

University of Nebraska - Lincoln

## DigitalCommons@University of Nebraska - Lincoln

---

Journal of the National Collegiate Honors  
Council –Online Archive

National Collegiate Honors Council

---

Fall 2017

### Honors Student Thriving: A Model of Academic, Psychological, and Social Wellbeing

Amanda Cuevas

*Florida Atlantic University, [apropstcuevas@fau.edu](mailto:apropstcuevas@fau.edu)*

Laurie A. Schreiner

*Florida Atlantic University*

Young Kim

*Florida Atlantic University*

Jennifer Bloom

*Florida Atlantic University*

Follow this and additional works at: <https://digitalcommons.unl.edu/nhcjournal>



Part of the [Curriculum and Instruction Commons](#), [Educational Methods Commons](#), [Higher Education Commons](#), [Higher Education Administration Commons](#), and the [Liberal Studies Commons](#)

---

Cuevas, Amanda; Schreiner, Laurie A.; Kim, Young; and Bloom, Jennifer, "Honors Student Thriving: A Model of Academic, Psychological, and Social Wellbeing" (2017). *Journal of the National Collegiate Honors Council –Online Archive*. 597.

<https://digitalcommons.unl.edu/nhcjournal/597>

This Article is brought to you for free and open access by the National Collegiate Honors Council at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Journal of the National Collegiate Honors Council –Online Archive by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# Honors Student Thriving: A Model of Academic, Psychological, and Social Wellbeing

AMANDA CUEVAS, LAURIE A. SCHREINER, YOUNG KIM,  
AND JENNIFER BLOOM

Florida Atlantic University

**A**lthough academic success in honors programs is easily quantified, student thriving has not been previously measured. Honors students are often recruited to raise the academic profiles of their institutions (Carlson; Hebel) and so tend to excel academically in ways that can be measured by grades and graduation rates. Little is empirically known, however, about their holistic success and wellbeing while in college (Boazman; Moon; Slavin, Coladarci, & Pratt; Walker). Because they are no more immune than other students to psychological and social impediments, they may be succeeding but not thriving in their college experience.

Thriving—defined as academic, psychological, and interpersonal wellbeing and engagement (Schreiner, “Thriving: Expanding”)—is a recent concept that expands the traditional approach of measuring college student success, which has historically been measured by such cognitive measures as GPA.

Thriving measures malleable psychosocial factors—i.e., academic determination, engaged learning, positive perspective, diverse citizenship, and social connectedness—that influence student behavior and contribute to such key success outcomes as persistence and GPA. When college students thrive, they are fully engaged academically, psychologically, and socially; in essence, they are getting the most out of college.

The main purpose of the present study was to develop a pictorial model of honors student thriving by investigating the pathways that predict a psychological sense of community, campus involvement, spirituality, student-faculty interaction, living on campus, certainty about a major, degree goals, and first choice of institution. This study further aimed to better understand honors students' levels of academic determination, engaged learning, positive perspective, diverse citizenship, and social connectedness. Better understanding how honors students thrive can enable honors administrators, faculty, and staff to engage students in more productive and meaningful ways.

We first provide readers with an overview of the pertinent research on honors students' characteristics and thriving as a conceptual framework and then guide readers through the quantitative development and meaning of an emerging model of honors student thriving based on a national sample of honors students. Finally, we offer recommendations to honors educators about helping students thrive.

## LITERATURE REVIEW

Honors students often display a unique constellation of characteristics that propel them to succeed in college and life. However, these characteristics may also cause stressors that place students at risk as they encounter the challenging learning environments to which they are drawn (Klein). Academic, psychological, and social characteristics may thus both promote and inhibit honors students' success.

### Academic Characteristics

Scholars and practitioners have described honors students as engaged in their own learning (Barnes); motivated and internally driven to succeed academically (Hammond, McBee, & Hebert; Robinson); high in academic self-concepts (Rinn); and aspiring to graduate or professional study (Bradshaw, Espinosa, & Hausman; Satterfield). In addition, honors students tend to have a strong work ethic (Smith & Zhang) and are committed to their

studies (Rau & Durand). Most students opt to participate in honors programs because they consider the learning environment to be an ideal match for their academic drive, learning preferences, and educational expectations (Chancey). Students enrolled in honors programs tend to seek academic recognition, believe in their ability to academically perform, look to develop a competitive edge in their careers, and embrace challenge (Robbins). Their curiosity, imagination, and creativity (Freyman; Giazsoni & Hilberg), along with a love of learning (Giazsoni & Hilberg) and higher-order thinking (Robinson), are often what distinguish honors students from their peers.

Despite these characteristics, Freyman warns that some honors students, especially those who bring in substantial amounts of AP credit, may be so concerned about grades and career preparation that they may avoid taking risks to expand their learning. Consequently, some honors students may strategically remain surface-level learners rather than engage in deep learning (Tagg, *The Learning Paradigm* and “Why Learn?”). Furthermore, some may experience such academic challenges as poor time management or writing skills (Longo) or may easily experience boredom (Robinson), which can impede their engagement in learning. Because honors students may also be less inclined to ask for help (Badenhausen), they may be at risk for greater academic, psychological, and emotional struggle. Some students may struggle psychologically as they discover they are not the only top performers as they had been in high school (Rinn).

## **Psychological Characteristics**

Characteristics of honors students such as perfectionism, multipotentiality, and indecision can manifest in ways that either promote or impede their psychological wellbeing (Walker) and success. For example, some evidence suggests that honors students who perceive greater academic obstacles can experience anxiety and feel that they have little control over their lives; as a result, they are less likely to build positive relationships with others, feel they have a purpose in life, and accept the negative and positive qualities about themselves (Walker). Perfectionism, a common characteristic of honors students, ranges on a scale from adaptive to maladaptive (Burns & Evans). Although adaptive perfectionism can drive academic performance (Schuler), maladaptive perfectionism has been connected to headaches, eating disorders, substance abuse, depression, anxiety, and suicide (Flett & Hewitt); they may also have trouble choosing a major or career path, which could lead them to drop out of college (Greene, “Gifted Adrift”).

The struggle to identify career goals is not only a characteristic of perfectionism but also a psychological challenge for many honors students because of their multipotentiality, or the variety of interests in which they have the potential to excel (Carduner, Padak, & Reynolds). Consequently, some undecided honors students may be overwhelmed by their options. Such students often avoid seeking guidance they need to narrow their major and career interests (Carduner, Padak, & Reynolds); some may not know how to ask for help and others may avoid getting help because they see it as a threat to their self-concept, feeling that it “calls their very identity into question” (Badenhausen 28).

The mental health of their students is a growing concern among honors educators (Owens & Giazzoni). Given the growing college student mental health crisis in the United States (ACHA), a better understanding of the psychological characteristics and behaviors of honors students is warranted to best help them thrive.

## **Interpersonal Characteristics**

Although honors students’ interpersonal characteristics have not been investigated thoroughly, several findings are highlighted in the literature. Moon found that honors students are more likely to engage with students having different religious, political, and personal beliefs than non-honors students. Honors students are often drawn to the honors environment because they perceive they will belong, make connections with other students who share similar academic motivations and curiosity, and discuss diverse issues (Soldner et al.). Within the honors environment, students often develop positive social relations with peers (Decker; Moon; Soldner et al.; Wawrzynski, Madden, & Jensen) and faculty (Cossentino). However, some honors students have trouble developing relationships with peers beyond the classroom (Owens & Giazzoni). This difficulty particularly occurs among those who perceive greater academic obstacles (Walker).

## **CONCEPTUAL FRAMEWORK**

Thriving is a construct that is situated at the intersection of positive psychology and higher education (Schreiner, “Thriving in College”), building on Bean and Eaton’s psychological model of college student retention as well as Keyes and Haidt’s concept of flourishing. Bean and Eaton posit that students bring a set of psychological characteristics that shape their college

experiences and influence their subsequent academic engagement, social integration, and persistence in college. Keyes and Haidt describe flourishing adults as those who experience emotional vitality and positive functioning even when encountering crises or disappointments. Flourishing people are filled with positive emotions, display resiliency in the face of challenges, develop positive relationships, are engaged as productive citizens, and seek to make a difference in others' lives (Keyes; Keyes & Haidt).

As the conceptual framework for our study, thriving consists of the psychosocial factors that researchers have found impact the college student experience and contribute to student success (Habley, Bloom, & Robbins). Psychosocial factors are noncognitive attributes such as personality traits, attitudes, and behaviors. Prior research has found that such psychosocial factors as self-efficacy, academic motivation and discipline, commitment to college, and social connection influence student persistence, GPA, and graduation (Robbins, Allen, et al.; Robbins, Lauver, et al.; Robbins, Oh, et al.). Because psychosocial factors are malleable (Robbins, Lauver, et al.), they can be influenced through interventions.

Building on this research, Schreiner (“The “Thriving Quotient” and “From Surviving””) developed a concept of thriving that is predicated on malleable psychosocial factors, which include motivational and psychological processes that shape student behavior and subsequent outcomes such as persistence to degree, satisfaction, and GPA (Schreiner, Kalinkewicz, et al.). In “From Surviving to Thriving During Transitions,” Schreiner conceptualizes thriving as academic, psychological, and social wellbeing, describing thriving college students as those who

are engaged in their own learning; are determined to succeed academically; grow personally; develop positive relationships with peers, faculty, and others; build connections within the community and are committed to making a difference; and establish ways of seeing themselves that enable them to gain maximum benefit from both the college experience and life after college. (4)

## **Five Factors of Thriving**

Thriving is comprised of five factors: engaged learning, academic determination, positive perspective, diverse citizenship, and social connectedness (Schreiner, McIntosh, et al.). *Engaged learning* measures students' levels of energy and meaningful processing during the learning experience. Engaged learners experience greater satisfaction with college and persistence to

graduation (Schreiner & Louis), as well as higher GPAs and greater institutional fit (Schreiner, Pothoven, et al.).

