Learning to Bend:

Examining the Effects of an Emotional Intelligence Intervention on First Year College Student Resilience

by

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ABSTRACT

The National Center for Educational Statistics (2018) reported that only 59% of first time college students will retain from their first to second year. The institutional effects of retention are wide ranging and nationwide colleges and universities are seeking effective methods of improving the retention of first year students. Isaak, Graves, & Mayers (2007) identified both emotional intelligence and resilience as important factors contributing to student retention. According to Daniel Goleman (1995), emotional intelligence is integral to success in life, and a significant relationship has been found with grades and successful acclimation to the college environment (Ciarrochi, Deane, & Anderson, 2002; Liff, 2003; and Pekrun, 2006). This study explored the impact of an emotional intelligence (EI) intervention within a First Year Experience course on students' emotional intelligence, resilience, and academic success. Forty four students at a small, private, liberal arts institution in the southeastern United States participated in the EI intervention and were measured for EI and resilience utilizing the EQ-i 2.0 and the 5x5RS measures as pre and posttests. Based on the results of this study, the EI intervention may have positive implications on EI, resilience and academic success. Institutions and researchers should continue to explore EI as a mechanism to improve resilience and academic success among first year students.

DEDICATION

I dedicate this accomplishment to all those who have supported me on one level or another throughout the process. First and foremost my wife, Carter, and my children Brooklyn, and Penelope. You have provided me with the support, love, and motivation to succeed; without which I most assuredly would not have. I am amazed and grateful every day at the life the three of you have given me. To the Batts, Davis, and Purvis families who were always supportive in spite of the times this work kept me and my family away. To our first child, our affable fur-baby Bailey, who served as an unaware participant in many debates and remained steadfast at my side through long nights of reading and writing. Last and never least, to God the Father. Who else could have led me here through the wilderness? Thank you for the blessings you have bestowed up me. I may never understand why, but I will always be grateful.

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INTRODUCTION

"The bamboo that bends is stronger than the oak that resists" - Japanese Proverb

For institutions of higher education the retention of students and timely graduation rates are of paramount importance. Specifically, retention affects (a) funding patterns, (b) facilities planning, and (c) academic curricula offered (Heisserer & Pareete 2002). The National Center for Higher Education Management Systems (NCHEMS, 2009) defines retention as the number of first-time, full-time undergraduates who return the fall semester after their first year. The literature corroborates this definition acknowledging retention as students who complete their first year of study at an institution and re-enrolled at the same institution for a second year (Hagedorn, 2005). The National Center for Educational Statistics (2018) reported that 16.9 million students were enrolled in postsecondary degree granting institutions in Fall 2016. Based on prior trends, only 59% of these students will complete their degree within six years of first-time enrollment at the institution in which they started (NCES, 2018).

Further emphasizing the importance of retention, institutional funding from the federal government has been tied to formal rates of four-year and six-year graduation. Formal graduation rates are defined by the National Center for Educational Statistics as degree completion from the first institution attended for first-time, full-time bachelor's degree-seeking students at 4-year postsecondary institutions. During the Obama administration, sweeping changes to federal funding for education created stricter accountability measures for institutions. In their review of former president Barack

Obama's work in higher education, Lederman and Fain (2017) wrote "Obama's proposal…sought to tie all federal financial aid to how colleges compare on affordability, student completion rates and the earnings of graduates" (para. 25). In his third State of the Union address, President Obama declared college completion as America's path to "win the future" (Jackson, 2011). Perhaps in response to the federal legislation, recently more than 75% of states have adopted funding models based on performance, often defined as first-to-second year retention and graduation rates (NCSL, 2015). According to Matthews (2009), first-to-second year retention has long been considered critical to improving graduation rates and he suggests that the first year is the "make-or-break period for many students regarding their academic, social, and emotional engagement with their chosen institution" (para. 10). Additionally, retention and graduation rates continue to be key metrics in national college and university rankings (Morse, Brooks, & Mason, 2017) and of high interest to students and parents as criteria for selection. Empirical work on retention in higher education is more than 70 years old (Braxton, 2000) and yet retention rates still linger around 60% (NCES, 2018). While attempts to improve retention are plentiful through institutional processes, few have been effective (Lederman, 2009) with many focusing on institutional flexibility to cater to individual students rather than investigating student flexibility. In addition to institutional effects, retention is an individual concern for students who receive financial aid yet fail to complete a degree, and are subsequently unable to secure gainful employment with which to repay loans (Lederman, 2010). Economists and other national watchdog organizations in the US echo this concern calling the ballooning student debt a "student loan debt

bomb" endangering students, and parents who co-sign on their children's loans (Soederberg, 2014, para. 1).

Another contributor to the woeful national completion rates is the retention of students with poor academic standing, commonly referred to as Academic Probation. In their continual assessment of American community colleges, Cohen & Brawer (2002) indicate that "As many as 25% of all students may be on academic probation at some time in their college careers" (p.67). Many colleges and universities use the term Academic Probation as a signal to students that their academic standing has fallen below an acceptable level determined by the college. Academic standing is determined by the number of hours attempted at the institution and a minimum grade point average (GPA). This minimum GPA is commonly referred to as a retention GPA and is the lowest cumulative or semester GPA that will allow a student to continue the following semester. GPA is typically calculated in one of two ways: Cumulative GPA is a reflection of the student's entire graded coursework while enrolled in a given institution, whereas term GPA is specific to a given semester or quarter. Retention GPA usually refers to a student's cumulative GPA. Typically, Academic Probation indicates a student will not be allowed to continue in school if his/her GPA is not improved to a level set by the institution.

