The Forgotten Year: College Sophomore Students' Self-Efficacy and Intent to Persist

Shelley R. Price-Williams, PhD, *University of Northern Iowa*

Pietro A. Sasso, PhD, *Delaware State University*

This study centered on sophomore college students' self-efficacy and intent to persist in higher education. Higher levels of self-efficacy were reported by participants who self-identified as heterosexual and on the Social Efficacy and Course Efficacy subscales. Further, the analyses revealed the distribution of scores in overall self-efficacy (p = .048) and social efficacy (p = .014) was lower among respondents who did not intend to return to higher education. These results hold implications for the transformation of the first-year seminar, the development of academically embedded seminars, and the enhancement of academic and faculty relationships.
Keywords: sophomores, transition, self-efficacy, persistence, student success

College sophomores have often been branded as *middle children* during a *forgotten year* in which they received the least amount of institutional support or visibility (Hunter, 2006; Sterling, 2018; Tobolowsky, 2008). Yet, the undergraduate transition into college is just as important as the matriculation across the sophomore year experience. As students persist into the sophomore year, transitional issues can arise while the level of institutional support dissipates (Sanchez-Leguelinel, 2008; Schaller, 2018; Schreiner, 2018; Schreiner et al., 2012; Tobolowsky, 2008). Sophomores emerge from a sometimes-enriched freshman experience and must assimilate into a new community on campus, where the established peer group from the first year may be dispersed across the academy (Estep et al., 2019). The object of this study was the self-efficacy of college sophomore students in relation to students' intent to persist in higher education.

Student retention and departure have been studied for decades (Reason, 2009; Tinto, 1987). Retention rates are commonly used as indicators of academic quality and student success and are often measured as a percentage. The rates change over time as students depart from the institution and represent a complex interaction between the characteristics of the students and the school (Tinto, 1987). In addition, measures of student persistence are typically higher on average than institutional rates of student retention and graduation (Tinto, 2012). Tinto (2012) emphasized that higher levels of attrition occur earlier, with 38% departing in the first year and 29% in the second year compared to 15% and 9%, respectively, in the junior and senior years.

Orientation, freshman seminars, and freshmen learning communities are common programs throughout higher education institutions and were developed to support the transition into college and foster student success (Provencher & Kassel, 2019). Yet, most efforts occur outside the classroom (Tinto, 2012). After the first year, such programming stops as college sophomores become ineligible based on credit hours and academic status. As a result, college sophomores at many institutions become forgotten and feel invisible (Gahagan & Hunter, 2006; Sanchez-Leguelinel, 2008; Tobolowsky, 2008).

Within the last 20 years, transition advocates have shined a light onto the sophomore and senior year experience to elevate awareness of the challenges students face and encourage the creation of support programs for these critical years (Kranzow & Foote, 2018; National Center for the First-Year Experience and Students in Transition, n.d.; Schaller, 2018; Schreiner, 2018; Schreiner et al., 2012; Tobolowsky, 2008; Young, 2018). Yet, a student's cognitive, intellectual, and moral development level can affect academic persistence and the coping strategies employed in times of challenge or crisis (Baxter Magolda et al., 2010; Chickering, 1969; Perry, 1968). Research originating from psychosocial disciplines focused on students' sense of belonging, self-

efficacy, and life purpose proffers a holistic analysis for the study of college student transitions (Bandura, 1995, 1997; Baxter Magolda, 2009; DeWitz et al., 2009; Schaller, 2005; Vuong et al., 2010).

Literature Review

SOPHOMORE PSYCHOSOCIAL DEVELOPMENT

Sophomore college students move through a cycle of identity development influenced and shaped by external factors and experiences in the college environment. Identity development, according to Chickering (1969), is an umbrella covering "a multitude of diverse events and activities" encompassing the "single major task for young adults" (p. 79). Chickering (1969) defined identity formation as establishing comfort with one's gender, body, appearance, cultural heritage, sexual orientation, sense of self, and life role and deemed it a necessary framework for continued adult development. According to Baxter Magolda (2007), sophomore students progress from absolute knowing, where knowledge is viewed as certain and instructors as authorities, to transitional knowing, where knowledge is uncertain. A realization that authorities, such as instructors, are not all-knowing is a turning point for college sophomores. Hunter et al. (2010) defined the sophomore year as a time for turning inward and exploring how one fits into college life and the world at large. Hunter et al. (2010) contended that prolonged indecisiveness, poor academic course selection, low academic and co-curricular engagement levels, behavioral problems, and increased time to degree completion can manifest in the sophomore year. In addition, Gahagan and Hunter (2006) distinguished financial hardships, academic concerns, and questioning purpose in life as daunting issues for sophomores.

Moreover, Schreiner et al. (2012) characterized the sophomore year as a tumultuous time where students are enrolled in general education courses avoided in the first year, are under increased pressure to declare a major or undergo a competitive admissions process to enter an academic program and have little interaction with faculty. Finally, Sanchez-Leguelinel (2008) highlighted the sense of abandonment and invisibility often associated with the sophomore college experience resulting from a decrease in support systems and first-year programming. Yet, sophomore students value a sense of belonging, the effectiveness of academic services, opportunities for intellectual growth, and approachable faculty (Sanchez-Leguelinel, 2008). Schreiner (2018) characterized thriving sophomore students as functioning at optimal levels and psychologically engaged.

SOPHOMORE STUDENT PERCEPTIONS

Students' perceptions, an important personal factor in sources of efficacy beliefs (Bandura, 1997), influence their development and engagement in the college

environment. Schaller (2005) conducted a qualitative study and identified four stages of movement that begin with *random exploration* in the first year, where students are not yet in touch with their internal voice and following the direction of others. This movement continues with *focused exploration* in the first semester of the sophomore year, where students get to know themselves as they explore relationships and their future. Students progress into *tentative choices*, where students begin seeing their future more clearly and finally end with *commitment*. Schaller (2005) found few students who attained a level of commitment in their sophomore year. It is imperative to go beyond perceptions to understand how students' views of their academic experiences relate to their confidence in those choices. According to Schaller (2005), a supportive and encouraging environment in which students feel safe to reflect and explore is conducive to moving students toward a level of commitment.