*Academic determination* describes students' use of such academic strategies as hope (Snyder), investment of effort (Robbins, Lauver, et al.), self-regulated learning (Pintrich, "The Role" and "A Conceptual Framework"), and environmental mastery (Ryff) that lead to higher GPAs and a greater likelihood of learning gains and persistence to graduation (Schreiner, "From Surviving").

*Positive perspective* is an optimistic view of both current and future experiences (Schreiner, "The 'Thriving Quotient'"). Thriving college students tend to possess what Seligman (*Authentic*) refers to as an optimistic explanatory style, which enables them to reframe negative events as temporary setbacks that can be overcome with renewed effort or different strategies. This explanatory style leads to resilience in meeting challenges and has been correlated to student success outcomes like better adjustment to college (Brissette, Scheier, & Carver) and greater psychological wellbeing (Burriss et al.).

*Diverse citizenship* includes interest and appreciation of differences in others as well as commitment to making the world a better place through social change (Schreiner, "The 'Thriving Quotient'" and "Thriving in Community"). Higher levels of diverse citizenship have been correlated with a stronger intent to persist in college (Schreiner, Pothoven, et al.).

Finally, *social connectedness* refers to students' desire to develop and maintain positive and meaningful relations with others (Schreiner, "The 'Thriving Quotient'"). Healthy relationships and social support promote psychological wellbeing (Diener, Oishi, & Lucas; Seligman, *Flourish*) and influence student persistence (Allen et al.).

## **Pathways and Predictors of College Student Thriving**

The existing literature shows that the pathways and predictors that contribute to college student thriving vary across different student groups, including first-year students (Nelson & Vetter; Schreiner, Kitomary, & Seppelt), graduate students (Petridis & Schreiner), sophomores (Schreiner, Slavin Miller, et al.), transfer students (McIntosh & Nelson), and students of color (McIntosh; Schreiner, Edens, & McIntosh; Schreiner, Kammer, et al.; Schreiner, Kitomary, & Seppelt; Schreiner, Vetter, et al.). Following this pattern, we anticipate that the pathways and predictors that contribute to honors student thriving will also be unique.

Pathways are the relationships between campus experiences and student characteristics that either directly or indirectly contribute to the variation in

college student thriving. For example, students may select a particular college as their first choice, leading to increased certainty about a major, leading to greater student-faculty interaction, leading to a stronger psychological sense of community, and contributing to a variation of thriving. Predictors are the key variables in the structural model: psychological sense of community, spirituality, student-faculty interaction, campus involvement, major certainty, entry characteristics, and institutional characteristics.

***Psychological sense of community.*** In all thriving studies, a psychological sense of community (PSC) makes the greatest contribution to thriving levels of college students. PSC is defined as the sense that members of a community experience when they discern that they belong, matter, and are valued and connected with others (McMillan & Chavis; Schreiner, “Thriving in College”). In 1995, Lounsbury & DeNeui created a psychological sense of community scale to measure PSC among college students that has been incorporated into the Thriving Quotient™ used in our study. Elkins, Forrester, & Noel-Elkins found that institutional involvement significantly increased college students’ sense of community and that a sense of belonging specifically influence students’ institutional commitment (Hausmann, Ye, et al.) and intentions to persist (Hausmann, Schofield, & Woods; Hausmann, Ye, et al.). Pritchard and Wilson posited that honors students are “no more likely to stay in school” than non-honors students without needed social support (19). Thus, given existing research, PSC is expected to significantly contribute to the thriving levels of honors students.

***Spirituality.*** Over the last decade, scholars have turned greater attention to exploring the role of spirituality in the lives of college students (Astin, Astin, & Lindholm; Braskamp, Trautvetter, & Ward; Chickering, Dalton, & Stamm; Parks; Rockenbach & Mayhew). Most notably, Astin, Astin, & Lindholm’s hallmark longitudinal study examining the spiritual growth of over 100,000 college students found, among other factors, that college student spiritual development increases from freshman through junior year. Although scholars have not agreed on one definition, spirituality generally refers to students’ understanding of their life’s meaning and purpose in the world and how they are connected to others (Astin, Astin, & Lindholm; Lindholm, “Methodological”; Nash & Murray; Parks). Spirituality research shows correlations between the spiritual growth of college students and such success outcomes as thriving (McIntosh; Schreiner, Kammer, et al.), learning gains, satisfaction with the college experience, and deep learning (Astin, Astin, & Lindholm; Kuh & Gonyea), and an increased optimism that fosters psychological well-being (Koenig, King, & Carson).



The late Sam Schuman a distinguished leader within the National Collegiate Honors Council noted, “While at college [students] are learning how to live their lives not just as intellectual creatures, but as whole, integrated human beings, with minds, spirits, and bodies” (5). Schuman contended that cultivating honors students’ spirits will also develop their intellects. Similarly, Astin, Astin, & Lindholm found that spiritual cultivation through service learning, study abroad, and interdisciplinary courses contributes to better grades, enhanced intellectual self-esteem, and higher educational aspirations. Consequently, spirituality is expected to contribute to the variation of honors student thriving in this study.

***Student-faculty interaction.*** Research reveals that students who interact with faculty achieve higher GPAs (Kim & Sax) and greater satisfaction and learning gains (Kuh & Hu; Lundberg & Schreiner), persistence to degree (Astin, “Student Involvement”; Elkins, Forrester, & Noel-Elkins; Tinto), educational aspirations (Kim & Sax; Lohr), and academic, psychological, and personal growth (Strong). Furthermore, student-faculty interaction fosters a sense of community among students (Astin, *What Matters*; Cheng), and classroom discussions about meaning and purpose in life foster students’ spiritual growth (Astin, Astin, & Lindholm; Nash & Murray). Given that student-faculty interaction is a staple of honors education, it is anticipated to be a predictor of honors student thriving.

***Campus involvement.*** An abundance of research has been published since Astin’s 1984 hallmark publication of “Student Involvement: A Development Theory for Higher Education,” which showed that campus involvement relates to engagement, persistence, a sense of belonging, and satisfaction with the college experience (Berger & Milem; Braxton, Hirschy, & McClendon; Kuh, Kinzie, et al.; Mayhew et al.; Reason; Strayhorn; Tinto; Wolf-Wendel, Ward, & Kinzie). Although studies have shown the correlation between campus involvement and persistence to degree, Emerick found a curvilinear relationship between a student’s grade point average and the number of roles in extracurricular activities in which the student engages. In other words, students earned higher GPAs when they were involved at manageable levels compared to those students who were either under- or over-involved. Scholars have documented honors students’ active involvement in a range of campus activities (Moon; Ory & Braskamp; Otero; Satterfield), including leadership positions (Cossentino). In a dissertation study, Cossentino found that honors students who were actively involved not only developed leadership, communication, and relationship-building skills but also were satisfied

with student life. Campus involvement is expected to be a predictor variable in honors student thriving.

**Major certainty.** Choosing a major is often a challenging experience for college students (Carduner, Padak, & Reynolds), and honors students frequently experience multipotentiality (Greene, “Gifted Adrift” and “Helping Build Lives”) or the ability to pursue myriad career options successfully, which can paralyze honors students (Gordon). Nevertheless, scholars have found that major certainty predicts intent to persist and reenrollment (Luke; Mayhew et al.). Furthermore, Chambliss & Takacs reported that students often were motivated to pursue a major introduced to them by a caring faculty member in an introductory course. Given the environment in which honors students learn and interact with faculty and honors advisors, major certainty is thought to be a predictor of honors student thriving.

**Entry and institutional characteristics.** Students enter college with myriad characteristics that have been demonstrated in the literature to have a positive impact on student success outcomes, including gender (Campbell & Fuqua), race and first-generation status (Pryor & Hurtado), and first-choice institution (Noel-Levitz). Among additional characteristics that served as control variables in this study are GPA, major certainty, and degree goal given that honors students generally earn higher GPAs than their counterparts (Marriner; Shushok, *Educating*) and tend to pursue graduate and professional education (Astin, “Student Involvement” 1984 and 1999; Sulaiman & Mohezar). Furthermore, living on campus contributes to honors students’ campus involvement (Wawrzynski, Madden, & Jensen), career goals (Shushok, “Student Outcomes”), interaction with faculty (Inkelas & Weisman), and sense of belonging (Campbell; Warwzynski, Madden, & Jensen). Finally, Gansemertopf and Schuh found that institutional selectivity contributed to graduation and retention rates. Given that honors programs and colleges typically extend admissions to the highest achievers, we hypothesize that institutional selectivity will indirectly contribute to honors student thriving in this study.

To address identified gaps in the literature and to expand current literature on honors student wellbeing and thriving, the following research questions guided this study:

- a. To what extent does a model of college student thriving fit a national sample of honors students? and
- b. To what extent do campus involvement, spirituality, student-faculty interaction, and a psychological sense of community contribute to

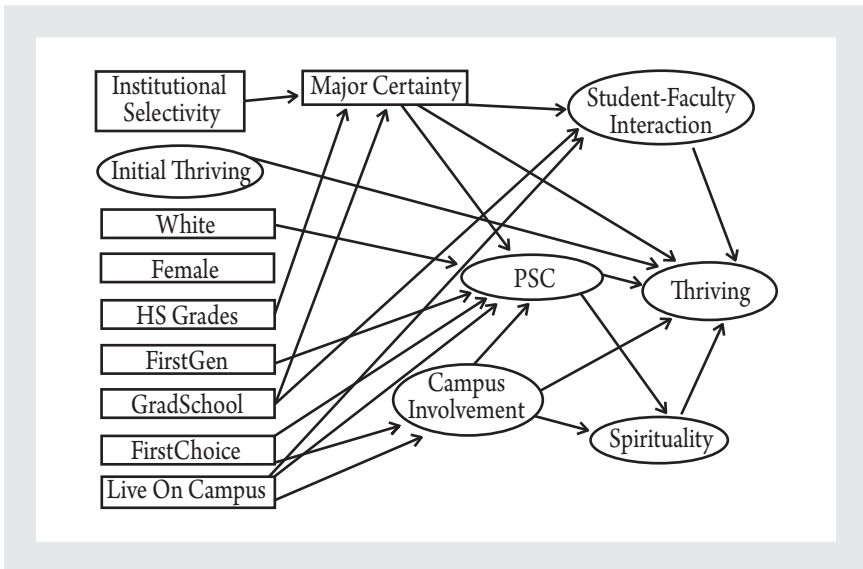
honors student thriving during a semester, after controlling for demographic characteristics and pre-existing levels of thriving?