Retention, as defined previously, is confined to and perceived as the physical act of returning to an institution for a second year. Within the construct of retention are the processes germane to the act of retaining. Much of the current research on the topic of retention has centered on institutional processes. For example Gansemer-Topf & Schuh

(2006) examined the effects of institutional selectivity and institutional expenditures on student retention rates. They found that selectivity and institutional expenditures that directly contributed to students' integration, such as instructional funding, did contribute positively to retention. While Lau (2003) studied the role administrators have on successful retention also finding positive effects. Hotchkiss, Moore, and Pitts (2006) however, present a more nuanced perception of retention that includes both student behavior and institutional efforts. Hagedorn (2005) defines these student attributes related to retention as desires or intentions of the individual student or resilience. Considering both institutional and student elements echoes the work of Bean (1983), Desimone, Harms, Vanhove, & Herian (2017), Tinto (1993), and Tusaie and Dyer (2004) who argue that students are influenced through their experiences with institutional structures and processes which shape their beliefs, attitudes and behaviors.

Part of the difficulty in addressing retention is its complexity. Much of the scholarship on retention has built upon Tinto's (1975) model of integration which suggested three main areas of influence: students' pre-college characteristics and goals, in-class interactions with peers and faculty, and out-of-classroom factors. From Tinto's suggestions, scholars have continued to analyze and tease out specific elements affecting retention which can be summarized into three tiers: social, individual, and institutional. Table 1 summarizes each of these tiers.

Table 1
Elements affecting retention

Tiers	Examples
Social Tier	
Social and External Support	Sense of belonging and mattering, familial support, staff and faculty support
Individual Tier	
Academic Performance	Course load and credit earned, academic self-discipline, college GPA and academic performance, high school GPA
Behaviors and Satisfaction	Commitment to college, sense of belonging and social connectedness, positive attitude about academics.
Institutional Tier	
Academic Engagement	Study abroad, co-curricular activities, undergraduate research activities, institution size, student clubs and organizations

In an effort to expound upon the elements that collectively contribute to retention, this study seeks to address the emotional/behavioral contributions to academic success and retention (Social Tier and Individual Tier) through the development of a program to build resilience in first-year undergraduate students.

Resilience and Emotional Intelligence

Resilience in psychological studies is often discussed in terms of an individual's stress response or how one copes through stressful situations. The stress response process

begins with the individual's appraisals, denoting an interpretation of an impending stressful situation (Lazarus, 1999). These appraisals include evaluations about the personal relevance of the situation and beliefs about potential resources available for meeting stressor demands (Schneider, Lyons, & Khazon, 2013). According to Schneider, et al. (2013) emotions play "a fundamental role in shaping our reactions to external stimuli and help to focus our attention, aid in interpreting harms or benefits, and motivate us to respond to anticipated or actual events" (p. 910). The association of emotional regulation to psychological resilience is extensively corroborated by Desimone et al (2017), Edward & Warelow (2005), and Martin et al (2015). Studying students in academic jeopardy, Isaak et al. (2007) identified four areas associated with students' lack of resilience: motivation, personal skill, emotion, and stress related factors. In their study, students in academic jeopardy identified academic, emotional, and motivational issues potentially faced by college students as well as completed a standardized measure of study habits and attitudes to be compared to students in good standing. Results showed that procrastination and time management were perceived at higher rates by those students in academic jeopardy, followed by study skills, emotional and stress-related difficulties.

As mentioned, resilience is the ability for an individual to cope in stressful situations. According to Parkes & Sarason (1986) stress is conceptualized "in terms of a relation between person and environment, emphasizing the dynamic, interactive nature of stressful transactions" (p. 1277) and of central concern is the way individuals perceive and respond to these events. Further, resilience is not a trait ability and can be developed and strengthened (Masten, 2001). According to Howard, Dryden, & Johnson (1999)

factors that enhance resilience include social support, physical wellbeing, self-regulation, optimism, and flexibility. Emotional Intelligence as it relates to resilience is the individual's ability to assess themselves, others, and interactions that materialize in a given environment. Emotional Intelligence (EI) is defined as a cross-section of interrelated "emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (Bar-On, 2006, p. 3). The fifteen factors Bar-On identifies as integral to EI are: 1) Self Regard, 2) Interpersonal Relationships, 3) Impulse Control, 4) Problem Solving, 5) Emotional Self-Awareness, 6) Flexibility, 7) Reality-Testing, 8) Stress Tolerance, 9) Assertiveness, 10) Optimism, 11) Self Actualization, 12) Happiness, 13) Independence, 14) Social Responsibility, and 15) Empathy. Some of these factors are considered genetic, such as a personality that is outgoing and social; however, many protective behaviors can be learned.

Emotional Intelligence is often discussed in the context of resilient behaviors exhibited by individuals in the face of adversity. For example, Joseph (1994) posited that resilient behavior is responsible, positive, self-reliant, committed, and socially skillful. Additionally Wang, Haertel, & Walberg (1997) argue that social and intellectual competence, planning, and resourcefulness are key characteristics of resilient individuals. Overlaying these attributes of resilience with Bar-On's fifteen factors of EI suggests that individuals with greater EI demonstrate greater resilient behaviors. This research will deploy an Emotional Intelligence curriculum intervention within a First Year Experience course with aims to improve resilient behaviors in first year students, whereby buoying retention rates.

Situated Context

Founded in 1891, Meredith College is a private, women's liberal arts college located in the bustling capital city of Raleigh, North Carolina. According to the "About Meredith" page on the school's website, total full-time enrollment is 1949 (1679 undergraduate students, 270 graduate/certificate students). Meredith draws the majority of its students from within North Carolina, however the student body boasts students from 39 countries and 33 states. Though its roots are in the Baptist church and some traditions persist, the College has been independent since 1997. Student to faculty ratio is 12:1, with 86% of the 133 faculty having earned doctoral or other terminal degrees.

