## DIFFERENCES IN COLLEGE ENGAGEMENT OF STUDENTS AS A FUNCTION OF COMMUNITY COLLEGE HONORS COURSE STATUS: A NATIONWIDE STUDY

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by

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#### DEDICATION

First and foremost, I want to thank Asha for giving me the encouragement and support to accomplish this goal. I was ready to quit before I started when we found out two months before classes started that we were going to have a baby. Asha not only never let me quit, but made me go to the last night of class during my first semester, approximately 14 hours after our son Noah was born. I thank her for her unwavering support! This milestone is one that we achieved together, and it is as much Asha's as it is mine.

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#### ABSTRACT

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#### Purpose

The purpose of this journal-ready dissertation was to determine the extent to which differences were present in scholastic/faculty engagement activities, in academic/support service use, and in college benchmark scores between community college students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. Specifically addressed in the first purpose was the relationship of honors course enrollment with scholastic engagement activities and with faculty engagement activities. The second purpose was to determine the extent to which differences existed in student use of academic support services and student support services by honors course enrollment status. The third purpose of this study was to ascertain the degree to which differences were present in five college benchmark scores by the honors course enrollment status of community college students.

#### Method

A non-experimental, causal-comparative research design was used in this journalready dissertation. Data from the Community College Survey of Student Engagement (CCSSE) were analyzed. Archival data consisting of a 25% random sample of the 2014 three-year CCSSE cohort (2012 through 2014) were obtained from CCCSE. The sample included responses from 108,509 community college students who completed the CCSSE survey. Approximately 7,000 of these students indicated they had previously enrolled in an honors course at a community college.

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#### Findings

Statistically significant differences were revealed in scholastic/faculty engagement activities, in academic/support service use, and in college benchmark scores as a function of honors course enrollment. Students who had been enrolled in an honors course reported greater scholastic/faculty engagement, more use of academic/support services, and had higher college benchmark scores than their peers who not been enrolled in an honors course. Results of this journal-ready dissertation were commensurate with the conclusions of previous researchers who documented that students who had been enrolled in an honors course had higher levels of class participation and academic preparation, more opportunities to synthesize information, and expended more effort to meet instructor expectations than their peers who had not been enrolled in an honors course. Consistent with previous researchers, honors course enrollment was statistically significantly related to greater engagement for community college students.

**KEY WORDS:** Academic engagement, Community college, Community College Survey of Student Engagement (CCSSE), Faculty interaction, Group work, Honors students, Benchmarks

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#### **CHAPTER I**

#### INTRODUCTION/REVIEW OF THE LITERATURE

Community colleges are utilized by almost half of all undergraduate students (American Association of Community Colleges, 2016) to reach educational and career goals. Students enrolled in community colleges come from diverse backgrounds with respect to their demographic characteristics and in their degree of academic preparedness for postsecondary education (Bailey, 2009). Although the growth of community colleges has provided educational opportunities for a larger number of students, the focus of administrators has shifted from increasing student enrollment to developing institutional supports that increase success and retention rates of already enrolled students (Smith, Baldwin, & Schmidt, 2015). Gaining a greater understanding of effective methods of student engagement may benefit administrators in developing a college environment that maximizes opportunities for student success. The Community College Survey of Student Engagement (CCSSE) is a survey instrument that can be used by educators to gain insight into student perspectives on levels of engagement, involvement, and achievement.

Educators can develop more effective strategies when resources such as CCSSE are used to develop policies and practices. Specifically, value exists in understanding engagement differences among students of varying levels of academic preparedness. Although developmental courses are a common facet of community colleges, academically well prepared students are also enrolled in community colleges. Academically engaged students who seek more challenging coursework have the opportunity to enroll in honors courses at approximately half of all 2-year colleges (Beck, 2003). Within this journal-ready dissertation, the degree to which differences were present in student academic and faculty engagement, utilization of support services, and engagement benchmarks, between community college students who had been enrolled in an honors course and community college students who had not been enrolled in an honors course were examined.

#### **Review of the Literature on Student Engagement**

Postsecondary education is both a defining characteristic of the United States and vital to the economic prospects of many individuals (Brint & Karabel, 2014). Postsecondary education and training will be required for 65% of jobs in the United States by 2020, an increase from 28% in 1973 (Carnevale, Smith, & Strohl, 2013). Community colleges provide an opportunity for students who may not have other avenues available to build skills or receive academic remediation, such as first generation students and students from lower socio-economic backgrounds (Brint & Karabel, 2014). Upon degree or certificate completion, students enrolled in community colleges can obtain positions requiring specialized skills, including the healthcare and automotive fields (Dougherty, 2014). Earning prospects for students rise by 13% for males and 22% for females upon completion of an associate's degree (Belfield & Bailey, 2014). Even students who attend community colleges and do not obtain a credential increase their earning power by 9% for males and 10% for females (Belfield & Bailey, 2014).

When analyzing the characteristics of students who enroll in community college, the reasons students enroll in community colleges and the background of community college students need to be examined. Approximately 45% of undergraduate students enroll in community colleges in the United States to develop skills and knowledge (American Association of Community Colleges, 2016). The goals for which students enroll in community colleges include: (a) obtaining an associate's degree; (b) transferring to a university; or (c) completing a certificate program (Center for Community College Student Engagement [CCCSE], 2012).

Diversity is a hallmark of students enrolled in community colleges. The diversity is represented by both gender, with women comprising 57% of students, and by ethnicity/race, with 51% of students considering themselves ethnic/racial minorities (American Association of Community Colleges, 2016). Additionally, 36% of community college students are first-generation college students. Within this diverse environment, students who vary culturally and academically can benefit from effective institutional practices (Chickering & Gamson, 1987), although the level of benefit may vary based on gender and ethnicity (Sontam & Gabriel, 2012). Additionally, the manner in which institutional supports are promoted may influence student participation (Dudley, Liu, Hao, & Stallard, 2015).

Student engagement, an amalgamation of the institutional environment and student actions, is an area where faculty, staff, and administrators can support students as they strive to reach their goals (Astin, 1984; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Pace, 1984; Reeve, 2012; Skinner & Pitzer, 2012). Specifically, Astin (1984) noted that interactions between students and faculty and collaborative learning were beneficial to the educational achievements of students. Further, scholars (e.g., Astin, 1984, 1991; Chickering & Gamson, 1987; Pascarella, 2001; Pike, 2004) established that purposeful interactions with faculty and perceptions of a supportive and inclusive environment, are associated with satisfaction, persistence, and development for students. The CCSSE is comprised of questions related to student perspectives on collegiate engagement, involvement, and achievement. Insight into how students reflect on their learning and apply knowledge is captured through questions focused on active and collaborative learning (CCSSE, 2017b). An important element of achievement can be understood by reflecting on questions that elicit responses from students related to the amount of time and effort expended in completing academic tasks. Also, the quality and quantity of student interactions with faculty can provide an understanding of a student's academic achievement and persistence (CCSSE, 2017b). Overall, exploring responses from students can provide insight into student perceptions of the collegiate environment and institutional policies and practices.

According to Chickering and Gamson (1987), the hallmarks of learning are marked by student discussions, writing projects, drawing connections, and application of concepts. However, simply incorporating active learning activities into instruction may not be sufficient. Cooperative learning activities designed without individual responsibility, accountability, and group equity may be less successful than tasks completed individually by students (Borrego, Karlin, McNair, & Beddoes, 2013; Johnson, Johnson, & Smith, 1991). The individual weight factor method, a peer assessment of individual group members that is factored into grading, is a strategy that can lead to increased individual accountability and increased individual satisfaction (Gatfield, 1999; Gupta, 2004). Astin (1993) observed that active learning had a negative effect on retention, which he theorized may be the result of poorly designed activities rather than to active learning as an instructional technique. Overall, active learning techniques signaled an institutional commitment to students, which had an overall positive influence on student persistence levels (Braxton, Jones, Hirschy, & Hartley, 2008).

Hyun, Ediger, and Lee (2017) reported that students were more satisfied with their individual learning when they participated in active learning activities and with group learning when participating in cooperative tasks. Active and collaborative learning pedagogies have been used by faculty in a variety of disciplines and settings. Cooperative and collaborative learning benefited students in various disciplines including engineering (Prince, 2004), mathematics (Cavanagh, 2011), and an anatomy and physiology class in which the first language of students was not English (Termos, 2013). Engaging activities and cooperative tasks were also observed to be beneficial for undergraduate students from underrepresented populations with a higher risk of failure (Freeman et al., 2007). This result is consistent with Cejda and Hoover's (2010) observation that Hispanic students preferred working both actively and in small groups on projects rather than working individually.

Classroom engagement benefits students through the development of critical thinking skills (Garside, 1996) and an increased ability to retain information (Bransford, 1979; Lysne & Miller, 2017). Typically, a small group of students actively engage in classroom discussion (Howard, Short, & Clark, 1996), whereas the remainder of students do not participate due to factors, including: (a) gender; (b) age; (c) class size; (d) lack of preparation; (e) emotions, such as fear or lack of confidence (Howard, James, & Taylor, 2002); and (f) the authority of faculty (Howard & Baird, 2000). Weaver and Qi (2005) established that students who interacted with faculty members outside of the classroom

reported greater class participation, more confidence, and less fear of faculty criticism than students who had minimal out-of-class interactions with faculty.

The quantity and quality of interactions between students and faculty are influential in student success. Researchers (Anaya & Cole, 2001; Cole, 2011; Flowers, 2004; Kim, Chang, & Park, 2009; Komaraju, Musulkin, & Bhattacharya, 2010; Tovar, 2015) have examined the influence of interactions between faculty and students in areas including academic achievement, collegiate persistence, and cognitive effects. Increases in interactions between students and faculty can raise the motivation and engagement of students (Chickering & Gamson, 1987; Kuh & Hu, 2001; Tinto, 2012).

An increase in academic achievement, demonstrated through higher student GPAs, is positively influenced by the frequency of contact between students and faculty (Komarraju et al., 2010). For example, a positive linkage between frequency of contact and an increase in GPA has been documented for Black students (Anaya & Cole, 2001), Hispanic students (Tovar, 2015), and Asian American students (Kim et al., 2009). In addition, interactions where faculty provided support and encouragement (Cole, 2011), as well as occasions where students challenged faculty ideas (Kim et al., 2009), were connected to increases in student GPA. The benefits of faculty interactions extended to students enrolled in community colleges (Tovar, 2015).

Barnett (2011) and Crisp (2010) contended that college student persistence rates were positively influenced by increased interactions with faculty. Positive benefits of interactions with faculty outside the classroom has been established at both 4-year universities (DeAngelo, 2014) and at community colleges (Barnett, 2011). Although most interactions were deemed positive, an area where interactions were negative for persistence related to students receiving critical feedback from faculty (Chang, Cerna, Han, & Saenz, 2008).

Students at 4-year universities benefited cognitively from frequent interactions with faculty (Flowers, 2004; Kim & Lundberg, 2016). Positive influences on cognitive outcomes were also seen among community college students who had frequent interactions with faculty (Lundberg, 2014). When the quality, rather than the quantity of interactions were examined, Lundberg (2010) documented similiarly positive outcomes.

#### **Review of the Literature on Support Services Use**

The goals of community college leaders have shifted in the past decade from providing access to postsecondary education, to a focus on student retention and completion (Smith et al., 2015). Initiatives such as Completion by Design and Achieving the Dream were implemented with the goal of increasing student success rates (Brock, Mayer, & Rutschow, 2016). A method implemented to support student learners in programs, such as Achieving the Dream, was to provide students with out-of-classroom supports, such as tutoring and advising (Achieving the Dream, 2017). Outside-of-class support for learners can be implemented in various ways that further engage students in the learning process (CCCSE, 2012) and address personal, academic, career, and financial challenges and concerns.

Although more than one-third of community college students expressed a desire for additional academic support in one or more courses (Noel-Levitz, 2007), only 18% of students used such supplemental academic instruction (CCCSE, 2012). Services, such as tutoring provide peer and academic support, making the postsecondary transition easier for students (Kuh, Kinzie, Schuh, & Whitt, 2010). Wurtz (2015) suggested that the use of learning assistance centers should be required for some students because these academic resources are more influential in community college persistence and success than motivation and prior skill. These centers support enrolled students by providing free services, such as tutoring, assessment, advising, and counseling (Stern, 2001). Modalities such as study skill development, learning assessments, contextual learning strategies, and questioning and probing strategies are utilized for student learning (Arendale, 2010; MacDonald, 2004). Students may be referred by instructors, required to use services to meet course requirements, or seek out learning assistance on their own (Perin, 2010). Academic assistance may be provided by professional or peer tutors for specific courses or to build reading, writing, and mathematics skills in individual and group settings (Koski & Levin, 1998).

Leaders of learning assistance centers have focused on providing services to students while limited efforts have been devoted to assessing the influence of the services on student academic performance (Hendriksen, Yang, Love, & Hall, 2005). After controlling for prior-skill level and self-selection, Wurtz (2015) concluded that students who used the learning center at a community college in California were three times as likely to complete courses and two times as likely to enroll in the following term when compared to their peers who did not use the learning center. The Delta Project's (2009) examination of the return on investment for providing academic support demonstrated that institutional revenues exceeded service costs, in addition to increased student persistence. Beyond academic performance in individual courses, retention rates (Symonds, Lawson, & Robinson, 2007) and the level of student engagement with the learning center (Bhaird, Fitzmaurice, Fhloinn, & O'Sullivan, 2013) are important measures of the positive academic influence of learning centers.

Within learning assistance centers, specialized skill labs for subject areas such as writing and mathematics are available to learners (Mendez, 2006). Resources, including: (a) designated space; (b) specialized equipment; (c) technology resources; (d) tutor assistance; and (e) faculty instruction were important in skill labs (Jaafar, Toce, & Polnariev, 2016). Implementing new initiatives, utilizing technology, and an increased focus by faculty and administration at LaGuardia Community College, led to increases in student attendance at tutoring sessions, more mathematics remediation levels, and higher graduation rates (Jaafar et al., 2016). Interactions with tutors and instructors improved student writing and communication skills, although the extent to which student writing skills improved by utilizing writing centers, was difficult to determine (Jones, 2001).

Peer tutoring, a common service available to students in learning assistance centers, evolved from a method to transmit knowlede from teachers to tutors to tutees to a structured framework for peers who have greater mastery of material to transmit knowledge to less adept peers (Arendale, 2010; Topping, 1996). The role of tutors has further evolved from a linear transmission of knowledge from tutors to students to a web of learning between their peers who are not professional teachers. Tutorial roles are typically focused on a specific discpline in which tutors receive training, and tutors are expected to follow specific protocols and proceduress (Arendale, 2010; Topping, 1996).

The benefits of drop-in tutoring support on academic performance and retention can be difficult to ascertain. The academic performance of students who sought tutoring services lagged behind their peers who did not seek tutoring, which may have served as a motivation to seek assistance, rather than a result of seeking help (Walker & Dancy, 2007). Students who consistently participated in tutoring had better academic performance (Munley, Garvey, & McConnell, 2010) and increased persistence rates among cohorts from the first to second year (Cooper, 2010). Tutoring positively influenced the academic performance of students in specific courses including chemistry (Rath, Peterfreund, Bayliss, Runquist, & Simonis, 2012) and calculus (Fayowski & MacMillan, 2008). In addition to gains in pass rates, course completion, and grades, student persistence and self-direction also increased among students who participated in tutoring (Hendriksen et al., 2005).

Academic advisors provide students with information about academic requirements and resources (Suvedi, Ghimire, Millenbah, & Shrestha, 2015) and can serve as a positive support for student success (Bahr, 2008) and persistence (King, 1993). College administrators stated that academic advising centers and faculty advising training were two of the most crucial elements for improved retention rates (Habley, Valiga, McClanahan, & Burkum, 2010). Experiences and satisfaction with academic advising are directly related to college retention (Noel-Levitz, 2009). Advisors promoted persistence by helping students increase their commitment to their academic goals (Bailey & Alfonso, 2005). Advising activities related to assisting students develop a clear academic path were positive for student expressions of intent to return (Hatch & Garcia, 2017).

Although 80% of students enter community colleges with the objective of earning a bachelors degree, only 14% of the 720,000 students who first enrolled in college in Fall 2007 reached their goal within six years (Jenkins & Fink, 2016). A transfer advisor can help students understand how to maximize their time in community colleges, understand university options and choices, and develop a path to a bachelors degree. Transfer advising is a relatively new area of emphasis for community colleges, therefore few theories or models are available (Webb, Dantzler, & Hardy, 2015). In a study by Gard, Paton, and Gosselin (2012), students expressed discontent with the level of knowledge of academic advisors about universities, degree programs, and the most effective ways to prepare for transfer while enrolled in the community college. Students intending to complete Science, Technology, Engineering, and Mathematics (STEM) degrees after transfer were most satisfied when consulting with subject faculty and financial aid officers, in addition to transfer advisors (Packard & Jeffers, 2013). Transfer delays occurred when STEM students received incorrect or incomplete information from advisors (Packard, Gagnon, & Senas, 2012).

Scholastic challenges can be compounded by financial challenges for community college students. Community college students, who are often first-generation, racial/ethnic minority, or from low-income backgrounds (Cohen & Brawer, 2013) have minimal collegiate resources at home or in secondary schools (Perna, 2006; Vargas, 2004). Lack of reliable information can result in students not obtaining financial aid (Kantrowitz, 2011), misunderstanding college costs and sources of aid (Perna, 2008), and thus having to navigate another barrier to college enrollment (Avery & Kane, 2004). This lack of understanding was demonstrated in 42% of Pell Grant eligible community college students not completing the Free Application for Federal Student Aid during the 2007-2008 academic year (Kantrowitz, 2009). Financial aid counselors guide students through the financial aid process, help them understand the cost of college, and help them

develop money management strategies. which may influence students' decisions to stay in college (McKinney & Roberts, 2012).

In a 2010 survey, community college financial aid counselors described workloads of 1,000 students per counselor, resulting in an inability to provide the necessary support to students (McKinney & Roberts, 2012). Additionally, 90% of financial counselors stated that students had misconceptions about aid eligibility and that 87% of students needed assistance in completing financial aid paperwork. Institutional leaders can support collegiate financial aid offices by: (a) providing additional institutional resources, (b) hiring more counselors, and (c) increasing financial aid outreach efforts, which can result in more students receiving necessary monetary assistance and financial resources (College Board, 2010).

Academic performance and persistence at postsecondary institutions can be challenging for students who have children. Child care is an important element of support in reaching educational goals for many college students (Brooks, 2012). Approximately 53% of independent undergraduate students have dependent children (National Center for Education Statistics, 2013). Completion rates were lower for students who had less time for academic pursuits because of child care issues (Taniguchi & Kaufman, 2005). Among surveyed community college administrators, approximately 42% reported providing childcare services for students (Rankin, 2008). In addition to childcare, a parent resource center at Western Michigan University supported the continued enrollment of students by: (a) providing child care resources; (b) financial assistance; (c) parenting guidance; and (d) academic support (Nelson, 2007). Approximately 80% of surveyed community college academic officers recognized low-cost childcare as a barrier to student success (Rankin, 2008). The benefits of child care for student support and retention are weighed against yearly operational costs that averaged \$1.5 million dollars (Carter, 2016). In addition to cost, liability was another factor that led some institutions to stop providing childcare services (Rankin, 2008).