**METHOD**

The present study explored the relationships between a psychological sense of community, spirituality, student-faculty interaction, and campus involvement in college students participating in honors colleges or programs. Specifically, the study examined how these relationships contribute to the variation in honors student thriving at the end of an academic semester. Structural equation modeling (SEM), a confirmatory statistical technique, was employed as it allows researchers to simultaneously test multiple regression equations and explore direct, indirect, and total effects of variables within a proposed model (Byrne).

Based on an empirical review of the literature as well as the national baseline model of thriving (Schreiner, Kalinkewicz, et al.), a hypothesized path model was developed as depicted in Figure 1. The observed variables (i.e., those that can be directly measured) within this study are indicated by rectangles, whereas latent variables (i.e., constructs of observed variables) are depicted by ovals. Control variables include demographic variables and institutional characteristics as shown in the far-left column of the model.

**FIGURE 1. HYPOTHESIZED PATH MODEL**



## Instrument

The five constructs of thriving are measured through the Thriving Quotient (TQ), a valid and reliable instrument consisting of twenty-four items that investigate the aspects of college student experience empirically determined to be most predictive of academic success (Schreiner, “The ‘Thriving Quotient: A New Vision’”; “From Surviving to Thriving”; “Thriving in College”). Confirmatory factor analysis indicates that thriving is a second-order factor consisting of the five scales described above ( $\chi^2_{(114)} = 1093.83$ ,  $p < .001$ , CFI = .954; RMSEA = .054 with 90% confidence intervals from .052 to .058; Schreiner, Kalinkewicz et al.).

## Participants and Procedures

After obtaining Institutional Review Board approval, we sent a recruiting email to the National Collegiate Honors Council (NCHC) listserv to solicit participation. Interested campus contacts then completed an institutional profile and intent to participate form. We sent an initial survey (i.e., Time 1) to these institutions in the early fall of 2013; this online survey was an honors student version of the Thriving Quotient™ instrument (Schreiner, 2013; survey available upon request). In mid-November 2013, we sent a shorter follow-up survey (i.e., Time 2) to the students who completed the survey during Time 1 and provided their email addresses. Time 1 yielded a 25% response rate, while 64% of participants completed the survey at Time 2. Final study participants included 945 undergraduate students enrolled during the fall 2013 semester from eleven honors programs across the United States, representing a variety of private and public institutions with differing Carnegie classifications. Table 1 outlines the demographic characteristics of the sample while Tables 2 and 3 demonstrate the institutional characteristics of the sample.

## RESULTS

Using AMOS software, we created a visual diagram of the hypothesized model and employed Structural Equation Modeling (SEM) to test a proposed model of honors student thriving. How well a specified dataset fits the hypothesized model (see Figure 1) is determined by measuring goodness of fit statistics (Brown; Byrne). Statisticians recommend that the root mean square of approximation (RMSEA) (Browne & Cudeck) and comparative fit index (CFI) (Bentler) additionally be used to fully evaluate the model for

goodness-of-fit. The RMSEA index measures fit between the hypothesized model and the population to which it is being compared while the CFI

**TABLE 1. DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS  
MEASURED AT TIME 1 (N = 945)**

Variable	N	Total %
Class Level:		
first-year	316	33.4%
sophomore	199	21.1%
junior	194	21.0%
senior	221	23.4%
other (e.g., fifth-year senior)	15	1.6%
First Gen	103	10.9%
Degree Goal:		
bachelor's degree	163	17.2%
teaching credential	21	2.2%
master's degree	351	37.1%
doctorate	223	23.6%
law or medical school	153	16.2%
other graduate degree	31	3.3%
Live on Campus	564	59.7%
First Choice	688	72.8%
Female	721	76.3%
White (Caucasian)	878	92.9%
High School Grades:		
mostly A's	813	86.0%
mostly A's and B's	124	13.1%
mostly B's	8	0.8%
Institutional Selectivity:		
open to all with high school diploma or equivalent	124	13.1%
majority of students admitted from top 50% of high school graduating class	117	12.4%
majority of students admitted from top 25% of high school graduating class	324	34.3%
majority of students admitted from top 10% of high school graduating class	380	40.2%

compares the model with the null model, which assumes that no correlations exist among variables within the model (Byrne). RMSEA values range between 0 (indicating exact fit) to 1 (suggesting poor fit); values with .06 or lower indicate good fit (Hu & Bentler). CFI values also range from 0 (indicating poor fit) to 1 (indicating perfect fit); scholars recommend a value close to .95 be used to determine good fit (Hu & Bentler). However, CFI values below .95 should be evaluated with RMSEA values to determine acceptable model fit.

**TABLE 2. INSTITUTIONAL CHARACTERISTICS OF PARTICIPATING INSTITUTIONS (N = 11)**

Institutional Variable	Institution		Honors Program	
	Mean	SD	Mean	SD
Undergraduate FTE	14,079.00	12,559.24	1,030.00	1,416.40
Percentage of Caucasians	61.42	33.23	69.61	37.03
Percentage of Females	54.20	6.45	61.20	8.66
Percentage Living on Campus	34.30	22.47	53.25	37.08
Average SAT/ACT Score	24.09	1.50	30.17	1.45
Average High School GPA	3.37	0.30	3.93	0.17
Admissions Selectivity:				
Avg/Min GPA	2.68	0.79	3.55	0.19
Avg/Min SAT/ACT Score	23.05	3.95	28.14	2.91

Note: Data based on information provided as not all institutions provided responses to each item.

**TABLE 3. CARNEGIE CLASSIFICATION OF PARTICIPATING INSTITUTIONS (N = 11)**

Variable	N	Total %
Associate's-Public Suburban-serving Multicampus	1	9%
Master's Colleges and Universities (medium programs)	3	27%
Master's Colleges and Universities (larger programs)	2	18%
Doctorate-granting Research Universities (high research activity)	1	9%
Doctorate-granting Research Universities (very high research activity)	3	27%
Theological seminaries, Bible colleges, and other faith-related institutions	1	9%
Public	8	72%
Private	3	27%

## Confirmatory Factor Analysis

We conducted Confirmatory Factor Analysis (CFA) on all latent variables or those depicted by an oval (e.g., initial thriving sum, PSC, student-faculty interaction, and post-thriving sum) in the proposed model (Byrne). CFA indicates how and if latent variables fit statistically within a model (Brown; Byrne). The final fit statistics of all latent variables in the model are listed in Table 4.

Although we originally proposed spirituality as a latent variable in the hypothesized model, the CFA model for spirituality demonstrated poor fit despite a series of statistical adjustments. Therefore, we created a new observed variable, designated by a rectangle, for spirituality that is comprised of three items: “My spiritual or religious beliefs provide me with a sense of strength when life is difficult,” “I gain spiritual strength by trusting in a higher power beyond myself,” and “My spiritual or religious beliefs are the foundation of my approach to life.” After performing principal component analysis (PCA), spirituality maintained strong reliability at  $\alpha = .97$ .

## Honors Model

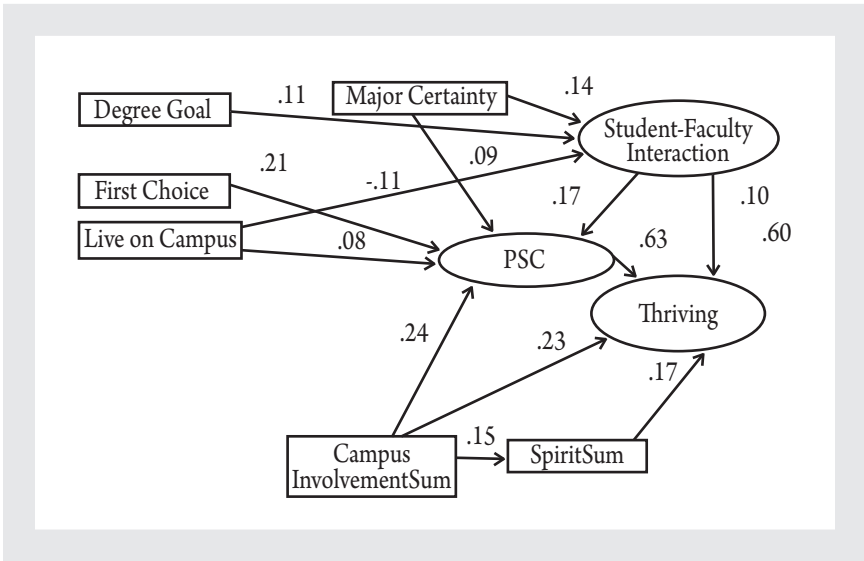
Because a test of the hypothesized structural honors model indicated poor fit ( $\chi^2_{(383)} = 3391.803$ ;  $p = .000$ ; CFI = .660) despite adjustments based on modification indices, we developed an alternative structural model of the pathways to honors student thriving. In this model, we removed the initial thriving variable given the short time gap (only ten weeks) between the initial and post-thriving administrations of the survey instrument as well as the high correlations between the initial thriving sum and post-thriving sum variables. We also removed demographic and institutional variables with low variance (i.e., gender, generation status, high school grades, institutional selectivity, and race/ethnicity) and applied additional modification indices to further improve the fit, resulting in a new structural model of honors student thriving

**TABLE 4. CFA FINAL GOODNESS OF FIT STATISTICS FOR LATENT CONSTRUCTS**

	CMIN ( $\chi^2$ )	df	p	CFI	RMSEA
Initial Thriving Sum	7.253	4	.123	.995	.029
PSC	8.659	2	.014	.995	.059
Student-Faculty Interaction	15.648	6	.016	.995	.041
Post Thriving Sum	8.194	4	.085	.994	.033

that has a relatively acceptable level of fit to the total sample ( $\chi^2_{(173)} = 711.721$ ;  $p < .000$ ; CFI = .895; and RMSEA = .057). The model explains 60% of the variance in honors students' thriving levels at the end of the fall 2013 semester. Figure 2 shows the pictorial representation of the model that indicates the specific pathways to honors student thriving, and Table 5 captures the total, direct, and indirect effects of the variables within the model. The next section explains the model in more detail, including factors that contributed directly and indirectly to thriving.