Table 2

Six Pillars of Meredith College Strategic Plan

2013-2016+ Strategic Plan Pillars for the Future of Meredith College	
Pillar 1	Ensure educational excellence through curricular and co-curricular pathways that lead to student success
Pillar 2	Cultivate optimal enrollment of highly-qualified students
Pillar 3	Provide the facilities and technology needed to support the College's projected growth
Pillar 4	Strengthen the College's long-term financial stability
Pillar 5	Enhance the visibility and profile of Meredith College
Pillar 6	Enrich quality of life for Meredith faculty, staff and students

(Meredith College, 2013).

With the start of the 2012-2013 school year, Meredith College announced a new Strategic Plan. The plan identified six pillars upon which the College would set the stage for a strong and vibrant future (Table 2). Of the six pillars, five are affected by student retention to some degree: Pillar 1, Pillar 3, Pillar 4, Pillar 5, and Pillar 6. Moreover, within the strategic plan is the stated goal of reaching 85% retention of first year students. Historically, the College has maintained a retention rate in the mid to upper 70% range. The average retention rate over the previous five years has been 78%. With the importance of retention to the success of the Strategic Plan and long-term health of the institution, Meredith College made several structural changes to address this metric. Two of these changes relevant to the research discussed here are the revamp and proliferation of the First Year Experience courses and the academic standing policy.

First Year Experience Courses

The First-Year Experience (FYE) course refers to a specific course offered on the campus of Meredith College (FYE 100). This is a single-credit, graded course, instructed by faculty or staff. The course is administered through the College Programs office (Student Affairs) and focuses on learning strategies, career and major exploration, diversity, money management, and other topics intended to help first-year students transition successfully. FYE 100 is typically offered only in the fall semester for students who are enrolled in their first semester. This course has been offered on the campus for approximately 20 years; however, with the renewed commitment to retention in 2013, the College began placing all incoming first year students in FYE rather than leaving enrollment at the discretion of the student. While the course is still optional, students

must elect to drop the course. As a result, 98% of first-year students enroll in the FYE course annually. Prior to enacting the opt-out approach to FYE, student participation fluctuated between 59 and 75%. Each fall approximately 25 sections of FYE 100 are offered with a capacity of 15 students. Each section is required to cover specific content though there is space and flexibility for instructors to arrange the course schedule and additional content as they choose. The Office of First Year Experience provides suggested syllabi and typically all sections of FYE are very similar.

Academic Standing Policy and Academic Probation

In addition to the institution's focus on retention, the College recently adopted a new academic standing policy regarding GPA. As indicated in Table 3, prior to 2016, minimum GPA was based on a stratified ladder (students with fewer than 16 hours need a GPA of 1.500 or higher; students with between 17-25 hours need a 1.700 or higher, etc.). The new, more simplified, policy states that students with between 1-59 hours need a minimum GPA of 1.8. (Meredith College Course Catalog, 2016-17 & 2015-16).

Table 3
Academic Standing Policy Pre-2016 & 2016-present

Satisfactory Progress, Probation, and Suspension

Academic Standing GPAs pre-2016		Academic Standing GPAs 2016 & beyond	
Total Hours	Minimum GPA	Total Hours	Minimum GPA
1-16	1.5	1-59	1.8
17-25	1.7	60+	2.0
26-59	1.8		
60-89	1.9		
90+	2.0		

Though much more straightforward, the new policy is also stricter and the result of these changes have been mixed. Not unexpectedly, the total number of students placed on probation, specifically those below the 59 hour threshold has risen slightly. The number of students on probation in a given term is approximately 40, roughly 2.5% of the undergraduate population. Proportionately, the number of students suspended has also increased. Academic Suspension is when a student already on Academic Probation fails to improve their GPA to the minimum required by the end of the semester. Academic Suspension is a period of one semester during which the student is not allowed to enroll in courses and is required to reapply to the College to begin courses at the conclusion of the suspension term. Previous research has found that students facing academic probation may display lower resilience, can have lower social skills (Coleman & Freedman, 1996) and reflect greater social alienation and emotional disturbance (Isaak, Graves, & Mayers, 2007). These results present a clear and present need for additional measures of support for this student population. One goal of this research is to assess the linkage between increased emotional/social capacity and improved resilience.

Problem of Practice

First-year students at Meredith College, like their peers at institutions around the country, face a number of academic and social challenges. To better prepare students to navigate these obstacles, I developed an emotional intelligence curriculum that was implemented through two FYE 100 courses that I instruct. Recent research on the influence of emotions in educational psychology has shown that "emotions are significantly related to students' motivation, learning strategies, cognitive resources, self-

regulation, and academic achievement, as well as to personality and classroom antecedents" (Pekrun, Goetz, Titz, & Perry, 2002, p. 91). Research from Schnieder et al. (2013) demonstrated that aspects of emotional intelligence confer benefits during the stress process by promoting resilient psychological responses. Kuh et al. (2007) suggest it is vitally important to note the presence of resilience in retention as a student characteristic. This is because many institutions typically focus on institutional practices and less on the student decision making process and other factors which cannot be controlled through institutional practices. This study will explore the linkages between emotional intelligence and resilience of first year students through an emotional intelligence intervention delivered within two sections of a First Year Experience course. The immediate inquiry in this study is the relationship between Emotional Intelligence and resilience in first year students. Resilience was chosen as a focal point due to the limited window for research and that it is an established component in a student's ability to continue their educational journey (Eisenberg, Lipson, & Posselt, 2016). Longer term, more holistic implications of this study are the effects improved EI and resilience have on retention rates for first year students.