In 2007, Schreiner (2010) surveyed 932 students at 10 public institutions and 1,924 students at 16 private institutions and found the type of institution to be a significant predictor of many outcome variables. Advising satisfaction and peer satisfaction significantly influenced the intent to reenroll at public and private institutions, respectively (Schreiner, 2010). However, faculty satisfaction influenced the intent to reenroll at private institutions in the study but not in the public sector. Satisfaction of sophomores in three areas significantly influenced intent to graduate: advising satisfaction, faculty satisfaction, and peer satisfaction. In a later study of 13,000 sophomores at 63 institutions, Schreiner (2012) found that 20% of respondents reported courses in the second year were worse or much worse than in the first year, 25% received lower grades than in the first year, and 18% reported the entire second-year experience as worse or much worse than the first year (Schreiner et al., 2012). Schreiner et al. noted interpersonal challenges sophomores encountered, such as lack of institutional support for networking, inability to self-select peers outside of formal programming, and involvement on campus in competition with other obligations.

EFFICACY IN COLLEGE

Scholars have reported that a great deal of self-exploration and questioning of oneself occurs in the sophomore year among college students (DeWitz et al., 2009; Elias, 2008). Many have found stress, social support, and campus climate influential on self-efficacy among college students (Edman & Brazil, 2009; Zajacova et al., 2005). Although research focusing on these constructs has been conducted with all levels of undergraduate students, there is scarce research focused on the self-efficacy of sophomore college students or sophomore students in general (Young, 2018). The following are a few examples.

DeWitz et al. (2009) investigated purpose in life in addition to college, social, and general self-efficacy beliefs of undergraduates and found self-efficacy significantly

correlated with purpose in life. Hsieh et al. (2007) investigated how self-efficacy differs with respect to academic goals and college achievement. Self-efficacy is significantly related to students' GPA and students' adoption of mastery orientations (Hsieh et al., 2007). Edman and Brazil (2009) examined academic efficacy and perceptions of campus climate and social support and found unexpected similarities between White and African American students on academic efficacy, but not with Asians and Latino participants in the study. With a goal to describe the relationship between academic self-efficacy beliefs and college outcomes, Gore (2006) examined the achievement, college self-efficacy, academic self-confidence, and college outcomes of first-year students, both male and female, who were White, African American, Asian American, and Latino. Gore (2006) completed a second study at 25 four-year institutions and determined that academic self-efficacy was a weak predictor of academic performance when measured at the beginning of the first semester of college compared to measurements taken at the end of students' first semester. Because of this measurable distinction, Gore (2006) suggested academic self-efficacy, as a predictor of college success, is dependent on when it is measured, how it is measured, and the desirable outcomes of the study.

When assessing the transition of college sophomores who are first-generation college students, it is important to consider the possible variance that may be attributable to students' experiences. Vuong et al. (2010) completed a study on the effects of self-efficacy on the academic success of first-generation college sophomore students and discovered first-generation students had lower previous term grade point averages and lower overall averages when compared to second-generation sophomores and discovered self-efficacy was positively related to grade point average and persistence. The authors maintained the results exhibit the influence of college sophomores' perceptions on academic performance and persistence (Vuong et al., 2010).

Conceptual Framework

Bandura's (1997) framework for self-efficacy and model of "triadic reciprocal causation" (p. 6), a social cognitive theory, provides a useful approach for understanding the socio-cultural influences upon college student development. This frame of interaction models the bi-directionality of behavior, internal personal cognition, affect, biology, and the external environment (Bandura, 1997). Sources of efficacy beliefs include mastery experiences (most authentic source), vicarious experiences provided by social modeling, social persuasion (least influential), and physiological and emotional states, such as interpretation of stress and tension (Bandura, 1995). While mastery of tasks increases college students' self-efficacy, social modeling by peers, faculty, and staff can also be influential. Moreover, social persuasion can "strengthen coping efficacy" (Bandura, 1995, p. 181) to reduce the threat of potential stressors or challenges in the college environment. In this study,

Bandura's theory provides a frame for defining and measuring self-efficacy based on the individual's belief system.

Research Design

This article disseminates results from the quantitative component of a mixed-methods sequential explanatory design, which encompassed a quantitative analysis followed by qualitative interviews and analysis. Ivankova et al. (2006) explained that quantitative data analysis provides a general understanding and that qualitative data analysis allows for a more in-depth exploration of participants' views. When using this approach, quantitative data may be collected and analyzed before qualitative data are collected and analyzed in the study's second phase (Ivankova et al., 2006). Through a linking method called "connecting" (Fetters et al., 2013, p. 2139), the sample for the qualitative portion of the design originates from the quantitative results. The participants selected are based on the analysis of the survey data from the quantitative method (Fetters et al., 2013; Ivankova et al., 2006). Integration of qualitative and quantitative approaches may allow for the use of the qualitative data "to assess the validity of quantitative findings" (Fetters et al., 2013, p. 2135) in a sequential explanatory design. Watkins and Gioia (2015) specified three different ways researchers might disseminate their work: (a) publishing quantitative results separately, (b) publishing qualitative results, or (c) publishing the results from both study phases together. Due to the complexity of the study and the amount of data collected, publishing results from both phases in one journal article with limited word and page count might compromise the richness of what is garnered from each phase.

RESEARCH QUESTIONS

The following research questions were addressed to investigate college sophomore students' intent to persist and the level of self-efficacy in relation to the college environment:

1. Are there significant differences in the level of self-efficacy reported by the participants based on age, gender identity, race/ ethnicity, sexual identity, disability status, transfer status, veteran status, first-generation status, or housing status?
2. Are there significant differences based on age, gender identity, race/ ethnicity, sexual identity, disability status, transfer status, veteran status, first-generation status, or housing status on the subscales of self-efficacy measured in this study: *Social Efficacy*, *Course Efficacy*, and *Roommate Efficacy*?
3. Is the intent to persist at the same institution, a different institution, or no institution in the upcoming term significantly different based on the level of self-efficacy?

