

# **Strengths-based Approaches in Co-Curricular and Curricular Leadership: Opportunities to Magnify Students' Thriving**

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## **Abstract**

The purpose of this article was to examine the effects of strengths-based approaches in co-curricular and curricular leadership on first-year students' holistic thriving, academic thriving, social thriving, and psychological thriving. We used propensity score matching and regression analyses with survey data from the Thriving Quotient, which was administered to first-year students at a large, public research university ( $n = 548$ ). The results suggest students' enrollment in a strengths-based leadership minor course was associated with higher levels of thriving in social, academic, and psychological domains. Students' participation in strengths-based student organizations was associated with higher thriving in social domains, while concurrent enrollment in the strengths-based leadership class and participation in strengths-based student organizations was associated with significantly higher holistic thriving, social thriving, and psychological thriving.

## **Introduction**

Over the last decade, practitioners in higher education working with undergraduate students have devoted considerable resources toward infusing their practices with strengths-based approaches to promote students' success and well-being (Lopez & Louis, 2009; Louis, 2011; Soria & Stubblefield, 2015a). Rooted in positive psychology (Seligman, 2002), strengths-based approaches seek to help individuals identify their greatest natural talents, apply their talents, and refine their talents through increased awareness, knowledge, and skill in a variety of contexts, activities, and situations (Clifton & Anderson, 2002). Strengths-based approaches are founded upon the idea that individuals who focus on remediating their weaknesses may only be able to achieve, at best, mediocre performance levels; however, if those individuals expend comparable effort on areas of existing strengths, they may reach levels of excellence (Clifton &

Harter, 2003). Therefore, rather than focus on deficiencies or remediating weaknesses, strengths approaches reveal the areas of individuals' lives in which they have the greatest potential of achieving success and encourage individuals to pursue development of the areas in which they are poised to reach their best performance.

Concomitant with the increases in strengths-based approaches in higher education, scholars have kept pace by exploring the benefits of strengths-based approaches in a variety of contexts, including career development (Soria, Hinz, Arnold, & Williams, 2016; Tomkovick & Swanson, 2014), academic advising (Schreiner & Anderson, 2005; Soria, Morrow, Laumer, & Marttinen, 2017), residence life (Soria & Taylor, Jr., 2016), and first-year experience courses (Burris et al., 2010; Stebleton, Soria, & Albecker, 2012). Yet, amid the flourishing research on the benefits of strengths-based approaches, very few scholars have investigated the potential outcomes of strengths-based approaches in both curricular and co-curricular leadership contexts. The purpose of this paper is to investigate whether strengths-based approaches in an introductory leadership minor course and in student organizations are associated with students' thriving, defined as students' intellectual, social, and emotional engagement (Schreiner, 2010). In particular, the research question guiding this study is as follows: are first-year students who participate in strengths-based curricular and co-curricular leadership opportunities significantly more likely to experience holistic thriving, academic thriving (academic determination and engaged learning), social thriving (social connectedness and diverse citizenship), and psychological thriving (positive perspective)?

## **Strengths-Based Approaches in Higher Education**

While there are many tools to help individuals identify their strengths, in this paper, we focus on Gallup's conceptualization of strengths and the Clifton StrengthsFinder assessment (Gallup, 2017). The Clifton StrengthsFinder assessment is a tool to help college students discover their top five talent themes out of 34 talent themes, which are natural patterns of thoughts, feelings, and behaviors (Hodges & Harter, 2005). The StrengthsFinder instrument includes 177 items to measure individuals' strengths in an ipsative approach in which people compare two options and select their preference (Asplund, Lopez, Hodges, & Harter, 2009). Scholars have conducted several confirmatory, reliability, and validity studies and found that the psychometric properties of the StrengthsFinder assessment are sound (Asplund et al., 2009; Hodges & Harter, 2003; Lopez, Harter, & Hodges, 2005). The ipsative nature of the assessment means that individuals with the same top five talent themes can use their talents in different ways. The odds of receiving the same top five talent themes in the exact same order as another person is 1 in 33.39 million, highlighting the individuality of those who discover their top five talent themes.

