**An empirical examination of spirituality as an internal developmental asset during middle childhood and adolescence.**

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**Abstract:**

This mixed method study explores youths' perceived conceptions of spirituality and tests whether spirituality is an additional internal developmental asset (IDA). Spirituality was assessed using an open-ended question asking youth to define spirituality followed by a closed-ended item gauging the extent to which their definition reflected their own spirituality. Using grounded theory to assess youths' qualitative responses resulted in the creation of 10 “spiritual categories.” Quantitative analyses revealed that youths' self-assessment of spirituality had significant concurrent effects on six domains of positive youth development (PYD). However, the longitudinal change model only revealed a significant effect between youths' self-ratings of spirituality and their later Character scores. Additionally, we tested if religious identification moderated the relations between youth spirituality and the domains of PYD but no significant effects were found. The significant findings provide support for the notion that spirituality is an IDA, thus helping professionals might seriously consider fostering the spiritual lives of youth.

**Keywords:** adolescence | teenagers | spirituality | internal development asset

**Article:**

While it is a common societal assumption that having a strong spiritual core is a developmental asset for adolescents, there is very little empirical evidence to support this argument (Lerner, Roeser, & Phelps, 2009). One reason for the paucity of research on this topic is the predominance of the deficit model of youth development that handicapped the field for the better part of the 20th century (Hall, 1904). This model assumed that adolescents are emotionally volatile and without some form of intervention their developmental trajectory would inevitably lead to risky and problematic behaviors (Lerner, 2004). While there is a percentage of youth who experience heightened difficulty during this phase, research has shown that negativity during
adolescence is greatly overemphasized (Balsano, Phelps, Theokas, Lerner, & Lerner, 2009; Lerner et al., 2009).

Benson (1997) found that youth in fact do have qualities that help them develop on a healthy trajectory towards adulthood. He termed these qualities developmental assets (Benson, 1997). When these characteristics are properly nurtured, youth thrive in the face of adversity and become more prepared to be positive contributors to the greater society in their adulthood years. Much research has been conducted that is grounded in the notion of developmental assets, which continues to be the leading strength-based conceptual framework in the field of adolescent development (for a review of developmental assets, see http://www.search-institute.org/developmental-assets/lists).

The paradigm shift from a deficit model perspective to a developmental asset perspective in youth development has spurred research that addresses the question of which factors contribute to positive development (Lerner et al., 2005). Because our theoretical perspective led us to consider spirituality as a developmental asset and because of its lack of attention in human development (Benson & Roehlkepartain, 2008), the focus of this study was on youths' perceptions of spirituality and the association between these perceptions and positive youth development.

THEORY OF POSITIVE YOUTH DEVELOPMENT (PYD)

The theory of positive youth development (PYD) focuses on the positive traits of youth by hypothesizing that the proper nurturance and cultivation of their developmental assets can significantly contribute to their ability to thrive (Lerner, 2004). This strength-based theory takes a more holistic approach to the discourse concerning youth development than does the deficit model since it addresses individual diversity in youth adversity as well as the capacity to recover from such developmental obstacles (Balsano et al., 2009; Damon, 2004; Lerner et al., 2009). Positive youth development operates on the premise that all adolescents have the capacity to thrive, in spite of the problems they may face, and positively contribute to the greater society (Lerner, 2004).

Two key concepts are subsumed within the theory of positive youth development, multidimensionality and multidirectionality (Baltes, 1987). The first is multidimensional development refers to the concept that individual development is characterized by change across multiple processes including physiological, emotional, cognitive, and spiritual. Multidirectional development reflects the concept that individual development reflects bi-directional influences of the person on his or her environment (i.e., context), and conversely the environment on the individual.

Positive youth development is reflected in a series of meta-indicators called the five C's (Lerner, 2004; Roth & Brooks-Gunn, 2003a, 2003b). The five C's are a list of character traits that, when enacted through behaviors by youth, lead to a sixth C, which has been labeled “Contribution”
representing not only a contribution to one's own needs, but also to community, family, and ultimately civil society (Lerner, 2004). One underlining theme of the mutually beneficial relationship between the individual and her context is the ethos that she develops or possesses, which motivates her to invest in things external to her own self. Moreover, the individual realizes that her focus should not reside solely with her own development; rather, it should transcend her life and connect to others in the greater society. This type of thinking (i.e., transcendence) is proposed to be the foundation of spirituality (Lerner, 2004; Lerner, Dowling, & Anderson, 2003). A better understanding of such a relationship can aid researchers, practitioners, and policy makers in providing youth with resources that can enhance their PYD.

Spirituality and Positive Youth Development

Many may assume that spirituality is a positive trait; however, empirical verification of this is difficult due to its malleable quality. Spirituality has had a variety of meanings, depending on the individual, context, time, and place. Because of its many meanings and resultant difficulty in operationalization, there has been a lack of empirical research exploring how spirituality relates to youth development (Benson, Roehlkepartain, & Rude, 2003). The rationale for assuming that spirituality is a viable pathway for positive youth development is two-fold. First, youths' conceptions of spirituality may help them reach a level of transcendence. The idea of transcendence is that youth have the ability to think about people, things, and concepts that may or may not involve themselves. Transcendence is important because in order for one to thrive, one must develop an ethos that involves a concern for others in the greater society (Lerner, 2004). Youth who are only concerned with themselves, and do not recognize their connectedness to others, may have a slower time developing the character traits that lead toward PYD. However, the focus of the individual cannot just reside on others because the individual is also a developing person, which leads to our second assumption.

The PYD approach thus emphasizes interdependence in the relationship between the environmental context and individual; therefore, attention must be devoted not only to others, but also to the developing individual's needs. Youth conceptions of spirituality must also capture the mutual relationship between the individual and his or her context. This can potentially spur the mutual relationships needed for the youth to thrive in a social world. In this respect, it makes sense to hypothesize that spiritual development may be related to the development of the five C's of PYD.

The development of the five C's is a process that youth undergo over time. This concept is also true in the development of spirituality; however, developmental scientists know more about development in other areas (e.g., emotional, cognitive, physiological) than they do about the spiritual dimension. One reason for the lack of knowledge about spirituality's development is its lack of coherence. Like other dimensions of development, spirituality is not a dimension that stands apart from other dimensions of development; rather, it is a vital force that impacts all other dimensions of development (Johnson, 2009). Therefore, isolating the unique features of its
development can be difficult, if even possible. However, a promising approach to understanding spirituality's role in other dimensions of human development is to understand how individuals view their own spirituality and explore how such concepts influence other aspects of their character.