Research hypotheses were formulated to further inform the study. First, it was hypothesized there would be significant differences in the level of overall self-efficacy and the *Social Efficacy*, *Course Efficacy*, and *Roommate Efficacy* subscales among the participants based on the demographic variables, with reports of higher efficacy among dominant groups. In addition, it was hypothesized that participants in the study who intended to persist in higher education would report higher levels of self-efficacy on the College Self-Efficacy Inventory (CSEI) compared to participants who did not intend to persist in higher education.

RESEARCH SITE

The institution selected for the study is geographically located in the Midwestern part of the United States and generically identified as "State University" in this study, confers a bachelor's degree, offers on-campus residential facilities, and is a public Master's College and University. Eighty-five percent of undergraduates at State University were full-time, while almost 15% were part-time. Just over 11% of the undergraduate students transferred into the university. The majority of undergraduate enrollment at State University for race and ethnicity was 74.6% White, and Black or African American students comprised the second largest demographic at 14.5%. While the graduation rates within 150% of the normal time to completion for men and women were comparable, some student groups exhibited a considerably lower rate of graduation than Whites at 54%. For example, the graduation rates for American Indian/Alaskan (20%), African American (33%), and Hispanic/Latino (29%) students were each over 30% lower. Finally, the attainment of a bachelor's degree was disproportionate across lines of race and ethnicity. While White females earned 97 more degrees than their male counterparts out of 1,755 in total, only 34% of African American males were awarded a bachelor's degree (out of 196) compared to 65% of African American females.

SAMPLE

A total of 213 sophomore college students with 30 to 59 earned credit hours at State University completed the CSEI online among the sophomore student population without confidential holds (N = 2,252). This resulted in a 9.5% response rate. Despite the use of repeat reminders to no responders and the use of an incentive, the final response rate was not high. A post hoc power analysis was performed using the G*Power 3.1.9.2 program to address this concern and its influence on the power of the study. The power analysis indicated sufficient power (0.86) to detect a large effect size.

Five students who did not complete the entire survey were removed from the sample (n = 208) and excluded from the data analyses. The typical respondent to the survey was a White, heterosexual female between the ages of 18 and 19 who began higher education at State University and lived on campus. A total of 75% of the

survey respondents self-identified as White Non-Hispanic, with the second largest group being Black Non-Hispanic (11.54%). When examined by race and ethnicity, participation resembled State University's population for White Non-Hispanic, Asian, and Hispanic sophomore students. Participation of Black students was slightly lower than that represented in the population, while the participation of multiethnic students was double. No participants from the sample self-identified as American Indian/Alaska Native or Native Hawaiian/Other Pacific Islander.

Over 90% of the sophomore students in the sample identified their age between 18 and 24. The remaining 9.1% identified as 25 years of age and over. This resembled the age demographic of the population. The estimated average age of the sample (n = 208) was 21, with a range cap of 60. The majority of the survey respondents were female (72.1%), and only one sophomore college student self-identified as not sure. The college sophomore students were asked to identify their sexual identity. Over 93% identified as heterosexual, while the remaining respondents (6.3%) identified as lesbian, gay, bisexual, questioning/unsure, or preferred not to respond.

Only three respondents to the survey self-identified as veterans. Slightly less than one-third of the college sophomores who completed the survey self-identified as first-generation college students, while even fewer identified as transfer students. Of the 208 survey respondents, over half lived on campus at the time they completed the survey. When asked about their enrollment intentions for the upcoming semester, over 89% of the sophomore college students reported their intention to return to State University. Of the sample (n = 208), a total of 10.6% of the respondents planned not to return to State University. Seventeen students planned to attend a different university, while five students indicated they did not plan to attend any university.

DATA COLLECTION

This study used simple random selection, in which each member of the undergraduate sophomore student population, full—or part-time and native or transfer, had an equal chance of selection. Each sophomore student was sent an email containing an invitation to participate, a description of the study, a link to the web-based survey, and details of the incentives for participation. Participation in the study was incentivized via a drawing for one of 10 gift cards to the campus bookstore worth $20.00.

VARIABLES

Age, race, ethnicity, gender identity, sexual identity, and housing status were variables captured in the demographic portion of the survey. Survey respondents were asked to identify their age within ranges, with the lowest being 18–19 and the highest being 50 or above. Response items for race/ethnicity were Black/Non-Hispanic, Asian, Hispanic, 2 or more races, White Non-Hispanic, and unknown. Respondents to

the survey were given six options from which to self-identify gender identity: male, male to female transgender, female, female to male transgender, not sure, and other. Housing status was determined by respondents' selection of living on campus, off campus with roommates, or off-campus with family, spouse, partner, or significant others. The undergraduate sophomore college students were asked to identify if they were a veteran by selecting yes or no. Sophomore students were asked if they were living with a disability. In addition, the students were asked to indicate if they transferred to the institution and if they were first-generation college students by answering yes or no. Respondents were asked to indicate their intent to attend the same institution, intent to attend another institution, or intent to not attend any institution in the upcoming fall semester.

INSTRUMENTATION

The CSEI was used as the survey instrument in the quantitative portion of the mixed-methods sequential explanatory design. Solberg et al. (1993) validated the CSEI on a sample of 164 Mexican American and Latino-American college students with a 51.7% response rate, of which 74% were female and 26% were male. The instrument contains 19 response items. Responses to each item follow the statement: "How confident are you that you could successfully complete the following tasks". The responses are rated on a 10-point scale ranging from a score of 1 as "not at all confident" to a score of 10 as "extremely confident" (Solberg et al., 1993).

Three subscales are derived from the response items: *Course Efficacy, Social Efficacy,* and *Roommate Efficacy* (Solberg et al., 1993). The *Course Efficacy* subscale measures a respondent's level of confidence to execute academic-related tasks, such as taking notes, writing papers, managing time, and understanding textbooks. The *Social Efficacy* subscale measures the respondent's level of confidence in engaging socially with peers, professors, and staff within and outside of the classroom in the college environment. The *Roommate Efficacy* subscale measures the respondent's level of confidence in negotiating space and chores and socializing with roommates.