As Meredith College looks to prioritize retention in the latest iteration of its Strategic Plan and considering the importance of retention on student well-being, institutional ranking, and financial health, exploring mechanisms to increase student retention is of particular concern. Contributing to matters of retention are stricter academic standing guidelines that have been enacted by the College. As a result more students are placed on probation and a greater percentage of students face suspension if they do not effectively navigate the probationary period and return to good standing.

Preparing new students at Meredith to be more resilient may lead to improved retention of both probation and non-probation students. This problem-of-practice is relevant because retention and the percent of retention (a nationally reported institutional metric) has internal and external consequences for the College. Given the size of the undergraduate enrollment, every student is of paramount concern. With 98% of the first year class enrolling in FYE 100, three sections of this course were selected as the setting for this study, two treatment and one control. To further illustrate this point: with a freshmen class of approximately 400 students each year and a goal of 85% retention for this class, in order to reach the goal, student attrition must be limited to fewer than 60 students. For every four additional students that are retained, retention rates increase by an entire percentage point.

For students, retention is equally important. Simpson (2005) posited that higher education is an investment for students and like any investment, not without risk. Students who fail to retain could face "considerable debt without acquiring the means to pay it off" (p. 35). Relatedly, students who withdraw from college are more than five times likely to default on existing college loans than those who graduate (Volkwein & Cabrera, 1998). Highlighting this concern, statistics from the U.S. Department of Labor (2017) on the median U.S. weekly salary for a person with some college but no degree was $744 with an associated average unemployment rate of 4.2%. While the average weekly salary of a person with a bachelor's degree was $1175 and an associated average unemployment rate of 2.5%

With regard to retention, institutional characteristics have been studied widely. These characteristics include; the size of the institution, support programs offered, student activities and organizations, and the culture of the institution. Such studies have found that funding for academic support services, tutoring, first year seminar, honors programs, multicultural and diversity initiatives, and physical facilities play an interrelated role in retaining students (Lau, 2003). The interconnectedness of the research focus with several of these characteristics (support, first year seminar, and diversity) further highlights the validity and potential implications of this work.

Research Questions

This study was conducted to investigate three research questions that stem from the problem of practice. Each question concerns the influence of emotional intelligence training on students' resilience and retention. The first question seeks to identify improvements in student resilience as a result of an emotional intelligence intervention in an FYE course. The second looks for traditional metrics of academic success (GPA) as an alternative indicator of retention. The third question examines the change in participants EI as a result of the intervention. The research questions are:

RQ 1: How and to what extent does an FYE course that emphasizes emotional intelligence affect college students' emotional intelligence?

RQ 2: How and to what extent does an FYE course that emphasizes emotional intelligence affect resilience?

RQ 3: How and to what extent does an FYE course that emphasizes emotional intelligence affect academic performance?

CHAPTER 2

THEORETICAL PERSPECTIVES GUIDING THE PROJECT

Student success in higher education takes on many forms and is measured from many perspectives. Academic skills proficiency, progress towards degree completion, grade point average (GPA), and retention are several examples of traditional measures of academic success among colleges and universities (Elias & Weissberg, 2000). Of these measures, according to Noel Levitz (2008), freshmen-to-sophomore retention rate and overall cohort graduation rate are the two most frequently cited statistics in connection with student success. Though retention claims the predominant focus, clearly many of these measures are interrelated constructs and for the purposes of this study, student success shall be defined in relation to retention as a product of said constructs. Another interrelated yet under-researched construct in student success and retention is emotional intelligence (EI). According to Goleman (1995), success in life is largely predicated on EI. With the financial implications and notoriety tied to retention, colleges and universities are keen to invest in programs with the potential to elevate retention numbers. Ciarrochi, Deane, & Anderson (2002), Liff (2003), and Pekrun (2006) were foundational in the practice of applying EI to student success. Liff (2003) found that the higher a student's EQ (emotional intelligence score) the greater their success in the classroom. Building upon this previous work on EI and student success, I hypothesize that deploying an intervention to improve EI in the student body may assist in retention and graduation of entering students. This chapter will discuss the research related to retention and student success, resilience, emotional intelligence and the overlap across these three constructs.

Retention and Academic Success

This first section will review theoretical frameworks that support the concept of retention and academic success. The foundational theory in the area of retention is Tinto's Interactionalist Theory of Departure (1987, 1993) that has reached near "paradigmatic status" (Berger & Braxton, 1998, p. 104). Tinto's (1993) discussion of best practices in retention center on the actions of the institution. The Interactionalist Theory focuses on elements of the student prior to arriving on campus and the institutions commitment level to the academic and social needs of the student. The crux of Tinto's theory is that a student's decision to leave an institution is a direct result of deficiency in academic systems, social systems, or both.

> The individual's experience in those systems (academic and social), as indicated by his/her intellectual (academic) and social integration, continually modifies his or her intentions and commitments (Tinto, 1993, p. 114-115).

Tinto emphasizes the types of interactions a student will have on a college campus as the impetus for the retention or departure of that student. Tinto (1987) identifies these factors as goals and integration. Goals are academic aspirations that the student has set for themselves during their time in college. Integration is the social component and relies upon the student's ability to form relationships with other institutional members (i.e. faculty, staff, peers) as well as their ability to adapt to institutional culture. Tinto (1993) however also calls upon institutions to aid in supporting student socialization rather than leaving integration solely on student ability. Institutions should not only provide aid but also provide assistance in identifying where aid is needed. This requires an institutional culture that fosters relationships not only from student to student but also between student

and faculty and staff. A campus culture robust in this type of social function has the ability to buoy students' academic goals, whereby aiding in retention and timely matriculation. In their review Pascarella and Terenzini (2005) corroborate Tinto's findings suggesting that student social interactions are unequivocally powerful in shaping the undergraduate experience.