Although it is difficult to pinpoint exactly when youths develop a sense of spirituality, research supports the idea that early in life individuals develop a capacity to know that there is an internal force that serves as an organizer for each human being (Bering, 2006; Richert & Harris, 2008). This “organizer” or “force” can be thought of as many things, one of which is the human spirit. The presence of a force within individuals that organizes the “whole, living, cognitive-emotional-moral being” (Johnson, 2009, p. 35) may thus influence the development of certain character traits, including the five C's of PYD.

Purpose of the Study

The primary aims of this study are to understand how youth conceptualize spirituality and to empirically test the hypothesis that spirituality is an internal developmental asset for adolescents. To test this, we explored the relationship between spirituality and the empirically validated meta-indicators of positive youth development (i.e., the five C's, and Contribution). The Search Institute does not explicitly define either internal or external developmental assets; however, based on different typologies listed on the website (http://www.search-institute.org/developmental-assets/lists), we defined external developmental assets as any persons, community, organization, or institution outside of the individual that supports the healthy development of youth. We define internal developmental assets as those qualities, characteristics, and skills within the youth that contribute to his or her healthy development.

The relationship between spirituality and positive youth outcomes was tested with a mixed method four step process. First, we examined youths' conceptualization of what it means to be a spiritual young person, and, secondly, we examined the concurrent relationship between spirituality (operationalized as the youths' perception of the extent to which they meet their own definition of spirituality) and the five C's of positive youth development. Third, because we are interested in development we examined the longitudinal effects of spirituality on PYD. Finally, we realize that some people may struggle with disaggregating being spiritual from religious identification and only recognize self-perceived spirituality as beneficial for religious youth. Therefore, we examined if religious identification moderates the relationship between spirituality and the five C's of positive youth development.

Hypothesized Links Between the Five C's and Spirituality

We now review each of the five C's (Lerner, 2004; Roth & Brooks-Gunn, 2003), and hypothesize about their possible empirical links to spirituality.
Competence refers to how effectively one functions in domain specific areas including social, academic, cognitive, and vocational. Social competence pertains to the strength of one's interpersonal skills (e.g., conflict resolution). Spirituality, in the ways that we are describing it, refers to internal characteristics that help individuals recognize their connection to other beings in the cosmos. It is plausible to infer that spirituality may be associated with one of the domains (i.e., social competence), but may not be related to other domains that are subsumed under the competence character trait. Thus, we expected a mild, but not strong, positive relationship between spirituality and competence.

Confidence refers to one's global sense of self-worth. One way that confidence can relate to spirituality is in how the youth perceives him or herself in relation to the universe. If youths have high self-esteem, they may be confident that they can add some good to others. They may be more likely to treat the earth with respect and build meaningful relationships and connections with others that help them on their path to purpose. Therefore, we hypothesized that spirituality would be positively related to confidence.

Connection refers to the individuals' ability to build meaningful relationships with institutions their environment. In line with the Search Institute's definition of spirituality, the spiritual individual develops a sense of belonging and interconnectedness with others, institutions, and the universe in general. We speculate that it is the individual's spiritual core that provides the capacity for one to make such meaningful connections, and, thus, we expected a positive, relationship between connection and spirituality.

Character in PYD theory is defined as “respect for societal and cultural rules, possession of standards for correct behaviors, a sense of right and wrong (morality), and integrity” (Lerner, et al., 2005, p. 23). According to Blasi (2005), one third of one's moral identity must be a desire to be moral. This desire guides individual thoughts and actions. We posited that moral desire develops out of the internal sense of spirituality. This link is what allows spirituality to influence individual character. Accordingly, we predicted that spirituality would have a strong positive association to character.

Compassion and caring, the final C, involves concern for others and an ability to be empathetic, which subsequently allows them to develop traits that put the concerns of others before their own (Damon, 1988; Eisenberg, Morris, McDaniel, & Spinrad, 2009). With one characteristic of spirituality being an ability to be concerned about the well-being of others, we hypothesized that spirituality and compassion/caring would be positively, albeit modestly, related.

The contribution variable is a trait that is linked to but distinct from the five C's (Lerner, 2004; Lerner et al., 2003). Lerner and his colleagues posit that when youth believe they have a responsibility to self and context, they will reflect on that responsibility and respond in ways that support that belief. Because spirituality can be thought of as transcending the self, we hypothesized that spirituality and contribution would be positively associated.
METHOD

Participants

We used data from Wave 6 (collected in 2008) and Wave 7 (collected in 2009) of the National 4-H Study of Positive Youth Development, led by Richard M. Lerner of Tufts University. The study was sponsored by the National 4-H Council (Washington, D.C.), and is the first longitudinal study to directly measure the characteristics of PYD. While this study now involves youth and their parents from over 40 different states, because only two waves were included in this study, our sample includes youth from 36 different states. Waves 6 and 7 were selected as the two time points that would have the largest number of youth. With a sample size of N = 1842, we easily had enough power to detect the medium effect sizes we predicted (Faul, Erdfelder, Lang, & Buchner, 2007).

The youth in this sample ranged in age from 10 to 18 years at the time of testing. Participants varied in gender, ethnicity, religion, and (U.S.) geographical region. The median family income (based on parent reports at Wave 6) was $60,000, with a median education level of 14 years (mothers). On average, this sample appears to be of high socioeconomic status. Table 1 summarizes additional demographic characteristics of the sample.

TABLE 1 Demographic Characteristics of the Full Sample (N = 1842)

<table>
<thead>
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<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Ethnicity (as reported by student)</td>
</tr>
<tr>
<td>European American</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Hispanic/Latino or Latina</td>
</tr>
<tr>
<td>Asian, Asian American, Pacific Islander</td>
</tr>
<tr>
<td>Multiethnic or Multiracial</td>
</tr>
<tr>
<td>American Indian/Native American</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Religion
None 14.5
Protestant 38.8
Catholic 26.8
Jewish 1.0
Buddhist 0.8
Hindu 0.1
Muslim 0.4
Other 17.6

Measures

Spirituality

Spirituality was assessed by an open-ended question on youths' definition of spirituality: “What does it mean to be a spiritual young person?” The follow up question asked youth to use a 5-point Likert scale (1 = Not Very Well, 5 = Very Well) to indicate “How well does that describe you?” Higher scores were indicative of a higher level of spirituality.