Solberg et al. (1993) found the subscales to have strong internal consistency and good convergent and discriminant validity in a validation study of the instrument with a principal component analysis. Solberg et al. (1993) reported a coefficient alpha using internal consistency estimates for the total score on self-efficacy (Cronbach's $\alpha = 0.93$) and each subscale: course (Cronbach's $\alpha = 0.88$), roommate (Cronbach's $\alpha = 0.88$), and social (Cronbach's $\alpha = 0.88$). Solberg et al. (1993) used multivariate analysis of variance (MANOVA) and found the CSEI to not be sensitive to differences in acculturation, gender, or class level,
$F(6,140) = 1.40$, $p < .05$, Wilks's Lamba = 0.94.

DATA ANALYSIS

Descriptive statistics were used to evaluate the survey data in terms of central tendency, variability, and extent of association between variables. The Mann-Whitney U Test, a nonparametric test, was conducted to evaluate differences in self-efficacy among the variable groups on the CSEI instrument and subscales. The cases were divided into variable groupings to examine differences among the variables on the CSEI and subscales. The groupings were traditional and post-traditional, White Non-Hispanic and other, male and female, heterosexual and not-heterosexual, first-generation status, disability status, veteran status, transfer status, and housing status on or off campus. Respondents who identified as between the ages of 18 and 24 were placed in the traditional group, and respondents who identified as age 25 or older were placed in the post-traditional group. All respondents who did not identify as White Non-Hispanic were placed in the other group. All respondents who identified a sexual identity other than heterosexual were placed in the not-heterosexual group. Respondents identified their disability, transfer, and veteran status by answering yes or no. Those respondents were grouped accordingly. Finally, all respondents who identified as living on campus remained in the on-campus group. Respondents who identified as living off-campus with roommates, family, partner, or spouse were placed in the off-campus group.

Results

RESPONSES ON THE CSEI

The mean Self-Efficacy Score (SES) of the sample (n = 208) was 7.90 (SD = 1.40). The SES was tabulated as the average of the scores reported on each answered survey item. The entire sample (n = 208) completed every item on the *Social Efficacy* and *Course Efficacy* subscales. Only those respondents who lived on or off campus with roommates answered all three subscales (n = 141), including the *Roommate Efficacy* items. For those respondents who lived off campus with family, a spouse, or a partner (n = 67), the SES was tabulated based on the responses on the *Social Efficacy* and *Course Efficacy* subscales only. Descriptive statistics were tabulated for the subscales, where 1 was the lowest possible score, and 10 was the highest. The lowest reported score on the *Social Efficacy* scale was 1.63 (M = 7.69, SD = 1.86). Even lower was a score of 1.00 (M = 7.79, SD = 2.10) out of 10.00 reported on the *Roommate Efficacy* scale. The lowest score reported on the *Course Efficacy* subscale was 3.86 (M = 8.20, SD = 1.40).

RQ1: DIFFERENCES IN LEVEL OF SELF-EFFICACY AMONG VARIABLE GROUPS

The first research question in this study asked if there were significant differences in the level of self-efficacy reported by the respondents based on age, gender identity, race/ethnicity, sexual identity, disability status, transfer status, veteran status, first-

generation status, or housing status. To address this question, nonparametric Mann-Whitney U Tests were used to examine the differences in overall self-efficacy reported by the respondents. The Mann-Whitney U Test was conducted on each variable group for each subscale to evaluate where the medians differed significantly between groups (see Table 1). Due to the low number of respondents who self-identified as veterans (n = 3) and students with disabilities (n = 7), no further analyses on those variables were conducted.

It was hypothesized there would be significant differences in the level of overall self-efficacy, and this was supported, in part. No significant differences were found in the self-efficacy scores when conducting the Mann-Whitney U Tests for the age group. Similarly, no significant differences were found among respondents who identified as White versus another race/ethnicity or among respondents who identified as male or female. However, significant differences were found in the overall self-efficacy score for the variable group sexual identity. The results of the Mann- indicated the distribution of self-efficacy scores among heterosexual respondents was higher than that of not-heterosexual respondents (z = -3.439, p = .001). The average rank for respondents who identified as heterosexual was 108.21. The average rank for respondents who did not identify as heterosexual was much lower at 48.92.

In addition, Mann-Whitney U Tests were conducted on first-generation status and transfer status. No significant differences in self-efficacy scores were found among respondents who self-identified as first-generation or not first-generation on either test. No significance resulted from the same tests for transfer status for the overall self-efficacy score. Finally, no significant differences were found for self-efficacy for students who lived on campus versus off campus.

RQ2: DIFFERENCES AMONG VARIABLE GROUPS ON THE SUBSCALES

The second research question focused on possible significant differences based on age, gender identity, race/ ethnicity, sexual identity, disability status, transfer status, veteran status, first-generation status, or housing status on the subscales of self-efficacy measured in this study: *Social Efficacy*, *Course Efficacy*, and *Roommate Efficacy*. The following are the results of each test.

Differences in Level of Social Efficacy

It was hypothesized there would be significant differences in the level of self-efficacy as measured on the *Social Efficacy* subscale, and this was supported, in part. No significant differences were found on the *Social Efficacy* subscale when conducting the Mann-Whitney U Tests for age group, race/ethnicity, or gender identity. No significant differences were found among respondents who self-identified as first-generation or not first-generation, for transfer status, or based on housing status. However,

significant differences were found in *the Social Efficacy* subscale scores for the variable group sexual identity. The results of the Mann-Whitney U Test indicated a higher distribution of scores on the *Social Efficacy* subscale among heterosexual respondents than that of not-heterosexual respondents (z = -2.904, p = .004). The average rank for respondents who identified as heterosexual was 107.63. The average rank for respondents who did not identify as heterosexual was much lower at 57.62.