#### **Review of the Literature on College Engagement Benchmark Scores**

Benchmark scores have become a common data point reviewed and analyzed by college administrators. Levy and Ronco (2012) reported that the notion of benchmarking may have originated from the work of ancient Egyptian surveyors or cobblers taking measurements. Modern benchmarking provides organizations with information to measure institutional performance or completion of objectives. Data produced through benchmarking are used: (a) for reports to external local and state entities, (b) for accreditation agency reporting, and (c) to gauge internal performance (Bers, 2012). Ewell (2011) suggested that community colleges should harness reporting requirements and benchmarking to examine organizational performance and strengthen institutions.

A benchmark score can be used by colleges and universities to: (a) determine if a goal was attained, (b) set a baseline for improvement, or (c) compare performance with a peer institution or a group of institutions. Benchmarks are defined as, "quantitative standards or criteria by which something can be judged or measured" (Ewell, 2011, p. 35). CCSSE is one of several instruments with benchmarking tools developed for community colleges. The CCCSE developed the instrument to measure the frequency and success of community college initiatives that helped students reach their postsecondary educational goals (Nora, Crisp, & Matthews, 2011). According to

McClenney (2007), the survey is grounded in research findings from: (a) Pace (1984), regarding the experiences of students, (b) Astin's (1984) work on student involvement, (c) Chickering and Gamson's (1987) effective undergraduate practices, and (d) Kuh's (2001) focus on student engagement.

Institutional practices can be developed to encourage student success. Tinto (2012) focused on four elements present in CCSSE benchmarks that have institutional influence: (a) setting high expectations of students; (b) supporting students in the academic, social, and financial realms; (c) offering frequent and timely assessment and communication with students; and (d) providing students with opportunities for involvement. In a study of the five CCSSE benchmark scores, McClenney and Marti (2006) observed that student engagement had a moderate effect on GPA for students enrolled in Florida community colleges. When examining individual CCSSE benchmarks, McClenney and Marti (2006) reported small effects for the active and collaborative learning benchmark on course completion and associate degree attainment. A small effect on associate degree attainment was also observed for student effort and support learners' benchmarks. Greater levels of engagement had the most positive influence on the GPA of academically underprepared and Black students. When three independent studies were examined, active and collaborative learning, academic challenge, and student-faculty interaction benchmarks had the greatest influence on degree attainment (McClenney & Marti, 2006). Price and Tovar (2014) reported that active and collaborative learning and support for learners had predictive values for institutional graduation rates.

The resulting data can be used by institutions to improve teaching and learning (Marti, 2008). Since 2003, the survey has been administered in random sections of courses annually during the spring semester (McClenney, 2007). Upon completion of CCSSE administration by institutions, colleges receive data that can be used to compare: (a) full-time and part-time students; (b) individual institutional data with all participating institutions; (c) individual institutional data with institutions of a similar size; and (d) consortium data if a college is part of a consortia (Ewell, 2011).

Results of the CCSSE survey are used to generate five benchmarks. Scholarship related to benchmark score comparisons based on honors course enrollment status is limited. Ross and Roman (2009), in an analysis of honors and non-honors students at one Florida community college using CCSSE survey results, determined the presence of a higher degree of academic engagement in general courses. Conceptually related survey items examined by Ross and Roman (2009) were grouped together to develop benchmarks. Honors students indicated a greater degree of class participation and academic preparation, and they expended more effort than the students' perceived capability than non-honors students. Also, honors students indicated that honors courses emphasized more critical thinking including analysis, synthesis, and problem solving. Ross and Roman (2009) indicated lower levels of engagement for honors students compared to non-honors students regarding career plans, career goals, e-mail communication with faculty, discussion of grades or assignments with faculty, and solving numerical problems.

The first CCSSE assessment, the active and collaborative learning benchmark, can be used to understand academic participation (CCSSE, 2017d). For this benchmark,

students were asked to answer questions that described how often they participated in specific activities in the classroom including class discussions, presentations, and group work. Students answered questions about class related activities occurring outside of the classroom, including questions about: (a) group projects, (b) tutoring or teaching other students, and (c) participation in a community-based project. Discussion of readings or course information were also factored into the active and collaborative learning benchmark. This benchmark was developed using Chickering and Gamson's (1987) practices for student-to-student collaboration principles and active learning techniques.

The second benchmark, student effort, is calculated based on student responses to eight questions (CCSSE, 2017d). The questions include: (a) preparation of multiple drafts of a paper, (b) working on projects requiring synthesis of researched sources, (c) attending class unprepared, (d) personal reading, and (e) time spent preparing for classes. Other questions in this benchmark are related to the use of tutoring services, skill labs (e.g., writing, mathematics), and computer labs. This benchmark was developed using Chickering and Gamson's (1987) undergraduate principle regarding the importance of time-on-task, a quantification of student effort.

Academic challenge, the third benchmark, is calculated based on the responses to 10 questions that reflect the academic rigors experienced by students (CCSSE, 2017d). Five questions are focused on mental activities in courses, including: (a) conceptual analysis, (b) synthesis of information, (c) evaluation of data, (d) theoretical applications, and (e) development of new skills using current information. This benchmark was created based on Chickering and Gamson's (1987) principle of high-expectations, timeon-task guidelines, and active learning recommendations. Although students may initially express negative feelings about rigorous work, substantive learning that goes beyond rudimentary exercises resulted in students expressing positive feelings about learning (Payne, Kleine, Purcell, & Carter, 2005). Responses for questions about the quantity of course materials and written papers and time spent studying were included in the academic challenge score. Lastly, questions related to the level of challenge presented to students through exams and by instructors were included in the benchmark.

The fourth benchmark, student-faculty interaction, is a measure of connections between students and faculty (CCSSE, 2017d). The benchmark is calculated by examining student responses to six questions. Responses to three questions about the frequency of communication with faculty, including discussion of grades and assignments, use of e-mail for correspondence, and receiving written or verbal feedback on performance, were used to calculate the benchmark. The other three questions in this benchmark are related to discussions with faculty on a variety of topics including readings or class materials, career plans, and work on activities beyond coursework. The foundation for the development of this benchmark was Chickering and Gamson's (1987) assertion that increased faculty-student interactions led to increased motivation and engagement for students.

The fifth CCSSE benchmark, support for learners, consists of responses to seven questions related to the level of support perceived by students from their institution (CCSSE, 2017d). Questions are related to the level of support available to help students succeed, which include: (a) encouragement of interactions with a diverse student community; (b) support in managing non-academic responsibilities; (c) social support; and (d) financial support. Two additional questions related to the utilization of academic

advising and career counseling were also in this benchmark. This benchmark is derived from Chickering and Gamson's (1987) suggestion that the institutional environment has an important influence on the quality of a student's education.

#### **Statement of the Problem**

Students attending community colleges have a variety of opportunities to explore courses, engage in academically related tasks inside and outside the classroom, and interact with instructors and their peers. Community college leaders have opportunities to develop policies and programs that help students reach their academic goals and encourage student engagement (Kuh et al., 2007), but must postsecondary institutions choose the most influential initiatives because of limited resources (Alfred, Shults, Jacquette, & Strickland, 2009). An opportunity available to students at approximately half of all community colleges in the United States is the opportunity to enroll in honors courses (Beck, 2003).

Honors courses are generally designed by community colleges to promote increased engagement through small classes and a greater emphasis on classroom interactivity (Otero, Spurrier, & Lanier, 2011). Critics of honors courses have suggested these courses require higher instructional expenditures, while serving a small cadre of high achieving students (Galinova, 2005). Higher expenditures for instruction, however, have been observed to have a positive relationship to graduation rates (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006). College leaders must consider the role of honors courses in a setting where the mission of the institution and the complexity of the organization have expanded, but funding has become more limited (Alfred et al., 2009).

#### **Purpose of the Study**

The overall purpose of this journal-ready dissertation was to determine the extent to which differences were present in scholastic/faculty engagement activities, in academic/student support service use, and in college benchmark scores between community college students who had been enrolled in an honors course and community college students who had not been enrolled in an honors course. Specifically addressed in the first purpose was the relationship of honors course enrollment with scholastic engagement activities and with faculty engagement activities. The second purpose was to determine the extent to which differences existed in student use of academic support services and student support services by honors course enrollment status. The third purpose of this study was to ascertain the degree to which differences were present in five college benchmark scores by the honors course enrollment status of community college students.

#### Significance of the Studies

Data sets from community colleges are used in less than 10% of higher education research (McClenney & Marti, 2006). Within the subset of community college research, few published works are available specifically related to honors education in the community college setting (Achterberg, 2004; Holman & Banning, 2012). Research studies regarding honors in community colleges, specifically large scale studies, are both limited and have not occurred since the late 1990s (Achterberg, 2004; Holman & Banning, 2012; Outcalt, 1999). According to Achterberg (2004), research about honors programs in community colleges within individual institutions and across multiple institutions should be a high priority. The majority of honors related dissertations and publications have been qualitative (Holman & Banning, 2012). Quantitative or mixed methods methodologies were specifically recommended by Holman and Banning (2012) upon examination of honors related dissertations and publications. Studies of honors education could be used by community college leaders and administrators to inform policy decisions and resource allocation.

#### **Definition of Terms**

The terms below are defined to provide the reader with a thorough understanding of the concepts that were explored in this journal-ready dissertation.

#### **Academic Challenge Benchmark**

This benchmark score is calculated based on the responses to 10 questions from the CCSSE (2017b) that reflect the academic rigors experienced by students. (CCSSE, 2017d). Five questions are focused on mental activities in courses including: (a) conceptual analysis, (b) synthesis of information, (c) evaluation of data, (d) theoretical applications, and (e) development of new skills using current information. Responses for questions about the quantity of course materials and written papers and time spent studying were included in the academic challenge score. Lastly, questions related to the level of challenge presented to students through exams and by instructors were also included in the benchmark.

#### Active and Collaborative Learning Benchmark

Students were asked to answer questions for this benchmark in which they described how often they participated in specific activities in the classroom including class discussions, presentations, and group work (CCSSE, 2017d). Class related activities occurring outside of the classroom included group projects, tutoring or teaching other students, participation in a community-based project, and discussion of readings or course information were also factored into the calculation of the active and collaborative learning benchmark score.

#### **Active Learning**

Active learning is an instruction technique used by faculty to encourage students to participate in the learning process rather than act as passive observers (Prince, 2004). Generally, students are involved in learning through activities that require reflection, engagement, or application of theories and concepts. Rather than only providing information to students, instructors provide guidance on how to work with information with the goal of understanding and application.

#### **Collaborative Learning**

Collaborative learning is a method of instruction where students work in small groups to achieve a common objective with the support of a facilitator, usually a class instructor (Prince, 2004). This instructional practice can be used by faculty in a variety of disciplines to engage students (Johnson et al., 2007). Students work in teams and share expertise and knowledge through small group interactions and activities (Kirschner, 2001).

#### **Community College**

A community college is a not-for-profit postsecondary educational institution where students can earn an associate of arts, associate of science degree, or vocational certificate (Cohen & Brawer, 2013). Community colleges provide both comprehensive and technical education curricula. During the Fall 2014 semester, the United States had 1,108 community colleges with an enrollment of 4.5 million part-time and 2.8 million full-time students (American Association of Community Colleges, 2016).

#### **Community College Survey of Student Engagement (CCSSE)**

The CCSSE is a survey given to community college students across the United States, Canada, and other select countries. The 38 question survey consists of inquiries designed to gather information about student behaviors and institutional practices that lead to increased student learning and student retention (CCSSE, 2017a). The survey instrument, administered to more than 700,000 students in more than 550 community colleges in the United States and other locations, has been tested and validated under the auspices of a grant from the Lumina Foundation for Education (CCSSE, 2017d). Several benchmark scores and student engagement were both observed to have a positive relationship with outcomes being measured including terms enrolled and courses completed (CCSSE, 2017d).

#### **Honors Courses**

Honors courses are characterized by rigorous academic standards, lower instructor-to-student ratios, and interactive classroom activities (National Collegiate Honors Council, 2013; Otero et al., 2011). Students who participate in honors courses are expected to demonstrate high proficiency in areas including critical thinking, effective communication, ethical reasoning, quantitative analysis, critical reading, and creativity. Students at approximately half of all community colleges in the United States have the opportunity to enroll in honors courses (Beck, 2003).

#### **Standard Curriculum**

The standard curriculum is composed of courses meeting the prevailing academic standards of an institution and the threshold requirements for degree completion. Most students enrolled in community colleges enroll in standard courses. A list of courses and descriptions for the standard curriculum is customarily found in a course catalog published in hard copy or electronic form by the office of the registrar.

#### **Student Effort Benchmark**

The student effort benchmark is calculated based on student responses to eight questions (CCSSE, 2017d). The questions include preparation of multiple drafts of a paper, working on projects requiring synthesis of researched sources, attending class unprepared, personal reading, and time spent preparing for classes. Other questions in this benchmark are related to the utilization of tutoring, skill labs (e.g., writing, math), and computer labs.

#### **Student Engagement**

Student engagement is a combination of student actions and the institutional environment, for which college administrators have at least some influence (Kuh et al., 2007). Levels of engagement can be examined by considering the amount of time and effort students devote to academic, personal, and co-curricular activities, such as studying, interacting with faculty and classmates, and involvement in student organizations (Astin, 1984). First year experience courses, student life clubs and organizations, and undergraduate research are examples of ways in which engagement has been encouraged by institutions. Student-faculty interactions and collaborative learning are two specific types of engagement connected to learning and educational attainment (Astin, 1984).

#### **Student-Faculty Interaction Benchmark**

This measure of connections between students and faculty is calculated by examining student responses to six questions (CCSSE, 2017d). Responses to three questions focused on the frequency of communication with faculty, including discussion of grades and assignments, use of e-mail for correspondence, and receiving written or verbal feedback on performance, were used to calculate the benchmark. The other three questions used in this benchmark are related to discussions with faculty on a variety of topics, including reading class materials, developing career plans, and working on activities beyond coursework.

#### **Support for Learners Benchmark**

This benchmark score consists of seven questions related to the level of support perceived by students from their institution (CCSSE, 2017d). Questions are related to the level of support available to help students succeed, encouragement of interactions with a diverse student community, support in managing non-academic responsibilities, social support, and financial support. Two additional questions related to the use of academic advising and career counseling were also included in this benchmark.

#### **Theoretical Framework**

The theory of involvement is the theoretical framework that was used for this journal-ready dissertation (Astin, 1999). First year experience courses, orientation sessions, and student life are some of the strategies developed by administrators to increase student engagement and involvement on college campuses. Honors educators focus on developing curriculum and classroom environments that facilitate the intellectual and personal growth of students (Galinova, 2005). Students in honors courses have opportunities for engagement through limited class size and committed faculty (Treat & Bernard, 2012).

Astin (1999) defined involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). In the theory of involvement, Astin (1999) posited that students engaged in their environments learned and grew. Involvement in honors programs was described as being influential in increasing student retention and greater than average changes in student characteristics (Astin, 1999). Further, Astin (1999) stated that honors students, "…are more likely than other students to persist in college and aspire to graduate and professional degrees" (p. 525). Honors courses may increase community college student engagement, thus benefiting student retention, transfer, and graduation rates.

#### **Delimitations**

The three studies in this journal-ready dissertation were delimited to the responses of a 25% sample of students who participated in the 2014 CCSSE survey (CCSSE, 2017c). The 2014 cohort was a 25% random sample of responses from students who completed the CCSSE survey from the 2012 academic year to the 2014 academic year. The data that were analyzed in the three articles in this journal-ready dissertation were student academic engagement and faculty engagement, student use of academic services and student services, and student benchmark scores by honors course enrollment status. Data regarding 4-year institutions, private universities, and community colleges that did not participate in the CCSSE survey were not analyzed in this journal-ready dissertation.

## Limitations

In the three articles in this journal-ready dissertation, only quantitative selfreported data on student academic and faculty engagement, student use of academic services and student services, and student benchmark scores by honors course enrollment status were analyzed. A limitation is clearly present because the data that were analyzed herein were student self-reported data from students who attended a community college where the survey was administered. Self-report data may be less accurate in comparison to more objective measures such as achievement tests (Astin, 1993). Objective measures are typically costlier and require more time to collect data, whereas self-reported data are less costly, can be collected quickly and efficiently, and may be used to collect data on an array of topics from participants that would be difficult to gather through other methods. Self-reported survey data are believed to be trustworthy when collected through the use of validated instrumentation and administration (Gonyea, 2005). In the areas of student engagement and faculty engagement, use of academic and student services, and student benchmark scores, only quantitative data were used in their measurements.

#### Assumptions

A fundamental assumption in this journal-ready dissertation was that the student response sample data provided by CCCSE are accurate. This same assumption was made for the honors course enrollment status reported by students who completed the survey. The data that were obtained from CCCSE are believed to be relatively accurate, free of errors, and provide reliable and valid scores of community college student engagement. These beliefs are based on review of validation research of the CCSSE instrument (Marti, 2008).

## **Literature Review Search Procedures**

For the purpose of this journal-ready dissertation, the literature regarding student academic and faculty engagement, student use of academic services and student services, and student benchmark score scholarship were examined. Phrases that were used in the search for relevant literature were: *student engagement, faculty engagement, student services, academic services, and benchmarks*. Searches for peer reviewed articles limited to the past 10 years were conduct using EBSCO Discovery Services. In some instances, date ranges were expanded due to limited or irrelevant results.

Key word searches for "student engagement" yielded 83,834 results for the past 10 years. When the term "community college" was added, the number of results was reduced to 7,449. When the search was further narrowed by choosing the subject of community colleges, the results were reduced to 860. Further narrowing was completed by choosing the subjects of learner engagement yielding 92 articles, academic achievement yielding 72 articles, and active learning which yielded 27 articles. A key word search for "faculty engagement" yielded 3,369 peer reviewed articles for the past 10 years. Adding the term "community college" led to 674 results. Choosing the subject term community college faculty yielded 54 results, student engagement yielded 27 results, and community college students yielded 21 results.

A key word search for "student services" produced 31,241 results for peer reviewed journals published in the past 10 years. Adding the key word "community college" reduced the number of results to 6,289. Choosing subject terms community college students yielded 248 results, college environment yielded 120 results, college student attitudes yielded 96 results, and student engagement yielded 94 results. A search for key words "academic services" yielded 3,973 results which were narrowed to 640 when the key words "community college" were added. Choosing the subject term academic achievement yielded 48 results, students yielded 25 results, and success resulted in 13 results. Searching for the term benchmark yielded 771,938 results for peer reviewed articles for the past 10 years. Adding the key words "community college" reduced the number of results to 7,762. Choosing the subject term college students yielded 180 results, community college students yielded 137 results, educational accountability yielded 68 results, and educational outcomes yielded 67 results. Relevant articles were reviewed pertaining to community college students and academic engagement, academic and student service use, and engagement benchmarks.

#### **Organization of the Study**

This journal-ready dissertation is composed of three research articles. In the first journal-ready dissertation article, the research questions that were addressed were on scholastic engagement activities and faculty engagement activities and whether they differed between students who had been enrolled in an honors course and students who had not been enrolled in an honors course. In the second journal-ready dissertation article, the research questions that were addressed involved academic support service use and student support service use and whether differences were present between students who had been enrolled in an honors course and students who had not been enrolled in an honors course and students who had not been enrolled in an honors course. In the third journal-ready dissertation article, the research questions that were addressed were on the college engagement benchmark scores of students who had been enrolled in an honors course and students who had not been enrolled in an honors course. In the third journal-ready dissertation article, the research questions that were addressed were on the college engagement benchmark scores of students who had been enrolled in an honors course and students who had not been enrolled in an honors course.