Competence

Competence was measured as a composite of 5 subscales: Scholastic Competence (5 items), Social Acceptance (5 items), Close Friendship (5 items), Athletic Competence (5 items), and Grades (1 item). Items for the first four subscales were drawn from Harter's (1988) Self-Perception Profile for Adolescents (SPPA). For the grades subscale, individuals were provided with a score for the types of grades they receive (e.g., “mostly Cs” received a 2.0; range from .5 [mostly below Ds] to 4.0 [mostly As]). Cronbach's alpha for this competence composite scale, based on the means of the 5 subscales, was .86 at Wave 6 and .85 at Wave 7.

Confidence

Confidence was calculated as the composite of two subscales, positive identity (Theokas et al., 2005) and self-worth. The 6 items for Positive identity are derived from the Search Institute's Profile of Student Life-Attitudes and Behaviors Survey (PSL-AB; Benson, Leffert, Scales, & Blyth, 1998). A sample item from this subscale includes “On the whole I like myself,” with responses ranging from (1) strongly agree to (5) strongly disagree.
The 5 items capturing Self-Worth were drawn from Harter's (1988) SPPA assessment. Items were counterbalanced so that half were worded in a positive direction (high self-worth) and half of the items were worded in a negative direction. For example, “Some teenagers are often disappointed with themselves” BUT “Other teenagers are pretty pleased with themselves.” Items are scored from 1–4 with 4 representing higher perceived self-worth. The Cronbach's alpha for the confidence composite scale, based on the means of the two subscales, was .91 at both Wave 6 and Wave 7.

Character

Character was measured as a composite of 4 subscales: Social Conscience (6 items), Values Diversity (4 items), Personal Values (5 items), and Conduct Morality (5 items). The first three subscales were indexed from the PSL-AB (Benson et al., 1998), with the later from Harter's (1988) SPPA. The Personal Values, Social Conscience, and one item from Values Diversity (i.e., “getting to know people who are of different race than I”) solicited the “importance” of the item in the youth's life. An example from Personal Values includes “telling the truth, even when it's not easy,” and “Helping other people” from Social Conscience. Scores ranged from 1 = not important to 5 = extremely important (5).

The remaining Values Diversity items were derived from Harter's (1988) SPPA, and used the same scoring protocol as explained above. A sample item from this subscale includes “Some teenagers usually do the right thing” BUT “Other teenagers often don't do what they know is right.” The Cronbach's alpha for the character composite scale, based on the means of the 4 subscales, was .90 at Wave 6 and Wave 7.

Connection

Connection was measured as a composite of 4 subscales: Connected to family (6 items), Connected to neighborhood (5 items), Connected to school (7 items), and Connected to peers (4 items), all of which were drawn from Benson et al.'s (1998) PSL-AB.

Six of the items measuring connection to school, five of the connection to family items, and all of the connection to community items were responded to on a scale of 1 = strongly agree to 5 = strongly disagree. Sample items from each subscale include: “I care about the school I go to,” “I have lots of good conversations with my parents,” and “I'm given lots of chances to make my town or city a better place in which to live,” respectively.

The final item for connection to family (i.e., “If you had an important concern about drugs, alcohol, sex, or some other serious issue, would you talk to your parent(s) about it?”), used a 0 = No to 4 = Yes format. The final item on connection to school (i.e., “How often do you feel bored at school?”) used a 4 = never to 0 = always, which was reverse coded.
All of the connection to peers items were indexed from Armsden and Greenberg's (1987) Peer Support Scale, which uses a 1 = always true to 5 = never true forced choice response format. An example item from this subscale includes “I trust my friends.”

The Cronbach's alphas for the connection composite scale, based on the means of the 4 subscales, were .91 at Wave 6 and .90 at Wave 7.

Caring/Compassion

The 9 items for caring are a composite of 5 modified items from the Eisenberg Sympathy Scale (ESS; Eisenberg et al., 1996) and 4 items on the Empathic Concern Subscale of the Interpersonal Reactivity Index (IRI; Davis, 1980). The ESS scale is used to measure the degree to which respondents feel sorry for the distress of another person. The response set ranges from 0 = Not Well through 4 = Very Well. A sample item from this scale includes “When I see another person who is hurt or upset, I feel sorry for them.”

The Cronbach's alphas for the caring and compassion scale, based on the composite score of the 9 items of the ESS and the 4 items of the IRI, were .83 for the sample at both Wave 6 and Wave 7.

Contribution

The contribution variable consists of items that capture the future likelihood of youth contributing to their own development, as well as their families, communities, and civil society. There are two equally weighted components of the contribution variable, Ideological (6 items) and Action (6 items). Items used for this variable were taken from Benson et al.'s (1998) Beyond Rhetoric Project and Small and Rodgers' (1995) Teen Assessment Project.

Four of the six items on the ideological subscale assess the extent to which youth agree or disagree with statements about their ability to contribute to the self or context (Benson et al., 1998). One item states “I often thinking about doing things so that people in the future can have things better.” The response set ranged from 1 = Strongly Disagree to 5 = Strongly Agree. The remaining two items asked youth to respond to statements about the likelihood that they would be civically involved in their future lives. One item read “be involved in community service.” Response set ranged from 1 = Very Low to 5 = Very High.

For the action subscale, the items solicited the youth's actual participation in various activities. The first two items asks how often the respondents either “help a friend” or “help a neighbor.” The response set ranged from 0 = Never to 4 = Very Often. One item asked about the frequency of the respondent's leadership experiences in a group or organization over the past year. The response set ranged from 0 = Never to 4 = Five or More Times. The final three items were statements that prompted youth to respond in a manner that obtained the youths frequency of
participation in service and/or school activities. For example, one item read as “Mentoring/Peer Advising.” Youth responded on a scale of 0 = Never to 5 = Every Day.

For all items on both subscales, higher scores were indicative of being more connected to self, family, and community. The Cronbach's alpha for the contribution scale was .81 both at Wave 6 and Wave 7.

Religious Identification

Because religion can be one pathway to spirituality (Dowling, Gestsdottir, Anderson, von Eye, & Lerner, 2003; Dowling et al., 2004), we wanted to examine if religious identification would moderate the relationship between spirituality and the various C factors. We created a dichotomous religious variable through dummy coding. Each of the youth who identified with a particular religious group was assigned “1,” whereas the youth who responded with “none” (i.e., did not identify with a religious group) when prompted were assigned “0.”