There are several ways to detect the presence of strengths; for instance, individuals naturally gravitate toward activities that facilitate utilization of their talents and derive great satisfaction and boundless energy when they engage in those specific activities (Clifton & Nelson, 1992). Additionally, when individuals are engaging in activities in which they rapidly learn, achieve tasks, and perform at optimal levels, they are most likely, in those moments, using their specific strengths (Clifton & Nelson, 1992). Ultimately, strengths represent individuals' preexisting capacity for functioning in ways that are authentic, energizing, and engaging, thus

enabling optimal performance and development (Linley, 2008).

Scholars continue to investigate and discover the ways in which students are benefitting from discovering their top five talent themes and engaging in activities, conversations, and programs to cultivate their strengths. For instance, researchers have found positive associations between college students' strengths awareness and their academic self-efficacy (Soria & Stubblefield, 2014), engagement (Soria & Stubblefield, 2014; Soria & Taylor, Jr., 2016), retention (Soria & Stubblefield, 2015a, 2015b; Soria & Taylor, Jr., 2016), and optimism (Soria & Stubblefield, 2015c). Outside of higher education contexts, researchers have also suggested that leaders who use their unique strengths have higher performance in the workplace (Linley, Woolston, & Biswas-Diener, 2009) as well as increased levels of goal attainment, autonomy, fulfillment, well-being, and optimal functioning (Linley, Nelson, Wood, Gillett, & Biswar-Diener, 2011).

Scholars have also explored strengths-based practices in college students' leadership development. Precedent has been established for these types of leadership studies, as several paradigmatic leadership theories include self-awareness as primary components of leadership development (Astin & Astin, 1996; Komives, Longenecker, Owen, Mainella, & Osteen, 2006; Kouzes & Posner, 2006) and the StrengthsFinder is a self-awareness assessment. The extant scholarship on leadership points toward the consistent finding that successful, authentic leaders possess a high degree of self-awareness and are conscious of how to use their strengths in organizations, group dynamics, and in interpersonal relationships (Avolio & Gardner, 2005; Higgs & Rowland, 2010; Moshavi, Brown, & Dodd, 2003). When college students are aware of their strengths, they possess not only a self-awareness of their own unique talents that can enhance their overall performance, but they also become more appreciative of others' strengths, thus increasing their ability to work more effectively in teams and groups and developing as a leader (Soria, Roberts, & Reinhard, 2015).

While the aforementioned literature provides a foundation for the benefits of strengths awareness in leadership, to date, there are few studies that explore the potential outcomes of strengths-based practices in curricular or co-curricular undergraduate leadership opportunities. Lane and Chapman (2011) explored the benefits of using the StrengthsFinder inventory with students who were enrolled in a 10-week co-curricular leadership seminar program. The authors found that students' strengths efficacy—their beliefs in their capability of building personal strengths and applying strengths in daily life to enhance their individual potential (Tsai, Chaichanasakul, Zhao, Flores, & Lopez, 2014)—was positively associated with the three individual dimensions of the social change model: consciousness of self, congruence, and commitment. Wisner (2011) utilized the StrengthsFinder among students who held formal leadership positions within student organizations across five private, faith-based institutions. Because students scored uniformly high on strengths ownership (the degree to which individuals adopt strengths philosophies, understand strengths in relationships, and invest in developing their own strengths), Wisner found the predictive ability of the strengths ownership variable was limited in relation to students' scores on the Student Leadership Practices Inventory (Kouzes & Posner, 2006). Scholars have also investigated strengths-based practices for graduate and professional students; for instance, Sorenson, Traynor, and Janke (2009) utilized StrengthsFinder and strengths activities in graduate-level pharmacy courses and discovered the strengths content

was the most beneficial in terms of enhancing students' learning outcomes and overall engagement with the material.