Three different manuscripts were generated from the five chapters that encompass this journal-ready dissertation. In Chapter I, the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, theoretical framework, delimitations, limitations, assumptions, and outline of the journalready dissertation were presented. In Chapter II, the degree to which differences were present in engagement between students in community colleges who had been enrolled in an honors course and students who had not been enrolled in an honors course were discussed. In Chapter III, the extent to which differences were present in the use of support services between students in community colleges who had been enrolled in an honors course and students who had not been enrolled in an honors course was examined. In Chapter IV, the degree to which differences existed in college engagement benchmark scores between students who had been enrolled in an honors course and students who had not been enrolled in an honors course was addressed. Lastly, in Chapter V, the results of each of the three investigations conducted as part of this journal-ready dissertation were compiled and linked with the extant literature in the discipline. Additionally, the significance for community college policies and practices and recommendations for future research was discussed.

## **CHAPTER II**

# DIFFERENCES IN ACADEMIC ENGAGEMENT AS A FUNCTION OF HONORS COURSE ENROLLMENT FOR COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

This dissertation follows the style and format of Research in the Schools (RITS).

#### Abstract

In this investigation, the extent to which differences were present in scholastic and faculty engagement as a function of community college student honors course enrollment status was addressed using data from the Community College Survey of Student Engagement. Statistically significant differences were revealed for all 7 measures of scholastic engagement: classroom participation, making presentations, completion of multiple drafts, synthesis of information from various sources for course papers, class preparation, in-class group project participation, and out-of-class group project participation. Statistically significant differences were also revealed for 6 measures of faculty engagement: frequency of e-mail communication, discussion of assignments or grades, out-of-class discussions of course concepts, receiving prompt written or verbal feedback, effort required to meet instructor expectations, and collaboration on non-course activities. Students who had been enrolled in an honors course were more engaged scholastically and interacted more with faculty than students who had not been enrolled in an honors course.

**Keywords:** Academic engagement, class participation, community college, Community College Survey of Student Engagement (CCSSE), faculty interaction, group work, honors students

# DIFFERENCES IN ACADEMIC ENGAGEMENT AS A FUNCTION OF HONORS COURSE ENROLLMENT FOR COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

Postsecondary education is both a defining characteristic of the United States and vital to the economic prospects of many individuals (Brint & Karabel, 2014). Postsecondary education and training will be required for 65% of jobs in the United States by 2020, an increase from 28% in 1973 (Carnevale, Smith, & Strohl, 2013). Community colleges provide an opportunity for students who may not have other avenues available to build skills or receive academic remediation, such as first generation students and students from lower socio-economic backgrounds (Brint & Karabel, 2014). Upon degree or certificate completion, students enrolled in community colleges may obtain positions requiring specialized skills, including the healthcare and automotive fields (Dougherty, 2014). Earning prospects for students rise by 13% for males and 22% for females upon completion of an associate's degree (Belfield & Bailey, 2014). Students who attend community colleges and do not obtain a credential increase their earning power by 9% for males and 10% for females (Belfield & Bailey, 2014).

When analyzing the characteristics of students who enroll in community college, the background of community college students need to be examined, including reasons for enrollment. Approximately 45% of all undergraduate students enroll in community colleges in the United States to develop skills and gain knowledge (American Association of Community Colleges, 2016). The goals for which students enroll in community colleges include obtaining an associate's degree, transferring to a university, or completing a certificate program (Center for Community College Student Engagement [CCCSE], 2012).

Diversity is a hallmark of students enrolled in community colleges. The diversity is represented by both gender, with women comprising 57% of students, and by ethnicity/race, with 51% of students considering themselves ethnic/racial minorities (American Association of Community Colleges, 2016). Additionally, 36% of community college students are first-generation college students. Within this diverse environment, students who vary culturally and academically can benefit from effective institutional practices (Chickering & Gamson, 1987), although the level of benefit may vary based on gender and ethnicity/race (Sontam & Gabriel, 2012). Additionally, the manner in which institutional supports are promoted may influence student participation (Dudley, Liu, Hao, & Stallard, 2015).

Student engagement, an amalgamation of the institutional environment and student actions, is an area where faculty, staff, and administrators may support students as they strive to reach their goals (Astin, 1984; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Pace, 1984; Reeve, 2012; Skinner & Pitzer, 2012). Specifically, Astin (1984) noted that interactions between students and faculty and collaborative learning were beneficial to the educational achievements of students. Further, scholars (e.g., Astin, 1984, 1991; Chickering & Gamson, 1987; Pascarella, 2001; Pike, 2004) established that purposeful interactions with faculty and perceptions of a supportive and inclusive environment are associated with satisfaction, persistence, and development for students.

The Community College Survey of Student Engagement (CCSSE) is comprised of questions related to student perspectives on collegiate engagement, involvement, and achievement. Insight into how students reflect on their learning and apply knowledge are captured through questions focused on active and collaborative learning (CCSSE, 2017b). An important element of achievement can be understood by reflecting on questions that elicit responses from students related to the amount of time and effort expended in completing academic tasks. The quality and quantity of student interactions with faculty can also provide an understanding of students' academic achievement and persistence (CCSSE, 2017b). Overall, exploring responses from students can provide insight into student perceptions of the collegiate environment and institutional policies and practices.

According to Chickering and Gamson (1987), hallmarks of active learning are marked by student discussions, writing projects, drawing connections, and application of concepts. However, simply incorporating active learning activities into instruction may not be sufficient. Cooperative learning activities designed without individual responsibility, accountability, and group equity may be less successful than tasks completed individually by students (Borrego, Karlin, McNair, & Beddoes, 2013; Johnson, Johnson, & Smith, 1991). The individual weight factor method, a peer assessment of individual group members that is factored into grading, is a strategy that can lead to increased individual accountability and increased individual satisfaction (Gatfield, 1999; Gupta, 2004). Astin (1993) observed that active learning had a negative effect on retention, which he theorized may be the result of poorly designed activities rather than active learning as an instruction technique. Overall, active learning techniques signaled an institutional commitment to students and had an overall positive influence on student persistence levels (Braxton, Jones, Hirschy, & Hartley, 2008). Hyun, Ediger, and Lee (2017) reported that students felt more satisfied with their individual learning when they participated in active learning activities and with group learning when participating in cooperative tasks. Active and collaborative learning pedagogies have been used by faculty in a variety of disciplines and settings. Cooperative and collaborative learning benefited students in various disciplines including engineering (Prince, 2004), mathematics (Cavanagh, 2011), and an anatomy and physiology class in which the first language of students was not English (Termos, 2013). Engaging activities and cooperative tasks were also observed to be beneficial for undergraduate students from underrepresented populations with a higher risk of failure (Freeman et al., 2007). This result is consistent with Cejda and Hoover's (2010) observation that Hispanic students preferred working both actively and in small groups on projects rather than working individually.

Classroom engagement benefits students through the development of critical thinking skills (Garside, 1996) and an increased ability to retain information (Bransford, 1979; Lysne & Miller, 2017). Typically, a small group of students actively engage in classroom discussion (Howard, Short, & Clark, 1996), whereas the remainder of students do not participate due to factors including gender, age, class size, lack of preparation, emotions such as fear or lack of confidence (Howard et al., 2002), and the authority of faculty (Howard & Baird, 2000). Weaver and Qi (2005) established that students who interacted with faculty members outside of the classroom reported greater class participation, more confidence, and less fear of faculty criticism than students who had minimal interactions with faculty outside of the classroom.

The quantity and quality of interactions between students and faculty are influential in student success. Increases in interactions between students and faculty can raise the motivation and engagement of students (Chickering & Gamson, 1987; Kuh & Hu, 2001; Tinto, 2012). Researchers (Anaya & Cole, 2001; Cole, 2011; Flowers, 2004; Kim, Chang, & Park, 2009; Komarraju, Musulkin, & Bhattacharya, 2010; Tovar, 2015) have examined the influence of interactions between faculty and students in areas including academic achievement, collegiate persistence, and cognitive effects.

An increase in academic achievement, demonstrated through higher student GPAs, is positively influenced by the frequency of contact between students and faculty (Komarraju et al., 2010). For example, a positive linkage between frequency of contact and an increase in GPA was also demonstrated for Black students (Anaya & Cole, 2001), Hispanic students (Tovar, 2015), and Asian American students (Kim et al., 2009). Interactions where faculty provided support and encouragement (Cole, 2011), as well as occassions where students challenged faculty ideas (Kim et al., 2009), were also connected to increases in student GPA. The benefits of faculty interactions extended to students enrolled in community colleges (Tovar, 2015).

Barnett (2011) and Crisp (2010) contended that persistence rates of college students are positively influenced by increased interactions with faculty. The positive benefits of outside of classroom interactions with faculty has been established at both 4year universities (DeAngelo, 2014) and at community colleges (Barnett, 2011). Although the most interactions were deemed positive, an area where interactions were negative for persistence related to students receiving critical feedback from faculty (Chang, Cerna, Han, & Saenz, 2008). Students at 4-year universities benefited cognitively from frequent interactions with faculty (Flowers, 2004; Kim & Lundberg, 2016). Positive influences on cognitive outcomes were also seen among community college students who had frequent interactions with faculty (Lundberg, 2014). When the quality, rather than the quantity of interactions were examined, Lundberg (2010) documented similiarly positive outcomes.

## **Statement of the Problem**

Students attending community colleges have a variety of opportunities to explore courses, engage in academically related tasks inside and outside the classroom, and interact with instructors and their peers. Community college leaders have opportunities to develop policies and programs that help students reach their academic goals and encourage students engagement (Kuh et al., 2007), but leaders must choose the most most influential initiatives due to limited resources (Alfred, Shults, Jacquette, & Strickland, 2009). An opportunity available to students at approximately half of all community colleges in the United States is the opportunity to enroll in honors courses (Beck, 2003).

Honors courses are generally designed by community colleges to promote increased engagement through small classes and a greater emphasis on classroom interactivity (Otero, Spurrier, & Lanier, 2011). Critics of honors courses have stated that courses require higher instructional expenditures, while serving a small cadre of high achieving students (Galinova, 2005). Higher expenditures for instruction, however, have been observed to have a positive relationship to graduation rates (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006). College leaders must consider the role of honors courses in a setting where the mission of the institution and the complexity of the organization have expanded but funding has become more limited (Alfred et al., 2009).

#### **Purpose of the Study**

The purpose of this study was to determine the degree to which differences were present in scholastic engagement activities and in faculty engagement activities between students who had been enrolled in an honors course and students who had not been enrolled in an honors course. Specifically addressed were the relationship of honors course enrollment with in classroom participation, completion of class presentations, writing of multiple drafts of papers, engagement in course papers or projects, class preparation, participation in in-class projects, and participation in out-of-class projects by honors course enrollment status. Also examined were the relationship of honors course enrollment and student interactions with instructors including e-mail communication, discussion of assignments or grades, out-of-class discussions of courses or course readings, receiving prompt written or verbal feedback on performance, perceived effort to meet instructor expectations, and work on non-course activities by honors course enrollment status.

#### **Significance of the Study**

Data sets from community colleges are used in less than 10% of higher education research (McClenney & Marti, 2006). Within the subset of community college research, few published works exist specifically related to honors education in the community college setting (Achterberg, 2004; Holman & Banning, 2012). A large scale study of honors education has not been conducted since the late 1990s (Outcalt, 1999). According to Achterberg (2004), research investigations into honors courses and their effects in community colleges within individual institutions and across multiple institutions should be a high priority. Quantitative or mixed methods methodologies were specifically recommended by Holman and Banning (2012) upon examination of honors related dissertations and publications. Studies of honors education could be used by community college leaders and administrators to make policy decisions and allocate resources. Examination of the results of a large scale analysis of community colleges may be used for benchmarking the performance of individual colleges.

## **Research Questions**

In this empirical investigation, one overarching research question was addressed: What is the difference in scholastic engagement activities and in faculty engagement activities between students who had been enrolled in an honors course and students who had not been enrolled in an honors course? Specific sub-questions under this overarching research question were: (a) What is the difference in classroom participation by honors course enrollment status?; (b) What is the difference in completing class presentations by honors course enrollment status?; (c) What is the difference in writing multiple drafts of a paper by honors course enrollment status?; (d) What is the difference in synthesis of information from various sources for course papers or projects by honors course enrollment status?; (e) What is the difference in lack of class preparation by honors course enrollment status?; (f) What is the difference in participation in in-class group projects by honors course enrollment status?; (g) What is the difference in participation in out-of-class group projects by honors course enrollment status?; (h) What is the difference in e-mail communication with instructors by honors course enrollment status?; (i) What is the difference in discussion of assignments or grades with instructors by honors course enrollment status?; (j) What is the difference in out-of-class discussions of ideas from courses or course readings with instructors by honors course enrollment

status?; (k) What is the difference in receiving prompt written or verbal feedback on performance from instructors by honors course enrollment status?; (l) What is the difference in effort required beyond perceived capability to meet instructor expectations by honors course enrollment status?; and (m) What is the difference in collaboration on non-course activities with instructors by honors course enrollment status?

#### Method

#### **Research Design**

In this study, a non-experimental, causal-comparative research design was used (Creswell, 2013; Johnson & Christensen, 2012). The independent variable cannot be manipulated in this type of non-experimental causal comparative research. In this empirical investigation, the independent variable was the honors course enrollment status of students who participated in the CCSSE survey. Honor course enrollment status consisted of two groups of community college students: those students who had been enrolled in an honors course and those students who had not been enrolled in an honors course and those students who had not been enrolled in an honors course. As such, the independent variable in this archival data represented events that had already occurred (Johnson & Christensen, 2012). The dependent variables in this investigation were the scholastic engagement activities and faculty engagement activities of community college students who participated in the survey. Accordingly, both the independent variable and the dependent variables had already taken place.

#### **Participants and Instrumentation**

Archival data consisting of a 25% random sample of the 2014 three-year CCSSE cohort (2012 through 2014) were obtained from CCCSE. The sample included responses from 108,509 community college students who completed the CCSSE survey.

Approximately 7,000 of these students indicated they had previously enrolled in an honors course at a community college.

The cohort included students from 684 institutions located in 48 states, the District of Columbia, three Canadian provinces, Bermuda, Micronesia, and the Marshall Islands (CCSSE, 2017c). Institutional enrollment varied, with 296 community colleges with less than 4,500 credit students; 168 colleges with 4,500 to 7,999 credit students; 141 colleges with 8,000 to 14,999 credit students; and 79 colleges with 15,000 or more credit students. College settings also varied, with 147 institutions in urban settings, 149 institutions in suburban settings, and 395 institutions in rural settings (CCSSE, 2017a).

The survey instrument was comprised of 38 questions developed to ascertain student perceptions of the academic and nonacademic environment. From the instrument, data on 13 survey items was used in this article. A variety of question types were present and included Likert scales, ratings, and multiple choice questions. The instrument was determined to provide reliable scores between the first and second survey administrations and to provide valid scores in measuring community college student engagement (Marti, 2008). Included in these data were responses from students about class participation, interactions with classmates, and learning outside of the classroom which are classified as active and collaborative learning; academic preparation, time expended for learning, and use of student services which is classified as student effort; and communication between students and faculty regarding coursework, academic performance, and career plans which is classified as student faculty interaction (CCSSE, 2017d). Participants answered questions about class discussions, class presentations, multiple paper drafts, research and synthesis of information, lack of class preparation, in-class group work, and out-of-class group work. In addition, responses were collected from students about faculty engagement including e-mail correspondence, discussion of assignments or grades, outof-class discussions about course material, feedback on academic performance, instructor expectations, and interacted in non-course activities. Students responded to the 13 questions on a Likert scale with 4 choices: Very Often, Often, Sometimes, and Never. These responses were coded numerically so they could be analyzed statistically.

## Results

Data were analyzed to determine the extent to which differences were present in scholastic and faculty engagement as a function of student honors course enrollment status. Pearson chi-square statistics were calculated for participant responses to the 13 questions based on honors course enrollment status. Frequency data were present for the honors course enrollment variable and for the 13 survey items (i.e., Very Often, Often, Sometimes, and Never). As such, the Pearson chi-square procedure was an appropriate statistical procedure (Slate & Rojas-LeBouef, 2011). The available sample size was at least five per cell and respondents had checked one response per survey item; therefore, the assumptions were met for using the Pearson chi-square procedure. Results will now be discussed in order of the research questions.

#### **Research Question One**

The focus of the first question was on whether differences were present in classroom participation by honors course enrollment status. The Pearson chi-square procedure revealed the presence of a statistically significant difference in class participation by honors course enrollment status,  $\chi^2(3) = 518.84$ , p < .001. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). More than 41% of

students who had been enrolled in an honors course reported participating in class Very Often, compared to 29.7% of students who had not been enrolled in an honors course. The percentage of students who reported they Never participated in class was higher for the students who had not been enrolled in an honors course, 2.7%, than for students who had been enrolled in an honors course who reported that they Never participated in class, 1.6%. Frequencies and percentages for this analysis by student honors course enrollment status are presented in Table 2.1.

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Insert Table 2.1 about here

## **Research Question Two**

The second research question was n making classroom presentations by honors course enrollment status. A statistically significant difference was present in making class presentations by honors course enrollment status,  $\chi^2(3) = 968.66$ , p < .001. The effect size for this finding, Cramer's V, was small, .11 (Cohen, 1988). More than 18% of students who had been enrolled in an honors course reported making class presentations Very Often compared to only 10.5% of students who had not been enrolled in an honors course and who reported that they made presentations Very Often. Although almost 25% of students who had not been enrolled in an honors course Never made presentations, only 12.5% of students who had been enrolled in an honors course reported Never making presentations. Table 2.2 contains the descriptive statistics for this analysis. Insert Table 2.2 about here

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## **Research Question Three**

The third research question was on the preparation of two or more drafts of a paper or assignment by student honors course enrollment status. A statistically significant difference was present in preparing multiple drafts by honors course enrollment status,  $\chi^2(3) = 476.82$ , p < .001. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). In the preparation of multiple drafts of papers or assignments, 20% of students who had not been enrolled in an honors course and almost 30% of students who had been enrolled in an honors course responded Very Often to preparation of multiple drafts, while 20.1% of students who had not been enrolled in an honors course reported Never preparing multiple paper drafts. Frequencies and percentages by honors course enrollment status are presented in Table 2.3.

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Insert Table 2.3 about here

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## **Research Question Four**

The fourth research question was on the synthesis of information from various sources for course papers or projects by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 655.29$ , p < .001. The effect size for this finding, Cramer's V, was below small,

.09 (Cohen, 1988). More than 40% of students who had been enrolled in an honors course reported synthesizing information from various sources for papers and projects Very Often, whereas less than 28% of students who had not been enrolled in an honors course reported synthesizing information from various sources for papers and projects Very Often. Approximately 8% of students who had not been enrolled in an honors course reported Never synthesizing information from various sources for papers and projects. That statistic was almost twice as high as the percentage, 4%, of students who had been enrolled in an honors course and who reported Never synthesizing information from various sources for papers and projects. Table 2.4 contains the descriptive statistics for this analysis.

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Insert Table 2.4 about here

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## **Research Question Five**

The fifth research involved the lack of class preparation by student honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 112.34$ , p < .001. The effect size for this finding, Cramer's V, was below small, .04 (Cohen, 1988). Regarding a lack of class preparation, 4% of students who had not been enrolled in an honors course and 5.7% of students who had been enrolled in an honors course responded Very Often to lack of class preparation. At the other end of the spectrum, 31.3% of students who had not been enrolled in an honors course and 34.7% of students who had been enrolled in an honors course responded Very Often to lack of class preparation. Never for lack of class preparation. Frequencies and percentages by honors course enrollment status are presented in Table 2.5.