RESULTS

The data were entered into a statistical program, “cleaned,” and all 4 assumptions (i.e., normality, linearity, homoscedasticity, independence of observation) were met for the variables used in the analyses. For ease of interpretability, for each of the C's listed above, raw scores were converted to a 0–100 scale by multiplying the raw score (ranging from 0–12) by 8.33. In all cases, higher scores were indicative of higher levels of the C being measured.

Spiritual Categories

Coding

Prior to analyzing the current sample, we used SPSS to randomly sample a smaller representative subsample (N = 125 divided evenly across geographical regions) to begin creating conceptual “spiritual categories” for the study. Then, using a grounded theory approach (Cresswell, 1997), we examined each response to the qualitative question line by line. As we reviewed each response, we began creating thematic categories based on an overarching idea of spirituality that was characteristic of each category. Reemerging thematic responses were categorized accordingly. The thematic categorizes were constructed in a sufficiently specific way that responses fit into only one category and broad enough so that each response would fit into one of the categories. This resulted in 10 broad mutually exclusive, “spiritual categories.”

Next, we employed a team of 4 undergraduates and trained them on how to code the responses. We then had those students code the same 125 responses that we used to create the spiritual categories. Any discrepancies in coding were discussed until we reached an inter-rater agreement rate of 100%.
These 10 thematic categories were applied to coding the open-ended responses for the entire sample \(N = 1842\). We divided the sample by four, with 10% of the responses overlapping across the trained coders so that we could continually check our inter-rater agreement yielding an agreement rate above 90%.

Demographic and sample size information for the youth in each spirituality category, as well as each category's mean spirituality score can be found in Table 2. Mean scores were calculated based on the youths' responses to the follow up quantitative spirituality question. Each of the 10 categories is defined below with examples of prototypical responses from youth in the given category.

### TABLE 2 Sample Size and Mean Spirituality Scores for Spiritual Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>N (%)</th>
<th>M</th>
<th>(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Possessing Keen Consciousness</td>
<td>98 (5)</td>
<td>3.50</td>
<td>(1.362)</td>
</tr>
<tr>
<td>2. Extraordinary Self-Confidence</td>
<td>128 (7)</td>
<td>3.67</td>
<td>(1.214)</td>
</tr>
<tr>
<td>3. High Religious Involvement</td>
<td>205 (11)</td>
<td>3.70</td>
<td>(1.220)</td>
</tr>
<tr>
<td>4. Being Connected</td>
<td>159 (9)</td>
<td>4.13</td>
<td>(1.044)</td>
</tr>
<tr>
<td>5. Belief in a Higher Power or Force</td>
<td>200 (11)</td>
<td>3.73</td>
<td>(1.194)</td>
</tr>
<tr>
<td>6. Having Purpose</td>
<td>21 (1)</td>
<td>4.19</td>
<td>(0.873)</td>
</tr>
<tr>
<td>7. To Exude Radiance</td>
<td>115 (6)</td>
<td>3.92</td>
<td>(1.077)</td>
</tr>
<tr>
<td>8. Being Virtuous</td>
<td>51 (2)</td>
<td>4.00</td>
<td>(1.020)</td>
</tr>
<tr>
<td>9. Unarticulated Spirituality</td>
<td>670 (36)</td>
<td>2.95</td>
<td>(1.568)</td>
</tr>
<tr>
<td>10. Same as Religious Youth</td>
<td>195 (11)</td>
<td>3.73</td>
<td>(1.203)</td>
</tr>
</tbody>
</table>

### Possessing Keen Consciousness

For youth in this category, being spiritual involves continuous reflection on important or influential factors in one's life. Additionally, being spiritual involves having a keen awareness of what is going on around the individual or in the world or having traits such as being insightful, contemplative, and thoughtful. Example responses from youth in this category include “to know yourself and inner feelings,” “realize there is more than this life,” “someone who is reflective and believes in the human spirit,” or the like.

### Extraordinary Self-Confidence
This thematic category defines a spiritual youth as someone with high levels of self-confidence; however, the responses did not appear to have narcissistic sentiments. The responses were related to things such as what the youth was involved in, his or her faith/worldview, or what he or she is striving for. Example responses include: “… believe in yourself,” “to have faith and to do what you believe in,” “believing in everything you try to reach for,” or “Following your beliefs even if it isn't the ‘cool’ thing.”

High Religious Involvement  
Youth in this category defined being spiritual as someone highly involved in and/or strictly and consistently following the teachings of her religious or faith system. Of note, being “highly involved” implies behavioral actions. The lives of these youth are regulated by the teachings of their particular religion. Responses include phrases such as “to be in prayer all the time,” “to go and worship in church,” and “to live my life according to the teachings of our Lord Jesus Christ.”

Being Connected  
This thematic category has “connectedness” as its foundation; however, the connections were to a variety of sources and were relational. For example, youth felt connected to a higher power, other individuals, or even nature itself. Example responses include statement such as: “[having] an intimate relationship with Christ,” “being in touch with all your feelings and others around you,” and “allow myself to know how I work and influence mother earth.” It is important to note that this category differs from the “Belief in a higher Power” category in that its focus is on the relationship with the transcendent power or force, as opposed to just a belief in the deity.

Belief in a Higher Power or Force  
For these youth, being a spiritual young person meant that one had a belief in a higher power, spirit, transcendent being, or force. The responses were not specific to strength of the belief, nor did they mention a relationship to the higher power, only a belief in the transcendent. Further, the responses represent a variety of religious worldviews, in terms of the language used to represent the spiritual realm (e.g., God or Jesus of Christianity, Buddha of Buddhism). Example responses include “Believe in Spirits!,” “to know Jesus Christ,” “believe in God,” or the like.

Having Purpose  
According to this thematic category, being a spiritual young person encompasses having found purpose in life, which serves as a motivating factor in some given life outcome. Several of the responses were tied to a religious based life-purpose, but also include general (non-religious based) life purpose. For example, one respondent conceptualized spirituality as “you have a purpose in life,” while another said being spiritual was to “believe that you can achieve and live the life God and our family taught us,” while another said “a person that seeks God everyday.”

To Exude Radiance
Being a spiritual young person was linked with having a comfortable state of existence. Reoccurring undergirding concepts for this category include: having positive affect, energy, and peace, respectively. Responses included statements such as “happy, excited,” “to be full of energy,” “to love life,” etc.