While research on strengths-based programming in co-curricular and curricular leadership opportunities is expanding, overall, there remains a significant gap in scholarship examining the potential benefits of embedding strengths in college students' leadership. In addition, the majority of leadership scholarship fails to take college students' self-selection into leadership experiences into consideration. These self-selection biases may contribute to systematic differences in the characteristics of students who participate in leadership opportunities; therefore, researchers should address these systematic characteristics between the students who participate in leadership opportunities when estimating the potential effects of leadership on outcomes (Austin, 2011). To address those limitations, we utilized quasi-experimental procedures (propensity score matching techniques) to construct control groups (first-year students who did not experience strengths-based leadership experiences) and treatment groups (first-year students who had strengths-based leadership experiences) similar to those found in randomized experiments. We utilized these innovative steps to reduce the potential bias found within students' self-selection into leadership experiences.

## Conceptual Framework

Both strengths-based approaches and the concept of thriving are rooted in positive psychology, which emphasizes cultivating individuals' natural capacities and strengths in everyday situations such that they can perform at their best and lead meaningful and fulfilling lives (Seligman, 2002). Strengths and thriving are also associated with Keyes (2002) concept of *flourishing*, which refers to emotional well-being, resiliency to meet challenges, and active and productive engagement with others and the social world. Schreiner (2010) applied those concepts to college students, using the holistic term *thriving* to describe students who are intellectually, socially, and psychologically engaged in their collegiate experiences. Schreiner (2010) developed the Thriving Quotient assessment to measure students' thriving in multiple dimensions. The Thriving Quotient extends traditional frameworks of student success by measuring students' engagement in their learning (the *engaged learning* domain) and aspects of learning and cognition such as self-regulation (the *academic determination* domain). The Thriving Quotient also measures students' internal psychological lenses (having a positive outlook on life, known as the *positive perspective* domain), civic engagement and commitment to community welfare (the *diverse citizenship* domain), and students' perceptions of their interpersonal relationships within the campus community (the *social connectedness* domain) (Kinzie, 2012).

Students who are thriving are engaged in their learning, confident in their ability to undertake challenging academic activities, integrated in their social communities on campus, desire to make a positive difference in their communities by giving back, and take actions to benefit the common good (Schreiner, 2010). Thriving students also view differences between individuals as potential opportunities for learning about others, seek out opportunities to engage with others from different backgrounds, can see multiple perspectives, and value the many gifts of diversity (Schreiner, 2010). Scholars investigating thriving and strengths-based approaches in higher education seek to locate institutional programs that can stimulate students' holistic well-

being, thus combining psychological elements of thriving with institutional aspects of engagement to create a robust model of student success (Kinzie, 2012). It is within this vein of scholarship that we contribute the present study in which we examine whether students' participation in strengths-based curricular and co-curricular leadership opportunities offered by institutions are associated with students' thriving.

## Methodology

**Procedures.** In fall 2014, a large, public, research-extensive university located in the upper Midwest offered the Clifton StrengthsFinder assessment to all first-year students. The study was approved by the Institutional Review Board. Over 95% of first-year students took the assessment. The institution offered students several opportunities to engage more fully with their strengths, including workshops, individual appointments with undergraduate strengths coaches, and a website featuring strengths resources. All first-year students participated in strengths programming during "Welcome Week," an orientation program. Several hundred university staff, administrators, and faculty participated in strengths trainings so that they could infuse their practices with strengths-based approaches, curricula, and programs. In addition, the academic leadership minor program, which enrolls over 1,000 undergraduates each year across four courses, provided the StrengthsFinder for all students enrolling in leadership minor classes who did not have an opportunity to take the StrengthsFinder if they were admitted prior to 2011.

In the introductory leadership minor course, faculty participated in standardized training each semester to present consistent curriculum to students. In class, faculty delivered a presentation about the StrengthsFinder instrument and the philosophy behind strengths-based approaches. Faculty then facilitated a discussion about students' talent themes, asked students to reflect about using their talent themes to meet a goal, and encouraged students to discuss their top five talent themes with each other. Students read a text about integrating strengths and leadership (Rath & Conchie, 2009) and faculty used a worksheet to map students' talent themes into four leadership domains (executing, strategic, relationship building, and influencing) (Rath & Conchie, 2009). Faculty organized students into four groups representing the domains into which the majority of students' talent themes fell (e.g., a student with Input, Ideation, Intellection, Learner, and Achiever talent themes would fit in the strategic domain because four of their five talent themes are located in that domain). Faculty then asked students to create diverse teams of four students in which each student represented a different strengths domain (those groups became project teams for the larger class assignments). In each of the class assignments and in feedback sessions, faculty asked students to reflect upon how they used their strengths to accomplish tasks and how they saw other team members using their strengths. Students also discussed their strengths informally throughout the duration of the semester as they connected with their classmates in class.