Differences in Level of Course Efficacy

Mann-Whitney U Tests were conducted to examine the differences in efficacy reported by the respondents on the *Course Efficacy* subscale among the variable groups. It was hypothesized there would be significant differences in the level of self-efficacy as measured on the *Course Efficacy* subscale, and this was supported, in part. No significant differences were found on the *Course Efficacy* subscale when conducting the Mann-Whitney U Tests for age group, race/ethnicity, or gender identity. No significant differences were found among respondents who self-identified as first-generation or not first-generation on either test. No significant differences were found for transfer status. Finally, no significant differences were found on the *Course Efficacy* subscale for students who lived on campus versus off campus. On the Mann-Whitney U Test, the distribution of scores on the *Course Efficacy* subscale was higher among heterosexual respondents than that of not-heterosexual respondents (z = -2.035, p = .042). The average rank for respondents who identified as heterosexual was 106.69. The average rank for respondents who did not identify as heterosexual was 71.65.

Differences in Level of Roommate Efficacy

Mann-Whitney U Tests were conducted to examine the differences in efficacy reported by the respondents on the *Roommate Efficacy* subscale among the variable groups. It was hypothesized there would be significant differences in the level of self-efficacy as measured on the *Roommate Efficacy* subscale, and this was supported, in part. No significant differences in gender or sexual identity were found on the *Roommate Efficacy* subscale when conducting the Mann-Whitney U Tests. In addition, no significant differences were found on either test for first-generation, transfer, or housing status.

Significant differences were found on the *Roommate Efficacy* subscale among the traditional and post-traditional respondents on the Mann-Whitney U Test, in addition to significant differences among respondents who identified as White, Non-Hispanic, or other. The distribution of scores on the *Roommate Efficacy* subscale for traditional respondents was higher than that of respondents who were post-traditional (z = -2.400, p = .016). The average rank for respondents who self-identified as traditional between the ages of 18 and 24 was 72.57. The average rank for respondents who self-identified as post-traditional ages 25 and older was 28.20. In addition, the distribution

of scores on the *Roommate Efficacy* subscale among those respondents who self-identified as White Non-Hispanic was higher than respondents who did not identify as White Non-Hispanic (z = -2.02, p = .028). The average rank for respondents who self-identified as White Non-Hispanic was 75.57. The average rank for respondents who identified their race/ethnicity as not White Non-Hispanic was 58.61.

RQ3: DIFFERENCES IN SELF-EFFICACY AND INTENT TO PERSIST

The third research question asked whether intent to persist at the same institution, a different institution, or no institution in the upcoming term differed significantly based on the respondents' self-efficacy level. The lowest average self-efficacy was reported by students who planned to enroll in a different university (M = 7.208, SD = 1.262). The widest range in self-efficacy of 6.32 was reported by respondents who indicated they planned to return to State University in the upcoming fall semester (M = 7.960, SD = 1.394), and the lowest efficacy score tabulated was 3.68.

The Mann-Whitney U Test was conducted to examine differences in self-efficacy scores reported by the respondents who planned to enroll at State University, a different college or university, or no college or university in the upcoming fall semester. For purposes of the analyses, respondents who indicated their intent to return (n = 186) to State University were assigned to the "returning" group. Respondents who indicated their intent to attend a different or no college or university (n = 22) were assigned membership in the "not returning group."

It was hypothesized that participants in the study who intended to persist would report significant differences in efficacy overall and on the three subscales compared to participants who did not intend to persist. The hypothesis was supported, in part. When conducting the Mann-Whitney Test on self-efficacy scores and intent to persist, the distribution of self-efficacy scores was higher among respondents who intended to return to higher education than respondents who did not intend to return in the upcoming fall semester (z = -1.90, p = .048). The average rank for respondents who self-identified as returning was 107.34. The average rank for respondents who self-identified as not returning was 80.48.

Table 1

Summary of Mann-Whitney U Tests

Groups	Mann-Whitney U Ranks			
	Social Efficacy	Course Efficacy	Roommate Efficacy	Self-Efficacy Score
Gender Identity				
Male	108.05	95.96	74.01	101.70
Female	102.46	107.05	69.72	104.87
Sexual Identity				
Heterosexual	107.63[b]	106.69[c]	72.32	108.21[a]
Not-Heterosexual	57.62	71.65	49.06	48.92
Race/Ethnicity				
White Non-Hispanic	105.57	107.70	75.57[c]	108.25
Other	101.28	94.91	58.61	93.26
Age Group				
Traditional	104.96	103.85	72.57[c]	104.88
Non-Traditional	100.92	110.95	28.20	100.71
1st Generation Status				
Yes	98.72	110.53	79.42	106.38
No	106.63	102.28	68.63	103.81
Transfer Status				
Yes	93.72	91.06	64.92	92.64
No	107.48	108.21	71.95	107.77
Housing Status				
On Campus	110.58	107.08	68.18	107.23
Off Campus	98.19	101.82	79.53	101.66
Persistence				
Returning	108.01[c]	105.34	71.76	107.34[c]
Not returning	74.80	97.39	64.07	80.48

Note. a = $p < .001$, b = $p < .01$, and c = $p < .05$

Even further, Mann-Whitney U Tests were conducted to examine any possible differences in efficacy for returning and not-returning students on the three subscales: *Social Efficacy*, *Course Efficacy*, and *Roommate Efficacy*. No significant differences in efficacy were found among the returning and not-returning groups for *Course Efficacy* or *Roommate Efficacy*. However, the distribution of scores on the *Social Efficacy* subscale was higher among respondents who intended to return to higher education

in the upcoming fall semester than respondents who did not intend to return (z = -2.451, p = .014). The average rank for respondents who self-identified as returning was 108.01. The average rank for respondents who identified as not returning was 74.80.