Being Virtuous

A spiritual youth was one with impeccable moral or virtuous character. Some example responses to the question of what does it mean to be a spiritual young person included answers such as: “… kind nice respectful person,” “to be of good moral standing and knowing what God would want you to do,” “… try to be a good person with anyone,” and “to do what is right.”

Same as Religious Youth

Being a spiritual youth was the same as being a religious youth. These individuals stated that being spiritual is essentially the same as being religious (e.g., “same as above,” “the same as being a religious person,” “the same as question twenty”). The previous question (i.e., question 20) asked what it means to be a religious young person. This particular category differs from the “High Religious Involvement” category is that youth in this category do not necessarily say what being religious is or if they are involved in a particular religious belief system, whereas, youth in the “High Religious Involvement” category explicitly state the religious activity in which they are engaged.

Unarticulated Spirituality

This category was the most perplexing, and interesting, of all the categories in that it speaks to the difficulties some youth have trying to conceptualize the abstract meaning of spirituality. Members of this category failed to respond to the qualitative question of “what does it mean to be a spiritual young person,” however, when asked the follow up question of “how well does that describe you?” they rated themselves accordingly. Responses include ambiguities such as: left the answer blank, gave vague one word (e.g., “important”) or short phrase (e.g., “be spiritual”) answers, did not provide a distinctive or cohort answer (e.g., “I don't know”), or the like.

Quantitative Analyses: Preliminary Steps

Because we were examining short- and long-term effects of spirituality, we conducted two sets of analyses. However, before hypotheses testing began, preliminary tests were conducted to determine if any demographic variables (i.e., age, gender) needed to be accounted for in either of the analyses. For the short term model, girls scored significantly higher than boys on all but one (i.e., confidence) of the C's; therefore, we accounted for gender in each of the analyses. For the change model, we found that girls scored significantly higher than boys on the character, caring, and contribution scales. Therefore, we also accounted for gender effects during hypotheses testing.
For the short-term model, at step one, we entered the gender control variable. At step two, we entered the quantititative spirituality variable. At step three, we entered the dichotomous religious identification (RelID) variable, and the multiplicative Spirituality X RelID variable at step four. This order of entrance was used with each of the C factors.

For the change model, which examined the long-term effects of spirituality, we first entered gender into the model. At step two, we entered the Wave 6 C scores that corresponded to the Wave 7 C scores used for the dependent variable. At step three, we entered the Wave 6 spirituality scores, followed by the Wave 6 dichotomous RelID variable at step four. Finally, at step five we entered the multiplicative Spirituality X RelID variable constructed from Wave 6 scores.

Because this study attempts to investigate the specific role that spirituality plays in youth's positive development (as opposed to the role of religiosity), we were cautious about any steps in our design that may confound religiosity and spirituality (i.e., “high religious involvement” [n = 205] and “same as religious youth” [n = 195]). To mitigate this issue, we took a conservative approach by running both the concurrent and longitudinal models twice, once with all of the 1842 youths in the sample (see results in Tables 3 and 4, respectively) and once with only the 1442 youth remaining after we eliminated the 400 youth from the two spiritual categories that appears to possibly confound spirituality with religiosity. A comparison of the results revealed that including the 400 youths in the analyses did not substantially alter the results, with the relationship between spirituality scores and each of the youth outcome factors remaining the same. Therefore, results presented in the remainder of the text will refer to the analyses run with the entire sample (N = 1842).

TABLE 3 Results for Concurrent Association Between Wave 6 Spirituality and the Wave 6 C's (N = 1842)

<table>
<thead>
<tr>
<th>Step/Variable</th>
<th>β</th>
<th>R 2 change</th>
<th>F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender c</td>
<td>.065**</td>
<td>.004**</td>
<td>7.356**</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td>.188***</td>
<td>.035***</td>
<td>62.978***</td>
</tr>
<tr>
<td>3. Religious IDa</td>
<td>.037</td>
<td>.001</td>
<td>2.352</td>
</tr>
<tr>
<td>4. SpiritXRel.b</td>
<td>.006</td>
<td>.000</td>
<td>0.007</td>
</tr>
<tr>
<td>Confidence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>-.066***</td>
<td>.004*</td>
<td>7.453**</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td>.188***</td>
<td>.035***</td>
<td>62.785***</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Spirituality</td>
<td>Religious ID</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Connection</strong></td>
<td>.131***</td>
<td>.230***</td>
<td>.105***</td>
</tr>
<tr>
<td>1. Gender</td>
<td>.017***</td>
<td>.053***</td>
<td>.011***</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td></td>
<td>.96.488***</td>
<td>.19.872***</td>
</tr>
<tr>
<td>3. Religious ID</td>
<td></td>
<td></td>
<td>.19.872***</td>
</tr>
<tr>
<td>4. SpiritXRel.</td>
<td></td>
<td></td>
<td>.026</td>
</tr>
<tr>
<td><strong>Character</strong></td>
<td>.267***</td>
<td>.255***</td>
<td>.058</td>
</tr>
<tr>
<td>1. Gender</td>
<td>.071***</td>
<td>.065***</td>
<td>.003</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td></td>
<td>.132.273***</td>
<td>.6.615</td>
</tr>
<tr>
<td>3. Religious ID</td>
<td></td>
<td></td>
<td>.6.615</td>
</tr>
<tr>
<td>4. SpiritXRel.</td>
<td></td>
<td></td>
<td>.169</td>
</tr>
<tr>
<td><strong>Caring and Compassion</strong></td>
<td>.307***</td>
<td>.175***</td>
<td>.075***</td>
</tr>
<tr>
<td>1. Gender</td>
<td>.094***</td>
<td>.031***</td>
<td>.006***</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td></td>
<td>.61.406***</td>
<td>.11.159***</td>
</tr>
<tr>
<td>3. Religious ID</td>
<td></td>
<td></td>
<td>.11.159***</td>
</tr>
<tr>
<td>4. SpiritXRel.</td>
<td></td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td><strong>Contribution</strong></td>
<td>.226***</td>
<td>.231***</td>
<td>.059</td>
</tr>
<tr>
<td>1. Gender</td>
<td>.051***</td>
<td>.053***</td>
<td>.003</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td></td>
<td>.103.262***</td>
<td>.6.634</td>
</tr>
<tr>
<td>3. Religious ID</td>
<td></td>
<td></td>
<td>.6.634</td>
</tr>
<tr>
<td>4. SpiritXRel.</td>
<td></td>
<td></td>
<td>.295</td>
</tr>
</tbody>
</table>

Note. Betas presented are the standardized coefficients.
aReligiosity: Youth who identified with a religious group were assigned a “1”; youth who did not identify with a religious group were assigned a “0.”

bSpiritXRel. = interaction term used to determine if religious identification moderated the relationship between spirituality and the given C dependent variable.

cGender: Girls = 1; Boys = 0.