Student social interactions, both in and out of the classroom, are integral to student success and retention (Astin, 1993; Pascarella & Terenzini, 2005). Astin (1996) states that "the greater the interaction with peers, the more favorable the outcome" (p. 126). Tinto's (1987, 1993) theory suggests that a student's interaction with academic and social systems on campus are conjoined and that they share reciprocal effects on the student. Learning communities for example, are an illustration of the positive reinforcement between social and academic systems that can increase student retention. Academic integration indicates alignment with the institution's academic values and succeeding in the classroom while social integration is the alignment of the campus environment with background, values, and goals (Kuh, Kinzie, Buckley, Bridges, and Hayek, 2007). Increased levels of academic and social integration are predicted to lead to greater institutional commitment and graduation There are a variety of factors that have been found to influence integration and academic performance and thus retention (Tinto, 1997). It is important to understand these traditional elements that have defined academic performance and retention for students and institutions. The following section will discuss these elements.

Student Elements

Literature on first year academic success largely squares on what could be termed student "inputs." These are influential elements that come with the student from prior to college entry. Ishler and Upcraft (2005) considered the most prominent of the characteristics to be sex, age, financial ability, intent to graduate, previous academic achievement, and family support. Similarly Astin's (1996), nationwide study of nearly 53,000 undergraduate students found four similar elements (race, sex, prior academic ability, and standardized test scores) to be indicative of academic success.

Institutional Elements

While much of the literature since Tinto's original theory focuses on the student elements that contribute to academic success and retention, Pascarella and Terenzini (1991) suggest specific qualities of the institution that contribute to retention include selectivity, reputation, race and gender of the existing student body, and on-campus housing. A study from Schmitt and Duggan (2011) highlights the importance of non-faculty institutional staff to retention. Noting that growth in staff positions has far outpaced that of faculty and that typically staff dominate early college interactions with students. Schmitt and Dougan observed student and staff interactions in administrative front offices, libraries, counseling and testing centers, admissions, and business offices. They found that students are more apt to approach and develop deeper relationships with staff as opposed to faculty even though they interact with faculty more regularly through class attendance. These studies highlight a variety of elements that are institution specific such as admissions practices, facilities, and organizational structure (i.e. professional academic advising).

Much of the literature and the majority of the institutional focus center upon these student and institutional elements for addressing retention and academic success concerns. For many good reasons, institutions seek to control enrollment. Historically, there has been the belief that if a student with a specific criterion is enrolled and certain institutional programs are in place, students will be influenced to stay at the institution. However, institutions cannot control the elements of every student, and the influence of institutional elements varies and may not impact every student (Braxton, Hirschy, & McClendon, 2004). What seems to be missing from the literature is the students' ability to adapt when these student or institutional elements are not present. Kuh et al (2007), in reviewing Tinto's work, point to his suggestion of adjustment being integral to integration into social and academic systems as necessitating this adaptability. Recent research on academic grit from Angela Duckworth (2015) and Carol Dweck's Growth Mindset (Claro, Paunesku, & Dweck, 2016) center on this concept. Nurturing students' ability to adjust may combat incongruences in student or institution elements that contribute to departure. Harnessing these theories, the goal of this intervention will be to buoy both academic and social integration as Tinto implores. Students will invariably encounter stressors in both academic and social situations. The content of the intervention aims to provide students with the necessary skills to adjust to the afore-mentioned incongruences in student and institutional elements.

There are however emerging challenges to Tinto's work. Most specifically in the areas of equity, opportunity, and social justice. These critiques center on the homogenization of the terms involvement, engagement, and integration as part of a tendency in thought and practice to over-focus on the student's role in success and not

enough on the societal and institutional roles. Wolf-Wendel, Ward, & Kinzie (2009) work summarizes these concerns saying:

> *there is room to be critical of the overemphasis these concepts place on the student as the agent and their underestimation of the role of institutional agents in fostering involvement, engagement, and integration (p. 421).*
>
> *An important concern about these concepts is the extent to which they fail to represent the experiences of students historically underrepresented in higher education (p. 422).*

Wolf-Wendel et al (2009) citing Hurtado (2007) also critique Tinto's integration theory for its foundation in predominantly white institutions and "calls for normative congruence, which implies that acculturation of historically marginalized groups and conformity to dominant modes of thinking and acting (p. 423)." Tinto has responded to these critiques suggesting the evolution of the term integration has altered his original intent and that the term is not appropriate in contemporary settings (p. 424).

Resilience Theory

Resilience is commonly defined as the ability to successfully adapt in the face of adversity or threatening situations (Gordon & Wang, 2004; Fergus & Zimmerman, 2005; Luthar, Cicchetti, & Becker, 2000; Martin & Marsh, 2006). Resilience as it is defined today has its roots in the work of Norman Garmezy (1974) who began studying children's response to psychological trauma. The field has evolved through numerous studies on negative life events, the associated risk factors, and the varying responses of individuals to similar events (Rutter, 1985; Mulloy, 2011). A robust study of resilience research from Luthar (2006) identified specific areas of stressors 1) major life stressors 2)