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Insert Table 2.5 about here

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## **Research Question Six**

The sixth research question was on in-class group project participation by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 279.44$ , p < .001. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). More than 22% of students who had been enrolled in an honors course reported Very Often for in-class group project participation, whereas 16% of students who had not been enrolled in an honors course reported Very Often for in-class group project participation. Approximately 7% of students who had been enrolled in an honors course and 11% of students who had not been enrolled in an honors course reported Never for in-class group project participation. Table 2.6 contains the descriptive statistics for this analysis.

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Insert Table 2.6 about here

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## **Research Question Seven**

The seventh research question was on out-of-class group project participation by student honors course enrollment status. A statistically significant difference was present for out-of-class group project participation by honors course enrollment status,  $\chi^2(3) =$ 

1038.83, p < .001. The effect size for this finding, Cramer's V, was small, .12 (Cohen, 1988). Approximately 15% of students who had been enrolled in an honors course reported Very Often for participation in out-of-class group projects. That statistic was more than twice as high as the percentage, 7%, of students who had not been enrolled in an honors course and who reported Very Often for participation in out-of-class group projects. Almost 22% of students who had been enrolled in an honors course and more than 36% of students who had not been enrolled in an honors course and more than 36% of students who had not been enrolled in an honors course and more course enrolled in an honors course reported Never for participation in out-of-class group projects. Frequencies and percentages by honors course enrollment status are presented in Table 2.7.

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Insert Table 2.7 about here

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## **Research Question Eight**

The eighth research question was on e-mail communication with instructors by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 601.49$ , p < .001. The effect size for this finding, Cramer's V, was below small, .09 (Cohen, 1988). Almost 46% of students who had been enrolled in an honors course reported Very Often for e-mail communication with instructors, whereas less than 33% of students who had not been enrolled in an honors course reported Very Often for e-mail communication with instructors. Approximately 6% of students who had not been enrolled in an honors course reported Never for e-mail communication with instructors. That statistic was almost twice as high as the percentage, 3%, of students who had been enrolled in an honors course and who reported Never for e-mail communication with instructors. Table 2.8 contains the descriptive statistics for this analysis.

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Insert Table 2.8 about here

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## **Research Question Nine**

The ninth research question involved discussion of assignments or grades with instructors by honors course enrollment status. The Pearson chi-square procedure revealed a statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 693.69$ , p < .001. The effect size for this finding, Cramer's V, was below small, .09 (Cohen, 1988). More than 30% of students who had been enrolled in an honors course reported discussions of assignments or grades with instructors Very Often, compared to approximately 19% of students who had not been enrolled in an honors course. The percentage of students who reported they Never participated in discussions of assignments or grades with instructors was higher for the students who had not been enrolled in an honors course who reported that they Never participated in discussions of assignments or grades with instructors, 5.1%. Frequencies and percentages for this analysis by student honors course enrollment status are presented in Table 2.9.

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Insert Table 2.9 about here

## **Research Question Ten**

The tenth research question was on whether differences were present in out-ofclass discussions of course concepts with instructors by student honors course enrollment status. A statistically significant difference was present for out-of-class discussions of course concepts with instructors by honors course enrollment status,  $\chi^2(3) = 1501.24$ , p <.001. The effect size for this finding, Cramer's V, was small, .15 (Cohen, 1988). Approximately 12% of students who had been enrolled in an honors course reported Very Often for participation in out-of-class discussions of course concepts with instructors. That statistic was more than twice as high as the percentage, 5%, of students who had not been enrolled in an honors course and who reported Very Often for participation in outof-class discussions of course concepts with instructors. Almost 46% of students who had not been enrolled in an honors course and more than 27% of students who had been enrolled in an honors course reported Never for participation in discussions of out-ofclass discussions of course concepts with instructors. Frequencies and percentages by honors course enrollment status are presented in Table 2.10.

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Insert Table 2.10 about here

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## **Research Question Eleven**

The eleventh research question was on receiving prompt written or verbal performance feedback from instructors by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 374.29$ , p < .001. The effect size for this finding, Cramer's V,

was below small, .07 (Cohen, 1988). More than 28% of students who had been enrolled in an honors course reported receiving prompt written or verbal performance feedback from instructors Very Often, whereas 19% of students who had not been enrolled in an honors course reported receiving prompt written or verbal performance feedback from instructors Very Often. Approximately 4% of students who had been enrolled in an honors course and 7% of students who had not been enrolled in an honors course and 7% of students who had not been enrolled in an honors course reported Never receiving prompt written or verbal performance feedback from instructors. Table 2.11 contains the descriptive statistics for this analysis.

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Insert Table 2.11 about here

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#### **Research Question Twelve**

The twelfth research question involved effort required beyond perceived capability to meet instructor expectations by honors course enrollment status. The Pearson chi-square procedure revealed a statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 575.29$ , p < .001. The effect size for this finding, Cramer's V, was below small, .09 (Cohen, 1988). Approximately 28% of students who had enrolled in an honors course reported that effort was required beyond perceived capability to meet instructor expectations Very Often, compared to approximately 17% of students who had not enrolled in an honors course. More than 7% of students who had been enrolled in an honors course and 9% of students who had not been enrolled in an honors course reported that effort was below that not perceived capability to meet instructor expectations. Frequencies and percentages for this analysis by student honors course enrollment status are presented in Table 2.12.

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Insert Table 2.12 about here

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## **Research Question Thirteen**

The thirteenth question was on collaboration on non-course activities with instructors by student honors course enrollment status. A statistically significant difference was present for collaboration on non-course activities with instructors by honors course enrollment status,  $\chi^2(3) = 1701.69$ , p < .001. The effect size for this finding, Cramer's V, was small, .15 (Cohen, 1988). More than 8% of students who had been enrolled in an honors course reported collaboration on non-course activities with instructors Very Often. That statistic was more than twice as high as the percentage, 2.7%, of students who had not been enrolled in an honors course activities with instructors. Almost 47% of students who had not been enrolled in an honors course activities with instructors. Almost 47% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and more than 68% of students who had not been enrolled in an honors course and percentages by honors course enrollment status are presented in Table 2.13.

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Insert Table 2.13 about here

## Discussion

In this investigation, the degree to which differences were present in scholastic engagement and faculty engagement between students who had been enrolled in an honors course and students who had not been enrolled in an honors course was addressed using national data from more than 108,000 students who completed the CCSSE survey. Inferential statistical analyses yielded statistically significant differences between the two groups for all seven survey items related to scholastic engagement and for all six survey items related to faculty engagement. Students who had been enrolled in an honors course reported higher levels of scholastic engagement (i.e., greater class participation, delivering more presentations, greater opportunities to work on group projects, and more often being prepared for class) than their peers who had not been enrolled in an honors course. Engagement with faculty (i.e., effort required to meet instructor expectations, collaboration on non-course activities, communication with faculty via e-mail, in-class and out-of-class discussions, and through written and verbal feedback) were also greater for students who had been enrolled in an honors course than for their peers who had not been enrolled in an honors course.

## **Connections with Existing Literature**

In the CCSSE survey, students who had been enrolled in an honors course reported being more academically engaged through classroom participation, presentations, synthesis of information, and participation in group projects than their peers who had not been enrolled in an honors course. According to Hyun et al. (2017), active learning and group learning activities increased the satisfaction students felt about their individual learning. Price and Tovar (2014) concluded that active and collaborative learning also had predictive values for institutional graduation rates. Engaging activities and cooperative learning were also demonstrated to be beneficial for students from underrepresented populations (Freeman et al., 2007). Educational techniques that engage students from diverse backgrounds are an important consideration in community college settings where many first generation college students and students from lower socioeconomic backgrounds choose to enroll (Brint & Karabel, 2014).

The results from this examination were consistent with Ross and Roman (2009) who documented the presence of greater engagement among students who had been enrolled in an honors course when compared to students who had not been enrolled in an honors course. Similar to the results of this study, Ross and Roman (2009) established that students who had been enrolled in an honors course reported higher levels of class participation, academic preparation, synthesis of information, and expending more effort to meet instructor expectations than students who had not been enrolled in an honors course. Some results differed between the two investigations. Contrary to this inquiry, however, Ross and Roman (2009) observed that students who had not been enrolled in an honors course reported higher levels of engagement with faculty including e-mail communication, discussion of grades or assignments, and out-of-class discussions than their peers who had been enrolled in an honors course.

## **Implications for Policy and for Practice**

Based upon the results of this empirical investigation, several implications for policy and for practice can be made. First, students who had been enrolled in an honors course reported greater scholastic engagement than students who had not been enrolled in an honors course. Active and collaborative learning, the development of critical thinking skills, and rigorous academic standards are common in honors courses (National Collegiate Honors Council, 2013; Otero et al., 2011). Many students enrolled in community colleges may benefit intellectually and personally from classes where strategies and characteristics of honors courses are adopted.

Second, students who had been enrolled in an honors course reported greater faculty engagement than students who had not been enrolled in an honors course. Smaller class sizes are a distinguishing factor of honors courses (National Collegiate Honors Council, 2013; Otero et al., 2011) and may contribute to greater classroom engagement, participation, and comfort with faculty and the collegiate environment (Howard & Baird, 2000; Howard et al., 2002; Howard et al., 1996). Educational leaders and policymakers have an opportunity through resource allocation and policy prioritization to replicate the honors course model by making small class sizes, active and collaborative learning, and increased faculty collaboration and communication a common facet of every student's community colleges experience.

#### **Recommendations for Future Research**

Based upon the findings of this study, several recommendations for future research can be suggested. First, opportunities exist for further investigation as researchers have only focused on community college honors programs in a small number of published studies (Achterberg, 2004; Holman & Banning, 2012). Specifically, it is important to complete more empirical investigations, as few quantitative studies of honors courses in community colleges have been published.

Second, researchers are encouraged to use more current data to replicate this quantitative study. A third opportunity for researchers is to use data from the National

Survey of Student Engagement to extend this investigation to 4-year university students. Fourth, an analysis of the student support service use between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course is recommended.

Fifth, an examination of benchmark scores derived from CCSSE data can provide researchers with insight into the extent to which differences might exist between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. Sixth, research on the effectiveness of community college programs or initiatives where a deliberate attempt has been made to simulate the honors course environment through small class sizes, active and collaborative learning, and undergraduate research is also recommended. Lastly, future research is encouraged regarding the demographic and scholastic background of academically prepared students who enroll in an honors course or join honors programs in community colleges. Such research investigations might provide insight into why well prepared students choose to attend community colleges rather than universities.

### Conclusion

In this nationwide investigation, the extent to which differences were present in scholastic engagement and faculty engagement between students who had been enrolled in an honors course and students who had not been enrolled in an honors course was examined. Statistically significant differences were revealed in scholastic engagement and faculty engagement activities between students who had enrolled in an honors course and students who had not enrolled in an honors course. Students who had been enrolled in an honors course were more engaged scholastically and interacted more with faculty

than students who had not been enrolled in an honors course. Community college leaders and policymakers may examine ways in which strategies used in honors courses can be applied generally to all courses.

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Frequencies and Percentages of Classroom Participation by Honors Course Enrollment Status

| Classroom Participation | Enrolled                  | Not Enrolled               |
|-------------------------|---------------------------|----------------------------|
| Very Often              | ( <i>n</i> = 2,776) 41.3% | ( <i>n</i> = 21,519) 29.7% |
| Often                   | ( <i>n</i> = 2,375) 35.3% | ( <i>n</i> = 25,356) 35.0% |
| Sometimes               | ( <i>n</i> = 1,470) 21.9% | ( <i>n</i> = 23,590) 32.6% |
| Never                   | ( <i>n</i> = 106) 1.6%    | ( <i>n</i> = 1,920) 2.7%   |

Frequencies and Percentages of Classroom Presentations by Honors Course Enrollment Status

| Classroom Presentation | Enrolled                   | Not Enrolled               |
|------------------------|----------------------------|----------------------------|
| Very Often             | ( <i>n</i> = 1,215) 18.1%  | ( <i>n</i> = 7,059) 9.8%   |
| Often                  | ( <i>n</i> = 2,082) 31.0%  | ( <i>n</i> = 16,621) 23.0% |
| Sometimes              | ( <i>n</i> = 2, 582) 38.4% | ( <i>n</i> = 30,929) 42.8% |
| Never                  | ( <i>n</i> = 838) 12.5%    | ( <i>n</i> = 17,577) 24.3% |

| Preparation of Multiple Drafts | Enrolled                  | Not Enrolled               |
|--------------------------------|---------------------------|----------------------------|
| Very Often                     | ( <i>n</i> = 1,992) 29.9% | ( <i>n</i> = 14,376) 20.0% |
| Often                          | ( <i>n</i> = 2,073) 31.1% | ( <i>n</i> = 21,301) 29.6% |
| Sometimes                      | ( <i>n</i> = 1,723) 25.8% | ( <i>n</i> = 21,792) 30.3% |
| Never                          | ( <i>n</i> = 884) 13.2%   | ( <i>n</i> = 14,444) 20.1% |

Frequencies and Percentages of Multiple Paper Draft Preparation by Honors Course Enrollment Status

Frequencies and Percentages of Synthesis of Information for Course Papers or Projects by Honors Course Enrollment Status

| Synthesis of Information | Enrolled                  | Not Enrolled               |
|--------------------------|---------------------------|----------------------------|
| Very Often               | ( <i>n</i> = 2,723) 40.7% | ( <i>n</i> = 19,859) 27.6% |
| Often                    | ( <i>n</i> = 2,503) 37.4% | ( <i>n</i> = 27,677) 38.4% |
| Sometimes                | ( <i>n</i> = 1,172) 17.5% | ( <i>n</i> = 18,629) 25.9% |
| Never                    | ( <i>n</i> = 287) 4.3%    | ( <i>n</i> = 5,859) 8.1%   |

| Lack of Class Preparation | Enrolled                  | Not Enrolled               |
|---------------------------|---------------------------|----------------------------|
| Very Often                | ( <i>n</i> = 380) 5.7%    | ( <i>n</i> = 2,871) 4.0%   |
| Often                     | ( <i>n</i> = 721) 10.8%   | ( <i>n</i> = 7,085) 9.9%   |
| Sometimes                 | ( <i>n</i> = 3,249) 48.8% | ( <i>n</i> = 39,412) 54.8% |
| Never                     | ( <i>n</i> = 2,311) 34.7% | ( <i>n</i> = 22,490) 31.3% |

Frequencies and Percentages of Lack of Class Preparation by Honors Course Enrollment Status

| Frequencies and Percentages of In-Class Group Project Participation by Honors Course |
|--|
| Enrollment Status  |

| Enrolled                  | Not Enrolled  |
|---------------------------|---|
| ( <i>n</i> = 1,475) 22.2% | ( <i>n</i> = 11,527) 16.1%                                  |
| ( <i>n</i> = 2,456) 37.0% | ( <i>n</i> = 24,654) 34.4%                                  |
| ( <i>n</i> = 2,273) 34.2% | ( <i>n</i> = 27,938) 38.9%                                  |
| ( <i>n</i> = 440) 6.6%    | ( <i>n</i> = 7,616) 10.6%                                   |
|                           | (n = 1,475) 22.2%<br>(n = 2,456) 37.0%<br>(n = 2,273) 34.2% |

| Frequencies and Percentages of Out-of-Class Group Project Participation by Honors |
|---|
| Course Enrollment Status  |

| Out-of-Class Project Participation | Enrolled                  | Not Enrolled               |
|------------------------------------|---------------------------|----------------------------|
| Very Often                         | ( <i>n</i> = 993) 14.9%   | (n = 5,258) 7.3%           |
| Often                              | ( <i>n</i> = 1,672) 25.1% | ( <i>n</i> = 12,196) 17.0% |
| Sometimes                          | ( <i>n</i> = 2,565) 38.5% | ( <i>n</i> = 28,499) 39.6% |
| Never                              | ( <i>n</i> = 1,440) 21.6% | ( <i>n</i> = 25,965) 36.1% |

| Enrolled                  | Not Enrolled  |
|---------------------------|---|
| ( <i>n</i> = 3,048) 45.6% | ( <i>n</i> = 23,351) 32.5%                                  |
| ( <i>n</i> = 2,134) 32.0% | ( <i>n</i> = 23,604) 32.8%                                  |
| ( <i>n</i> = 1,299) 19.5% | ( <i>n</i> = 20,566) 28.6%                                  |
| ( <i>n</i> = 197) 2.9%    | ( <i>n</i> = 4,345) 6.0%                                    |
|                           | (n = 3,048) 45.6%<br>(n = 2,134) 32.0%<br>(n = 1,299) 19.5% |

Frequencies and Percentages of E-Mail Communication with Instructors by Honors Course Enrollment Status

Frequencies and Percentages of Discussion of Assignments or Grades with Instructors by Honors Course Enrollment Status

| Discussion of Assignments or<br>Grades with Instructors | Enrolled                  | Not Enrolled               |
|---|---------------------------|----------------------------|
| Very Often  | ( <i>n</i> = 2,030) 30.3% | ( <i>n</i> = 13,634) 18.9% |
| Often   | ( <i>n</i> = 2,299) 34.4% | ( <i>n</i> = 22,412) 31.1% |
| Sometimes   | ( <i>n</i> = 2,018) 30.2% | ( <i>n</i> = 29,950) 41.6% |
| Never   | ( <i>n</i> = 343) 5.1%    | ( <i>n</i> = 5,970) 8.3%   |

Frequencies and Percentages of Out-of-Class Discussions of Course Concepts with Instructors by Honors Course Enrollment Status

| Out-of-Class Discussions with<br>Instructors | Enrolled                  | Not Enrolled               |
|--|---------------------------|----------------------------|
| Very Often                                   | ( <i>n</i> = 793) 11.9%   | ( <i>n</i> = 3,455) 4.8%   |
| Often  | ( <i>n</i> = 1,437) 21.6% | ( <i>n</i> = 8,409) 11.7%  |
| Sometimes                                    | ( <i>n</i> = 2,590) 38.9% | ( <i>n</i> = 26,958) 37.5% |
| Never  | ( <i>n</i> = 1,841) 27.6% | ( <i>n</i> = 32,977) 45.9% |

# Frequencies and Percentages of Receiving Prompt Written or Verbal Performance Feedback from Instructors by Honors Course Enrollment Status

| Prompt Performance Feedback<br>from Instructors | Enrolled                  | Not Enrolled               |
|---|---------------------------|----------------------------|
| Very Often                                      | ( <i>n</i> = 1,883) 28.2% | ( <i>n</i> = 13,966) 19.4% |
| Often   | ( <i>n</i> = 2,685) 40.2% | ( <i>n</i> = 28,597) 39.8% |
| Sometimes                                       | ( <i>n</i> = 1,827) 27.3% | ( <i>n</i> = 24,359) 33.9% |
| Never   | ( <i>n</i> = 286) 4.3%    | ( <i>n</i> = 4,968) 6.9%   |

Frequencies and Percentages of Effort Required Beyond Perceived Capability to Meet Instructor Expectations by Honors Course Enrollment Status

| Effort Required Beyond Perceived<br>Capability to Meet Expectations | Enrolled                  | Not Enrolled               |
|---|---------------------------|----------------------------|
| Very Often  | ( <i>n</i> = 1,842) 27.6% | ( <i>n</i> = 12,348) 17.2% |
| Often   | ( <i>n</i> = 2,505) 37.5% | ( <i>n</i> = 25,587) 35.6% |
| Sometimes   | ( <i>n</i> = 1,846) 27.6% | ( <i>n</i> = 27,250) 37.9% |
| Never   | ( <i>n</i> = 486) 7.3%    | ( <i>n</i> = 6,726) 9.4%   |

Frequencies and Percentages of Collaboration on Non-Course Activities with Instructors by Honors Course Enrollment Status

| Engagement in Non-Course<br>Activities with Instructors | Enrolled                  | Not Enrolled               |
|---|---------------------------|----------------------------|
| Very Often  | ( <i>n</i> = 559) 8.4%    | ( <i>n</i> = 1,923) 2.7%   |
| Often   | ( <i>n</i> = 966) 14.6%   | ( <i>n</i> = 4,948) 6.9%   |
| Sometimes   | ( <i>n</i> = 2,014) 30.4% | ( <i>n</i> = 15,839) 22.2% |
| Never   | ( <i>n</i> = 3,084) 46.6% | ( <i>n</i> = 48,650) 68.2% |

# **CHAPTER III**

# DIFFERENCES IN SUPPORT SERVICES USE AS A FUNCTION OF HONORS COURSE ENROLLMENT FOR COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

This dissertation follows the style and format of Research in the Schools (RITS).