Discussion

The purpose of the study was to investigate differences in self-efficacy among college sophomore students as measured on the CSEI and the intent of those students to persist in higher education. In association with the research questions in this study, it was hypothesized there would be significant differences in the level of overall self-efficacy based on the investigated demographic variables. In relation, higher levels of self-efficacy were expected among dominant groups. This hypothesis was supported in part. Among the 208 college sophomore students at State University who completed the CSEI, higher levels of self-efficacy were reported by participants who self-identified as heterosexual compared to participants who identified as lesbian, gay, bisexual, or questioning/unsure (p = .001). No significant differences were found for gender, as reported in the literature (Elias, 2008; DeWitz et al., 2009; Vuong et al., 2010), or for race and ethnicity for overall self-efficacy (Capik & Schupp, 2023). No significant differences in overall self-efficacy were found based on housing status or whether the participant was a transfer or first-generation student (Blekic et al., 2020; Capik & Schupp, 2023).

This study is one of few to examine sexual identity as a demographic variable with the level of self-efficacy among college students. Campus climate may be a factor influencing differences in overall self-efficacy, as found by Edman and Brazil (2009). The intersectionality of other identities with sexual identity, such as race/ethnicity and gender, and the influence of the college environment must be considered for its impact on overall self-efficacy in relation to this finding (Wang & Kennedy-Phillips, 2013).

It was hypothesized that based on the demographic variables, there would be significant differences in the level of self-efficacy on the *Social Efficacy*, *Course Efficacy*, and *Roommate Efficacy* subscales of the CSEI among the participants, with reports of higher efficacy among dominant groups. The analyses' results supported the hypothesis, in part. The following is a discussion of the results for each subscale.

On the *Social Efficacy* subscale, the distribution of scores for students who did not self-identify as heterosexual was lower than the reported scores of students who self-identified as heterosexual (p = .004). The subscale measures college students' confidence in engagement with peers, faculty, and staff inside and outside of the classroom. This finding indicated students who self-identified as lesbian, gay, bisexual, or questioning/unsure were less confident in engaging with others academically or

socially in this environment. Stress, social support, and campus climate have been identified as influential on self-efficacy among college students in relative studies (Edman & Brazil, 2009; Estepp et al., 2019; Zajacova et al., 2005). Dissatisfaction with the campus climate could be a cause for the lack of confidence, and this was the case in the results of Edman and Brazil (2009). Even further, college environments that foster dominant and subordinate relationships are more likely to suppress the voices of its members (Baxter Magolda, 1992).

On the *Course Efficacy* subscale, in support of the hypothesis, it was found that college sophomore participants who self-identified as lesbian, gay, bisexual, or questioning/unsure reported lower scores in efficacy compared to participants who self-identified as heterosexual (p = .042). Participants in this underrepresented group reported lower levels of confidence in academic-related tasks, such as writing papers, taking tests and quizzes, or managing time. It would be shortsighted not to consider the timing of this study in proximity to final examinations, as emphasized in the literature (Estepp et al., 2019; Gore, 2006). Yet, no significant differences were found among other variable groups for *Course Efficacy*.

Finally, significant differences in the *Roommate Efficacy* subscale were found between two variable groups. Traditional students between the ages of 18 and 24 reported higher levels of efficacy versus post-traditional students who were 25 years of age or over (p = .016). Students who self-identified as White Non-Hispanic reported higher levels of efficacy on the *Roommate Efficacy* subscale versus students who self-identified as Black Non-Hispanic, Asian, Hispanic, two or more races, or unknown (p = .028).

Sophomore attrition nationwide trends slightly less than that of freshmen; the cumulative loss of enrollment of both classes can be impactful for a public institution of higher education where state support is waning (Capik & Schupp, 2023; Tinto, 2012). Among the 208 respondents who completed the CSEI survey in this study, 22 sophomore students (10.6%) indicated they planned not to return to State University in the upcoming fall. It was hypothesized that participants in the study who intended to persist in higher education would report higher levels of self-efficacy on the CSEI compared to participants who did not intend to persist in higher education. The results yielded a connection, in part, between self-efficacy and persistence (Garza et al., 2014; Baier et al., 2016). This holds significance for retention efforts in higher education (Tito, 2012).

Future research should consider the boundaries of prior studies and, albeit a complex phenomenon to assess, explore the relationship between campus climate and the self-efficacy of college students. This is especially salient when considering

the marginalization of underrepresented groups on campus. The social efficacy of underrepresented groups in relation to academic performance may impact student persistence. For example, a Student of Color can experience the campus climate negatively on a predominantly White campus in the absence of social support (Tinto, 2012). A more in-depth study of social efficacy may help to understand the influence of the environment on overall self-efficacy. More specifically, not all students depart due to academic struggles (Tinto, 1987). Also, this study was not executed at an institution where formal sophomore programming exists. Therefore, the results of the study do not reflect the impact of such programming. Yet, there are many institutions in the United States, both public and private, where sophomore programming is available to the entire student population. It would be useful to analyze the impact of sophomore programming on the level of self-efficacy of sophomore college students (Tobolowsky, 2008).

LIMITATIONS

First, this study was executed at one site—a 4-year Public Master's College and University in the Midwest. Therefore, this study cannot be generalized to other public academic institutions, especially when considering different sizes and types of institutions. The timing of the collection of data is a limitation of this study. The results were limited to only one point in time. The proximity to final exams may have restricted participation as the sophomore students were approaching a heightened period of the semester. In conjunction with the timing of the study, more can possibly be gleaned from the collection of data in the fall of the sophomore year, which is closer in proximity to the transition to the second year of college. Another limitation was that no academic information was collected from the participants in the study. Academic information, such as cumulative grade point average, would be useful in understanding the relationship between college sophomore students' self-efficacy and academic performance.

Limitations of this study revealed implications for future research on the self-efficacy and persistence of college sophomores. For generalizability, it would be necessary to examine the self-efficacy of college students in a cross-sectional design at both public and private universities. Even further, it may be helpful to examine the self-efficacy of college sophomores at different institutions of similar size and type to understand the influence of the college environment. According to Schreiner and Tobolowsky (2018), little is known about the role of faculty in the student's second-year success, which warrants researchers including this in their studies.