There are over 1,500 student organizations at this university and it is not possible to know how students in each organization implemented strengths-based discussions, trainings, workshops, or other programs. Some student organizations hosted undergraduate strengths coaches in workshops to teach organization members about their talent themes and how to use their strengths in leadership, teamwork, and interpersonal relationships. Leaders in student organizations also participated in strengths workshops and trainings as a part of their leadership

development and then returned to their student organizations to facilitate strengths discussions. Some student organizations integrated strengths approaches into their team development activities, including performance feedback sessions designed to help members discover how they could leverage their unique strengths to benefit the organizations.

**Instrument.** We utilized data from the Thriving Quotient survey, an assessment designed to measure the academic, social, and psychological domains of college students' experiences (Schreiner, 2010). The survey is a part of a larger project instituted at several higher education institutions across the United States. Researchers have found the survey items have high reliability and validity (Schreiner, McIntosh, Nelson, and Pothoven, 2009). We embedded additional items in the survey to measure students' participation in strengths-based discussions in student organizations.

**Participants.** We administered the Thriving Quotient to all first-year students enrolled at the University of Minnesota, Twin Cities, a large, public research university in the upper Midwest, in December 2014 ( $n = 5,530$ ). The response rate was 28.07% ( $n = 1,552$ ), which included only students who had taken the StrengthsFinder. The participants included more female students (63.3%,  $n = 983$ ) than male students (36.7%,  $n = 569$ ), a response not representative of the proportion of females (52.5%) and males (47.5%) in the first-year population. In addition, 3.4% of the respondents were Hispanic ( $n = 52$ ), 0.9% American Indian or Native American ( $n = 14$ ), 12.0% Asian ( $n = 187$ ), 3.4% Black ( $n = 52$ ), 0.3% reported no race/ethnicity ( $n = 4$ ), 6.1% international ( $n = 95$ ), and 73.7% White ( $n = 1,144$ ). The response rates by race/ethnicity closely mirror the first-year population. Additionally, 24.5% were first-generation students ( $n = 381$ ), 20.9% were Pell grant recipients ( $n = 324$ ), and 84.0% lived in an on-campus residence hall ( $n = 1,304$ ), all factors representative of the entire first-year class.

### **Measures.**

*Independent measures.* In the survey, students responded to an item in which they indicated whether they had strengths-related discussions in student clubs, organizations, or activities (1 = yes and 0 = no). We collected students' enrollment in the strengths-based introductory leadership minor course from institutional records (1 = enrolled in the introductory leadership course and 0 = did not enroll in the course). In our final sample, which only included students who answered all survey items used in the analyses, 274 students had strengths-based conversations in student organizations or in the introductory minor course (17.7% of the sample), which we matched with 274 students who did not have those strengths-based experiences for a final sample size of  $n = 548$ . Of those students, 7.3% ( $n = 20$ ) enrolled in both the leadership course and participated in strengths-based student organizations, 17.15% ( $n = 47$ ) enrolled in only the leadership course, and 75.5% ( $n = 207$ ) only participated in strengths-based student organizations. We dummy-coded those three variables to examine the differential impacts of leadership involvement over non-participation.

*Covariate measures.* We utilized several measures as covariates in propensity score matching that correlate with students' leadership involvement, including their time spent volunteering (Soria, Nobbe, & Fink, 2013) and in employment (Soria, Hussein, &

Vue, 2014). We also included demographic covariate measures including sex, age, race/ethnicity, and socioeconomic status (Dugan & Komives, 2010; Soria, Hussein, & Vue, 2014), as measured by whether students received Pell grants or were first-generation students. Finally, we also included whether students lived on campus, their college of enrollment, and cumulative grade point average after their first semester (Soria, Hussein, & Vue, 2014).