#### Abstract

In this investigation, the extent to which differences were present in academic support service use and student support services use between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course was investigated using data from the Community College Survey of Student Engagement. Statistically significant differences were revealed in the utilization of 4 measures of academic support service use (i.e., greater utilization of tutoring services, skill labscomputer labs, and acdemic advising). Statistically significant differences were also present between the two groups for 5 measures of student support service utilization (i.e., career counseling, job placement assistance, child care, financial aid advising, and transfer credit advising). Students who had been enrolled in an honors course used academic support services and student support services more often than their peers who had not been enrolled in an honors course.

**Keywords:** Academic support, advising, community college, Community College Survey of Student Engagement (CCSSE), financial aid, honors students, student services, support services, tutoring

# DIFFERENCES IN SUPPORT SERVICES USE AS A FUNCTION OF HONORS COURSE ENROLLMENT FOR COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

The goals of community college leaders have shifted in the past decade from providing access to postsecondary education to a focus on student retention and completion (Smith, Baldwin, & Schmidt, 2015). Initiatives such as Completion by Design and Achieving the Dream were implemented with the goal of increasing student success rates (Brock, Mayer, & Rutschow, 2016). A method implemented to support student learners in programs, such as Achieving the Dream, was to provide students with out-of-classroom supports such as tutoring and advising (Achieving the Dream, 2017). Outside-of-class support for learners can be implemented in various ways that further engage students in the learning process (Center for Community College Student Engagement [CCCSE], 2012) and address personal, academic, career, and financial challenges and concerns.

Although more than one-third of community college students expressed a desire for additional academic support in one or more courses (Noel-Levitz, 2007), only 18% of students used such supplemental academic instruction (CCCSE, 2012). Services, such as tutoring provide peer and academic support, making the postsecondary transition easier for students (Kuh, Kinzie, Schuh, & Whitt, 2010). Wurtz (2015) suggested that the use of learning assistance centers should be required for some students because learning assistance centers are more influential in community college persistence and success than motivation and prior skill. These centers support enrolled students by providing services such as tutoring, assessment, advising, and counseling (Stern, 2001). Modalities such as study skill development, learning assessments, contextual learning strategies, and questioning and probing strategies are used to enhance student learning (Arendale, 2010; MacDonald, 2004). Students may be referred by instructors, required to use services to meet course requirements, or seek out learning assistance on their own (Perin, 2010). Academic assistance may be provided by professional or peer tutors for specific courses or to build reading, writing, and mathematics skills in individual and group settings (Koski & Levin, 1998).

Leaders of learning assistance centers have focused on providing services to students while limited efforts have been devoted to assessing the influence of the services on student academic performance (Hendriksen, Yang, Love, & Hall, 2005). After controlling for prior-skill level and self-selection, Wurtz (2015) concluded that students who used the learning center at a community college in California were three times as likely to complete courses and two times as likely to enroll in the following term. The Delta Project's (2009) examination of the return on investment for providing academic support demonstrated that institutional revenues exceeded service costs, in addition to increased student persistence. Beyond academic performance in individual courses, retention rates (Symonds, Lawson, & Robinson, 2007) and level of student engagement with the learning center (Bhaird, Fitzmaurice, Fhloinn, & O'Sullivan, 2013) are important measures of the influence of learning centers.

Within learning assistance centers, specialized tutoring for subject areas, such as writing and mathematics, is available to learners (Mendez, 2006). Resources including designated space, specialized equipment, technology resources, and tutors and faculty instruction are important in learning assistance centers (Jaafar, Toce, & Polnariev, 2016).

Implementing new initiatives, utilizing technology, and and increased focus by faculty and administration at LaGuardia Community College, led to increases in student attendance at tutoring sessions, more mathematics remediation levels, and higher graduation rates (Jaafar et al., 2016). Interactions with tutors and instructors improved student writing and communication skills, although the extent to which student writing skills improved by utilizing writing centers was difficult to determine (Jones, 2001).

Peer tutoring, a common service available to students in learning assistance centers, evolved from a method to transmit knowlede from teachers to tutors to tutees to a structured framework for peers who have greater mastery of material to transmit knowledge to less adept peers (Arendale, 2010; Topping, 1996). The role of tutors has further evolved from a linear transmission of knowledge from tutors to students to a web of learning between peers who are not professional teachers. Tutorial roles are typically focused on a specific discpline, tutors receive training, and tutors are expected to follow specific protocols and proceduress (Arendale, 2010; Topping, 1996).

The benefits of drop-in tutoring supports on academic performance and retention can be difficult to ascertain. The academic performance of students who saught tutoring services lagged behind their peers who did not seek tutoring, which may have served as a motivation to seek assistance, rather than a result of seeking help (Walker & Dancy, 2007). Students who consistently participated in tutoring had better academic performance (Munley, Garvey, & McConnell, 2010) and increased persistence rates among cohorts from the first to second year (Cooper, 2010). Tutoring positively influenced the academic performance of students in specific courses including chemistry (Rath, Peterfreund, Bayliss, Runquist, & Simonis, 2012) and calculus (Fayowski & MacMillan, 2008). In addition to gains in pass rates, course completion, and grades, student persistence and self-direction also increased among students who participated in tutoring services (Hendriksen et al., 2005).

Academic advisors provide students with information about academic requirements and resources (Suvedi, Ghimire, Millenbah, & Shrestha, 2015) and can serve as a positive support for student success (Bahr, 2008) and persistence (King, 1993). College administrators stated that academic advising centers and faculty advising training were two of the most crucial elements for improved retention rates (Habley, Valiga, McCalanahan, & Burkum, 2010). Experiences and satisfaction with academic advising is directly related to college retention (Noel-Levitz, 2009). Advisors promoted persistence by helping students increase their commitment to their academic goals (Bailey & Alfonso, 2005). Advising activities related to assisting students develop a clear academic path were positive for student expressions of intent to return (Hatch & Garcia, 2017).

Although 80% of students enter community colleges with the objective of earning a bachelors degree, only 14% of the 720,000 students who first enrolled in college in Fall 2007 reached their goal within six years (Jenkins & Fink, 2016). A transfer advisor can help students understand how to maximize their time in community colleges, understand university options and choices, and develop a path to a bachelors degree. Transfer advising is a relatively new area of emphasis for community colleges, therefore few theories or models are available (Webb, Dantzler, & Hardy, 2015). In a study by Gard, Paton, and Gosselin (2012), students expressed discontent with the level of knowledge of academic advisors about universities, degree programs, and effective ways to prepare for transfer while enrolled in the community college. Students intending to complete Science, Technology, Engineering, and Mathematics (STEM) degrees after transfer were most satisfied when consulting with subject faculty and financial aid officers in addition to transfer advisors (Packard & Jeffers, 2013). Transfer delays occurred for STEM students when advisors provided incorrect or incomplete information (Packard, Gagnon, & Senas, 2012).

Scholastic challenges can compounded by financial challenges for community college students. Financial aid counselors influence student retention by providing students with guidance as they navigate how to pay for college and understand the financial aid system (McKinney & Roberts, 2012). Community college students who are often first-generation, racial/ethnic minority, or from low-income backgrounds (Cohen & Brawer, 2013) have minimal collegiate resources at home or in secondary schools (Perna, 2006; Vargas, 2004). Lack of reliable information can result in students not obtaining financial aid (Kantrowitz, 2011), misunderstanding college costs and sources of aid (Perna, 2008), and thus having to navigate another barrier to college enrollment (Avery & Kane, 2004). This lack of understanding was demonstrated in 42% of Pell Grant eligible community college students not completing the Free Application for Federal Student Aid during the 2007-2008 academic year (Kantrowitz, 2009).

Community college financial aid counselors in a 2010 survey described workloads of 1,000 students per counselor, resulting in an inability to provide the necessary support to students (McKinney & Roberts, 2012). Additionally, 90% of counselors stated that students had misconceptions about aid eligibility and that 87% of students needed assistance in completing financial aid paperwork. Institutional leaders can support collegiate financial aid offices by providing additional institutional resources, hiring more counselors, and increasing financial aid outreach efforts, which can result in more students getting necessary assistance and financial resources (College Board, 2010).

Academic performance and persistence can be challenging for students who have children. Child care services are an important element of support in reaching educational goals for many college students (Brooks, 2012). Approximately 53% of independent undergraduate students have dependent children (National Center for Education Statistics, 2013). Completion rates were lower for students who had less time for academic pursuits because of child care issues (Taniguchi & Kaufman, 2005). Among surveyed community college administrators, approximately 42% reported providing childcare services for students (Rankin, 2008). In addition to childcare, a parent resource center at Western Michigan University supported the continued enrollment of students by providing child care resources, financial assistance, parenting guidance, and academic support (Nelson, 2007).

Approximately 80% of surveyed community college academic officers recognized low-cost childcare as a barrier to student success (Rankin, 2008). The benefits of child care for student support and retention are weighed against yearly operational costs that averaged \$1.5 million dollars (Carter, 2016). In addition to cost, liability was another factor that led some institutions to stop providing childcare services (Rankin, 2008).

#### **Statement of the Problem**

Many government officials at both state and federal levels have raised questions about the costs of higher education and the role of public subsidies in education (Field, Kelderman, & Bidwell, 2013). As pressure to reduce taxpayer support of higher education increases, students are leaving with more student loan debt. College graduates are leaving institutions with approximately \$30,000 in loans that will need to be repaid (McRobbie, 2017). Cumulatively, the student debt for Americans is higher than creditcard and car loans at more than \$1.3 trillion dollars. Therefore, effective academic and individual support provided by institutions will benefit students as they strive to reach academic and career goals in a financially challenging environment. Institutional leaders are also dealing with the challenge of providing effective services in an era of reduced funding and increased scrutiny in education (Field et al., 2013). Community college students benefit from using institutional supports that are effective in helping the individual succeed and persist.

Initiatives such as advising are most beneficial for students when sessions are personalized for the individual and occur frequently and consistently (Visher, Butcher, & Cerna, 2010). Customized effective assistance can only occur when advisors work with a smaller number of students more often. The national median advisee load is 441 students to 1 advisor (Robbins, 2013). The cost of providing support services can be expensive, especially when additional services are provided to a select group of students. A City University of New York program where students are required to have frequent meetings with advisors, mandatory tutoring, advising, and seminars on topics including study skills and goal setting costs the university \$16,300 more per student over three years than what is spent on a typical student (Mangan, 2015). Advisors for this program had a caseload of 60 to 80 students while general advisors worked with 600 to 1500 students. An increase in graduation rates has been used as a justification for the additional expense.

Expenses for other services such as computer labs are perpetual because of the need for upgrades in hardware and software (Bartkovich, 2011). In addition to academic

support services such as computer labs, community college administrators face challenges for other student services such as counseling. In an examination of California students, Epstein (2015) discovered that community college students reported greater rates of family problems, suicidal ideation, and attempted suicides than their peers at 4year institutions. Although the population of community college students may benefit from having access to support services, 2-year postsecondary institutions provide much less support compared to 4-year universities. Administrators must understand which academic and student support services are most beneficial for students and where resources are best allocated, when considering an array of potentially offerings.

#### **Purpose of the Study**

The purpose of this study was to determine the extent to which differences were present in academic support service use and in student support service use between students who had been enrolled in an honors course and students who had not been enrolled in an honors course. Specifically addressed was honors course enrollment status and its relationship to student utilization of academic support services including tutoring services, skill labs (e.g., writing, mathematics), and computer labs. Also addressed was student utilization of student support services including academic advising, career counseling, job placement, child care, financial aid advising, and transfer credit advising by honors course enrollment status. Through an analysis of a national archival dataset, findings may be generalizable to community college students in the United States.

#### Significance of the Study

Research using community college data samples comprise less than 10% of all higher education research (McClenney & Marti, 2006). Research studies regarding

honors in community colleges, specifically large scale studies, are both limited and have not occurred since the late 1990s (Achterberg, 2004; Holman & Banning, 2012; Outcalt, 1999). Additionally, Holman and Banning (2012) suggested a need for more quantitative and mixed methods scholarship related to honors in higher education. Therefore, examination of this empirical investigation may be utilized by higher education leaders, to inform resource allocation decisions regarding academic support services and student support services.

#### **Research Questions**

In this empirical investigation, one overarching research question was addressed: What is the difference in academic support services use and in student support services use between students who had been enrolled in an honors course and students who had not been enrolled in an honors course? Specific sub-questions under this overarching research question were (a) What is the difference in the use of tutoring services by honors course enrollment status?; (b) What is the difference in the use of skill labs (e.g., writing, mathematics) by honors course enrollment status?; (c) What is the difference in using computer labs by honors course enrollment status?; (d) What is the difference in using academic advising services by honors course enrollment status?; (e)What is the difference in the use of career counseling services by honors course enrollment status?; (f) What is the difference in the use of job placement services by honors course enrollment status?; (g) What is the difference in using child care services by honors course enrollment status?; (h) What is the difference in using financial aid advising services by honors course enrollment status?; and (i) What is the difference in using transfer credit advising services by honors course enrollment status?

#### Method

## **Research Design**

A non-experimental, causal-comparative research design was used in this study (Creswell, 2013; Johnson & Christensen, 2012). In this type of non-experimental causal comparative research, the independent variable cannot be manipulated. The archival data that were analyzed signified events that had already occurred (Johnson & Christensen, 2012). The honors course enrollment status of students who completed the survey was the independent variable that was analyzed. The dependent variables that were present in this investigation were the academic support service use and student support service use of community college students who participated in the survey. Both the independent variable of honors course enrollment and the dependent variables of academic support service use and student support service use had already occurred.

#### **Participants and Instrumentation**

The archival data set that was obtained from CCCSE consisted of a 25% random sample of the 2014 three-year Community College Survey of Student Engagement (CCSSE) cohort (2012 through 2014) data set. Approximately 7,000 of the 108,509 students who completed the CCSSE survey reported that they had been enrolled in an honors course. Geographically, the cohort included 684 institutions in 48 states, the District of Columbia, several Canadian provinces, and three island nations (CCSSE, 2017a). The sample consisted of 147 community colleges in urban settings, 149 colleges in suburban settings, and 395 colleges in rural settings. Student enrollments varied with 296 colleges with enrollments of less than 4,500 students; 168 college with enrollments

of 4,500 to 7,999 students; 141 colleges with 8,000 to 14,999 students; and 79 colleges with 15,000 or more students (CCSSE, 2017a).

The CCSSE survey was a 38 question instrument used to collect student perspectives on their experiences in the community college setting. Student views regarding academic and student support services are also explored through a set of nine questions classified as support for learners in the instrument. Marti (2008) verified that the instrument provided consistent scores from the first and second administrations and provided reliable and valid scores of community college student engagement. Survey questions included Likert scales for frequency of use, satisfaction, and importance. The four choices for frequency were often, sometimes, rarely/never, and don't know/not applicable. Students chose among very, somewhat, and not at all in response to questions about satisfaction and importance. Students could also select not applicable for satisfaction for services they did not use. Responses from students related to the use of tutoring services, skill and computer labs, academic advising, transfer credit advising, financial aid advising, career counseling, job placement services, and child care services were included in these data (CCSSE, 2017b). The responses were numerically coded for statistical analysis.

#### Results

Data were analyzed to determine the extent to which differences were present in academic support service use and in student support service use between students who had been enrolled in an honors course and students who had not been enrolled in an honors course. Pearson chi-square statistics were calculated for responses to nine questions based on honors course enrollment status by frequency category for frequency

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of use (i.e., Often, Sometimes, Rarely/never, and Don't Know/Not Applicable [NA]). Frequency data were present for the honors course enrollment variable and for the nine survey items. As such, the Pearson chi-square procedure was an appropriate statistical procedure (Slate & Rojas-LeBouef, 2011). The available sample size were at least five per cell and respondents checked one response per survey item; therefore, the assumptions were met for using the Pearson chi-square procedure. Results will now be discussed in order of the research questions.

#### **Research Question One**

The focus of the first question was on whether differences were present in utilization of tutoring services by honors course enrollment status. The Pearson chisquare procedure revealed a statistically significant difference was present in the use of tutoring services by honors course enrollment status,  $\chi^2(3) = 586.05$ , p < .001. The effect size for this finding, Cramer's V, was below small, .09 (Cohen, 1988). More than 15% of students who had been enrolled in an honors course reported using tutoring services Often, compared to 8% of students who had not been enrolled in an honors course. The percentage of students who reported they Rarely/Never used tutoring services was higher for students who had not been enrolled in an honors course, 48.2%, than for students who had been enrolled in an honors course, 48.2%, than for students who had been enrolled in an honors course who reported that they Rarely/Never used tutoring services and percentages for this analysis by student honors course enrollment status are presented in Table 3.1.

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Insert Table 3.1 about here

## **Research Question Two**

The second research question was on whether differences were present in the use of skill labs (e.g., writing, mathematics) by honors course enrollment status. A statistically significant difference was present by honors course enrollment status,  $\chi^2(3) =$ 304.14, *p* < .001. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). Almost 16% of students who had not been enrolled in an honors course and more than 23% of students who had been enrolled in an honors course responded Very Often to using skill labs, whereas 39% of students who had not been enrolled in an honors course and almost 34% of students who been enrolled in an honors course reported they Rarely/Never used skill labs. Frequencies and percentages for this analysis by student honors course enrollment status are presented in Table 3.2.

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Insert Table 3.2 about here

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### **Research Question Three**

The focus of the third research question was on the use of computer labs by honors course enrollment status. A statistically significant difference was present by honors course enrollment status,  $\chi^2(3) = 269.19$ , p < .001. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). More than 39% of students who had been enrolled in an honors course reported using computer labs Very Often compared to approximately 31% of students who had not been enrolled in an honors course and who reported using computer labs Very Often. A large disparity was not present at the other end of the spectrum with almost 26% of students who had not been enrolled in an honors course and approximately 21% of students who had been enrolled in an honors course responding Never to the use of computer labs. Table 3.3 contains the descriptive statistics for this analysis.

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Insert Table 3.3 about here

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## **Research Question Four**

The fourth research question was focused on the use of academic advising services by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 462.11$ , p < .001. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). More than 23% of students who had been enrolled in an honors course reported using academic advising services Very Often, whereas less than 15% of students who had not been enrolled in an honors course reported using services Very Often. Approximately 34% of students who had not been enrolled in an honors course and more than 26% of students who had been enrolled in an honors course reported Rarely/Never for the use of academic advising services. Frequencies and percentages by honors course enrollment status are presented in table 3.4.

Insert Table 3.4 about here

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# **Research Question Five**

The focus of the fifth research question was on the use of career counseling services by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 512.96$ , p < .001. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). Approximately 11% of students who had been enrolled in an honors course reported Often using career counseling services. That statistic was twice as high as the percentage, 5.5%, of students who had not been enrolled in an honors course and who reported Often using career counseling services. More than 46% of students who had been enrolled in an honors course reported Rarely/Never to the use of career counseling services and 53% of students who had not been enrolled in an honors course reported Rarely/Never in the use of career counseling services. Table 3.5 contains the descriptive statistics for this analysis.

