.107	.239	2.950	.003
Regression for <i>Classroom Management</i>					
Non-Christian ( $n = 67$ )					
1.Connection to God	-.032	.086	-.055	-.372	.711
2.Transcendent Beliefs Regarding Life	.271	.119	.338	2.272	.026
Regression for <i>Classroom Management</i>					
Christian ( $n = 266$ )					
1.Connection to God	.000	.067	.000	.002	.998
2.Transcendent Beliefs Regarding Life	.125	.088	.116	1.414	.159

## APPENDIX I

**REGRESSION ANALYSIS SUMMARY COMPARING LEVEL OF TEACHING FOR CONNECTION TO GOD MEASURE AND TRANSCENDENT BELIEFS REGARDING LIFE MEASURE PREDICTING 3 CONSTRUCTS OF TSES**

Regression Analysis Summary Comparing Level of Teaching for Connection to God Measure and Transcendent Beliefs Regarding Life Measure Predicting 3 Constructs of TSES

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>P</i>
Regression for <i>Student Engagement</i>					
Elementary School Teaching ( <i>n</i> = 179)					
1.Connection to God	-.015	.064	-.022	-.239	.811
2.Transcendent Beliefs Regarding Life	.327	.100	.302	3.251	.001
Regression for <i>Student Engagement</i>					
Middle School Teaching ( <i>n</i> = 105)					
1.Connection to God	-.171	.084	-.269	-2.03	.045
2.Transcendent Beliefs Regarding Life	.327	.143	.303	2.288	.024
Regression for <i>Student Engagement</i>					
High School Teaching ( <i>n</i> = 49)					
1.Connection to God	.301	.097	.460	3.108	.003
2.Transcendent Beliefs Regarding Life	.084	.167	.075	.505	.616
Regression for <i>Instructional Strategies</i>					
Elementary School Teaching ( <i>n</i> = 179)					
1.Connection to God	-.063	.054	-.109	-1.17	.241
2.Transcendent Beliefs Regarding Life	.310	.085	.399	3.650	<.001
Regression for <i>Instructional Strategies</i>					
Middle School Teaching ( <i>n</i> = 105)					
1.Connection to God	-.112	.074	-.203	-1.52	.131
2.Transcendent Beliefs Regarding Life	.230	.125	.246	1.840	.069
Regression for <i>Instructional Strategies</i>					
High School Teaching ( <i>n</i> = 49)					
1.Connection to God	.168	.193	.140	.869	.389
2.Transcendent Beliefs Regarding Life	.495	.332	.240	1.490	.143
Regression for <i>Classroom Management</i>					
Elementary School Teaching ( <i>n</i> = 179)					
1.Connection to God	-.071	.057	-.118	-1.23	.217
2.Transcendent Beliefs Regarding Life	.203	.090	.215	2.246	.026
Regression for <i>Classroom Management</i>					
Middle School Teaching ( <i>n</i> = 105)					
1.Connection to God	-.084	.073	-.153	-1.14	.254
2.Transcendent Beliefs Regarding Life	.248	.124	.266	1.994	.049
Regression for <i>Classroom Management</i>					
High School Teaching ( <i>n</i> = 49)					
1.Connection to God	.096	.116	.140	.831	.410
2.Transcendent Beliefs Regarding Life	.070	.200	.059	.349	.729

**APPENDIX J****REGRESSION ANALYSIS SUMMARY COMPARING NON-WHITE AND WHITE FOR CONNECTION TO GOD MEASURE AND TRANSCENDENT BELIEFS REGARDING LIFE MEASURE PREDICTING 3 CONSTRUCTS OF TSES**

Regression Analysis Summary Comparing Non-White and White for Connection to God Measure and Transcendent Beliefs Regarding Life Measure Predicting 3 Constructs of TSES

Predictor	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>t</i>	<i>p</i>
Regression for <i>Student Engagement</i>					
Non-White Ethnicity ( <i>n</i> = 138)					
1.Connection to God	-.059	.086	-.08	-.685	.494
2.Transcendent Beliefs Re: Life	.345	.123	.329	2.808	.006
Regression for <i>Student Engagement</i>					
White Ethnicity ( <i>n</i> = 194)					
1.Connection to God	-.010	.058	-.01	-.180	.858
2.Transcendent Beliefs Re: Life	.259	.103	.221	2.510	.013
Regression for <i>Instructional Strategies</i>					
Non-White Ethnicity ( <i>n</i> = 138)					
1.Connection to God	-.113	.071	-.18	-1.589	.114
2.Transcendent Beliefs Re: Life	.385	.102	.436	3.787	<.001
Regression for <i>Instructional Strategies</i>					
White Ethnicity ( <i>n</i> = 194)					
1.Connection to God	-.008	.064	-.01	-.133	.895
2.Transcendent Beliefs Re: Life	.230	.114	.179	2.018	.045
Regression for <i>Classroom Management</i>					
Non-White Ethnicity ( <i>n</i> = 138)					
1.Connection to God	-.097	.071	-.16	-1.353	.178
2.Transcendent Beliefs Re: Life	.283	.102	.328	2.775	.006
Regression for <i>Classroom Management</i>					
White Ethnicity ( <i>n</i> = 194)					
1.Connection to God	-.036	.053	-.06	-.681	.496
2.Transcendent Beliefs Re: Life	.141	.094	.134	1.495	.137