minor life stressors (i.e. hassles). 3) life situation stressors (institutionalization) and 4) socioeconomic related stressors. Particularly relevant to this study are major and minor life stressors and socioeconomic stressors. Kuh et al. (2006) identified some of these stressors in terms of the college student, for example; academically underprepared, delaying enrollment in college, working in excess of 30 hours per week, and first generation college student. Academic resilience is defined as the ability to succeed academically in the face of real or perceived challenging circumstances (Wang, Haertel, & Walberg, 1997). Research into the risk factors associated with resilience has led to the investigation of protective factors that allow certain individuals to withstand or mitigate adversity. Garmezy (1991) and Rutter (1985) identified some of these protective factors including faith, tolerance, problem solving skills, support systems, self-efficacy, self-control, and goal orientation. As will be illustrated later in the chapter, the emotional intelligence modules developed for this study overlap significantly with these protective factors: Self Perception – self-efficacy and goal orientation; Self Expression – self-control; Stress Management – support systems; Decision Making – problem solving; Interpersonal – faith and tolerance. Further illustrating the shared elements of Emotional Intelligence and resilience, resilience training at the University of Pennsylvania by Reivich, Seligman, Martin, & McBride (2011) suggests that core competencies in resilience include a) self awareness, b) self regulation, c) optimism, d) mental agility (flexibility), e) character strengths, and f) connections (relationships). Over time, protective factors have been categorized into three overarching areas: individual characteristics, familial situation and support, and aspects of the wider community. Interestingly, these three areas align well with research on retention and academic

success from Tinto and others. It is presumed that the more protective factors an individual has, the better they will be at persevering in the face of adversity (Richardson, 2002).

From this early work on resilience, research has transitioned from viewing resilience as a simple set of protective factors to a cyclical, iterative process. More than resistance to or recovery from adversity, resilience becomes an interaction between protective factors and context or a cycle between disruption and growth periods (Richardson, 2002; Morales 2000). To simulate this "resilience cycle", Morales (2000) utilized understanding as a means to improving the identification of risk factors, understanding and refining protective factors, and acknowledging resilience as an evolving ability. Much of the work in resilience has been concerned with major life stressors or disadvantaged populations more prone to such events (Masten, 2001). Given the nature of the college experience; transitioning to new environments, independence, maturity, social interactions, etc., this study was intentional to recognize minor life events in relation to resilience. Campbell-Sills et al. (2006) suggests that resilience viewed in this way contributes to maintaining healthy functioning, aiding with everyday stressors, not just traumatic ones. Similarly Martin and Marsh (2009) have done studies on academic setbacks and difficulties that are typical of the ordinary course of college life. Their research focuses on resilience as termed "academic buoyancy," defined as everyday instances such as poor grades, due-dates, exams and other threats to confidence. Seligman, Ernst, Gillham, Reivich, & Linkins (2009) studying positive psychology and resilience in education found that "more wellbeing is synergistic with better learning and that increases in wellbeing are likely to produce increases in learning (p.294)"

Synthesizing much of the research in the field, Seligman et al. posited that optimism produces broader attention, creative thinking, and more holistic thinking.

Resilience is not without criticism. Due to its multidimensional nature, research shows that resilience emerges despite the presence of risk factors and lack of protective factors (Fentress & Collopy, 2011). Luthar (2000) discusses this weakness positing that just because resilience is present in one area of life it is not guaranteed to exist in other domains. Similarly, given the internal elements of resilience, it is unrealistic to expect all individuals to develop or respond in explicit ways. Continued research is needed to address the diversity of the construct between major and minor stressors as well as disadvantaged versus general population. Richardson (2002), Morales (2000), and Luthar, Cicchetti & Becker (2000) suggest a methodology that considers the interaction between the protective factors and the contextual framework in which they occur. One such methodology could be emotional intelligence. Bar-On (2006) defined this as: "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (p.4). Emotional intelligence may assist students in modulating varying stressors and context.

Emotional Intelligence

Emotional Intelligence (EI) can claim roots as far back as Aristotle, though contemporary foundations are attributed to Thorndike's (1920) concept of social intelligence. Thorndike suggested a more holistic view of intelligence that includes the ability to think and act in all contexts of life. After Thorndike, research interested in the area of social intelligence and EI waned. It was Thorndike's challenge to the singular

notion of intellectual ability (IQ) that gave rise to contemporary concepts of EI and social intelligence (Bar-On, 1997; Goleman, 1995; Salovey & Mayer, 1990). Perhaps coincidentally, educational institutions have, for decades, been concerned with students' academic success but until more recently the concept has been largely confined to intellect or IQ. Pauk (1962) suggested that academic success required certain skills such as: self-perception, motivation, and the resilience, among other personal characteristics all of which are typically considered attributes of EI. While there is no universally agreed upon definition of EI, contemporary research and theory emanate from three main theories: Bar-On (1997), Goleman (1995), Mayer and Salovey (1997). The following sections will discuss each of these theories.

Bar-On's Emotional-Social Intelligence

Bar-On's theory and interrelated measure, Emotional Quotient Inventory (EQ-i), is highly validated and the most widely utilized emotional intelligence (EI) measure. The Bar-On model does not attempt to separate EI from social intelligence. Based on work from early EI scholars who viewed EI as a component of social intelligence, Bar-on (2006) suggests "that both concepts are related and may, in all likelihood, represent interrelated components of the same construct" (p. 1). To this end, Bar-On's model also draws on the earliest social intelligence work that sought to describe socially competent behavior as non-intellective factors on intelligent behavior. Bar-On's model is therefore intentionally a broader model of emotional-social intelligence (ESI) that is "composed of a number of intrapersonal and interpersonal competencies, skills and facilitators that combine to determine effective human behavior" (p.2).