**FIGURE 2. STRUCTURAL REGRESSION HONORS STUDENT THRIVING ALTERNATIVE MODEL**



**TABLE 5. STANDARDIZED INDIRECT, DIRECT, AND TOTAL EFFECTS ON HONORS STUDENT THRIVING**

Exogenous Variable	Direct	Indirect	Total
PSC	.631	.000	.631
Campus Involvement	.231	.179	.409
Student-faculty Interaction	.099	.107	.206
Spirituality	.170	.000	.170
Majorsure	.000	.086	.086
On Campus	.000	.026	.026
Degree Goal	.000	.022	.022
First Choice	.000	.135	.135



**DISCUSSION:****AN EMERGING PICTURE OF HONORS STUDENT THRIVING**

A picture of honors student thriving begins to emerge from our study. We now explore honors student thriving levels as well as pathways to honors student thriving and how to shape them.

**Honors Student Thriving Levels**

The results of our study indicate that the overall thriving levels of honors students are not significantly different from traditional students ( $M = 4.59$ ,  $SD = .55$  for honors students,  $M = 4.61$ ,  $SD = .67$  for traditional students). However, an examination of the scale scores of honors students' thriving revealed that honors students are not consistently thriving in all areas and that their levels of Social Connectedness are not only significantly lower than their other scale scores but also are lower than the levels reported by traditional students.

Honors students reported the highest levels of thriving on the Academic Determination scale, which measures goal-setting, self-regulation of learning, investment of effort, management of time and resources, and leveraging one's strengths to address academic challenges (Schreiner, "Thriving: Expanding"). On this scale, honors students differed most significantly from their peers. Honors students reported that they were confident they would reach their educational goals, knew how to apply their strengths to achieve academic success, and found ways to complete uninteresting assignments with excellence. However, they reported lower levels of being able to manage all the demands of college life. This finding reflects the observations of many honors educators (Cossentino; Moon; Satterfield) that honors students often take on challenging academic loads while simultaneously being involved in many campus activities. Consequently, honors students may feel overextended and overwhelmed with their many responsibilities. Because honors students often possess a strong work ethic and academic drive, it may be easy to assume that all is well with them (Dougherty; Harding); however, the remaining results show otherwise.

Honors students reported levels of engaged learning and diverse citizenship that were higher than seen in their peers, but the effect sizes were small. Schreiner & Louis define engaged learning as an investment of students' time and energy in which students are present, actively involved, and highly engaged in their own learning. Engaged learners apply what they are learning

in other classes and spheres of their lives (Schreiner, “The ‘Thriving Quotient’” and “Thriving in College”). Honors students were most likely to agree with the following two items on the engaged learning scale: (a) they felt they were learning things that were personally worthwhile to them, and (b) they found themselves thinking about what they were learning within and outside of class.

However, honors students were less likely to agree that they could find ways to apply what they were learning in class to other aspects of their lives or that they felt energized by what they were learning in most of their classes. These findings are congruent with previous studies that indicate that honors students have a propensity for boredom (Slavin) and for focusing on grade attainment to reach academic goals, such as gaining admission to the best graduate and professional schools, rather than deep learning (Freyman).

Diverse citizenship is a desire to make a difference in others’ lives, the community, and the world (Schreiner, “The ‘Thriving Quotient’” and “Thriving in College”), and honors students are often described as desiring to be difference-makers (Otero; Piehl). Honors students scored moderately high on the Diverse Citizenship scale and reported higher levels of Diverse Citizenship than their peers, but the effect size was small. This sample of honors students agreed that it was important for them to make a difference in their community; however, they were less likely to agree that they spent time making a difference in others’ lives.

The Positive Perspective scores of honors students were no different than those of their peers, both scores being moderate. The Positive Perspective scale measures students’ levels of optimism; those who score high view their future with confidence, expect good things to happen to them, and can reframe negative events into positive learning experiences (Schreiner, “Thriving in College”). Although honors practitioners have described honors students as optimistic (Klein; Otero), honors students in this study were no more optimistic than other students. Honors students’ perfectionistic tendencies (Speirs Neumeister, “Interpreting” and “Understanding”) may impede their positive perspective and actually increase tendencies for anxiety and depression (Flett & Hewitt) when not well-managed. Given some honors students’ inclination toward stress, anxiety, and other mental health issues, cultivating strategies to develop a positive perspective may aid their psychological wellbeing. Researchers have found that an optimistic outlook can lower depression and stress (Brissett et al.; Burris et al.) as well as lead to increased psychological adjustment to college (Brissett et al.).

Honors students scored markedly lower on the Social Connectedness scale than on any other thriving scale. In “Thriving in College,” Schreiner defined Social Connectedness as “having good friends, being in relationship with others who listen to them, and feeling connected to others so that one is not lonely” (43). Although Social Connectedness scores are also the lowest scores in the traditional samples of college students (Schreiner, Kalinkewicz, et al.), honors students’ scores were significantly lower than their peers’, in contrast to the other scales in which honors students scored the same or higher than their peers. Honors students also displayed the greatest amount of variance on this scale, meaning that students’ perceptions differed more from one another on this scale than on any other. Responses to an open-ended item on the Thriving Quotient survey presented a wide range of responses to why honors students might not socially connect, including struggles with belonging and self-identity issues; personal issues rather than limited opportunities to socially connect through university programming; interpersonal conflicts with roommates or significant others; not feeling a sense of community within the residence hall; and focusing primarily on academics because of pressure to achieve a certain GPA to maintain scholarships. Therefore, Social Connectedness may be an area that needs to be developed more in some students than in others. Given that 38% of the sample were also first-year students during their first semester in college, they also may not have had enough time to forge friendships. Nonetheless, this aspect of honors students’ wellbeing deserves future attention because scholars have found that positive social connections correlate with retention and success (Chambliss & Takacs; Robbins et al.) as well as honors students’ perceptions of their own academic success (Walker).

### **Pathways to Thriving in Honors Students**

Our findings suggest that the pathways to thriving are different for honors students than for samples of traditional college students. Although the measurement model of honors student thriving is the same as the national baseline model (Schreiner, Kalinkewicz, et al.), i.e., conceptualization of thriving remains the same across these samples, the structural model did not fit the honors student sample collected in this study. The primary reason for this difference lies in the demographic characteristics of the honors students in this sample, who were more homogenous than the national sample of traditional students; they were predominantly White and female, with less than 11% identifying as first-generation students. Furthermore, high school

grades contributed little to the model because high grades are a prerequisite to entrance to the selective learning environments of an honors program or college.

The second way the structural model differed for honors students is that campus involvement contributed more powerfully to the variation of thriving among honors students than the traditional sample of undergraduates. In the honors model, campus involvement directly contributed to thriving whereas it only indirectly contributed in the sample of traditional college students (Schreiner, Kalinkewicz, et al.). Honors students at all class levels reported higher levels of involvement in campus leadership activities, student organizations, and community service than the traditional sample, and this involvement was a more significant pathway to their thriving in college. Subsequently, honors students who were involved in campus activities perceived a significantly stronger sense of community on campus and reported higher levels of spirituality than students in the baseline model.

These data seem to reflect that, as established in the literature, campus involvement fosters college students' sense of community (Elkins et al.; NSSE; Strayhorn). Through campus activities, honors students connect and collaborate with others on campus, including peers, faculty, and other campus personnel, which can foster feelings of belonging and membership. Through their contributions, they feel that they matter, that they are valued, and that they are part of a community that is greater than themselves. (Please note that campus involvement broadly captured engagement in university activities, which likely included honors activities, but the instrument did not measure specific involvement in honors activities.)

Furthermore, campus involvement is significantly related to honors students' spirituality and levels of thriving. As a reminder, spirituality includes three items: "My spiritual or religious beliefs provide me with a sense of strength when life is difficult"; "I gain spiritual strength by trusting in a higher power beyond myself," and "My spiritual or religious beliefs are the foundation of my approach to life." Scholars have found that engagement in co-curricular activities and engagement with peers can influence college students' spirituality, consequently improving GPA, educational aspirations, and satisfaction with the college experience (Astin, Astin, and Lindholm; Braskamp et al.; Dalton, "Career"). Similarly, honors students who participated in student organizations and community service reported higher levels of spirituality and overall levels of thriving in this study. Consequently, the relationship between spirituality and honors student thriving is worthy of continued attention.

Third, student-faculty interaction did not contribute as strongly to the variation in honors student thriving as it did in the baseline model (Schreiner, Kalinkewicz, et al.). Although student-faculty interaction is a critical component of the honors student model, honors students did not report interactions with faculty as frequently as the sample of traditional undergraduate students, which is surprising given that student-faculty interaction is a hallmark of honors education (NCHC). This finding may be a consequence of several factors, including that honors students may not perceive the need to interact with faculty as much as other students. Honors classes generally are smaller than traditional classes, often allowing for greater student-faculty interaction within the classroom (NCHC) and thus reducing the need for students to meet with faculty outside of the classroom. Honors students are also busy and, given all that they juggle, may not choose to make the time to meet with faculty. Student-faculty interaction contributed slightly less to honors students' sense of community than in the traditional college model. Consequently, honors students who do not connect as frequently with faculty may be abdicating a key opportunity to heighten their sense of community and take full advantage of a pathway to help them thrive in college.