*Dependent measures.* In the Thriving Quotient, students respond to the following item that holistically measures their sense of thriving: “Thriving is defined as getting the most out of your college experience, so that you are intellectually, socially, and psychologically engaged and enjoying the college experience. Given that definition, to what extent do you think that you are thriving as a college student this semester?” Students responded to the item on a scale from 1 = not even surviving to 6 = consistently thriving.

We also explored students’ academic thriving, social thriving, and psychological thriving in our analyses. Academic thriving includes two constructs: engaged learning and academic determination. Students’ engaged learning describes students’ behavioral participation in the learning process and the psychological aspects of meaningful processing and focused attention (Schreiner, McIntosh, Kalinkewicz, & Propst Cuevas, 2013). Engaged learning includes four items, including students’ perceptions that they are learning things in their classes that are worthwhile to them and that they can find ways to apply what they are learning in class to other elements of their lives. Students’ academic determination reflects students’ motivation, self-efficacy, hope, and ability to regulate their own learning (Schreiner et al., 2013). Students’ academic determination includes five items from the survey, including students’ level of confidence that they will reach their educational goals, students’ perception on whether they know how to apply their strengths to achieve academic success, and students’ confidence in juggling the demands of college life, among others. The items in both constructs were measured on a scale from 1 = strongly disagree to 6 = strongly agree.

Thriving in the social domain includes students’ social connectedness and diverse citizenship. Social connectedness measures the presence of healthy relationships and friendships in students’ campus experiences (Schreiner et al., 2013). Social connectedness includes six items measuring whether students feel content with their friendships and whether they feel as though their friends really care about them. All items were measured on a scale from 1 = strongly disagree to 6 = strongly agree.

Schreiner (2010) defined diverse citizenship as “an openness and valuing of difference in others and active involvement with others to make the world a better place” (p. 8). Diverse citizenship includes whether students spend time making a difference in other people’s lives (and believe they can make a difference), value interacting with people whose viewpoints are different from their own, have experienced a change in knowledge or beliefs by becoming more aware of the perspectives of those from different backgrounds, and believe it is important to become aware of the perspectives of individuals from different backgrounds, among others. The items were measured on a scale from 1 = strongly disagree to 6 = strongly agree.

Finally, we measured students' psychological thriving through their positive perspective, or optimistic outlook on life (Schreiner et al., 2013). The domain of positive perspective contains two items asking students whether they look for the best in situations even when things seem hopeless and whether they tend to see the glass half-full rather than half-empty. The items in both constructs were measured on a scale from 1 = strongly disagree to 6 = strongly agree.

**Data Analyses.** We utilized propensity score matching techniques in SPSS 23.0 using the procedures outlined by Thoemmes (2012). We began by using binary logistic regression to compute propensity scores for individual students. The propensity scores reflect an estimated probability that a student would enroll in a leadership minor course or have a strengths-based discussion in a student club or organization. Next, we used 1:1 nearest neighbor matching, meaning that each student in the treatment condition is matched to a student in the untreated condition who has the most similar estimated propensity score (Austin, 2011). We matched without replacement and we discarded all units that fell outside of the area of common support to avoid extrapolation to units that were so dissimilar that no comparisons could be made to other units (Thoemmes, 2012). We imposed a caliper of .20 of the standard deviation of the logit of the propensity score to avoid inadequate matches (Austin, 2011).

Next, we checked whether the matching procedures balanced the distribution of variables in both the treatment and control groups. We examined the standardized mean differences (the mean differences between the two groups divided by the standard deviation of the control group) in the treatment and control groups before and after matching. We detected no large imbalances above .25 after matching in each analyses, meeting the threshold suggested by Rosenbaum and Rubin (1985). We also examined the overall imbalance test (Hansen & Bowers, 2008) and found that no variables were significantly unbalanced after matching. Additionally, the measure developed by Iacus, King, and Porro (2009) was smaller in the matched sample than in the unmatched sample. Our visual inspections of histograms of propensity scores pre- and post-matching suggested the magnitude of standardized differences was reduced, and histograms of standardized differences of all terms pre- and post-matching suggested that the standardized differences post-matching were centered on zero and that no systematic differences existed after matching (Thoemmes, 2012). These results suggest that, before matching procedures were implemented, the covariates within the treatment and control groups differed significantly and that the propensity score matching decreased bias by making the observed and treatment groups more similar with regard to their covariates.