## APPENDIX K GAFOOR TABLES

Table K-1

*Match of the Qualities of Spiritually Developed Persons and/or List of Values Identified By NCERT for Value Education with Characteristics of Academically Resilient Persons*

<u>Qualities of spiritually developed persons*</u>	<u>List of 83 values identified by NCERT</u>	<u>Personal characteristics of academically resilient persons<sup>#</sup></u>
1. Appreciation of diversity	Abstinence. Appreciation of cultural values. Anti-Untouchability. Citizenship.	1. <i>Ability to approach new situations,</i>
2. Caring	Consideration for others. Concern for others. Co-operation. Cleanliness.	2. <i>Academic and individual aspiration</i>
3. Compassion	Compassion. Common Cause. Common good. Courage. Courtesy. Curiosity.	3. <i>Academic motivation</i>
4. Creative activities	Democratic decision making. Devotion.	4. <i>Academic self concept</i>
5. Face and use suffering and transcend pain	Dignity of the individual. Dignity of manual work. Duty. Discipline.	5. <i>Achievement motivation</i>
6. Field independent	Endurance. Equality. Friendship.	6. <i>Affectional ties with family</i>
7. Holistic worldview	Faithfulness. Fellow-feeling. Freedom.	7. <i>Autonomy</i>
8. Honesty	Forward looking. Good manners. Gratitude of others. Gentlemanliness. Honesty.	8. <i>Belief in self</i>
9. Ideals and aspirations	Helpfulness. Humanism. Hygienic living. Initiative. Integrity. Justice.	9. <i>Cohesion</i>
10. Inner strength and resilience	Kindness. Kindness to animals.	10. <i>Communication skills</i>
11. Inspired by vision and values	Leadership. National Unity. Loyalty to duty. National Consciousness. Non-Violence. National Integration. Obedience.	11. <i>Deep commitment to relationships</i>
12. Integrity	Peace. Proper Utilization of time.	12. <i>Dispositional attributes of the individual</i>
13. love and relationships	Punctuality. Patriotism. Quest for knowledge. Purity. resourcefulness.	13. <i>Empathy</i>
14. Optimistic	Regularity. Respect for others. Reverence for old age. Sincerity. Simple living.	14. <i>Highly adaptable temperament</i>
15. Personal power—sense of control	Social justice. Self discipline. Self help. Self respect. Self Confidence. Self support. Self study. Self reliance. Self control. Self restraint. Social service.	15. <i>Internal and realistic sense of control</i>
16. Reflection on experience	Solidarity of mankind. Sense of social responsibility. Sense of discrimination between good and bad. Socialism.	16. <i>Internal locus of control</i>
17. Self-awareness	Sympathy. Secularism and respect for all religions. Spirit of enquiry. Team work. Team spirit. Truthfulness. Tolerance.	17. <i>Involvement</i>
18. Self-knowledge	Universal truth. Universal love. Value for national and civic property.	18. <i>Less friction</i>
19. Sense of purpose		19. <i>Love</i>
20. Sensitivity and responsiveness		20. <i>Loving and trusting relationships</i>
21. Service to others		21. <i>Motivation</i>
22. Spontaneity		22. <i>Positive and negative social behaviours</i>
23. Striving and seeking		23. <i>Positive coping strategies</i>
		24. <i>Positive disposition</i>
		25. <i>Positive responsiveness to others</i>
		26. <i>Reflectiveness in unfamiliar situations</i>
		27. <i>Resourcefulness</i>
		28. <i>Responsibility</i>
		29. <i>Satisfaction</i>
		30. <i>Self - efficacy</i>
		31. <i>Self - understanding</i>
		32. <i>Self esteem</i>
		33. <i>Self regulation</i>
		34. <i>Sense of efficacy</i>
		35. <i>Sense of purpose</i>
		36. <i>Social competence</i>
		37. <i>Student commitment</i>
		38. <i>Students' belief about their total ability</i>
		39. <i>Task orientation</i>