The fourth way the pathways to thriving differed for honors students was that living on campus directly contributed to honors students' sense of community whereas it only indirectly contributed to a psychological sense of community through campus involvement in the baseline model. This finding may be a consequence of a large percentage of honors students in honors living-learning communities, which are specifically designed to bolster a sense of community (Moon; Soldner et al.; Wawrzynski et al.).

Finally, students' level of certainty about their major contributed less to honors students' PSC than in the baseline model. In our sample, 80% of honors students reported being sure or very sure of their major, closely mirroring the percentage of traditional undergraduates. Like graduate students who establish their sense of community more through affiliation with their graduate program than their campus (Petridis & Schreiner), major certainty possibly contributes less to the variation in honors students' sense of community on campus because their primary affiliations and identity are through the honors program or college rather than through a particular major.

## **Shaping Honors Student Thriving**

A key way to shape honors student thriving may be through the pathways that contribute most significantly to their variation in thriving scores. These pathways are categorized into campus experiences and student characteristics.

## *Campus Experiences*

According to our findings, honors students' thriving is fostered primarily through their college experiences. Campus experiences include a psychological sense of community (PSC), campus involvement, student-faculty interaction, and living on campus.

***Psychological sense of community.*** Campus experiences collectively influence honors students' perception of their psychological sense of community (PSC), which is the most significant contributor to the variation in their levels of thriving. PSC is the perception that one matters, belongs, is connected, and makes a difference within a given community (McMillan & Chavis); experiencing a strong sense of community on campus propels college students' institutional commitment and persistence (Hausmann et al.). Honors students in our study reported levels of PSC that were significantly greater than what their peers reported, with nearly 81% reporting that they felt proud of their institution, almost 78% reporting that they felt they belonged, nearly 69% agreeing that being a student at their institution filled an important need in their lives, and almost 60% reporting a strong sense of community on their campus.

According to these findings, this sample of honors students experienced a strong psychological sense of community themselves but did not perceive as strong a sense of community for the campus as a whole. Perhaps this result reflects the fact that many honors students participate in honors colleges or programs that are intentionally designed to foster a sense of community (Austin; Wawrzynski et al.). Honors students are often drawn to a learning environment where they expect to fit in with colleagues who share similar values, goals, and interests (Clauss; Ford; Giazzoni & Hilberg; Hammond et al.; Shushok, "Student Outcomes"). Because PSC seems to be the fuel for honors student thriving, students who do not perceive a strong PSC could be at risk for potential departure from the institution (Pritchard & Wilson).

***Campus involvement.*** Another direct contributor to the variance in honors student thriving and indirect contributor through PSC is campus involvement. This pathway to thriving is more powerful for honors students than for their peers. In 1999, Astin defined campus involvement as "energy" (518) that students expend by engaging in activities and organizations on campus. Involvement in campus activities generally, rather than in any specific type of activity including honors, seems to matter most to honors student thriving. Honors students reported greater levels of involvement on campus than did their peers and were more likely to be involved in student

organizations (55%), campus events and activities (37%), leadership of student organizations (32%), and community service (28%). This greater campus involvement among honors students is well-supported by the literature (Cossentino; Moon; Satterfield).

Campus involvement contributes to honors student thriving in meaningful ways: they engage more deeply in their learning; hone problem solving skills; boost their self-confidence in their abilities to apply their strengths, reach their goals, and effectively juggle the competing demands of college life; experience opportunities to make a difference and build their confidence in knowing that they can make a difference; see life more positively and optimistically; and socially connect and collaborate with others on campus. Furthermore, experiences that engage interaction with others helps to bolster honors students' PSC. Involvement in activities on a college or university campus has been demonstrated to foster college students' sense of community (Braskamp et al.; Elkins et al.; NSSE; Strayhorn). Consequently, the more that honors students engage in activities on their respective campuses, the greater their perceptions of PSC within a community in which they are learning and developing as leaders and scholars.

***Student-faculty interaction.*** Contrary to expectations, student-faculty interaction did not contribute as powerfully in the variance of honors student thriving as it does for other types of students. Additionally, our sample of honors students reported interacting with faculty less frequently than their traditional peers did. Although more than half reported frequently emailing, texting, or Facebooking faculty, only a third reported frequently meeting with their faculty during office hours, discussing career and graduate school plans, or socializing outside of class, and less than a fourth reported frequently meeting with their academic or faculty advisor. Although this finding may reflect a characteristic of this current Millennial generation, in which technology is their preferred mode of communication (Jonas-Dwyer & Pospisil), honors students who interacted more frequently with faculty in person reported higher levels of PSC and thriving. These students also reported higher levels of social connectedness, suggesting that through their interaction with faculty they experienced social support that enabled them to engage more in college life and to feel that they mattered and were part of the campus community.

***Living on campus.*** The final pathway to thriving is living on campus, primarily contributing to PSC, which then indirectly contributed to thriving. Most honors students who lived on campus reported higher levels of PSC and felt that they belonged, perceived a strong sense of community on

campus, and were proud of the institution they were attending. Other scholars have also found that living on campus positively contributed to honors students' sense of belonging (Campbell; Wawrzynski et al.).

### *Student Characteristics*

Honors students' thriving is also shaped by distinct behaviors or decision-making processes that contribute to the variation in thriving. These characteristics include spirituality, major certainty, degree goal, and first choice.

***Spirituality.*** Honors students were significantly less spiritual ( $M = 4.12$ ) than the national sample ( $M = 4.75$ ) (Schreiner, Kalinkewicz, et al.) and demonstrated the greatest variation in their responses of all their scores in this study ( $SD = 1.74$ ). However, those students who reported high levels of spirituality were more likely to thrive. High-spirituality honors students found their spiritual or religious beliefs to be a source of strength when they perceived life as difficult and to serve as a driver in the pursuit of academic goals and deep engagement in learning; they experienced the world with greater optimism, and served their communities at higher levels than those students for whom spirituality was not as critical. Scholars have found that students' faith serves as "an anchor for students' engagement in their learning and their overall success" in a sequential, explanatory, mixed-methods study of students at faith-based institutions (Derrico, Tharp, & Schreiner, 16–17). Furthermore, researchers have shown the relationship between spirituality and maintaining equanimity (Astin, Astin, and Lindholm; Dalton, "The Place of Spirituality"; Derrico, Tharp, & Schreiner). Although most students in our study attended public institutions, our findings suggest that some honors students consider their spiritual nature a critical key to their success. Scholars in the last decade have advocated for cultivating the role of spirituality in college student success (Astin, Astin, and Lindholm; Braskamp, et al.; Chickering, et al.; Lindholm, "Methodological"; Nash & Murray; Parks; Rockenbach & Meyhew). Similarly, Schuman called for the cultivation of not only honors students' intellects but their spirits as well.

***Major certainty.*** How sure students were about their major indirectly contributed to the variance in thriving through PSC and student-faculty interaction variables. In this sample, 80% of honors students were sure or very sure of their major. Those who were sure experienced higher levels of a sense of community, interacted more with faculty outside of class, and were more satisfied with those interactions, which in turn fueled their academic



determination and engaged learning. Thus, major certainty contributes to thriving because it correlates with more frequent and rewarding interactions with faculty and a stronger sense of community.

***Degree goal and first choice of institution.*** Also contributing indirectly to the variation in honors student thriving is students' degree aspirations and whether they are enrolled in their first-choice institution. Honors students who indicated goals of pursuing graduate or professional school interacted with faculty more frequently, which contributed to their level of thriving. In our study, over 80% of honors students intended to pursue an advanced degree compared to only 66% in the national sample (Schreiner, Kalinkewicz, et al.). Students who were in their first-choice institution were significantly more likely to thrive because of their greater sense of community on campus. Admission to the honors program may have been a motivator for selecting the institution as their first choice. Chancey has noted that honors students may perceive that participating in an honors program is more prestigious and thus a better academic fit for them. Research on a psychological sense of community on campus has indicated that when PSC is fostered, the institution can become the right fit even if initially it was not a student's first choice, and students can subsequently thrive in that environment (Schreiner, "Thriving: Expanding").

In sum, our results indicate key pathways to helping honors students thrive and confirm what other scholars have reported: that what appears to matter most to student success and wellbeing is what happens to students while they are in college (Mayhew et al.). Honors students who thrive are primarily those who establish a strong sense of community on campus through their involvement with faculty and in campus life. Those who are sure of their major, intend to pursue an advanced degree, rely on their spirituality as source of meaning and strength, and/or are enrolled at their first-choice institution are also more likely to thrive.

## LIMITATIONS

Although our study provides an initial picture of honors student thriving, several limitations are worth noting. First, despite the diversity of institutions and Carnegie institutional classifications represented, the student sample was comprised mostly of first-year White females. Consequently, this sample limits a fuller understanding of how thriving occurs among all honors students, including males and students of color, across the span of the college experience. Second, because of the short amount of time (approximately ten weeks)

between each administration of the Thriving Quotient survey, no significant change between initial and post-thriving was evident. A longer longitudinal study might have provided additional insights into changes in honors student thriving. Third, the study design is correlational in nature, which inherently limits conclusions about causation.

## **RECOMMENDATIONS FOR PRACTICE**

Given the findings of our study, we propose several key recommendations for faculty and other educators. The findings of the study may assist stewards and champions of honors education to establish an environment on their campuses in which honors students can thrive and make the most of their college experience.