IMPLICATIONS FOR PRACTICE

More than ever, the persistence of college students beyond the sophomore year is detrimental to the fiscal vitality of an institution in higher education. Even though

students may report intent to persist, many of those students may be struggling psychosocially and academically in the college environment. If those struggles continue, retention in future semesters may be compromised. Therefore, early efforts by colleges and universities to support the transition of college students beyond the freshmen year may be instrumental in combatting post-sophomore attrition, such as through formal transfer orientation programs. Kranzow and Foote (2018) maintained specialized sophomore programming can foster a sense of community and belonging that will serve as capital as students encounter challenges in the second year. There is also a great need for assessment of sophomore-year programming (Young, 2018) to determine program effectiveness and specific psychosocial gains. Transformation of the first-year seminar, academic-embedded seminars, and enhancement of institutional relations with advisors and faculty are initiatives institutions can launch to facilitate sophomore persistence.

Transformation of the First-Year Seminar

First-year seminars support the students' acquisition of necessary academic skills and resources for navigating the college environment. First-year seminars in higher education are no less important than their inception decades ago. However, academic course-imbedded versions fail to address many skills that form the foundation for later success in the academy. "Retooling existing initiatives" (Gahagan & Hunter, 2006, p. 19) can be instrumental in improving the experiences of sophomore students. This warrants a transformation of the curriculum in first-year seminars to prepare college students for upcoming transitions to the middle years and beyond. Preparing first-year students for solidifying life roles, applying to competitive academic programs, and establishing a new support network are just a few examples of content (Sterling, 2018).

In the last 2 decades, many institutions created seminars specifically for sophomore students. As an alternative to an additional undergraduate course requirement, institutions might embed sophomore transition programming into each academic discipline identified as "mastery-oriented instruction" (Bandura, 1997, p. 438). This type of transition programming can engage the college sophomore in the academic community. Schaller (2018) suggested that this type of seminar can engage students in community-based or service learning that connects to their major and enhances their purpose in life. Academic-embedded sophomore seminars help sophomore students develop a community, which Schreiner et al. (2012) and Schreiner (2018) maintained would foster a sense of membership and belonging and facilitate early interactions with faculty from the discipline, which is meaningful and impactful. Kranzow and Foote (2018) emphasized a focus on language used to communicate with sophomores and policies, practices, and traditions to foster connectivity.

Enhancement of the Academic Advising and Faculty Relationship

Advisors and faculty play a key role in sophomore students' academic and social support networks. Academic advisors are the central resource and point of orientation, characterized as a "critical leverage point" (p.42) by Young et al. (2015) in the absence of formal transfer programming. The development of rapport and trust early in the advising-advisee relationship immediately following the sophomore student's transition is necessary for the establishment of a sound support structure at the new institution (Blekic et al., 2020). A fragmented relationship with the academic advisor contributes to an unstable foundation from which to build one's academic career (Sterling, 2018). Faculty teaching style and engagement in the classroom influence students' mastery of course efficacy. Faculty must be equipped with knowledge about sophomores, provided opportunities to connect with them, and be incentivized to do so (Schreiner & Tobolowsky, 2018).

Conclusion

Social efficacy is as important as course efficacy to overall self-efficacy and college student persistence. The critical nature of the sophomore transition in relation to the identity development of traditional-aged college students is important to consider. Campus climate, level of connection, and student support may be contributing factors to sophomore attrition, especially among underrepresented groups who are often marginalized on campus, as revealed by student reports of efficacy in this study. Transfer sophomores are at high risk for departure, particularly those who are first-generation college students. Faculty, staff, and advisors play a crucial role in sophomore students' support network and are the front line for identifying students who may be at risk for attrition. Finally, the college environment heavily influences the self-efficacy of college sophomore students. Campus communities that celebrate and support all college sophomores, native and transfer, through effective programming have an opportunity to combat sophomore attrition and increase student persistence beyond the sophomore year.

References

Baier, S. T., Markman, B. S., & Pernice-Duca, F. M. (2016). Intent to persist in college freshmen: The role of self-efficacy and mentorship. *Journal of College Student Development*, *57*(5), 614–619. https://doi.org/10.1353/csd.2016.0056

Bandura, A. (1995). *Self-efficacy in changing societies*. Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W. H. Freeman and Company.

Baxter Magolda, M. B. (1992). *Knowing and reasoning in college: Gender-related patterns in students' intellectual development.* Jossey-Bass.

Baxter Magolda, M. B. (2007). Self-Authorship: The foundation for twenty-first-century education. *New Directions for Teaching and Learning, 109*, 69–83. https://doi.org/10.1002/tl.266

Baxter Magolda, M. B. (2009). *Authoring your life: Developing an internal voice to navigate life's challenges.* Stylus.

Baxter Magolda, M. B., Creamer, E.G., & Meszaros, P.S. (2010). *Development and assessment of self-authorship: Exploring the concept across cultures.* Stylus.

Blekic, M., Carpenter, R., & Cao, Y. (2020). Continuing and transfer students: Exploring retention and second-year success. *Journal of College Student Retention: Research, Theory & Practice*, *22*(1), 71–98. https://doi.org/10.1177/1521025117726048

Capik, D., & Shupp, M. (2023). Addressing the sophomore slump: First-generation college students' completion of year two of study in a rural bachelor's degree granting college. *Journal of College Student Retention: Research, Theory & Practice*, *25*(3), 632–656. https://doi.org/10.1177/15210251211014868

Chickering, A. W. (1969). *Education and identity.* Jossey-Bass.