*p < .05; **p < .01; ***p < .001.

Note. Betas presented are the standardized coefficients. aReligiosity: Youth who identified with a religious group were assigned a “1”; youth who did not identify with a religious group were assigned a “0.” bSpiritXRel. = interaction term used to determine if religious identification moderated the relationship between spirituality and the given C dependent variable. cGender: Girls = 1; Boys = 0. *p < .05; **p < .01; ***p < .001.

10.1080/10888691.2012.722891-T0004

TABLE 4 Results for Longitudinal Association Between Wave 6 Spirituality and the Wave 7 C’s, Controlling for Wave 6 C’s (N = 1842)

<table>
<thead>
<tr>
<th>Step/Variable</th>
<th>β</th>
<th>R 2 change</th>
<th>F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Wave 6 Competence</td>
<td>.707***</td>
<td>.499***</td>
<td>470.030***</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td>.021</td>
<td>.000</td>
<td>0.403</td>
</tr>
<tr>
<td>3. Religious IDa</td>
<td>.016</td>
<td>.000</td>
<td>0.229</td>
</tr>
<tr>
<td>4. SpiritXRel.b</td>
<td>.094</td>
<td>.001</td>
<td>0.702</td>
</tr>
<tr>
<td>Confidence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Wave 6 Confidence</td>
<td>.691***</td>
<td>.478***</td>
<td>430.975***</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td>.039</td>
<td>.001</td>
<td>1.339</td>
</tr>
<tr>
<td>3. Religious ID</td>
<td>.098**</td>
<td>.009**</td>
<td>8.612**</td>
</tr>
<tr>
<td>4. SpiritXRel.</td>
<td>−.200</td>
<td>.003</td>
<td>3.078</td>
</tr>
<tr>
<td>Connection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Wave 6 Connection</td>
<td>.649***</td>
<td>.421***</td>
<td>344.593***</td>
</tr>
<tr>
<td>2. Spirituality</td>
<td>.047</td>
<td>.002</td>
<td>1.716</td>
</tr>
</tbody>
</table>
### Tests of Hypothesis Short Term (Concurrent) Model

**Competence**

Hypothesis 1 predicted a significant positive relationship between level of spirituality and competence scores. Gender was entered at step 1 of the model, and significantly contributed to the variance in Competence scores ($\beta = .065$, $p < .001$). At step 2, the spirituality score was
entered, and it also significantly contributed to the variance of competence scores ($\beta = .188, p < .001$). Neither the RelID variable entered at step three nor the Spirituality X RelID variable significantly contributed to the variance in competence scores. However, because of the relation between spirituality and competence scores, this hypothesis was supported.

**Confidence**

Hypothesis 2 predicted that level of spirituality would have a significant and positive link to confidence scores. At step 1, gender differences significantly contributed to confidence scores ($\beta = -.066, p < .001$). At step two, as shown in Table 3, spirituality scores were also linked to competence scores ($\beta = .188, p < .001$). At the trend level, RelID significantly predicted confidence scores ($\beta = .046, p < .10$) at step 3. The interaction term entered at step 4 did not account for a significant amount of variance. With the significant positive relationship between spirituality and confidence scores, this hypothesis was supported.

**Connection**

Hypothesis 3 predicted that level of spirituality would be positively associated with connection scores. Gender differences were accounted for at step 1, and significantly contributed to competence scores ($\beta = .131, p < .001$). Spirituality scores were entered in the model at step 2 and was significantly related to the connection scores ($\beta = .230, p < .001$). Religious identification was entered at step three, and also significantly predicted connection scores ($\beta = .105, p < .001$). At step four, the interactive term did not affect the relationship between spirituality and connection scores. Therefore, this hypothesis was supported.

**Character**

Hypothesis 4 predicted a significant and positive relationship between level of spirituality and character scores. Gender was entered at step 1, and it was significantly related to character scores ($\beta = .267, p < .001$). At step 2, spirituality scores also significantly contributed to character scores ($\beta = .255, p < .001$). At step 3, RelID significantly predicted character scores at the trend level ($\beta = .058, p < .10$), but the interaction tested at step 4 was not significant. Nevertheless, this hypothesis was supported.

**Caring and Compassion**

Hypothesis 5 predicted that level of spirituality would be positively associated with caring and compassion scores. Gender was entered at step 1 and significantly contributed to caring and compassion scores ($\beta = .307, p < .001$). Spirituality scores significantly contributed to the caring and compassion scores ($\beta = .175, p < .001$). Religious identification at step 3 also significantly predicted the dependent variable ($\beta = .075, p < .001$), although the interaction term at step 4 was not significant. This hypothesis was supported.

**Contribution**
Hypothesis 6 predicted a positive and significant relationship between level of spirituality and the 6th C, contribution. The gender variable, entered at step 1 of the model, was significantly related to contribution scores ($\beta = .226, p < .001$). Spirituality scores were entered at step two of the model. We found a positive and significant relationship between contribution scores and spirituality ($\beta = .231, p < .001$). The RelID variable added at step 3 influenced contribution scores only at the trend level ($\beta = .059, p < .10$), and, again, the interaction effect tested at step 4 was not significant. This hypothesis was also supported.

Long Term (Longitudinal) Model

Because the heart of our interest in the role of spirituality is developmental in nature, we tested spirituality's potential long-term effects on the six C's of PYD (accounting for earlier levels of the youth outcome measures). As Table 4 shows, spirituality did not have significant long-term effects on changes in the competence, confidence, connection, caring and compassion, or contribution scores. However, spirituality did make a modest but significant contribution to youths' character scores overtime ($\beta = .089, p < .05$). Youth spirituality at Wave 6 was positively linked to changes in youth Character scores at Wave 7.

We also examined if religious identification moderated the relationship between spirituality and each of the respective C's over time; however, we did not find an interactive effect for any of the relationships between youth self-perceived spirituality and the respective C's over time (see Table 4).