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Insert Table 3.5 about here

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# **Research Question Six**

The sixth research question was focused on the use of job placement services by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 585.41$ , p < .001. The effect size for this finding, Cramer's V, was below small, .08 (Cohen, 1988). More than 6% of students who had been enrolled in an honors course reported Often using job placement services. That statistic was more than twice as high as the percentage, 2.6%, of students who had not been enrolled in an honors course and who reported Often using job placement services. Almost 48% of students who had been enrolled in an honors course reported Rarely/Never in the use of career counseling services and approximately 49% of students who had not been enrolled in an honors course reported Rarely/Never in the use of job placement services. Frequencies and percentages by honors course enrollment status are presented in Table 3.6.

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Insert Table 3.6 about here

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#### **Research Question Seven**

The focus of the seventh research question was on the use of child care services by honors course enrollment status. The Pearson chi-square procedure revealed the presence of a statistically significant difference was present by honors course enrollment status,  $\chi^2(3) = 281.54$ , p < .001. The effect size for this finding, Cramer's V, was below small, .06 (Cohen, 1988). Approximately 4% of students who had been enrolled in an honors course reported Often using child care services. That statistic was twice as high as the percentage, 1.9%, of students who had not been enrolled in an honors course and who reported Often using child care services. Almost 38% of students who had been enrolled in an honors course and approximately 40% of students who had not been enrolled in an honors course reported Rarely/Never using child care services. Table 3.7 contains the descriptive statistics for this analysis. Insert Table 3.7 about here

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## **Research Question Eight**

The eighth research question was focused on using financial aid advising services by honors course enrollment status. The Pearson chi-square procedure revealed the presence of a statistically significant difference by honors course enrollment status,  $\chi^2(3)$ = 84.54, *p* < .001. The effect size for this finding, Cramer's V, was below small, .03 (Cohen, 1988). Approximately 24% of students who had been enrolled in an honors course reported Often using financial aid advising services, compared to 19% of students who had not been enrolled in an honors course. The percentage of students who reported they Rarely/Never used financial aid advising services was higher for students who had not been enrolled in an honors course, 31%, than for students who had been enrolled in an honors course who reported that they Rarely/Never used financial aid advising services, 28.9%. Frequencies and percentages for this analysis by student honors course enrollment status are presented in Table 3.8.

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Insert Table 3.8 about here

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# **Research Question Nine**

The focus of the ninth research question was on the use of transfer credit advising services by honors course enrollment status. A statistically significant difference was present in this survey item by honors course enrollment status,  $\chi^2(3) = 871.94$ , p < .001.

The effect size for this finding, Cramer's V, was small, .11 (Cohen, 1988). More than 15% of students who had been enrolled in an honors course reported Often using transfer credit advising services. That statistic was more than twice as high as the percentage, 7.1%, of students who had not been enrolled in an honors course and who reported Often using transfer credit advising services. Almost 34% of students who had been enrolled in an honors course reported Rarely/Never using transfer credit advising services and approximately 39% of students who had not been enrolled in an honors course reported Rarely/Never using transfer credit advising services and approximately 39% of students who had not been enrolled in an honors course reported Rarely/Never using transfer credit advising services. Frequencies and percentages by honors course enrollment status are presented in Table 3.9.

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Insert Table 3.9 about here

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#### Discussion

In this study, the degree to which differences were present in academic support service use and in student support service use between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course was investigated. This analysis was conducted using national data from more than 108,000 students who completed the CCSSE survey. Statistically significant differences between the two groups for all four survey items related to academic support service use and for all five survey items related to student support service use were revealed. Students who had been enrolled in an honors course reported higher levels of academic support service use (i.e., utilization of tutoring services, skill and computer labs, and academic advising) than their peers who had not been enrolled in an honors course. Greater use of student support services encompassing career counseling, job placement, child care, and financial aid and transfer credit advising were also reported by students who had been enrolled in an honors course when compared to their peers who had not been enrolled in an honors course.

#### **Connections with Existing Literature**

According to Noel-Levitz (2007), one-third of students expressed a desire for additional academic support in one or more classes. The desire to have academic support is contrasted by a CCCSE (2012) study in which researchers determined that approximately 18% of students actually used supplemental academic instruction. The utilization rates were higher in this investigation, with 40.8% of students who had been enrolled in an honors course and 28% of students who had not been enrolled in an honors course reporting Sometimes or Often using tutoring services. Students in this study reported using skill labs (e.g., writing, mathematics) at an even greater rate, with 49.7% of students who had been enrolled in an honors course and 39.8% of students who had not been enrolled in an honors course reporting Sometimes or Often used skill labs. Seeking specialized assistance had a positive influence on the academic performance of students in challenging courses such as chemistry (Rath et al., 2012) and calculus (Fayowski & MacMillan, 2008).

Academic advising experiences and satisfaction were also reported to have a direct influence on retention rates (Noel-Levitz, 2009). The use of academic advising services Sometimes or Often was reported by 69.3% of students who had been enrolled in an honors course and 59.5% of students who had not been enrolled in an honors course. Further illustrating the importance of using academic advising services, Hatch and Garcia

(2017) noted that advising activities resulting in the development of a clear academic path was a positive influence on a student's intention to return.

In a survey of community college financial aid advisors, 90% of counselors reported that students had misconceptions about eligibility for financial aid and that 87% of students benefited from assistance in completing financial aid forms (McKinney & Roberts, 2012). In this investigation, more than 56% of students who had been enrolled in an honors course and almost 52% of their peers who had not been enrolled in an honors course reported using financial aid advising. Community college students, many who are first-generation, racial/ethnic minority, or from low-income backgrounds (Cohen & Brawer, 2013), do not always have access to robust information sources related to college costs and sources of aid (Perna, 2008), and therefore benefit from using financial aid advising services. Community college financial aid counselors, however, reported being challenged with workloads averaging one counselor for every 1,000 students, resulting in the inability to provide adequate support to all students (McKinney & Roberts, 2012).

#### **Implications for Policy and for Practice**

Several implications for policy and practice can be discerned from the results of this empirical investigation. First, students who had been enrolled in an honors course reported greater use of academic support services and student support services than their peers who had not been enrolled in an honors course. Almost twice as many students who had been enrolled in an honors course Often used tutoring services when compared to their peers who had not been enrolled in an honors course. It is vital to understand if students who had been enrolled in an honors course were being provided with additional services or information and encouragement to seek additional assistance.

Second, community college administrators are challenged with determining the best way to allocate limited resources for activities beyond the core instruction functions. Using learning assistance centers had a positive influence on the academic performance of students (Hendriksen et al., 2005) and the return on investment for providing academic support services was greater than the cost (Delta Project, 2009). Therefore, administrators should examine allotments for academic support services and student support services to determine if adequate resources are being allocated.

# **Recommendations for Future Research**

Based upon the results of this empirical investigation, several recommendations for future research can be made based upon the findings of this study. First, because only a small number of quantitative studies on community college honors programs have been published (Achterberg, 2004; Holman & Banning, 2012), opportunities exist for further research related to examining the efficacy of community college honors program. Second, it is suggested that scholars use both quantitative and qualitative methodologies to explore the experiences of community college honors students.

Third, more current data should be used to replicate this study to determine the degree to which the results delineated herein are generalizable to community college students today. Fourth, researchers are encouraged to use data from the National Survey of Student Engagement to ascertain the extent to which the results obtained herein on community college students would be generalizable to 4-year university students. A fifth opportunity for researchers is extending the research completed by the Delta Project

(2009) related to quantifying the costs and benefits of providing academic support services. Gaining insight into the cost and returns of support services would provide additional information for administrators in determining how best to allocate resources.

Sixth, an examination of the scholastic engagement and faculty engagement between students who had been enrolled in an honors course and students who had not been enrolled in an honors course is recommended. A greater understanding of student engagement may compliment this study on the use of support services. Lastly, an examination of benchmark scores calculated using CCSSE data to determine the extent to which differences might exist between the two groups of students would provide valuable insight into student perspectives.

#### Conclusion

In this nationwide investigation, the extent to which differences were present in academic support service use and student support service use between students who had been enrolled in an honors course and students who had not been enrolled in an honors course was examined. Statistically significant differences were revealed in the use of both academic support services and student support services between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. Students who had been enrolled in an honors course and student support services than their peers who had not been enrolled in an honors course. Students who had been enrolled in an honors course and student support services than their peers who had not been enrolled in an honors course. Community college leaders and policymakers may examine various support services to determine if more students would benefit from using a particular service and why students who had been enrolled in an honors course were using services at a greater rate.

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Frequencies and Percentages of Tutoring Services Use by Honors Course Enrollment Status

| Tutoring Service Use | Enrolled                  | Not Enrolled               |
|----------------------|---------------------------|----------------------------|
| Often                | ( <i>n</i> = 980) 15.3%   | ( <i>n</i> = 5,813) 8.3%   |
| Sometimes            | ( <i>n</i> = 1,636) 25.5% | ( <i>n</i> = 13,788) 19.7% |
| Rarely/Never         | (n = 2,709) 42.3%         | ( <i>n</i> = 33,736) 48.2% |
| Don't Know/NA        | ( <i>n</i> = 1,085) 16.9% | ( <i>n</i> = 16,707) 23.9% |

| Skill Lab Use | Enrolled                  | Not Enrolled               |
|---------------|---------------------------|----------------------------|
| Often         | ( <i>n</i> = 1,476) 23.1% | ( <i>n</i> = 11,129) 15.9% |
| Sometimes     | ( <i>n</i> = 1,703) 26.6% | ( <i>n</i> = 16,698) 23.9% |
| Rarely/Never  | ( <i>n</i> = 2,162) 33.8% | ( <i>n</i> = 27,255) 39.0% |
| Don't Know/NA | ( <i>n</i> = 1,053) 16.5% | ( <i>n</i> = 14,822) 21.2% |

Frequencies and Percentages of Skill Lab Use by Honors Course Enrollment Status

| Computer Lab Use | Enrolled                  | Not Enrolled               |
|------------------|---------------------------|----------------------------|
| Often            | ( <i>n</i> = 2,514) 39.2% | ( <i>n</i> = 21,632) 30.9% |
| Sometimes        | ( <i>n</i> = 2,045) 31.9% | ( <i>n</i> = 21,873) 31.3% |
| Rarely/Never     | ( <i>n</i> = 1,330) 20.8% | ( <i>n</i> = 17,888) 25.6% |
| Don't Know/NA    | ( <i>n</i> = 517) 8.1%    | ( <i>n</i> = 8,565) 12.2%  |

Frequencies and Percentages of Computer Lab Use by Honors Course Enrollment Status

| Academic Advising Services Use | Enrolled                  | Not Enrolled               |
|--------------------------------|---------------------------|----------------------------|
| Often                          | ( <i>n</i> = 1,526) 23.4% | ( <i>n</i> = 10,286) 14.5% |
| Sometimes                      | ( <i>n</i> = 2,992) 45.9% | ( <i>n</i> = 31,895) 45.0% |
| Rarely/Never                   | ( <i>n</i> = 1,718) 26.4% | ( <i>n</i> = 23,826) 33.7% |
| Don't Know/NA                  | ( <i>n</i> = 279) 4.3%    | ( <i>n</i> = 4,795) 6.8%   |

Frequencies and Percentages of Academic Advising Services Use by Honors Course Enrollment Status

| Career Counseling Services Use | Enrolled                  | Not Enrolled               |
|--------------------------------|---------------------------|----------------------------|
| Often                          | ( <i>n</i> = 689) 10.7%   | (n = 3,863) 5.5%           |
| Sometimes                      | ( <i>n</i> = 1,771) 27.4% | ( <i>n</i> = 14,764) 20.9% |
| Rarely/Never                   | ( <i>n</i> = 3,010) 46.6% | ( <i>n</i> = 37,368) 53.0% |
| Don't Know/NA                  | ( <i>n</i> = 990) 15.3%   | ( <i>n</i> = 14,530) 20.6% |

Frequencies and Percentages of Career Counseling Services Use by Honors Course Enrollment Status

| Job Placement Services Use | Enrolled                  | Not Enrolled               |
|----------------------------|---------------------------|----------------------------|
| Often                      | ( <i>n</i> = 413) 6.4%    | ( <i>n</i> = 1,819) 2.6%   |
| Sometimes                  | ( <i>n</i> = 876) 13.7%   | ( <i>n</i> = 5,857) 8.3%   |
| Rarely/Never               | ( <i>n</i> = 3,064) 47.8% | ( <i>n</i> = 34,272) 48.9% |
| Don't Know/NA              | ( <i>n</i> = 2,059) 32.1% | ( <i>n</i> = 28,196) 40.2% |

Frequencies and Percentages of Job Placement Services Use by Honors Course Enrollment Status

Frequencies and Percentages of Child Care Services Use by Honors Course Enrollment Status

| Child Care Services Use | Enrolled                  | Not Enrolled               |
|-------------------------|---------------------------|----------------------------|
| Often                   | ( <i>n</i> = 252) 3.9%    | ( <i>n</i> = 1,332) 1.9%   |
| Sometimes               | ( <i>n</i> = 302) 4.7%    | ( <i>n</i> = 1,555) 2.2%   |
| Rarely/Never            | ( <i>n</i> = 2,394) 37.5% | ( <i>n</i> = 27,785) 39.8% |
| Don't Know/NA           | ( <i>n</i> = 3,433) 53.8% | ( <i>n</i> = 39,212) 56.1% |

| Financial Aid Advising Use | Enrolled                  | Not Enrolled               |
|----------------------------|---------------------------|----------------------------|
| Often                      | ( <i>n</i> = 1,508) 23.5% | ( <i>n</i> = 13,321) 19.0% |
| Sometimes                  | ( <i>n</i> = 2,093) 32.6% | ( <i>n</i> = 23,035) 32.9% |
| Rarely/Never               | ( <i>n</i> = 1,852) 28.9% | ( <i>n</i> = 21,721) 31.0% |
| Don't Know/NA              | ( <i>n</i> = 960) 15.0%   | ( <i>n</i> = 11,917) 17.0% |

Frequencies and Percentages of Financial Aid Advising Services Use by Honors Course Enrollment Status

| Transfer Credit Advising Use | Enrolled                  | Not Enrolled               |
|------------------------------|---------------------------|----------------------------|
| Often                        | ( <i>n</i> = 973) 15.2%   | (n = 4,968) 7.1%           |
| Sometimes                    | ( <i>n</i> = 1,720) 26.9% | ( <i>n</i> = 13,766) 19.6% |
| Rarely/Never                 | ( <i>n</i> = 2,160) 33.8% | ( <i>n</i> = 27,294) 38.9% |
| Don't Know/NA                | ( <i>n</i> = 1,545) 24.1% | ( <i>n</i> = 24,061) 34.3% |

Frequencies and Percentages of Transfer Credit Advising Services Use by Honors Course Enrollment Status

# **CHAPTER IV**

DIFFERENCES IN COLLEGE ENGAGEMENT BENCHMARK SCORES AS A FUNCTION OF HONORS COURSE ENROLLMENT FOR COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

This dissertation follows the style and format of Research in the Schools (RITS).

#### Abstract

In this investigation, the extent to which differences were present in benchmark scores as a function of community college student honors course enrollment status was investigated using data from the Community College Survey of Student Engagement. Statistically significant differences were revealed for all 5 benchmark scores (i.e., active and collaborative learning, student effort, academic challenge, student-faculty, support for learners). Students who had been enrolled in an honors course had benchmark scores that were 9 to 16 points higher than their peers who had not been enrolled in an honors course, reflecting higher levels of scholastic engagement, deeper connections with instructors and peers, and greater use of academic and student support services.

**Keywords:** Benchmarks, Community College Survey of Student Engagement (CCSSE), community college, honors students, institutional performance, student support

# DIFFERENCES IN COLLEGE ENGAGEMENT BENCHMARK SCORES AS A FUNCTION OF HONORS COURSE ENROLLMENT FOR COMMUNITY COLLEGE STUDENTS: A NATIONWIDE STUDY

Benchmark scores have become a common data point reviewed and analyzed by college administrators. Levy and Ronco (2012) reported that the notion of benchmarking may have originated from the work of ancient Egyptian surveyors or cobblers taking measurements. Modern benchmarking provides organizations with information to measure institutional performance or completion of objectives. Data produced through benchmarking are used: (a) for reports to external local and state entities, (b) for accreditation agency reporting, and (c) to gauge internal performance (Bers, 2012). Ewell (2011) suggested that community colleges should harness reporting requirements and benchmarking to examine organizational performance and strengthen institutions.

A benchmark score can be used by colleges and universities to: (a) determine if a goal was attained, (b) set a baseline for improvement, or (c) compare performance with a peer institution or a group of institutions. Benchmarks are defined as, "quantitative standards or criteria by which something can be judged or measured" (Ewell, 2011, p. 35). The Community College Survey of Student Engagement (CCSSE) is one of several instruments with benchmarking tools developed for community colleges. The Center for Community College Student Engagement (CCCSE) developed the instrument to measure the frequency and success of community college initiatives that helped students reach their postsecondary educational goals (Nora, Crisp, & Matthews, 2011). According to McClenney (2007), the survey is grounded in research findings from: (a) Pace (1984), regarding the experiences of students, (b) Astin's (1984) work on student involvement,

(c) Chickering and Gamson's (1987) effective undergraduate practices, and (d) Kuh's(2001) focus on student engagement.

Institutional practices can be developed to encourage student success. Tinto (2012) focused on four elements present in CCSSE benchmarks that have institutional influence: (a) setting high expectations of students; (b) supporting students in the academic, social, and financial realms; (c) offering frequent and timely assessment and communication with students; and (d) providing students with opportunities for involvement. In a study of the five CCSSE benchmark scores, McClenney and Marti (2006) observed that student engagement had a moderate effect on GPA for students enrolled in Florida community colleges. When examining individual CCSSE benchmarks, McClenney and Marti (2006) reported small effects for the active and collaborative learning benchmark on course completion and associate degree attainment. A small effect on associate degree attainment was also observed for student effort and support learners' benchmarks. Greater levels of engagement had the most positive influence on the GPA of academically underprepared and Black students. When three independent studies were examined, active and collaborative learning, academic challenge, and student-faculty interaction benchmarks had the greatest influence on degree attainment (McClenney & Marti, 2006). Price and Tovar (2014) reported that active and collaborative learning and support for learners had predictive values for institutional graduation rates.

The resulting data can be used by institutions to improve teaching and learning (Marti, 2008). Since 2003, the survey has been administered in random sections of courses annually during the spring semester (McClenney, 2007). Upon completion of

CCSSE administration by institutions, colleges receive data that can be used to compare: (a) full-time and part-time students; (b) individual institutional data with all participating institutions; (c) individual institutional data with institutions of a similar size; and (d) consortium data if a college is part of a consortia (Ewell, 2011).

Results of the CCSSE survey are used to generate five benchmarks. Scholarship related to benchmark score comparisons based on honors course enrollment status is limited. Ross and Roman (2009), in an analysis of honors and non-honors students at one Florida community college using CCSSE survey results, determined the presence of a higher degree of academic engagement in general courses. Conceptually related survey items examined by Ross and Roman (2009) were grouped together to develop benchmarks. Honors students indicated a greater degree of class participation and academic preparation, and they expended more effort than the students' perceived capability than non-honors students. Also, honors students indicated that honors courses emphasized more critical thinking including analysis, synthesis, and problem solving. Ross and Roman (2009) indicated lower levels of engagement for honors students compared to non-honors students regarding career plans, career goals, e-mail communication with faculty, discussion of grades or assignments with faculty, and solving numerical problems.