Next, we utilized a factor analysis on the survey items for the purpose of data reduction—to explain a larger set of measured variables with a smaller set of latent constructs (Henson & Roberts, 2006). To develop the independent measures used in this study, we conducted a factor analysis on 23 items. We utilized Velicer's (1976) minimum average partial (MAP) method, Ruscio and Roche's (2012) comparative data (CD) technique, and Raiche, Roipel, and Blais's (2006) optimal coordinate (OC) method to estimate the factors (Courtney, 2013). We used the procedures outlined by Courtney (2013) to analyze the data using SPSS R-Menu v2.0 (Basto & Pereira, 2012). Velicer's MAP values suggested a distinct fifth step minimum squared average partial correlation; against a plot of eigenvalues, the OC procedures estimated five factors; and, finally, the CD method suggested retaining five factors. We this evidence, we retained the following five factors: engaged learning ( $\alpha = .798$ ), academic determination ( $\alpha = .760$ ), diverse citizenship ( $\alpha = .790$ ), positive perspective ( $\alpha = .816$ ), and social connectedness ( $\alpha = .866$ ). The

factor reliability scores closely approximated those found in prior research (Schreiner et al., 2013). We computed the factor scores using the regression method and standardized the scores with a mean of zero and a standard deviation of one.

Finally, we utilized ordinary least squares regression to examine associations between students' participation in curricular and co-curricular strengths-based conversations and their sense of thriving, academic determination, engaged learning, social connectedness, positive perspective, and diverse citizenship. We tested the assumptions of regression analysis and found that the multicollinearity, homoscedasticity, linearity, and independence assumptions were not violated (Tabachnick & Fidell, 2007).

## Results

The results of the first regression analysis suggest that strengths-based conversations in the leadership minor course ( $\beta = .262, p < .001$ ) and in student organizations ( $\beta = .115, p < .01$ ) were positively associated with first-year students' sense of thriving during their first semester of study (Table 1). The combination of strengths-based conversations within the leadership minor course and participation in a student organization had no effects on students' thriving. Participation in strengths-based conversations within curricular and co-curricular leadership accounted for 6.5% of the variance in students' thriving.

The results of the second regression analysis suggest that strengths-based conversations within the leadership minor course ( $\beta = .188, p < .001$ ) were positively associated with first-year students' engaged learning during their first semester of study (Table 1). Strengths-based conversations in student organizations and the combination of strengths-based conversation in a leadership minor course and in a student organization had no effects on students' engaged learning. Participation in curricular and co-curricular leadership accounted for 3.4% of the variance in students' engaged learning in this model.

The results of the third regression analysis suggest that concurrent strengths-based conversations in the leadership minor course and in a student organization ( $\beta = .125, p < .01$ ) and strengths-based conversations in student organizations ( $\beta = .180, p < .001$ ) were positively associated with first-year students' academic determination (Table 1). Strengths-based conversations in only the leadership minor course had no effects on students' academic determination. Strengths-based conversations within participation in curricular and co-curricular leadership accounted for 3.9% of the variance in students' academic determination.

The results of the fourth regression analysis suggest that all three types of strengths-based conversations in leadership were significantly and positively associated with students' social connectedness. Specifically, concurrent strengths-based conversations in the leadership minor course and in a student organization ( $\beta = .111, p < .01$ ), strengths-based conversations in leadership courses ( $\beta = .102, p < .05$ ), and strengths-based conversations in a student organizations ( $\beta = .213, p < .001$ ) were positively associated with first-year students' social connectedness (Table 1). Strengths-based conversations in this model accounted for 4.9% of the variance in students' social connectedness.