Note: \*Based on Spiritual development –dimensions (Linda, 2002); competencies, skills, or qualities of a “spiritually intelligent” person (Zohar & Marshall, 2000); characteristics of a spiritually developed person (Mackley, 1997)  
# within-child factors fostering resilience identified from review of 83 studies on academic resilience (Gafoor & Neena, 2011) with italicized terms indicating match of those in 3<sup>rd</sup> column with values/qualities in 1<sup>st</sup> or 2<sup>nd</sup> columns

Table K-2

*Correspondence Between Educational Means of Developing the Spirit and Academic Resilience in Students Identified from Relevant Sets of Literature*

	Literature on promoting spiritual development*	Literature on fostering academic resilience #
Instruction	<p><b>Developing Self-awareness and Self-Knowledge</b> with opportunities to be aware of own inner world of thoughts and feelings, hopes and fears, personality, needs and wants ,gifts, abilities and strengths as well as their limitations and weaknesses</p> <p><b>Developing Sensitivity and Responsiveness</b> by becoming aware of moral obligations, being moved to deep emotion, reflection and /or action, by aspects of life such as the natural and made world, music, art, architecture, literature, poverty, injustice, innocent suffering, mystery and human achievement, expressing gratitude and appreciation, transcending the present moment, e.g. in recalling the past, reflecting on the future, or exercising their imagination</p> <p><b>Developing Inner Strength and Resilience</b> to be hopeful, patient, persevering and resilient in the face of difficulty, exercise self-control over the expression of instincts and impulses, thoughts and feelings</p> <p>respond with courage to challenging situations e.g. in confronting difficult situations on the playing field, losing a game or resisting peer pressure, set targets, plan to achieve them and take appropriate action to do so</p> <p><b>Nurturing the Ideals and Aspirations</b> with opportunities to: create and invent works of beauty, value and usefulness , develop worthwhile beliefs and values</p> <p><b>Enhancing Love and Relationships</b> by developing intimate and enduring relationships with other people, encouraging to sympathise and empathise with other people, expressing regret and apologise, when appropriate to do so , pursuing ideals and visions for the future, seeking to create, maintain and repair relationships with others, valuing themselves and other people</p> <p><b>Promoting Seeking and Striving</b> for meaning in experiences of change, loss, suffering, beauty, birth, and death , to do what is right</p> <p><b>Encouraging Reflection on experience</b> on deep or ultimate questions and seek answers to, on moral choices, on the way their attitudes and values ,</p>	<p>Adapting curriculum and instruction to respond student diversity</p> <p>Democratic classroom learning environment</p> <p>Co-operative learning</p> <p>Culturally compatible classroom programmes</p> <p>Curriculum exposure on diversity</p> <p>Fostering a sense of achievement in children</p> <p>Instructional strategy</p> <p>Pacing and feedback</p> <p>Student engagement</p> <p>Teach students that they have innate resilience</p> <p>Teach to student's strength</p> <p>Tutoring</p>
Teacher behavior	<p>Promoting active learning</p> <p>Building pupil's self esteem</p> <p>consideration of ultimate questions - questions about meaning, purpose and value</p> <p>extended opportunities to work on a topic</p> <p>Students must have to opt 'for depth over breadth</p>	<p>Caring and support ,</p> <p>Encouragement of student</p> <p>Engagement and involvement ,</p> <p>Enhancing students personal growth and increasing social contacts, Higher levels of educational support ,</p> <p>Interaction between teacher and students</p> <p>Mentoring , Teacher expectations -feedback and actions</p>
School ethos and environment	<p>appreciation of diversity within the school</p> <p>Approaches that help individuals and groups to self-organize</p> <p>believe that students are listened to,</p> <p>celebration of individual and collective success</p> <p>constructive management of pupils' behaviour</p> <p>inquiry, exploring and learning about what has heart and meaning</p> <p>personal change as a vehicle for systemic change and social justice</p> <p>positive attitudes towards visitors</p> <p>positive staff-student relationship</p> <p>school culture</p> <p>use students gifts of intuition, imagination, and creativity</p> <p>Values and attitudes to be promoted</p>	<p>Meaningful opportunities to participate</p> <p>Cohesion</p> <p>Warmth Safe and orderly environment</p> <p>Positive school experience</p> <p>Academic environment factors</p> <p>Extracurricular activities</p> <p>School support</p>

Note: \*Based Linda, (Ed). 2002; Zohar & Marshall's 2000); (Mackley, 1997)

# identified from review of 83 studies on academic resilience (Gafoor & Neena, 2011)