The first CCSSE assessment, the active and collaborative learning benchmark, can be used to understand academic participation (CCSSE, 2017b). For this benchmark, students were asked to answer questions that described how often they participated in specific activities in the classroom including class discussions, presentations, and group work. Students answered questions about class related activities occurring outside of the classroom, including questions about: (a) group projects, (b) tutoring or teaching other students, and (c) participation in a community-based project. Discussion of readings or course information were also factored into the active and collaborative learning benchmark. This benchmark was developed using Chickering and Gamson's (1987) practices for student-to-student collaboration principles and active learning techniques.

The second benchmark, student effort, is calculated based on student responses to eight questions (CCSSE, 2017b). The questions include: (a) preparation of multiple drafts of a paper, (b) working on projects requiring synthesis of researched sources, (c) attending class unprepared, (d) personal reading, and (e) time spent preparing for classes. Other questions in this benchmark are related to the use of tutoring services, skill labs (e.g., writing, mathematics), and computer labs. This benchmark was developed using Chickering and Gamson's (1987) undergraduate principle regarding the importance of time-on-task, a quantification of student effort.

Academic challenge, the third benchmark, is calculated based on the responses to 10 questions that reflect the academic rigors experienced by students (CCSSE, 2017b). Five questions are focused on mental activities in courses, including: (a) conceptual analysis, (b) synthesis of information, (c) evaluation of data, (d) theoretical applications, and (e) development of new skills using current information. This benchmark was created based on Chickering and Gamson's (1987) principle of high-expectations, timeon-task guidelines, and active learning recommendations. Although students may initially express negative feelings about rigorous work, substantive learning that goes beyond rudimentary exercises resulted in students expressing positive feelings about learning (Payne, Kleine, Purcell, & Carter, 2005). Responses for questions about the quantity of course materials and written papers and time spent studying were included in the academic challenge score. Lastly, questions related to the level of challenge presented to students through exams and by instructors were included in the benchmark.

The fourth benchmark, student-faculty interaction, is a measure of connections between students and faculty. The benchmark is calculated by examining student responses to six questions. Responses to three questions about the frequency of communication with faculty, including discussion of grades and assignments, use of email for correspondence, and receiving written or verbal feedback on performance, were used to calculate the benchmark. The other three questions included in this benchmark are related to discussions with faculty on a variety of topics including readings or class materials, career plans, and work on activities beyond coursework. The foundation for the development of this benchmark was Chickering and Gamson's (1987) assertion that increased faculty-student interactions led to increased motivation and engagement for students.

The fifth CCSSE benchmark, support for learners, consists of responses to seven questions related to the level of support perceived by students from their institution. Questions are related to the level of support available to help students succeed, which include: (a) encouragement of interactions with a diverse student community; (b) support in managing non-academic responsibilities; (c) social support; and (d) financial support. Two additional questions related to the utilization of academic advising and career counseling were also included in this benchmark. This benchmark is derived from Chickering and Gamson's (1987) suggestion that the institutional environment has a significant influence on the quality of a student's education.

# **Statement of the Problem**

Approximately 56.4% of students who first enrolled at a public community college in 2014, continued into their second year (American College Testing, 2016). This perceived lack of success has led to a focus on collegiate practices. Questions have been raised by government officials and the public about the role of taxpayer subsidies for educational initiatives (Field, Kelderman, & Bidwell, 2013) and the level of public financial support has trended lower (Phelan, 2014). Community college administrators are being asked by accreditation boards, local, state, and federal government agencies, and the public to demonstrate institutional effectiveness through data that illustrated standards and cost-effectiveness (Bers, 2012; Levy & Ronco, 2012). Therefore, the process of collecting, analyzing, and utilizing data for developing effective initiatives that benefit students as they work toward educational and career goals is vital.

Many benchmarking endeavors are characterized by an informal collection and utilization of best practices from internal and external entities (Levy & Ronco, 2012). Although benchmarking is a standard practice in business settings, formalized benchmarking processes are not common in higher education. The culture of higher education has been resistant to the use of assessment tools and administrators in higher education have collected the expected clarifying data for improvement (Levy & Ronco, 2012). Also, the data collection process is challenging and expensive with no guarantee institutions will benefit from the investment.

Community colleges can benefit by making use of data to improve institutional performance and student success. Many traditional measures of institutional effectiveness may provide an inaccurate picture of community college effectiveness (Ewell, 2011). Benchmarking becomes difficult when institutions operate independently to be responsive to demands by the community in which the college is located. Many higher education performance measures were developed based on measures of success, such as retention and graduation, that are more difficult to attain in an open enrollment educational setting (Ewell, 2011). Community colleges benefit through the development of benchmarking tools that function in a manner in which the effectiveness of institutional programs and processes are reliably measured (Nora et al., 2011).

#### **Purpose of the Study**

The purpose of this study was to determine the degree to which differences were present in college engagement benchmark scores between students who had been enrolled in an honors course and students who had not been enrolled in an honors course. Specifically addressed were active and collaborative learning benchmark scores, student effort benchmark scores, academic challenge benchmark scores, student-faculty benchmark scores, and support for learners benchmark scores by the honors course enrollment status of community college students. Because a national dataset was analyzed in this empirical study, information obtained may be of interest to community college administrators in the United States.

### Significance of the Study

Honors education, particularly at community colleges, has not been examined extensively. Community college samples are used by education researchers in less than 10% of higher education investigations (McClenney & Marti, 2006). Current research specifically focused on honors education in community colleges is nominal (Achterberg, 2004; Holman & Banning, 2012). The majority of honors education related dissertations and publications have been qualitative (Holman & Banning, 2012) and a large scale quantitative study of honors education in community colleges has not occurred since the late 1990s (Outcalt, 1999). Therefore, community college administrators and leaders may consider results of this empirical investigation of college engagement when determining strategies for allocating limited resources.

# **Research Questions**

In this empirical investigation, one overarching research question was addressed: What is the difference in college engagement benchmark scores between students who had been enrolled in an honors course and students who had not been enrolled in an honors course? Specific sub-questions under this overarching research question were: (a) What is the difference in active and collaborative learning benchmark scores by honors course enrollment status?; (b) What is the difference in student effort benchmark scores by honors course enrollment status?; (c) What is the difference in academic challenge benchmark scores by honors course enrollment status?; (d) What is the difference in student-faculty benchmark scores by honors course enrollment status?; and (e) What is the difference in support for learners benchmark scores by honors course enrollment status?

# Method

# **Research Design**

A non-experimental, causal-comparative research design was used in this study (Creswell, 2013; Johnson & Christensen, 2012). In this type of non-experimental causal comparative research, the independent variable cannot be manipulated. The events represented through the archival data had already occurred (Johnson & Christensen, 2012). The independent variable that was analyzed was the honors course enrollment status of community college students who completed the survey. The dependent variables were the college engagement benchmark scores of community college students who participated in the survey.

## **Participants and Instrumentation**

The CCCSE provided an archival data set consisting of a 25% random sample of the 2014 three-year (2012 through 2014) CCSSE cohort. The data set contained responses from 108,509 students who completed the CCSSE survey, including almost 7,000 students who indicated enrolling in an honors course. A total of 684 institutions in 48 states, the District of Columbia, select Canadian provinces, and three island nations (CCSSE, 2017a) were included in the data set. The locations of the community colleges in the sample included 147 colleges in urban areas, 149 colleges in suburban areas, and 395 colleges in rural areas. The sizes of enrollments in the dataset also varied with 296 small sized colleges with enrollments of less than 4,500 students; 168 medium sized college with enrollments of 4,500 to 7,999 students; 141 large colleges with 8,000 to 14,999 students; and 79 extra-large colleges with 15,000 or more students (CCSSE, 2017a).

The CCSSE survey included 38 questions designed to ascertain student views on the academic and nonacademic college environment. Question types included in the survey included ratings, Likert scales, and multiple choice questions. The reliability, validity, and consistency between first and second administrations of the survey have been validated (Marti, 2008). Responses from survey items related to institutional practices and student behaviors that bolster student engagement and positively influence learning and persistence were used to calculate benchmark scores (CCSSE, 2017b). Specifically, responses for questions related to active and collaborative learning, student effort, academic challenges, student-faculty interactions, and support for learners were used to develop benchmarks.

The active and collaborative learning benchmark is a measure of student participation in class discussions, presentations, group work, outside class group projects, peer tutoring, participation in community projects, and discussion of course information outside of the classroom (CCSSE, 2017b). The student effort benchmark score is based on academic efforts in preparation of multiple paper drafts, synthesis of information, attending class unprepared, personal reading, preparation for classes, and utilization of academic support services and facilities. The academic challenge benchmark is a synthesis of student responses to questions about the mental activities required for courses, quantity of academic work, amount of student effort, and level of challenge in exams and from instructors. Student-faculty interactions measures the connection between students and faculty developed through frequency of communication and topic of communication. Support for learners is a benchmark of the level of academic support services and personal support services available to students (CCSSE, 2017b).

#### Results

Data were analyzed to determine the extent to which differences were present in college engagement benchmark scores between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. A multivariate analysis of variance (MANOVA) was the statistical analysis conducted as the dependent variable of benchmark scores (i.e., active and collaborative learning, student effort, academic challenge, student-faculty, support for learners) consisted of continuous and interval level data. Prior to conducting the MANOVA procedure, the underlying assumptions for data normality was checked. Specifically examined were Box's Test of Equality of Covariance and the Levene's Test of Equality of Error Variances. Although these assumptions were not met, due to the robustness of a MANOVA procedure, Field (2013) contends that this procedure is appropriate for this investigation.

The MANOVA revealed a statistically significant difference, Wilks'  $\Lambda = .96$ , p < .001, partial  $\eta^2 = .04$ , in college engagement benchmark scores between students who had been enrolled in an honors course and students who had not been enrolled in an honors course. Using Cohen's (1998) criteria, a small effect size was present. Follow-up univariate analysis of variance procedures revealed statistically significant differences between students who had enrolled in an honors course and students who had not enrolled in an honors course in their active and collaborative learning benchmark score, F(1, 79092) = 2664.64, p < .001, partial  $\eta^2 = .033$ , a small effect size; student effort benchmark score, F(1, 79092) = 1128.90, p < .001, partial  $\eta^2 = .014$ , a small effect size; academic challenge benchmark score, F(1, 79092) = 1237.61, p < .001, partial  $\eta^2 = .015$ , a small effect size; and for the support for learners benchmark score, F(1, 79092) = 919.14, p < .001, partial  $\eta^2 = .011$ , a small effect size. Accordingly, the five effect sizes in this investigation were small effect sizes (Cohen, 1988).

Following these five univariate analysis of variance procedures, descriptive statistics were examined to determine where the statistically significant differences

yielded were. With respect to student active and collaborative learning benchmark scores, students who had been enrolled in an honors course had an average score that was approximately 16 points higher than for students who had not been enrolled in an honors course. Presented in Table 4.1 are the descriptive statistics pertaining to this analysis.

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Insert Table 4.1 about here

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The second research question was focused on student effort benchmark scores by honors course enrollment status. The average benchmark scores for students who had been enrolled in an honors course was approximately 10 points higher than for their peers who had not been enrolled in an honors course. The difference in benchmark scores reflects student effort in academic preparation of multiple paper drafts, synthesis of information, frequency of attending classes unprepared, personal reading, preparation for classes, and use of academic services and facilities. The descriptive statistics for this analysis are delineated in Table 4.2.

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Insert Table 4.2 about here

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The focus of the third research question was on academic challenge benchmark scores by honors course enrollment status. Students who had been enrolled in an honors course had an average score that was approximately 11 points higher in their academic challenge benchmark score than their peers who not been enrolled in an honors course. As such, students who had been enrolled in an honors course reported more engagement in intellectual activities required for courses, quantity of academic work, amount of student effort, and level of challenge experienced by students during exams and from instructors than their peers who had not been enrolled in an honors course. Descriptive statistics for this analysis are revealed in Table 4.3.

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Insert Table 4.3 about here

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The fourth research question was focused on student-faculty benchmark scores by student honors course enrollment status. Benchmark scores for students who had been enrolled in an honors course were approximately 14 points higher than their peers who had not been enrolled in an honors course. With respect to the student-faculty benchmark score, students who had been enrolled in an honors course reported more frequent communication and greater breadth in topics of communication between instructors and students than their peers who had not been enrolled in an honors course. Table 4.4 contains the descriptive statistics for this analysis.

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Insert Table 4.4 about here

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The focus of the fifth research question was on the support for learners benchmark scores by honors course enrollment status. Students who had been enrolled in an honors course had an average score that was approximately 9 points higher for this benchmark, a measure of academic support services and student support services available for students, than their peers who had not been enrolled in an honors course. Presented in Table 4.5 are the descriptive statistics for this analysis.

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Insert Table 4.5 about here

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# Discussion

In this empirical investigation, the degree to which differences were present in college engagement benchmark scores between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course, was addressed. National data from more than 108,000 students who completed the CCSSE survey were used to conduct this analysis. Statistically significant differences were revealed for all five benchmark scores (i.e., active and collaborative learning, student effort, academic challenge, student-faculty, support for learners). Students who had been enrolled in an honors course had benchmark scores that were 9 to 16 points higher than their peers who had not been enrolled in an honors course, reflecting higher levels of scholastic engagement, deeper connections with instructors and their peers, and greater use of academic and student support services.

# **Connections with Existing Literature**

The benchmark scores that had the greatest predictive value regarding student graduation rates were the active and collaborative learning and support for learners benchmarks (Price & Tovar, 2014). The finding regarding the predictive value of the active and collaborative benchmark was also observed by McClenney and Marti (2006). McClenney and Marti (2006) also reported that the academic challenge and studentfaculty benchmarks had predictive value regarding degree attainment. With respect to the active and collaborative learning benchmark, students who had been enrolled in honors courses averaged 16.14 more points for this benchmark, the largest disparity between the two groups among the five benchmark scores. Thus, students who had been enrolled in an honors course had more opportunities to participate in class discussions, presentations, group work, outside class group projects, peer tutoring, participation in community projects, and discussions of course information outside the classroom. A combination of in-class and out-of-class opportunities may positively influence students striving to reach their academic goals.

The second largest disparity in benchmark scores, 14.21 points, between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course, was present in the student-faculty interaction benchmark. Students who had been enrolled in an honors course reported greater frequency of communication with faculty (i.e., discussion of grades and assignments, e-mail correspondence, written or verbal feedback on academic performance) and greater frequency of interactions with faculty (i.e., discussion of readings or class material, career plan consultation, or work on non-course activities). Greater interactions with faculty may be influenced by smaller class sizes common in honors courses (National Collegiate Honors Council, 2013; Otero, Spurrier, & Lanier, 2011). Smaller classes may provide more opportunities for interaction between students and faculty and may increase rapport between students and instructors. Class participation by students decreased due to fear or lack of confidence (Howard, James, & Taylor, 2002) and feelings of infallible authority regarding faculty (Howard & Baird, 2000). According to Weaver and Qi (2005), interacting with faculty

outside of the classroom led students to feel more confident, be less fearful of faculty criticism, and participate more in class discussions than their peers who had fewer out-of-class interactions with faculty.

The support for learners benchmark (i.e., institutional encouragement to interact with a diversity of students, support managing non-academic responsibilities, social support, financial support, use of academic advising, and use of career counseling) had the smallest mean difference in scores of all five benchmarks, approximately 9 points, between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. Thus, although students who had been enrolled in an honors course perceived a greater level of support from the academic institution, the contrast was not as stark as other benchmarks. The use of academic advising services has been positive for retention (Hatch & Garcia, 2017; Noel-Levitz, 2009) and persistence (Bailey & Alfonso, 2005) rates. Consulting with financial aid counselors can also positively influence student retention through financial guidance regarding college costs and financial aid (McKinney & Roberts, 2012).

## **Implications for Policy and for Practice**

The findings from this study lead to several implications for policy and practice. First, students who had been enrolled in an honors course had a greater number of opportunities for a more robust academic experience as reflected in the large disparity in the academic and collaborative benchmark score. This benchmark also had the greatest predictive value for degree attainment (McClenney & Marti, 2006; Price & Tovar, 2014). Thus, institutional leaders should consider current curriculum and teaching strategies to determine if instructional techniques should be modified to include more active and collaborative learning opportunities. Opportunities outside the classroom such as field work, civic engagement, or service learning may also provide experiential opportunities to enhance student learning.

Second, students who had not been enrolled in an honors course had statistically significantly fewer interactions with faculty than their peers who had been enrolled in an honors course. Although, the larger number of interactions in honors courses may partially reflect smaller class sizes, it is vital to provide opportunities for all students who desire connections with faculty inside and outside the classroom. Administrators should examine student-to-instructor ratios to determine if some disciplines need more instructors in order to reduce class sizes. Additionally, instructors should be provided with informal opportunities to interact with students such as advising student clubs, serving as academic advisors, or by providing supplemental instruction through labs or one-on-one tutoring. Both monetary and non-monetary rewards may be considered as additional incentives for faculty.

## **Recommendations for Future Research**

Based upon the results of this study, several recommendations for future research can be made. First, as few investigations of honors programs in community colleges have been published, opportunities exist for more inquiries into honors programs in community colleges (Achterberg, 2004; Holman & Banning, 2012). Specifically, quantitative investigations are minimal in the literature. Second, this quantitative study should be replicated by researchers using more current data to determine if similar conclusions can be drawn. Third, researchers should consider using data from the National Survey of Student Engagement to extend this investigation to students at 4-year universities and determine the generalizability of these findings. Fourth, an examination of CCSSE data that is reflective of scholastic engagement and faculty engagement, between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course is of value. Lastly, further research using CCSSE data on student support service use differences between these two groups of students is recommended. Additional research on support service use that analyzes CCSSE data would be complimentary to this study.

## Conclusion

In this nationwide investigation, the extent to which differences were present in benchmark scores between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course was examined. Statistically significant differences were revealed for all five benchmark scores (i.e., active and collaborative learning, student effort, academic challenge, student-faculty, support for learners) between the two groups of students. Students who had been enrolled in an honors course had benchmark scores that were 9 to 16 points higher than students who had not been enrolled in an honors course, reflecting higher levels of scholastic engagement, deeper connections with instructors and their peers, and greater use of academic and student support services. Opportunities may be present for community college leaders to reduce the benchmark score disparity through championing innovative instructional techniques, encouraging student use of support services, and by providing opportunities for students to have positive interactions with faculty.