### **Recommendation 1: Support Honors Students' Mental and Social Wellbeing**

Our findings revealed that many honors students struggle with balancing priorities and managing their time and stress levels. Because many honors students are focused on earning a high GPA to gain admission to a top graduate or professional school, they sometimes sacrifice their physical and mental wellbeing in pursuit of their academic endeavors. Mental health issues, including anxiety and depression, are all too common among this generation of college students (Gruttadaro & Crudo). Honors faculty and staff need to establish proactive relationships with the campus counseling center liaison to offer honors student programming focused on proactive, positive, psychology-based prevention and outreach rather than relying solely on treatment once a disorder is manifested (Schreiner, Hulme, et al.; Wolff, Barclay, & Buning). Part of this outreach may include training sessions for honors faculty, staff, and peer mentors as well as preventive programming to enhance honors students' wellbeing.

### **Recommendation 2: Encourage Honors Students to Get Selectively Involved**

Because honors students tend to be easily overwhelmed by the demands of college life and often take on too much, helping them intentionally select activities that align with their interests, goals, and values can be helpful (Schreiner, Slavin Miller, et al.). Furthermore, Dalton suggested in "Career and Calling" that students "link head and heart" (22), meaning that students

should be encouraged to engage in activities that connect to their sense of purpose or calling. Faculty may also assist students by developing collaborative class projects that enable them to engage with other members of the campus or local community (Nash & Murray) and encouraging them to participate in activities that will be reported on a co-curricular transcript (Montijo), which can be used in advising appointments and referenced in employment interviews.

### **Recommendation 3: Engage Faculty in Appreciative Advising with Honors Students**

Although student-faculty interaction may not have contributed as strongly as one might anticipate to the variation in the model of honors student thriving, we contend that faculty do critically contribute to honors student thriving. Not only do faculty have the privilege of helping honors students learn about course content or develop academic acumen, but they also have the potential to foster students' learning about themselves (Nash & Murray; Parks). Through interactions outside the classroom, such as advising, honors students can interact meaningfully with faculty. One high-impact advising practice is Appreciative Advising, characterized by intentionally affirming and cultivating the best within students (Bloom, Hutson, & He); through application of this theory-to-practice framework, faculty can help students identify their strengths, passions, interests, and goals, using the conversation to connect students to opportunities such as undergraduate research, study abroad, internships, graduate and professional school, or career options while tying these activities to their purpose or calling. Our findings indicate that honors students may not be taking full advantage of personal engagement with faculty, frequently opting to communicate virtually instead. Faculty can develop strategies such as intentionally conversing with students before or after class or requiring that students meet with them in person during the semester to encourage positive student-faculty interaction and to nurture thriving.

### **Recommendation 4: Leverage Spirituality as a Potential Pathway to Thriving**

Sam Schuman argued that honors students' spirits should not be neglected if one of the main charges of honors education is to develop the next generation of social leaders. Within our study, spirituality proved to be a powerful predictor of every aspect of honors student thriving. Although

the cultivation of honors students' spiritual lives has largely been ignored (Schuman), research overwhelmingly supports the benefits of acknowledging students' spiritual lives (Astin, Astin, & Lindholm; Braskamp et al.; Dalton, "Integrating Spirit" and "The Place of Spirituality"; McIntosh; Parks; Rockenbach & Mayhew). Among honors students, spirituality can be intentionally leveraged in the residence halls, the classroom, the campus, and outside communities. For example, an honors living-learning community can adopt the theme of spirituality as a topic of conversation in which students exchange their ideas and approaches on how their spiritual lives influence their college experiences and help them discover their meaning and purpose (Lindholm, "Methodological Overview"; Nash & Murray). Faculty may also engage in conversations within the classroom about meaning and purpose and how students can connect the course content to their future goals (Nash & Murray). In "Career and Calling," Dalton explained: "College students who are able to continue their spiritual development in college and to integrate their deepest beliefs and passions with career and life plans are able to make the transition from college to work and life in community satisfyingly and successfully" (23–24).

Finally, using Parks's "hearth, table, and commons" mentoring model (201), members of the campus community can intentionally design programming to foster the spiritual lives of students. The hearth is a place for reflection and conversation; therefore, designated spaces on campus such as library reading rooms or community living rooms may be designated as spiritual development zones where students can be encouraged to reflect, pray, or meditate. The table is a place for people to eat and commune, so faculty and administrators may sponsor brownbag lunches or potluck dinners in their homes to encourage conversations about meaning and purpose. Finally, the commons is a space where people frequently convene; within such spaces, conversation starters might be displayed to encourage students to discuss spiritual matters.

## CONCLUSION

The findings of our study illuminated pathways to honors student thriving. Our recommendations are offered as a starting point to assist educators in acknowledging honors students as whole beings for whom intentional college experiences and programming may help pave the way to make the most of their college years and not just to survive but to thrive.

## REFERENCES

- ACHA. (2014). *American College Health Association-National College Health Assessment II: Reference group executive summary Fall 2013*. Hanover, MD: American College Health Association. Retrieved from <[http://www.acha-ncha.org/docs/ACHA-NCHA-II\\_ReferenceGroup\\_ExecutiveSummary\\_Fall2013.pdf](http://www.acha-ncha.org/docs/ACHA-NCHA-II_ReferenceGroup_ExecutiveSummary_Fall2013.pdf)>
- Allen, J., Robbins, S. B., Casillas, A., & Oh, I. (2008). Third-year college retention and transfer: Effects of academic performance, motivation, and social connectedness. *Research in Higher Education*, 49, 647–64.
- Astin, A. W. (1999). Student involvement: A development theory for higher education. *Journal of College Student Development*, 40, 518–29.
- . (1984). Student involvement: A development theory for higher education. *Journal of College Student Personnel*, 25, 297–308.
- . (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey Bass.
- Astin, A., Astin, H. S., & Lindholm, J. A. (2011). *Cultivating the spirit: How colleges can enhance students' inner lives*. San Francisco, CA: Jossey-Bass.
- Austin, K. A. (2007). *The relationship between housing type and college experience for honors college students* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 1445915)
- Badenhausen, R. (2010). “Help, I need somebody”: Rethinking how we conceptualize honors. *Journal of the National Collegiate Honors Council*, 11(2), 27–31.
- Barnes, S. D. (2012). *Exploring relationships of metacognition and university honors students' academic behaviors* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3544995)
- Bean, J. P., & Eaton, S. B. (2000). A psychosocial model of college student retention. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 48–61). Nashville, TN: Vanderbilt University Press.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238–46.

- Berger, J. B., & Milem, J. F. (1999). The role of student involvement and perceptions of integration in a causal model of student persistence. *Research in Higher Education, 40*, 641–64.
- Bloom, J. L., Hutson, B. L., & He, Y. (2008). *The appreciative advising revolution*. Champaign, IL: Stipes.
- Boazman, J. K. (2010). *Well-being and academic success in gifted college students: Early-college entrants and honors college students* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3448580)
- Bradshaw, G., Espinosa, S., & Hausman, C. (2001). The college decision-making of high achieving students. *College and University, 77*(2), 15–22.
- Braskamp, L. A., Trautvetter, L. C., & Ward, K. (2006). *Putting students first: How colleges develop students purposefully*. Boston, MA: Anker Publishing.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). Understanding and reducing college student departure. *ASHE-ERIC Higher Education Report, 30*(3).
- Brechting, E. H., Burris, J. L., Carlson, C. R., & Salsman, J. (2009). Factors associated with the psychological well-being and distress of university students. *Journal of American College Health, 57*, 536–43.
- Brissette, I., Scheier, M. F., & Carver, C. S. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition. *Journal of Personality and Social Psychology, 82*, 102–11.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York, NY: Guilford Press.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–62). Newbury Park, CA: Sage Publications.
- Burns, L. R., & Evans, A. M. (2009). Measures of perfectionism. In E. Mpofu & T. Oakland (Eds.), *Current practices and issues in rehabilitation and health assessment* (pp. 521–44). New York, NY: Springer.
- Burris, J. L., Brechting, E. H., Salsman, J., & Carlson, C. R. (2009). Factors associated with psychological well-being and distress of university students. *Journal of American College Health, 57*, 536–44.

- Byrne, B. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York, NY: Routledge.
- Campbell, K. C. (2006). *An examination of student completion in a collegiate honors program* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3211660)
- Campbell, K. C., & Fuqua, D. R. (2008). Factors predictive of student completion in a collegiate honors program. *Journal of College Student Retention, 10*, 129–53.
- Carduner, J., Padak, G. M., & Reynolds, J. (2011). Exploratory honors students: Academic major and career decision making. *NACADA Journal, 31*, 14–28.
- Carlson, S. (2010). UMass to build \$182-million honors college. *The Chronicle of Higher Education*. Retrieved from <<http://chronicle.com/blogs/buildings/umass-to-build-182-million-honors-college/28055>>
- Chambliss, D. F., & Takacs, C. G. (2014). *How college works*. Cambridge, MA: Harvard University Press.
- Chancey, J. M. (2013). *Achievement goal orientations of academically talented college students: Socioemotional factors contributing to honors program participation* (Doctoral dissertation). Retrieved from <<http://digitalcommons.uconn.edu/dissertations/88>>
- Cheng, D. X. (2004). Students' sense of campus community: What it means and what to do about it. *NASPA Journal, 41*, 216–32.
- Chickering, A. W., Dalton, J. C., & Stamm, L. (2006). *Encouraging authenticity and spirituality in higher education*. San Francisco, CA: Jossey-Bass.
- Clauss, J. J. (2011). The benefits of an honors education for all students. *Journal of the National Collegiate Honors Council, 12*, 95–99.
- Cossentino, A. L. (2006). *Understanding the experiences, satisfaction, and performance of honors students: A multisite case study at public higher education institutions* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3243737)
- Dalton, J. C. (2001). Career and calling: Finding a place for the spirit in work and community. *New Directions for Student Services, 95*, 17–25.