The results of the fifth regression analysis suggest again that all three types of strengths-based conversations in leadership were significantly and positively associated with students' diverse citizenship. Specifically, strengths-based conversations in the leadership minor course and in a student organization ( $\beta = .164, p < .001$ ), in leadership courses ( $\beta = .185, p < .001$ ), and in student organizations ( $\beta = .198, p < .001$ ) were positively associated with first-year students' diverse citizenship (Table 1). Strengths-based conversations in this model accounted for 6.9% of the variance in students' social connectedness.

Finally, the results of the sixth regression analysis suggest that all three types of strengths-based conversations in leadership were significantly and positively associated with students' positive perspective. Specifically, strengths-based conversations in the leadership minor course *and* in a student organization ( $\beta = .109, p < .05$ ), in leadership courses ( $\beta = .091, p < .05$ ), and in student organizations ( $\beta = .204, p < .001$ ) were positively associated with first-year students' positive perspective (Table 1). Strengths-based conversations in this model accounted for 4.5% of the variance in students' positive perspective.

Table 1  
*Regression Analyses*

|   | <i>Thriving</i>               |      |      |          | <i>Engaged Learning</i>     |      |         |          |
|---|-------------------------------|------|------|----------|-----------------------------|------|---------|----------|
|   | B                             | SE   | B    | <i>p</i> | B                           | SE   | $\beta$ | <i>p</i> |
| Intercept   | 4.303                         | .069 |      | .000     | -.032                       | .072 |         | .662     |
| Leadership Minor Course<br>and Student Organization | .247                          | .264 | .039 | .350     | .452                        | .277 | .070    | .103     |
| Student Organization                                | .484                          | .180 | .115 | .007     | .198                        | .189 | .046    | .294     |
| Leadership Minor Course                             | .634                          | .105 | .262 | .000     | .468                        | .110 | .188    | .000     |
|   | <i>Academic Determination</i> |      |      |          | <i>Social Connectedness</i> |      |         |          |
|   | B                             | SE   | B    | <i>p</i> | B                           | SE   | $\beta$ | <i>p</i> |
| Intercept   | -.101                         | .068 |      | .139     | -.070                       | .078 |         | .369     |
| Leadership Minor Course<br>and Student Organization | .762                          | .261 | .125 | .004     | .769                        | .296 | .111    | .010     |
| Student Organization                                | .172                          | .178 | .042 | .335     | .471                        | .202 | .102    | .020     |
| Leadership Minor Course                             | .425                          | .104 | .180 | .000     | .573                        | .118 | .213    | .001     |
|   | <i>Diverse Citizenship</i>    |      |      |          | <i>Positive Perspective</i> |      |         |          |
|   | B                             | SE   | B    | <i>p</i> | B                           | SE   | $\beta$ | <i>p</i> |
| Intercept   | -.171                         | .067 |      | .011     | -.169                       | .063 |         | .007     |
| Leadership Minor Course<br>and Student Organization | .987                          | .255 | .164 | .000     | .609                        | .239 | .109    | .011     |
| Student Organization                                | .756                          | .176 | .185 | .000     | .342                        | .163 | .091    | .037     |
| Leadership Minor Course                             | .464                          | .102 | .198 | .000     | .444                        | .096 | .204    | .000     |

## Discussion

The results of this study suggest that strengths-infused curricular and co-curricular opportunities are positively associated with first-year students' sense of psychological, intellectual, social, and emotional well-being, although the results of strengths-based courses and student organizations were not necessarily uniform for the thriving outcomes. Specifically, we discovered that enrollment in only the strengths-based leadership courses had positive effects on *all* areas of students' thriving: students' holistic thriving, engaged learning, academic determination, social connectedness, diverse citizenship, and positive perspective. In other words, students who enrolled in the strengths-based academic leadership course reported being energized by what they were learning, having greater confidence in their academic abilities, an easier time making friends, greater passion for contributing back to their communities and learning more about others from diverse backgrounds, and a more positive outlook on life.

Due to the rigorous leadership minor faculty training program, we hypothesize that the strengths-based experiences in leadership courses may have been more consistently and uniformly applied than students' experiences in student organizations, which had differential effects on students' outcomes. Students who participated in strengths-based discussions in student organizations had significantly higher holistic thriving, social connectedness, diverse citizenship, and positive perspective. Students who have strengths-related discussions in co-curricular contexts may have more fulfilling friendships, greater optimism, are more likely to value diversity, and more desire to give back to their communities than their peers who do not have these strengths-based conversations. The combination of enrollment in the strengths-based leadership course and strengths discussions in student organizations had the fewest relationships with students' outcomes, yielding only positive effects on students' academic determination, social connectedness, diverse citizenship, and positive perspective.