DISCUSSION

A common societal assumption is that youth who have a strong spiritual core are more prosocial; however, empirical evidence of such claims has been missing in the social sciences (King & Boyatzis, 2004). In this study, we proposed to empirically test spirituality's viability as a developmental asset that could contribute to positive youth development.

In our analyses, we examined the relationship between youths' self-perceived spirituality and the five C's of PYD and the subsequent C (i.e., contribution). Briefly, we found that, cross-sectionally, spirituality accounted for a significant amount of variance in all six C's examined in this study, with higher levels of spirituality being related to better youth outcomes. However, longitudinally, spirituality only accounted for a positive change in character scores over time. Whether youth were religious or not had no concurrent or longitudinal effect on the relationship between spirituality and the six C's.

Generally speaking, youth in this sample conceptualized being a spiritual young person as something that is positive in nature, but in different ways. It is promising that their perceived levels of spirituality not only were related to their own development, but to helping them develop an ethos that can someday influence the development of others in their social worlds. We now situate our findings within the broader context of adolescent development.
Being Spiritual

Having high religious involvement has been linked with several positive outcomes for youth (King & Roeser, 2009) and Damon (2008) argues that what youth need is to find their purpose in life. The youth in this sample largely viewed being a spiritual young person in positive terms, but in distinct ways. The first general way is related to being an upstanding young person. Youth conceptualized being spiritual as “having high religious involvement,” “having a purpose in life,” “exuding radiance,” and “being virtuous.”

The next broad group of conceptualizations involved having meaning in life. Youth conceptualized being spiritual as “possessing a keen consciousness,” “extraordinary self-confidence,” “being connected,” and having a “belief in a higher power or force.” As a species, we strive to find meaning in life and when we can do this, we are able to live more fruitful lives that helps us “transcend the ephemeral present” (Steger, 2009, p. 709). Youth who conceptualized spirituality in these ways can be said to be on their way to transcending the present by being connected to others in the universe, having a belief in beings that transcend the natural world, constantly reflect in ways that may them aware of the world around them. Such qualities can no doubt help youth contribute to civil society.

These two particular ways of conceptualizing spirituality are promising because if youth internalize one or the other, they may gravitate to social settings with peers who are engaging in positive behaviors (i.e., religious settings) or develop the motivation and drive to achieve an outcome that helps them become model citizens (i.e., purpose). Further, youth would engage in behaviors in a virtuous way or be more likely to have a positive aura about them.

The final broad category consisted of two groups: “unarticulated spirituality” and “same as religion” of youth who had not quite come to a conclusion of what it means to be a spiritual young person. This may reflect a common way that ideas about religion and spirituality are transmitted from adults to youth (Kelley, Athan, & Miller, 2007; Smith & Denton, 2005). However, we argue that if given the opportunity to contribute to the discourse on distinctions between spirituality and religion, they may be more apt to internalize its meaning, which can have positive consequences for their development.

Relations Between Spirituality and Positive Youth Development

Competence

Two previous studies that allowed youth to define spirituality both noted that the youth seemed surprised that an adult was actually asking them about their beliefs regarding spirituality and spiritual development (Kelley et al., 2007; Smith & Denton, 2005). This was also evident in our study with the large number of youth assigned to our “unable to articulate” category. But it also speaks to their ability to think critically about an important aspect of their lives and conclude for themselves what being spiritual means.
Spirituality was correlated with the measure of competence in our study. Critical thinking is not a skill that develops spontaneously, and those that do develop this skill outperform their peers on navigating complex problems (Sternberg, 1985). While we have no information regarding the process youth engaged in to develop their conceptions of spirituality, our data do suggest youth have the capacity to think critically about the topic. The broad range and depth of conceptualizations of spirituality in this study support the notion that youth think critically about what it means to be a spiritual young person. That capacity of critical thinking can plausibly help youth with having the competence needed to navigate through the barriers that arise in their lives.

Confidence

Measures of confidence and spirituality were correlated in this study. One of the ways that youth conceptualized being a spiritual young person was to have an extraordinary, but not necessarily narcissistic, level of self-confidence. Conceptualizing being spiritual in this manner can possibly lead to youth seeking out beneficial environments. For instance, because youth are drawn to those they can identify with their spiritual identity may help them seek out positive peer groups, and scholars have found that belonging to positive peer groups is linked with increases in self-esteem or worth (Harter, 1990). Additionally, higher levels of self-esteem have been linked with lower incidences of depression and eating disorders among youth (Ata, Ludden, & Lally, 2007; Hrabosky, Masheb, White, & Grillo, 2007). Therefore, high levels of self-perceived spirituality may indicate that an individual values him or herself, which can serve as a buffer against some of the negative aspects of adolescent development (e.g., use of illicit drugs, risk-taking behaviors).

Connection

As predicted, level of spirituality was significantly linked to levels of connection. For some youth, spirituality may have been the bond that secured various connections in their lives. Therefore, what their spirituality may provide is a fertilizer that nurtures human connections for youth. Those very connections are also linked to happiness and general well-being (Hoerger, Quirk, Lucas, & Carr, 2009). Noted psychologist Gilbert and colleagues (Gilbert et al., 2004; Gilbert, 2007) found that connections are essential to happiness and life satisfaction. When youth can internalize a model of spirituality that emphasizes connections, they are more likely to build the necessary relationships that allow them to positively contribute to others and the world around them.

Character

The findings on the character scores provided us with the most promising outlook on the role of self-perceived spirituality in the lives of youth. Spirituality was linked not only to youth character in the here and now, but also to positive changes in their character over time. Additionally, of the five C's, the relationship between level of their perceived spirituality and character scores was the strongest (i.e., had the highest beta weight).
Youth were asked their opinions of what it means to be a spiritual young person and, then, to compare themselves to that ideal. This inevitably linked spirituality with positive character traits, as demonstrated by the ways that they characterized being spiritual (e.g., virtuous, having purpose in life, being aware). When youth successfully internalize these spiritual traits, they develop an identity or an internal sensor that allows those positive traits (e.g., admirable, good morals, having good judgment) to transfer to other aspects of their lives. Our findings provide evidence that a strong spiritual core can lead to positive changes in character.

Caring and Compassion

Our hypothesis that level of spirituality would be significantly linked to Caring and Compassion scores was supported in this study. Research has found strong links among prosocial behavior, empathy, and caring and compassion. However, what is less clear is the motivation for empathic or altruistic behaviors. In particular, two ways that youth conceptualized spirituality (i.e., being connected, being virtuous) may have secured the link between caring and compassion and spirituality. Additionally, some have argued that spirituality develops early in life (Johnson, 2009). Considering these two ideas in tandem, we suggest that spirituality be considered in the discourse on root causes of empathic, altruistic, and ultimately prosocial behaviors.