- . (2006). Integrating spirit and community in higher education. In A. W. Chickering, J. C. Dalton, & L. Stamm (Eds.), *Encouraging authenticity and spirituality in higher education* (pp. 165–85). San Francisco, CA: Jossey-Bass.
- . (2006). The place of spirituality in the mission and work of college student affairs. In A. W. Chickering, J. C. Dalton, & L. Stamm (Eds.), *Encouraging authenticity and spirituality in higher education* (pp. 145–64). San Francisco, CA: Jossey-Bass.
- Decker, J. M. (2008). *How does the living-learning environment affect honors students' perceptions of self, others, and the institution?* (Master's thesis). Available from ProQuest Dissertations & Theses database. (UMI No. 1457840)
- Derrico, C., Tharp, J., & Schreiner, L. A. (2014). *Called to make a difference: The experiences of students who thrive on faith-based campuses*. Paper presented at the Association for the Study of Higher Education, Washington, D.C.
- Diener, E., Oishi, S., & Lucas, R. E. (2009). Subjective well-being: The science of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), *The Oxford handbook of positive psychology* (2nd ed., pp. 187–94). Oxford, UK: Oxford University Press.
- Dougherty, S. B. (2007). Academic advising for high-achieving college students. *Higher Education in Review*, 4, 63–82.
- Elkins, D. J., Forrester, S. A., & Noel-Elkins, A. V. (2011). Students' perceived sense of campus community: The influence of out-of-class experiences. *College Student Journal*, 45(1), 105–21.
- Emerick, S. M. (2005). *What types of out-of-classroom involvement are related to students' self-efficacy and grade point: An investigation of the constructs of quantity, quality, and connectedness of involvement* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3175325)
- Flett, G. L., & Hewitt, P. L. (2002). *Perfectionism: Theory, research, and treatment*. Washington, D.C.: American Psychological Association.
- Ford, J. (2008). Creating an honors culture. *Journal of the National Collegiate Honors Council*, 9(1), 27–29.



- Freyman, J. (2005). What is an honors student? *Journal of the National Collegiate Honors Council*, 6(2), 23–29.
- Gansemer-Topf, A. M., & Schuh, J. H. (2006). Institutional selectivity and institutional expenditures: Examining organizational factors that contribute to retention and graduation. *Research in Higher Education*, 47, 613–42.
- Giazconi, M., & Hilberg, N. (2009). Dealing with subjective and objective issues in honors education. *Journal of the National Collegiate Honors Council*, 10, 57–59.
- Gordon, V. N. (2007). *The undecided college student: An academic and career advising challenge* (3rd ed.). Springfield, IL: Charles C. Thomas Publisher.
- Greene, M. J. (2003). Gifted adrift: Career counseling of the gifted and talented. *Roeper Review*, 25, 66–72.
- . (2006). Helping build lives: Career and life development of gifted and talented students. *Professional School Counseling*, 10, 34–42.
- Gruttadaro, D., & Crudo, D. (2012). *College students speak: A survey report on mental health*. Retrieved from the National Alliance on Mental Illness (NAMI) website: <[http://www.nami.org/Content/NavigationMenu/Find\\_Support/NAMI\\_on\\_Campus1/NAMI\\_Survey\\_on\\_College\\_Students/collegereport.pdf](http://www.nami.org/Content/NavigationMenu/Find_Support/NAMI_on_Campus1/NAMI_Survey_on_College_Students/collegereport.pdf)>
- Habley, W. R., Bloom, J. L., & Robbins, S. (2012). *Increasing persistence: Research-based strategies for college student success*. San Francisco, CA: John Wiley & Sons.
- Hammond, D. R., McBee, M. T., & Hebert, T. P. (2007). Motivational aspects of giftedness. *Roeper Review*, 29(3), 197–205.
- Harding, B. (2008). Students with specific advising needs. In V. N. Gordon, W. R. Habley, T. J. Grites, and Associates (Eds.), *Academic advising: A comprehensive handbook* (2nd ed., pp. 189–203). San Francisco, CA: Jossey-Bass.
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education*, 48, 803–39.

- Hausmann, L. R. M., Ye, F., Schofield, J. W., & Woods, R. L. (2009). Sense of belonging and persistence in White and African American first-year students. *Research in Higher Education, 50*, 649–69. doi:10.1007/s11162-009-9137-8
- Hebel, S. (2005, April 8). U. of Minnesota to close 2 colleges and open an honors college in bid for global recognition. *The Chronicle of Higher Education*. Retrieved from <<http://www.chronicle.com/article/U-of-Minnesota-to-Close-2/25064>>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.
- Inkelas, K. K., & Weisman, J. L. (2003). Different by design: An examination of student outcomes among participants in three types of living-learning programs. *Journal of College Student Development, 44*, 335–68.
- Jonas-Dwyer, D., & Pospisil, R. (2004). The millennial effect: Implications for academic development. *Higher Education Research and Development Society of Australasia (HERDSA) Conference Proceedings*. Retrieved from <<http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=A39AA95810B26F46AEF2B0B3893523FF?doi=10.1.1.216.2538&rep=rep1&type=pdf>>
- Keyes, C. L. M. (2003). Complete mental health: An agenda for the 21st century. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 293–309). Washington, D.C.: American Psychological Association.
- Keyes, C. L. M., & Haidt, J. (Eds.). (2003). *Flourishing: Positive psychology and the life well-lived*. Washington, D.C.: American Psychological Association.
- Kim, Y. K., & Sax, L. J. (2009). Student-faculty interaction in research universities: Differences by student gender, race, social class, and first-generation status. *Research in Higher Education, 50*, 437–59. doi:10.1007/s11162-009-9127-x
- Klein, J. R. (2006). *Extreme millennial students: Advising strategies for working with honors students*. Retrieved from NACADA Clearinghouse of Academic Advising Resources Web site: <<http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/Honors-students.htm>>

- Koenig, H., King, D., & Carson, V. B. (Eds.). *Handbook of religion and health* (2nd ed.). Oxford, UK: Oxford University Press.
- Kuh, G. D., & Gonyea, R. M. (2006, Winter). Spirituality, liberal learning, and college student engagement. *Liberal Education*, 92, 40–47. Retrieved from <[https://www.aacu.org/liberaleducation/le-wi06/le-wi06\\_perspective1.cfm](https://www.aacu.org/liberaleducation/le-wi06/le-wi06_perspective1.cfm)>
- Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *The Review of Higher Education*, 24, 309–32.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters to student success: A review of the literature*. Commissioned report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success, Washington, D.C.
- Lindholm, J. A. (2013). Methodological overview of the UCLA spirituality in higher education project. In A. B. Rockenbach & M. J. Mayhew (Eds.), *Spirituality in college students' lives: Translating research into practice* (pp. 9–16). New York, NY: Routledge.
- . (2004). Pathways to the professoriate: The role of self, others, and environment in shaping academic career aspirations. *The Journal of Higher Education*, 75, 603–35.
- Lohr, S. C. (2004). *Student faculty connections: Grasping the essence of informal interaction* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3140510)
- Longo, J. L. (2008). *Forging connections: Development of academic argument in first year honors students' writing* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3326351)
- Lounsbury, J. W., & DeNeui, D. (1995). Psychological sense of community on campus. *College Student Journal*, 29, 270–77.
- Luke, C. C., II. (2009). *An examination of psychological factors that predict college student success and retention* (Doctoral dissertation), University of Tennessee. Retrieved from <[http://trace.tennessee.edu/utk\\_graddiss/71](http://trace.tennessee.edu/utk_graddiss/71)>
- Lundberg, C. A., & Schreiner, L. A. (2004). Quality and frequency of faculty-student interaction as predictors of learning: An analysis by student race/ethnicity. *Journal of College Student Development*, 45, 549–65.

- Marriner, N. R. (2006). Above average ability, creativity, and self-efficacy as predictors of success for honors students (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3244252)
- Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A., & Wolniak, G. C. (2016). *How college affects students: 21st century evidence that higher education works (Volume 3)*. San Francisco, CA: Jossey-Bass.
- McIntosh, E. J. (2012). *Thriving in college: The role of spirituality and psychological sense of community in students of color* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI NO. 1035327809)
- McIntosh, E. J., & Nelson, D. D. (2012). Transfer students: Thriving in a new institution. In L. A. Schreiner, M. C. Louis, & D. D. Nelson (Eds.), *Thriving in transitions: A research-based approach to college student success* (pp. 137–66). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology, 14*, 6–23.
- Montijo, N. (2016). The value of a co-curricular transcript. NASPA Newsletter.
- Moon, J. L. (2012). *Honors and high-ability students: Factors that predict academic efficacy, critical thinking skills, and academic goals* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3511628)
- Nash, R. J., & Murray, M. C. (2010). *Helping college students find purpose*. San Francisco, CA: Jossey-Bass.
- National Survey of Student Engagement (NSSE). (2012). *Promoting student learning and institutional improvement: Lessons from NSSE at 13 (annual report)*. Retrieved from <[http://nsse.iub.edu/NSSE 12\\_Results/ pdf/ NSSE\\_2012\\_Annual\\_Results.pdf](http://nsse.iub.edu/NSSE_12_Results/pdf/NSSE_2012_Annual_Results.pdf)>
- NCHC. (n.d.). Definition of Honors Education. Retrieved from <<https://www.nchchonors.org/directors-faculty/definition-of-honors-education>>
- Nelson, D. D., & Vetter, D. (2012). Thriving in the first college year. In L. A. Schreiner, M. C. Louis, & D. D. Nelson (Eds.), *Thriving in transitions:*