DeWitz, S. J., Woolsey, M. L., & Walsh, W. B. (2009). College student retention: An exploration of the relationship between self-efficacy beliefs and purpose in life among college students. *Journal of College Student Development, 50*(1), 19–34. https://doi.org/10.1353/csd.0.0049

Edman, J. L., & Brazil, B. (2009). Perceptions of campus climate, academic efficacy and academic success among community college students: An ethnic comparison. *Social Psychology of Education: An International Journal, 12*(3), 371–383. https://doi.org/10.1007/s11218-008-9082-y

Elias, R. Z. (2008). Anti-intellectual attitudes and academic self-efficacy among business students. *Journal of Education for Business, 84*(2), 110–117. https://doi.org/10.3200/JOEB.84.2.110-117

Estepp, C. M., Shoulders, C. W., & Johnson, D. M. (2019). Predicting freshmen academic outcomes and sophomore retention in a college of agriculture. *NACTA Journal*, *64*, 466–475. https://www.jstor.org/stable/27157820

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs-principles and practices. *Health Services Research, 48*(6), 2134–2156. https://doi.org/10.1111/1475-6773.12117

Gahagan, J., & Hunter, M. S. (2006). The second-year experience: Turning attention to the academy's middle children. *About Campus, 11*(3), 17–22. https://doi.org/10.1002/abc.168

Garza, K. K., Bain, S. F., & Kupczynski, L. (2014). Resiliency, self-efficacy, and persistence of college seniors in higher education. *Research in Higher Education Journal*, *26*, 1–19. https://files.eric.ed.gov/fulltext/EJ1055323.pdf

Gore, P. A., Jr. (2006). Academic self-efficacy as a predictor of college outcomes: Two incremental validity studies. *Journal of Career Assessment, 14*(1), 92–115. https://doi.org/10.1177/106907270528136

Hsieh, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self-efficacy and goal orientation. *Journal of Advanced Academics, 18*(3), 454–476. https://doi.org/10.4219/jaa-2007-50

Hunter, M. S., Tobolowsky, B. F., Gardner, J. N., Evenbeck, S. E., Pattengale, J. A., Schaller, M., & Schreiner, L. A. (2010). *Helping sophomores succeed: Understanding and improving the second year experience*. Jossey-Bass. Kindle Edition.

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods, 18*(1), 3–20. https://doi.org/10.1177/1525822X052822

Kranzow, J., & Foote, S. M. (2018). Engaging sophomores through curricular and cocurricular initiatives. *New Directions for Higher Education, 2018*(183), 71–83. https://doi.org/10.1002/he.20294

National Center for the First-Year Experience and Students in Transition. (n.d.). *National Survey of Sophomore-Year Initiatives.* https://sc.edu/about/offices_and_divisions/national_resource_center/research/center_projects/center_surveys/nssyi/index.php

Perry, W. G. (1968). *Forms of intellectual and ethical development in the college years: A scheme.* Holt, Rinehart and Winston, Inc.

Perez, M. (2020). An examination of university sophomore students' thriving factors, second-year experiences, and student success outcomes. *Research Issues in Contemporary Education*, *5*(1). 1–24.

Provencher, A., & Kassel, R. (2019). High-impact practices and sophomore retention: Examining the effects of selection bias. *Journal of College Student Retention: Research, Theory & Practice*, *21*(2), 221–241. https://doi.org/10.1177/1521025117697728

Reason, R. D. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, *50*(6), 659–682. https://doi.org/10.1353/csd.0.0098

Sanchez-Leguelinel, C. (2008). Supporting "slumping" sophomores: Programmatic peer initiatives designed to enhance retention in the crucial second year of college. *College Student Journal, 42*(2), 637–646.

Schaller, M. A. (2005). Wandering and wondering: Traversing the uneven terrain of the second college year. *About Campus, 10*(3), 17–24. https://doi.org/10.1002/abc.131

Schaller, M. A. (2018). Intentional design of the college sophomore year. *New Directions for Higher Education, 183,* 23–34. https://doi.org/10.1002/he.20290

Schreiner, L. A. (2010). Factors that contribute to sophomore success and satisfaction. In M. Hunter, B. Tobolowsky, J. Gardner, S. Evenbeck, J. Pattengale, M. Schaller, & L.A. Schreiner (Eds.), *Helping Sophomores succeed: Understanding and improving the second year experience* (pp. 129–145). Jossey-Bass.

Schreiner, L. A. (2018). Thriving in the second year of college: Pathways to success. *New Directions for Higher Education*, *2018*(183), 9–21. https://doi.org/10.1002/he.20289

Schreiner, L. A., & Tobolowsky, B. F. (2018). The role of faculty in sophomore success. *New Directions for Higher Education, 183*, 59–70. https://doi.org/10.1002/he.20293

Schreiner, L. A., Miller, S. 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. 111–136)*.* National Resource Center for the First-Year Experience and Students in Transition.

Solberg, V. S., O'Brien, K., Villareal, P., Kennel, R., & Davis, B. (1993). Self-efficacy and Hispanic college students: Validation of the college self-efficacy instrument. *Hispanic Journal of Behavioral Sciences, 15*(1), 80–95. https://doi.org/10.1177/07399863930151004

Sterling, A. J. (2018). Student experiences in the second year: Advancing strategies for success beyond the first year of college. *Strategic Enrollment Management Quarterly*, *5*, 136–149. https://doi.org/10.1002/sem3.20113

Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition.* The University of Chicago Press.

Tinto, V. (2012). *Completing college: Rethinking institutional action.* University of Chicago Press. Kindle Edition.

Tobolowsky, B. F. (2008). Sophomore in transition: The forgotten year. *New Directions for Higher Education, 144*, 59–67. https://doi.org/10.1002/he.326

Vuong, M., Brown-Welty, S., & Tracz, S. (2010). The effects of self-efficacy on academic success of first-generation college sophomore students. *Journal of College Student Development, 51*(1), 50–64. https://doi.org/10.1353/csd.0.0109

Wang, Xu, & Kennedy-Phillips, L. (2013). Focusing on the sophomores: Characteristics associated with the academic and social involvement of second-year college students. *Journal of College Student Development, 54*(5), 541–548. https://doi.org/10.1353/csd.2013.0072

Watkins, D. C., & Gioia, D. (2015). *Mixed methods research.* Oxford University Press.

Young, D. G. (2018). Outcomes assessment and sophomore programs: How assessment as organizational learning can improve institutional integrity. *New Directions for Higher Education, 2018*(183), 47–57. https://doi.org/10.1002/he.20292

Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46*(6), 677–706. https://doi.org/10.1007/s11162-004-4139-z