A second influence on the Bar-On model recalls Darwin's early work on emotional expression as a means of adaptation and survival. The ESI "stresses the importance of emotional expression and views the outcome of emotionally and socially intelligent behavior in Darwinian terms of effective adaptation" (p.3). Similar to many ESI theories from Darwin forward, Bar-On's model has five general considerations in regards to ESI: 1) the ability to identify, comprehend, and express emotions; 2) the ability to regulate emotions; 3) the ability to identify emotion in others and relate to them; 4) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (5) the ability to be self-motivated.

Given these influences, the Bar-On model suggests that "emotional-social intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (p.4). The skills and facilitators referred to here are those five previously mentioned factors. Bar-On also suggests that within these five factors, additional competencies exist and these are measured by the EQ-i.

Mayer and Salovey Model

Considered the foremost experts in the field, Mayer and Salovey's work situated EI as a subset of Thorndike's social intelligence and revised its scope. They described social intelligence to include the ability to monitor one's emotions and the feelings and emotions of others. Within this definition they clarified EI as the ability to correctly perceive, appraise, and express emotion. The Mayer, Salovey & Caruso (2002) model includes four ability-based branches: 1) identifying emotions, 2) using emotions to help

think more creatively and solve problems, 3) understanding emotions, and 4) regulating emotions. Moreover, the four branches are arranged in such a way as to illustrate a progression from an ability focus to integrated high-level regulatory functioning (Mayer & Salovey, 1997). Moving through each branch illustrates this progression. The first branch is concerned with awareness of emotion in the self and others and appropriate expression. The second branch concerns the way individuals facilitate various emotions, balance emotions, and determine which one requires the most attention (Salovey, et al., 2004). Moving into the third branch, EI involves the ability to recognize emotions and understand their progression and to reason about them appropriately (Bar-On, 1997; Salovey et al., 2004). By the time individuals reach the fourth branch, emotion is successfully regulated and a utilized function of social and intellectual development.

Goleman's Model

Daniel Goleman's (1995, 2001) theory of EI is one that focuses on the importance of EI in performance, specifically workplace performance and is a blend of the Mayer & Salovey and Bar-On models. Goleman (2001) defines EI in four domains; "Self-Awareness, Self-Management, Social Awareness (empathy), and Relationship Management (social skills)" (p.27). Within these domains exist twenty learnable EI skills Goleman labels "emotional competencies." Distinguishing between EI and these emotional competencies, Goleman posits,

> ...although our emotional intelligence determines our potential for learning the practical skills that underlie the four EI clusters, our emotional competence shows how much of that potential we have realized by learning and mastering skills and translating intelligence into on-the-job capabilities (p.28).

In other words, Goleman believes that individuals are born with a general emotional intelligence that determines their potential for learning emotional competencies. Simply having a propensity for one of the EI areas does not indicate mastery.

Goleman suggests that learning these skills is indeed a necessity for successful performance. While Goleman's focus is on job performance, his list of competencies and EI abilities are easily paralleled to academic success. Following Goleman's (1997) work, EI became particularly popular within the business community and leadership. As interest and benefits in the concept grew, it led to the idea that EI could be beneficial for academic success (Elias & Bruene-Butler, 1997).

Emotional Intelligence & Academic Success/Retention

According to The National Center for Education Statistics (2018), between the year 2018 and 2027, 20-21 million students will be enrolled in higher education annually. With changing population demographics and increased diversity (U.S. Census Bureau, 2018), higher education must be prepared to work with and support a more diverse pool of students (Kadison, 2004). With increased student diversity, institutions should expect an increasing array of student elements affecting retention such as gender, age, financial ability, intent to graduate, previous academic achievement, and family support in addition to a variety of talents and dysfunctions. In fact, the National College Health Assessment (2018) reported the following instances of mental health issues in college-going students: 87% felt overwhelmed, 53% felt hopeless, 84% felt exhausted, 62% felt lonely. According to Hong, Ivy, Gonzalez & Ehrensberger (2007) a greater number of students with cognitive disabilities are enrolling in postsecondary institutions and these students do not often possess the necessary coping skills to succeed. Eisenberg et. al. (2016)

suggest nearly one third of students show clinically significant mental health concerns such as depression or anxiety (p.87). While mental health and students facing these issues are not the explicit aim of this study, the growing number of undergraduates with mental health concerns warrants mention here. As mental health concerns affect a larger portion of the student body it is critical that innovations seeking to improve student success address these issues. Reciprocally, Eisenberg et al. (2016) citing an earlier study from Eagan et al. (2013) suggest diminishing levels of resilience appears to be a contributing factor in declining mental health (p. 88). Without properly developed coping skills these students are at an elevated risk of leaving college short of degree completion (Hoyt & Winn, 2004). As a result, higher education must find ways to support mental health issues and the development of their students. This development is essential to establishing the psychological skills needed to cope in college life as well as the academic skills to succeed (Hong et al., 2007).

Multiple studies have shown the necessity of emotional intelligence in a successful life (Goleman, 1995; Bar-On & Haddley, 1999; Liff, 2003; Ashkanasy & Dasborough, 2003). In separate studies, Bar-On & Haddley (1999) and Stein & Book (2000) found that EI could predict 27-45% of a person's success. As a result, researchers have begun to apply the notion of EI and success to academics. Professor James Parker has extensively studied the association of EI to academic success utilizing Bar-On's Emotional Quotient Inventory (EQ-i) to measure student EI. In one study Parker, Duffy, Wood, Bond, and Hogan (2005) administered the EQ-i to 1426 first year students at four separate institutions prior to the start of classes. Using GPA as a metric of success, higher EQ-i scores correlated with higher GPAs (3.0 or better) while lower scores were found in

students with a sub 2.0 GPA. Another study of first year students attending a Canadian university (N=382) found that EI subscales intrapersonal, adaptability, and stress management were strong predictors of academically successful and unsuccessful first-year university students (Parker et al, 2004). In yet another study on EI featuring the EQ-i, Parker & Duffy (2005) focused on student retention from the first year to the second year of enrollment. Students who returned for a second year showed higher EI scores in more domains than those who did not return for a second year. Like Parker, Petrides (2004) studied EI and academic success in students but rather than use the EQi measure, researchers developed their own questionnaire that included items from the EQi. Not only did Petrides' study show a link between EI and academic success it also showed that higher levels of EI contributed to lower levels of counterproductive academic behaviors (i.e. missing class, procrastination).