Contribution

The Search Institute defines developmental assets as “40 common sense, positive experiences and qualities that help influence choices young people make and help them become caring, responsible, successful adults” (Search Institute, 2010, p. 1). With the consistent links we found between their spirituality and traits that lead youth on a path to becoming caring, responsible, and successful, we argue that spirituality is a developmental asset. For youth in our study, higher levels of spirituality were linked with qualities that lead to their having a higher likelihood of positively contributing to self, family, and community.

In sum, our findings provide empirical support to the number of assumptions that people have about the benefits of youth having a strong spiritual core. With a burgeoning interest in the role of spirituality aiding youth in their journey toward positive developmental outcomes, we are excited that we now have a foundation of youth constructed definitions and empirical evidence to advocate for spiritual development as a possible viable pathway to positive youth development.

Strengths of the Study

There are several strengths of this study that should be noted. First, this study used reliable and valid measures to assess the five C's of positive youth development. Second, a unique aspect of this study is the way it examines the viability of the claim of spirituality being a developmental asset. To our knowledge, this study is the first to empirically test and find viable evidence that spirituality is a developmental asset for adolescents. Third, many studies typically aggregate spirituality and religiosity, but this study examined spirituality separately from religious
identification. This allowed us to collect data indicating that even though youth who had no specified religious identification had a lower mean level of spirituality (see Table 2), religious identification did not moderate the relationship between spirituality and the five C's. This suggests that regardless of whether youth did or did not identify with a religious group, spirituality was still linked to youth's ability to thrive. Fourth, the sample size and diversity both contributed to the strength of this study. Participants in this study represented states in all five U.S. regions (i.e., West, Midwest, Southwest, Southeast, Northeast). While we cannot say exactly to whom our study can be generalized, with such a large sample size that geographically covers the United States, we are confident that our results are generalizable to many youth in the United States. Fifth, we were able to measure the effects of spirituality in the immediate as well as distant future. This particular statistical methodology allows us greater insight into the possible ways that spirituality can have a lasting effect on youth.

Finally, this study provides insight into how spiritually has a stronger influence on some character traits than others. For this study, based on differences in beta weights, spirituality had a stronger influence on character, connection, and contribution, as opposed to competence, confidence, and caring and compassion. This allowed for greater insight into what spirituality actually meant for youth in this study. According to their definitions, spirituality has implications for socio-emotional, cognitive, and behavioral character traits, all of which can lead youth on a successful pathway toward thriving.

Limitations and Implications for Future Research

Despite its strengths, the study did have limitations. First, our quantitative measure of spirituality was based on a single, self-perceived, item. Generally, it is recommended that multiple-item measures be used to capture a single construct; however, with well-developed questions, using a single item measure can be equally advantageous as a multiple item measure (Gardner, Cummings, & Dunham, 1998). With that said, future studies should seek to further investigate the validity of a single item measure of youth's self-perception of spirituality.

Second, although we had 10 different conceptualization of spirituality, for our quantitative analysis we only used the aggregated spirituality scores. Therefore, we are uncertain of the links between specific categories/conceptions of spirituality and the various meta-indicators of PYD. Future studies should conduct separate analyses for each typology of spirituality to determine if some conceptions have stronger, and/or more lasting, effects on positive youth development.

Third, our study only found long-term effects of spirituality on one of the five C's, character. Spirituality is a dynamic construct and can undergo substantial change over time. Future research should continually examine additional ways that spirituality has a developmental influence on PYD. A second limitation is that the effect sizes (i.e., modest relationships) were small between spirituality and the C's. Although the short-term relations were significant, they were small in
magnitude. The significant relations noted between spirituality and youths' prosocial development in this study are tempered somewhat by the relatively small effect sizes.

Fourth, while we were able to obtain wide ranging rich data regarding youths' understandings of spirituality, future studies should allow for more probing to solicit richer conceptualizations. The large number of youth in the “unable to articulate” category is evidence that many youth need more time and help in determining what it means to them to be spiritual young persons. Further, more probing may reveal universal understandings of spirituality among youth, as opposed to self-perceptions that may be limited in their generalizability.

Fifth, we found that spirituality was related to changes in only one youth outcome—character. We suspect that despite transforming the scores, we had a multicolinearity problem here, as the Wave 6 youth outcome variables were significantly associated with the Wave 7 ones, resulting in the Wave 7 variable having relatively little variance left to explain after controlling for the Wave 6 score. In future studies, larger sample sizes may help increase the power of these change analyses and ways of reducing multicolinearity need to be explored. Finally, although our study is represented by youth from various ethnic groups, it is overwhelmingly “non-Hispanic White.” Studies similar to this one should be replicated, but on more diverse samples to garner a better (i.e., more diverse and inclusive) understanding of how youths self-perceptions of spirituality is linked to their positive development across various cultural groups.

The promise of our findings leads us to encourage developmental interventionists to consider spiritual development as part of their curriculum and discourse when working with youth. Because they are seldom given the opportunity to reflect on and discuss what it means to be spiritual and how that can impact their lives, communal settings with trusted peers and mentors provide a very promising opportunity for youth to have experiences in conversations that can have lasting influence on their character and behaviors.

Acknowledgments

We gratefully acknowledge the crucial assistance of Oladapo Adeniran, Ruth Bowhay, Nicole Everett, and Jessica Boessen, for their help with coding the qualitative data. Their work greatly contributed to the completion of this project.

Notes

Note. Betas presented are the standardized coefficients.

aReligiosity: Youth who identified with a religious group were assigned a “1”; youth who did not identify with a religious group were assigned a “0.”
bSpiritXRel. = interaction term used to determine if religious identification moderated the relationship between spirituality and the given C dependent variable.

cGender: Girls = 1; Boys = 0.

*p < .05; **p < .01; ***p < .001.

Note. Betas presented are the standardized coefficients.

aReligiosity: Youth who identified with a religious group were assigned a “1”; youth who did not identify with a religious group were assigned a “0.”

bSpiritXRel. = interaction term used to determine if religious identification moderated the relationship between spirituality and the given C dependent variable.

cGender: Girls = 1; Boys = 0.

*p < .05; **p < .01; ***p < .001.

REFERENCES