- A research-based approach to college student success* (pp. 41–63). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Noel-Levitz (2012). Why did they enroll? The factors influencing college choice. *National resource report*. Retrieved from <[https://www.ruffalonl.com/documents/shared/Papers\\_and\\_Research/2012/2012\\_Factors\\_to\\_Enroll.pdf](https://www.ruffalonl.com/documents/shared/Papers_and_Research/2012/2012_Factors_to_Enroll.pdf)>
- Ory, J. C., & Braskamp, L. A. (1988). Involvement and growth of students in three academic programs. *Research in Higher Education*, 28(2), 116–29.
- Otero, R. (2005). What honors students are like now. *Journal of the National Collegiate Honors Council*, 6(1), 51–53.
- Owens, E. W., & Giazzoni, M. (2010). Honors students in crisis: Four thoughts from the field. *Journal of the National Collegiate Honors Council*, 11(2), 37–41.
- Parks, S. D. (2011). *Big questions, worthy dreams: Mentoring young adults in their search for meaning, purpose, and faith* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Petridis, H. L., & Schreiner, L. A. (2013, Nov. 16). *Graduate student success: A psychosocial model*. Presentation at the 2013 meeting of the Association for the Study of Higher Education, St. Louis, MO.
- Piehl, M. (2005). The hopes and fears of post-9/11 years. *Journal of the National Collegiate Honors Council*, 6, 47–49.
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16, 385–407.
- . (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeindner (Eds.), *Handbook of self-regulation* (pp. 451–502). San Diego, CA: Academic Press.
- Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of College Student Development*, 44(1), 18–28.
- Pryor, J. H., & Hurtado, S. (2012). *Using CIRP-level data to study input-adjusted degree at attainment*. Retrieved from <[http://www.hcmstrategists.com/contextforsuccess/papers/PRYOR\\_HURTADO\\_PAPER.pdf](http://www.hcmstrategists.com/contextforsuccess/papers/PRYOR_HURTADO_PAPER.pdf)>

- Rau, W., & Durand, A. (2000). The academic ethic and college grades: Does hard work help students to “make the grade?” *Sociology of Education*, *73*, 19–38.
- Reason, R. D. (2009). Student variables that predict retention: Recent research and new developments. *NASPA Journal*, *46*, 482–501.
- Rinn, A. N. (2007). Effects of programmatic selectivity on the academic achievement, academic self-concepts, and aspirations of gifted college students. *Gifted Child Quarterly*, *51*, 232–45. doi:10.1177/0016986207302718
- Robbins, G. A. (2010). *To participate or not to participate: The perceptions of gifted students regarding an honors program at a private southeastern university* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3420118)
- Robbins, S. B., Allen, J., Casillas, A., Peterson, C. H., & Le, H. (2006). Unraveling the differential effects of motivational and skills, social, and self-management measures from traditional predictors of college outcomes. *Journal of Educational Psychology*, *98*, 598.
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, *130*, 261–88. doi:10.1037/0033-2909.130.2.261
- Robbins, S. B., Oh, I., Le, H., & Button, C. (2009). Intervention effects on college performance and retention, mediated by motivational, emotional, and social control factors: Integrated meta-analytic path analyses. *Journal of Applied Psychology*, *94*, 1163–84.
- Robinson, N. M. (1997). The role of universities and colleges in educating gifted undergraduates. *Peabody Journal of Education*, *72*, 217–36.
- Rockenbach, A. B., & Mayhew, M. J. (2013). Introduction. In A. B. Rockenbach & M. J. Mayhew (Eds.), *Spirituality in college students' lives: Translating research into practice* (pp. 3–8). New York, NY: Routledge.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069–81.

- Satterfield, B. H. (2006). Honors students. In L. A. Gohn & G. R. Albin (Eds.), *Understanding college student subpopulations: A guide for student affairs professionals* (pp. 95–110). Washington, D.C.: NASPA.
- Schreiner, L. A. (2012). From surviving to thriving during transitions. In L. A. Schreiner, M. C. Louis, & D. D. Nelson (Eds.), *Thriving in transitions: A research-based approach to college student success* (pp. 1–18). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- . (2016). Thriving: Expanding the goal of higher education. In D. W. Harvard (Ed.), *Well-Being and Higher Education: A Strategy for Change and the Realization of Education's Greater Purpose* (pp. 135–48). Washington, D.C.: Bringing Theory to Practice, American Association of Colleges and Universities.
- . (2013). Thriving in college. *New Directions for Student Services*, 143, 41–52.
- . (2010). Thriving in community. *About Campus*, 15, 2–10.
- . (2013). The Thriving Quotient™ [instrument]. Unpublished instrument. (Copy on file with author)
- . (2010). The “Thriving Quotient”: A new vision for student success. *About Campus*, 15, 2–10.
- Schreiner, L. A., Edens, D., & McIntosh, E. J. (2011, March). *The Thriving Quotient: A new vision for student success*. Paper presented at the National Association of Student Personnel Administrators, Philadelphia, PA.
- Schreiner, L. A., Hulme, E. E., Hetzel, R., & Lopez, S. J. (2009). Positive psychology on campus. In S. J. Lopez (Ed.), *The Oxford handbook of positive psychology* (2nd ed., pp. 569–78). Oxford, UK: Oxford University Press.
- Schreiner, L. A., Kalinkewicz, L., Cuevas, A. E. P., & McIntosh, E. J. (2013, November 14). *Measuring the malleable: Expanding the assessment of student success*. Paper presented at the Association for the Study of Higher Education, St. Louis, MO.
- Schreiner, L. A., Kammer, R., Vetter, D., Primrose, B., & Quick, D. (2011, March 15). *Pathways to thriving among students of color: Differential pathways to college success*. Paper presented at the National Association of Student Personnel Administrators, Charlotte, NC.

- Schreiner, L. A., Kitomary, A., & Seppelt, T. L. (2010, February). *Predictors of thriving among first-year students of color*. Paper presented at the 2010 Annual Conference on the First-Year Experience, Denver, CO.
- Schreiner, L. A., & Louis, M. (2011). The Engaged Learning Index: Implications for faculty development. *Journal on Excellence in College Teaching*, 22(1), 5–28.
- Schreiner, L. A., McIntosh, E. J., Nelson, D., & Pothoven, S. (2009, November 7). *The Thriving Quotient: Advancing the assessment of student success*. Paper presented at the Association for the Study of Higher Education, Vancouver, BC, Canada.
- Schreiner, L. A., Pothoven, S., Nelson, D., & McIntosh, E. J. (2009, November 7). *College student thriving: Predictors of success and retention*. Paper presented at the Association for the Study of Higher Education, Vancouver, BC, Canada.
- Schreiner, L. A., Slavin Miller, S., Pullins, T. L., & Seppelt, T. L. (2012). Beyond sophomore survival. In L. A. Schreiner, M. C. Louis, & D. D. Nelson (Eds.), *Thriving in transitions: A research-based approach to college student success* (pp. 111–36). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Schreiner, L. A., Vetter, D., Kammer, R., Primrose, B., & Quick, D. (2011, March 15). *Pathways to thriving for students of color*. Presentation at the National Association of Student Personnel Administrators, Philadelphia, PA.
- Schuler, P. A. (2000). Perfectionism and gifted adolescents. *The Journal of Secondary Gifted Education*, 11(4), 183–96.
- Schuman, S. (2013). *If honors students were people: Holistic honors education*. National Collegiate Honors Council Monograph Series. Lincoln, NE: NCHC.
- Sedlacek, W. E. (2004). *Beyond the big test: Noncognitive assessment in higher education*. San Francisco, CA: Jossey-Bass.
- Seligman, M. E. P. (2002). *Authentic happiness: Understanding the new positive psychology to realize your potential for lasting fulfillment*. New York, NY: Atria.



- . (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Free Press.
- Shushok, F., Jr. (2006). Student outcomes and honors programs: A longitudinal study of 172 honors students 2000–2004. *Journal of the National Collegiate Honors Council*, 7, 85–96.
- Shushok, F. X. (2002). *Educating the best and brightest: Collegiate honors programs and the intellectual, social, and psychological development of students* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 307562)
- Slavin, C. (2008). Defining honors culture. *Journal of the National Collegiate Honors Council*, 9(1), 15–18.
- Slavin, C., Coladarci, T., & Pratt, P. (2008). Is participation in an honors program related to retention and graduation rates? *Journal of the National Collegiate Honors Council*, 9(2), 59–70.
- Smith, W. L., & Zhang, P. (2009). The academic ethic and the transition to college. *College Student Journal*, 43, 86–98.
- Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling and Development*, 73, 355–60.
- Soldner, M., Rowan-Kenyon, H., Inkelas, K. K., Garvey, J., & Robbins, C. (2012). Supporting students' intentions to persist in STEM disciplines: The role of living-learning programs among other social-cognitive factors. *Journal of Higher Education*, 83, 311–36.
- Speirs Neumeister, K. L. (2004). Interpreting successes and failures: The influence of perfectionism on perspective. *Journal for the Education of the Gifted*, 27, 311–35.
- . (2004). Understanding the relationships between perfectionism and achievement motivation in gifted college students. *The Gifted Child Quarterly*, 48, 219–31.
- Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success for all students*. New York, NY: Routledge.
- Strong, P. E. (2007). *A qualitative investigation of out-of-class student-faculty interaction in an undergraduate learning community* (Doctoral dissertation). Available from ProQuest Doctoral Dissertations & Theses database. (UMI No. 3282204)

- Sulaiman, A., & Mohezar, S. (2006). Student success factors: Identifying key predictors. *Journal of Education for Business, 81*, 328–33.
- Tagg, J. (2003). *The learning paradigm college*. Bolton, MA: Anker Publishing.
- . (2004). Why learn? What we may “really” be teaching students. *About Campus, 9*, 2–10.
- Tinto, V. (1993) *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- Walker, M. (2012). *The relationship of factors of academic success and psychological well-being for college honors students* (Doctoral dissertation). Available from ProQuest Dissertations & Theses database. (UMI No. 3525657)
- Wawrzynski, M. R., Madden, K. U., & Jensen, C. (2012). “The Influence of the College Environment on Honors Students' Outcomes.” *Journal of College Student Development, 53*, 840–45.
- Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Development, 50*, 407–28.
- Wolff, L. A., Barclay, S. R., & Buning, M. M. (2014). Promoting student well-being on campus: It takes a village. In C. Borzumato-Gainey & S. Degges-White (Eds.), *College student mental health counseling: A developmental approach* (pp. 339–53). New York, NY: Springer.

---

The authors may be contacted at  
[apropstcuevas@fau.edu](mailto:apropstcuevas@fau.edu).