Overall, the most consistent relationships we observed in this study are between strengths-based interactions in curricular and co-curricular leadership and the social and psychological thriving domains (social connectedness, diverse citizenship, and positive perspective) as opposed to the academic thriving domains (engaged learning and academic determination). One of the many benefits of strengths-based approaches includes the opportunity to learn not only about one's strengths, but to discover the strengths of others and view those strengths through an appreciative lens (Soria & Stubblefield, 2015c). It may be the case that strengths-based discussions and activities inspire students to form ready connections with their classmates, thus fostering friendships and inspiring students to develop a sense of belonging and commitment to their campus communities (Soria & Stubblefield, 2015c). Students who discover their strengths—the areas in which they are primed to achieve optimal success—may feel a greater efficacy in tackling obstacles and overcoming adversity, thus inspiring overall higher optimism and a positive outlook on life (Soria & Stubblefield, 2014, 2015b).

While the social, emotional, and community-based outcomes were uniformly associated with all three types of strengths-related conversations, the academic outcomes were less clearly-defined. In particular, students who had strengths-related discussions in the academic leadership class were more likely to experience engaged learning, meaning they were more likely to feel energized by what they were learning and able to make connections across their academic

experiences. Strengths-based practices have relevance across many dimensions of students' experiences in higher education (Schreiner & Anderson, 2005); therefore, we hypothesize the strengths-infused academic experiences in the leadership minor course may have felt relevant and applicable to several areas of students' lives, thus improving their overall engagement in their academic learning. Students who had strengths-based conversations in co-curricular organizations and in the combination of *both* the leadership minor class and in organizations were more likely to experience academic determination. This finding corroborates prior research suggesting that college students who know and engage with their strengths possess a high degree of self-efficacy to undertake academic challenges (Soria & Stubblefield, 2014).

There are several limitations of this study worth noting; for example, we obtained the data used to measure students' strengths-related discussions from a survey of less than one-third of the first-year class. Students who completed the survey may have been enthusiastic about their university experiences and the strengths initiative, thus potentially biasing the results given the representativeness of students who selected to respond to the survey (Soria, Roberts, & Reinhard, 2015). We also do not have a lot of information about the nature of students' strengths-based discussions in student organizations or the extent to which students' strengths-based interactions in other contexts (e.g., residence life) influenced their sense of thriving. We recommend that researchers work to discover which particular components of strengths-based interactions in student organizations may yield differential results among students.

An additional limitation regarding the sample is the overrepresentation of females compared to the population. Our sample is limited to first-year students and the data are drawn from a single institutional type—a large, public research-intensive university—which potentially limits the generalizability of the results to other institutions. We recommend that scholars conduct future studies at other institutional types (e.g., community colleges, etc.) and with students at different academic levels to better understand whether strengths-based practices may impact students' outcomes in different environments.

## Conclusion

The results of this study suggest that strengths-based curricular and co-curricular leadership opportunities can boost some aspects of students' thriving; notably, enrollment in a strengths-based leadership minor course was associated with students' thriving in social, academic, and psychological dimensions. Students' participation in strengths-based student organizations was associated with thriving in primarily social domains, while the combination of enrollment in the course and participation in student organizations had differential associations with students' thriving. Overall, students' participation in strengths-based initiatives explained a very low amount of variance in students' holistic thriving (including students' thriving in academic, social, and psychological domains). Therefore, it is important to acknowledge that, while the strengths-based initiatives tended to have some positive effects on students' thriving, other experiences on campus may have stronger effects in terms of uplifting students' optimism, connections with others, and engagement with their academic experiences. We recommend that scholars continue to investigate a variety of programmatic opportunities for students to gain self-awareness, connect with others, and become inspired to be the best versions of themselves—opportunities which, in turn, can promote students' thriving.

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