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Descriptive Statistics for Active and Collaborative Learning Benchmark Scores by Honors Course Enrollment Status

| Honors Course Enrollment | п      | М     | SD    |
|--------------------------|--------|-------|-------|
| Enrolled                 | 6,727  | 65.89 | 28.06 |
| Did Not Enroll           | 72,367 | 49.75 | 24.18 |

Descriptive Statistics for Student Effort Benchmark Scores by Honors Course Enrollment Status

| Honors Course Enrollment | п      | М     | SD    |
|--------------------------|--------|-------|-------|
| Enrolled                 | 6,727  | 59.23 | 25.18 |
| Did Not Enroll           | 72,367 | 48.75 | 24.38 |

| Honors Course Enrollment | п      | М     | SD    |
|--------------------------|--------|-------|-------|
| Enrolled                 | 6,727  | 60.99 | 24.22 |
| Did Not Enroll           | 72,367 | 49.96 | 24.64 |

Descriptive Statistics for Academic Challenge Benchmark Scores by Honors Course Enrollment Status

| Honors Course Enrollment | п      | М     | SD    |
|--------------------------|--------|-------|-------|
| Enrolled                 | 6,727  | 63.66 | 26.91 |
| Did Not Enroll           | 72,367 | 49.45 | 24.34 |

Descriptive Statistics for Student-Faculty Interaction Benchmark Scores by Honors Course Enrollment Status

| Honors Course Enrollment | n      | М     | SD    |
|--------------------------|--------|-------|-------|
| Enrolled                 | 6,727  | 57.66 | 26.32 |
| Did Not Enroll           | 72,367 | 48.30 | 24.01 |

Descriptive Statistics for Support for Learners Benchmark Scores by Honors Course Enrollment Status

## **CHAPTER V**

# DISCUSSION

Almost half of all undergraduate students enroll in community colleges (American Association of Community Colleges, 2016) to fulfill educational and career goals. As administrators shift focus from providing access to higher education to ensuring the success of already enrolled students (Smith et al., 2015), a greater understanding of effective methods for engaging students in the collegiate experience may maximize opportunities for student success. In this journal-ready dissertation, the extent to which differences were present in student academic and faculty engagement, utilization of support services, and engagement benchmark scores between community college students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course were examined.

Results across all three investigations are synthesized in this chapter. In the first research investigation, the differences in scholastic engagement activities and in faculty engagement activities between students who had been enrolled in an honor course and students who had not been enrolled in an honors course was determined. In the second study, the extent to which differences were present in academic support service use and student support service use between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course was analyzed. Finally, in the third research article, the degree to which differences were present in college engagement benchmark scores between students who had been enrolled in an honors course course and students who had not been enrolled in an honors course was investigated.

# **Summary of Study One**

In the first research article, scholastic engagement activities and faculty engagement activities as a function of honors course enrollment status was examined. Revealed in Table 5.1 are the results of the statistical analyses. Statistically significant differences were revealed for all seven measures of scholastic engagement (i.e., classroom participation, making presentations, completion of multiple drafts, synthesis of information from various sources for course papers, class preparation, in-class group project participation, and out-of-class group project participation) and six measures of faculty engagement (i.e., frequency of e-mail communication, discussion of assignments or grades, out-of-class discussions of course concepts, receiving prompt written or verbal feedback, effort required to meet instructor expectations, and collaboration on non-course activities). Clearly, students who had been enrolled in an honors course were more engaged scholastically and interacted more often with faculty than their peers who had not been enrolled in an honors course. These result were consistent with Ross and Roman (2009) who documented greater engagement among students who had been enrolled in an honors course.

# Table 5.1

| Engagement Measure   | Statistically<br>Significant | Effect Size | Higher Performing<br>Group |
|--|------------------------------|-------------|----------------------------|
| Classroom Participation  | Yes                          | Below Small | Honors                     |
| Classroom Presentation   | Yes                          | Small       | Honors                     |
| Preparation of Multiple Drafts   | Yes                          | Below Small | Honors                     |
| Synthesis of Information   | Yes                          | Below Small | Honors                     |
| Lack of Class Preparation  | Yes                          | Below Small | Honors                     |
| In-Class Project Participation   | Yes                          | Below Small | Honors                     |
| Out-of-Class Project<br>Participation                                  | Yes                          | Small       | Honors                     |
| E-Mail with Instructors  | Yes                          | Below Small | Honors                     |
| Discussion of Assignments or<br>Grades with Instructors                | Yes                          | Below Small | Honors                     |
| Out-of-Class Discussions with<br>Instructors                           | Yes                          | Small       | Honors                     |
| Prompt Performance Feedback from Instructors                           | Yes                          | Below Small | Honors                     |
| Effort Required Beyond<br>Perceived Capability to Meet<br>Expectations | Yes                          | Below Small | Honors                     |
| Engagement in Non-Course<br>Activities with Instructor                 | Yes                          | Small       | Honors                     |

Summary of Results for Scholastic Engagement and Faculty Engagement as a Function of Honors Course Enrollment Status

# **Summary of Study Two**

In the second empirical investigation, the extent to which differences were present in academic support service (i.e., tutoring, skill labs, computer labs, and academic advising) use and student support service (i.e., career counseling, job placement assistance, child care, financial aid advising, and transfer credit advising) use as a function of honors course enrollment status was examined. Statistically significant differences in the use of all support services were present between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. Results of the statistical analysis are presented in Table 5.2. Students who had been enrolled in an honors course were using every academic support services and student support services more frequently than their peers who not been enrolled in an honors course. College transitions (Kuh et al., 2010), Higher retention rates (Symonds et al., 2007), graduation rates (Jaafar et al., 2016), and easier college transitions (Kuh et al., 2010) were observed for students who had used support services. Therefore, institutional leaders should provide funding and backing for support services while also using all opportunities to promote the benefits of student use of support services.

# Table 5.2

| Support Service          | Statistically<br>Significant | Effect Size | Higher Use<br>Group |
|--------------------------|------------------------------|-------------|---------------------|
| Tutoring Services        | Yes                          | Below Small | Honors              |
| Skill Labs               | Yes                          | Below Small | Honors              |
| Computer Labs            | Yes                          | Below Small | Honors              |
| Academic Advising        | Yes                          | Below Small | Honors              |
| Career Counseling        | Yes                          | Below Small | Honors              |
| Job Placement            | Yes                          | Below Small | Honors              |
| Child Care               | Yes                          | Below Small | Honors              |
| Financial Aid Advising   | Yes                          | Below Small | Honors              |
| Transfer Credit Advising | Yes                          | Small       | Honors              |

Summary of Results for Support Service Use as a Function of Honors Course Enrollment Status

# **Summary of Study Three**

In the third study of this journal-ready dissertation, the degree to which differences were present in college engagement benchmark (i.e., active and collaborative learning, student effort, academic challenge, student-faculty, support for learners) scores between students who bad been enrolled in an honors course and their peers who had not been enrolled in an honors course was investigated. Statistically significant differences in benchmark scores were present between students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course. Students who had been enrolled in an honors course had higher benchmarks than their peers who not been enrolled in an honors course. Therefore, students who had been enrolled in an honors course reported higher levels of scholastic engagement, deeper connections with peers and instructors, and greater use of academic support services and student support services.

Table 5.3

| Benchmark                | Statistically<br>Significant | Effect Size | Higher Use<br>Group |
|--------------------------|------------------------------|-------------|---------------------|
| Active and Collaborative | Yes                          | Small       | Honors              |
| Student Effort           | Yes                          | Small       | Honors              |
| Academic Challenge       | Yes                          | Small       | Honors              |
| Student-Faculty          | Yes                          | Small       | Honors              |
| Support for Learners     | Yes                          | Small       | Honors              |

Summary of Results for College Engagement Benchmark Scores as a Function of Honors Course Enrollment Status

# **Connection with Existing Literature**

Revealed in the three articles in this journal-ready dissertation, students who had been enrolled in an honors course reported being more academically engaged through classroom participation, synthesis of information, and participation in group projects. Active learning led to greater satisfaction with learning (Hyun et al., 2017) and had predictive value for graduation (Price & Tovar, 2014). Cooperative learning and active learning were also demonstrated to be beneficial for students from underrepresented populations (Freeman et al., 2007). Results of this journal-ready dissertation were consistent with Ross and Roman (2009), who reported that students who had been enrolled in an honors course had higher levels of class participation and academic preparation, more opportunities to synthesize information, and expended more effort to meet instructor expectations than their peers who had not been enrolled in an honors course.

With respect to differences in use of academic support services and student support services, students who had been enrolled in an honors course used academic support services and student support services more often than their peers who had not been enrolled in an honors course. Although one-third of students express a desire for additional academic support (Noel-Levitz, 2007), only approximately 18% of students used supplemental instruction (CCSSE, 2012). The use of tutoring services in this study was higher for students who had been enrolled in an honors course (40.8%) than for their peers who had not been enrolled in an honors course (28%). Creating an academic plan with an advisor (Hatch & Garcia, 2017) was a positive influence on student intention to return as was academic advising experiences and satistfaction a positive influence on retention rates (Noel-Levitz, 2009).

Regarding college engagement benchmark scores, students who had been enrolled in an honors course had higher average benchmark scores than students who had not been enrolled in an honors course. The active and collaborative benchmark was observed to have predictive value for degree attainment in studies by McClenney and Marti (2006) and Price and Tovar (2014). Additionally, the academic challenge benchmark and student-faculty benchmark (McClenney & Marti, 2006) and support for learners (Price & Tovar, 2014) had predictive value for graduation. The active and collaborative benchmark reflected that students who been enrolled in an honors course had more opportunities to participate in class discussions, presentations, group work, outside class group projects, peer tutoring, participation in community projects, and discussions of course information outside the classroom. Greater levels of participation and interactions with faculty may be influenced by smaller class sizes common in honors courses (National Collegiate Honors Council, 2013; Otero et al., 2011). Additionally, interacting with faculty outside of the classroom led students to feel more confident, be less fearful of faculty criticism, and participate more in class discussions than their peers who had fewer out-of-class interactions with faculty (Weaver & Qi, 2005).

# **Connection to Theoretical Framework**

The theory of involvement (Astin, 1999) was the theoretical framework used in this journal-ready dissertation. Involvement was defined by Astin (1999) as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). Honors educators strive to develop curriculum and classroom environments that facilitate the development of a student intellectually and personally (Galinova, 2005). The findings from these investigations reveal that students who had been enrolled in an honors course were more involved than their peers who had not been enrolled in an honors course.

The higher levels of involvement are demonstrated through higher levels of engagement with the learning process and with faculty inside and outside the classroom. Students who had been enrolled in an honors course also used academic and student support services more often and had higher benchmark scores than their peers who had not been enrolled in an honors course. According to Astin (1999), the higher levels of involvement experienced by students who had been enrolled in an honors course will be influential in the retention and personal growth of students.

## **Implications for Policy and for Practice**

Active and collaborative learning, the development of critical thinking skills, and rigorous academic standards are common in honors courses (National Collegiate Honors Council, 2013; Otero et al., 2011) and are reflected by the higher levels of scholastic engagement experienced by students who had been enrolled in an honors course. More students enrolled in community colleges may benefit intellectually and personally from classes where critical thinking and academic rigor are emphasized. Students who have been enrolled in an honors course reported greater faculty engagement reflective of smaller class sizes (National Collegiate Honors Council, 2013; Otero et al., 2011) and may contribute to greater classroom engagement, participation, and comfort with faculty and the collegiate environment (Howard & Baird, 2000; Howard et al., 2002; Howard et al., 1996). Resource allocation and policy prioritization by educational leaders and policymakers can provide more students an opportunity to experience smaller class sizes, active and collaborative learning, and increased faculty collaboration.

As almost twice as many students who had been enrolled in an honors course Often used tutoring services when compared to their peers who had not been enrolled in an honors course, it is important to understand if students who had been enrolled in an honors course were being provided with additional services or information and encouragement to seek additional assistance. Administrators should examine allotments for academic support services and student support services to determine if adequate resources are being allocated. As the return on investment for providing academic support services was greater than the cost (Delta Project, 2009), institutional leaders can justify the need to allocate resources and provide backing for support endeavors. The academic and collaborative benchmark had the greatest score disparity in this study and greatest predictive value for degree attainment (McClenney & Marti, 2006; Price & Tovar, 2014), reflecting a more robust academic experience common to students who had enrolled in an honors course. Thus, institutional leaders should consider current curriculum and teaching strategies to determine if instructional techniques include enough active and collaborative learning opportunities in the classroom as well as experiential opportunities to enhance student learning outside the classroom through field work, civic engagement, or service learning. As the larger number of interactions in honors courses may partially reflect smaller class sizes, it is vital to provide opportunities for all students who desire connections with faculty inside and outside the classroom, to have avenues for engagement. An examination of student-to-instructor ratios in the classroom should be examined and opportunities for faculty to interact informally with students such as through student club advising and academic advising should be considered.

## **Recommendations for Future Research**

Based upon the results of this empirical investigation, several recommendations for future research can be made. First, as researchers have only published a small number of studies on community college honors programs (Achterberg, 2004; Holman & Banning, 2012), opportunities exist for further research. Specifically, quantitative examinations of honors courses in community colleges are vital as few quantitative studies have been published. Second, researchers are encouraged to replicate this quantitative study with more current data. A third opportunity for researchers is to extend this investigation to 4-year university students using data from the National Survey of Student Engagement. Fourth, research on the effectiveness of community college programs or initiatives where a deliberate attempt has been made to simulate the honors course environment through small class sizes, active and collaborative learning, and undergraduate research is also recommended. Lastly, future research is encouraged regarding the demographic and scholastic background of academically prepared students who enroll in an honors course or join honors programs in community colleges may provide insight into why well-prepared students choose to attend community colleges rather than universities.

## Conclusion

In this journal-ready dissertation, the extent to which differences were present in scholastic/faculty engagement activities, in academic/support service use, and in college benchmark scores between community college students who had been enrolled in an honors course and their peers who had not been enrolled in an honors course was addressed. Data from the Community College Survey of Student Engagement were procured and analyzed. Statistically significant differences were revealed in scholastic/faculty engagement activities, in academic/support service use, and in college benchmark scores as a function of honors course enrollment. Students who had been enrolled in an honors course reported greater scholastic/faculty engagement, more use of academic/support services, and had higher college benchmark scores. Consistent with the findings of previous researchers (McClenney & Marti, 2006; Price & Tovar, 2014), honors course enrollment was associated with greater scholastic engagement for community college students.

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# **APPENDIX**



October 5, 2017

Institutional ReviewBoard Office of Research and Sponsored Programs 903 Bowers Blvd, Huntsville, TX 77341-2448 Phone: 936.294.4875 Fax: 936.294.3622 <u>irb@shsu.edu</u> www.shsu.edu/~rgs\_www/irb/

| TO:              | Abraham Korah [Faculty Sponsor: Dr. John Slate]  |
|------------------|--|
| FROM:            | Sam Houston State University (SHSU) IRB  |
| PROJECT TITLE:   | Differences in College Engagement of Students as a Function of<br>Community College Honors Course Status: A Nationwide Study [T/D]   |
| PROTOCOL #:      | 2017-09-36517  |
| SUBMISSION TYPE: | INITIAL REVIEW   |
| ACTION:          | DETERMINATION OF EXEMPT STATUS   |
| DECISION DATE:   | October 5, 2017  |
| REVIEW CATEGORY: | Category 4—research involving existing, publicly available data usually has little, if any, associated risk, particularly if subject identifiers are removed from the data or specimens. |

Thank you for your submission of Initial Review materials for this project. The Sam Houston State University (SHSU) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

\* What should investigators do when considering changes to an exempt study that could make it nonexempt?

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research. In this case, please make available sufficient information to the IRB so it can make a correct determination.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

DATE:

Donna Desforges IRB Chair, PHSC

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

# VITA

Abraham Korah, MA, MBA, MLIS

Associate Professor and Librarian Lone Star College-CyFair Email: abraham.korah@lonestar.edu

### **Academic Degrees**

Doctor of Education, Sam Houston State University, Educational Leadership, May 2018 Dissertation: Differences in College Engagement of Students as a Function of Community College Honors Course Status: A Nationwide Study

Master of Arts, New York University, Higher Education Administration

Master of Science, University of North Texas, Library Information Science

Master of Business Administration, Sam Houston State University, Management

Bachelor of Arts, University of Northern Iowa, Finance

# **Publications**

### **Peer-Reviewed Publications**

- Korah, A. & Slate, J. R. (2017). Gender and ethnic/racial differences in community college student enrollment in honors courses: A national study. *Global Journal of Human-Social Science*, 17(4).
- Korah, A., & Cassidy, E. (2010). Students and federated searching: A survey of use and satisfaction. *Reference and User Services Quarterly*, 49(4), 325-332.
- Korah, A., Cassidy, E., Elmore, E., & Jarabek, A. (2009), Off the shelf: Trends in the purchase and use of electronic reference books. *Journal of Electronic Resources Librarianship*, 21(3), 263-278.

# Presentations

# **Peer-Reviewed Presentations**

- Korah, A. (October, 2016). Outliers? A quantitative analysis of student participation in two-year college honors in the United States. Poster presentation at the National Collegiate Honors Council Annual Conference, Seattle, WA.
- Korah, A. (October, 2016). *Beyond the book report: Facilitating complex and nuanced honors student research in two-year colleges*. Poster presentation at the National Collegiate Honors Council Annual Conference, Seattle, WA.

- Catala, P. C., Holmes, D. L., Lue King, K. A., Korah, A. P., & Landry, E. Y. (2016, February). Where do I belong?: A multi-site campus ecology case study. Paper proposal presented at Southwest Educational Research Association, New Orleans, LA.
- Korah, A., Becker, A., & Allerano, V. (March, 2015). *When the question means more than the answer: Facilitating inquiry to improve research.* Presentation presented at the biannual meeting of the Association of College & Research Libraries, Portland, OR.
- Korah, A., Norem, M., Green, S., & Turner, M. (March, 2013). Uncommon Knowledge: Collaborating with subject faculty to promote integrity and lifelong ethics.
   Presentation presented at the biannual meeting of the Association of College & Research Libraries, Indianapolis, IN.
- Korah, A., & Allerano, V. (April, 2013). *End the long wait: Taking an active and thoughtful role in your library job search.* Presentation at the annual meeting of the Texas Library Association, Fort Worth, TX.
- Korah, A., Cassidy, E., & Elmore, E. (April, 2010). *eReference books: Past, present, and future*. Presentation at the annual meeting of the Electronic Resources and Libraries, Los Angeles, CA.
- Korah, A. & Maniam, B. (April, 2009). Too big to fail! An examination of the 2008 financial crisis. Presentation at the annual meeting of the Allied Academies, New Orleans, LA.
- Korah, A. (March, 2008). *Scholarly research and communication tools*. Poster presentation at Digital Discovery: Issues in Scholarly Publishing, Houston, TX.

#### **Other Presentations**

- Korah, A., & Mori, K. (February, 2017). *Thinking like a researcher*. Presentation for Lone Star College-CyFair Honors College, Cypress, TX.
- Korah, A. (October, 2016). *Research and proposal writing: Finding and using information effectively and efficiently.* Presentation for Lone Star College-CyFair Honors College, Cypress, TX.
- Korah, A. (June, 2016). *Take a trip down under, mate.* Presentation at the Learning, Inspiration, Fellowship, and Enrichment (LIFE) workshop, Cypress, TX.
- Korah, A. (June, 2015). *Academic leadership*. Presentation at The Academy Alumni Association retreat, Spring, TX.
- Korah, A. (April, 2015). *The halo effect: Using habits to reach your professional goals*. Presentation at Empower U professional development, Cypress, TX.

- Korah, A. (March, 2015). *Business Apps*. Presentation at the Business Success Seminar, Cypress, TX.
- Korah, A. (September, 2014). *The halo effect: Using habits to reach your academic goals*. Presentation for Lone Star College-CyFair Honors College, Cypress, TX.

### **Professional Experience**

- 2011-present Lone Star College Associate Professor Reference and Instruction Librarian
- 2009-2011 San Jacinto College Reference and Instruction Librarian Systems Librarian
- 2007-2009 Sam Houston State University Business & Economics Reference and Instruction Librarian
- 1998-2005 University of North Texas Coordinator, Center for Cooperative Education and Internships
- 1997-1998 University of Chicago Assistant Director, Experiential Education

### **Honors and Awards**

Faculty Excellence Award, nominee CyFair Unsung Hero Award CyFair Spirit Award Humanities Texas Grant M.A.D. Duck Award, 2011, 2012, 2013, 2014 Soaring Eagle Award, 2005