Barchard (2003) looked at the GPAs of 150 college students utilizing cognitive, personality, and EI domains as predictive measures. He found multiple measures of EI significantly correlated with academic success including; self-expression, self-awareness, and flexibility. It is important to note that Barchard's results only found significance in EI when coupled with other domains such as personality and intelligence. Alternatively, Liff (2003) applied EI to college student success, studying the effects of social and emotional competencies on undergraduate students' success. From this research Liff suggested that the more developed a student's EI skills were, the more success they should have in college. The German psychologist Reinhard Pekrun (2006) studied and identified specific emotions related to academic success and achievement (achievement emotions).

Through his work, Pekrun identified nine Academic Achievement Emotions; enjoyment, hope, pride, relief, anger, anxiety, shame, hopelessness, and boredom.

Teaching Emotional Intelligence

Bar-On (1997) and Stein and Book (2000) found that EI is not static, that it can be increased, and that it naturally improves over time. Studies augmenting EI are plentiful (Ashkanasy & Dasborough, 2003; Bar-On & Handley, 1999; Goleman, 1995; Liff, 2003; Schutte and Malouff, 2002; Stein & Book, 2000). Ashkanasy and Dasborough (2003) studied students (N=144) who were enrolled in an advanced leadership skills course. The Mayer, Salovey, and Caruso Emotional Intelligence Test (MSCEIT, 2003) was administered and students were required to participate in an EI intervention consisting of two assignments and a post examination. Ashkanasy and Dasborough found that student performance was positively correlated with change in EI. While this study suggests that increased levels of EI may correlate with greater academic performance, more importantly, this study also showed that EI can be taught. Schutte and Malouff (2002) studied the impact of teaching and teachability of EI skills in a first year experience course. Students in the test group received a specially designed intervention for EI training. Control group students were placed into standard freshman experience course sections. Researchers found that students enrolled in the EI sections were retained for the academic year at a significantly higher rate while being more aware and in control of their emotions than those in the control group.

Additional theoretical support for teaching EI can be derived from the three level model suggested by Mikolajczak (2009): 1) *knowledge* of emotions and strategies to deal with emotional situations, 2) actual *abilities* in relation to emotional functioning and 3)

personality *traits* in dealing with emotions. With a fourth level concerning emotional self-efficacy proposed by Nelis, Quoidbach, Mikolajczak, & Hansenne (2009). The current study seeks to build upon these results to include resilience and academic success measures while utilizing alternative EI assessments and adding additional qualitative data from participants.

Emotional Intelligence and Resilience

Studies on resilience have explored characteristics that aid individuals in coping with adverse or stressful situations (Edward & Warelow, 2005). These characteristics, also known as protective factors, are a convergence of genetic and learned behaviors. The stress process begins with risk appraisals or the individual evaluation of adverse situations (Lazarus, 1999). According to Lazarus, these appraisals can be divided into primary and secondary appraisals. Primary appraisals are those that determine the importance of the event to the individual: Does the situation present a danger to the individual's goals or values. Secondary appraisals concern the individual's belief that the impending threat can be dealt with. Primary and secondary appraisals combine when faced with adversity and determine where the situation is manageable (challenge) or not (threat). According to Schneider (2004), these appraisals are related to emotion and individuals who gauge situations as "challenge" vs "threat" are higher in coping skills. Brodkin and Coleman (1996) suggested characteristics of resilient individuals include:

> Having a sense of humor, flexibility, caring, empathy, good communication skills, at least one supportive caregiver, the ability to problem-solve, resourceful in seeking out the support or help of others, a sense of autonomy (that is, the ability

to act independently and exert control over one's environment), having goals, educational aspirations, persistence, and hopefulness (p. 29).

Successfully coping with adversity "involves emotional intelligence and resilience, both of which can be developed through support and education (Brodkin and Coleman, 1996, p. 1)." Bar-On (1997) and Goleman (1995) describe EI as skill, personality and wellbeing. Similarly, Matthews, Zeidner, & Roberts (2002) refer to EI as the ability to identify, express, and understand emotions; to incorporate emotions into thought; and to normalize both positive and negative emotions. EI is often studied and discussed in the context of resilient behavior. Wang, Haertel, & Walberg, (1997) posited that resilient individuals display characteristics such as social competence, IQ, planning, and resourcefulness to combat the stress process. Overlaying Wang, et al's characteristics with the five domains of EI from the Bar-On (1997) model; Social Competence (self-expression & interpersonal), Planning (decision making), and Resourcefulness (stress management & self-perception) illustrates the shared constructs between resilience and EI. *Interpersonal* is the ability to determine how others feel, facilitating membership in social groups and mutually satisfying relationships. *Self Expression & Self Perception* include the ability to accurately identify and express emotions, which help to discern between challenge and threat situations. Utilizing emotions to enhance thinking includes the ability to change emotion and alter the cognitive processes, be objective, and improve problem-solving or creativity. *Decision Making* includes understanding emotional information, how emotions interact, and their causes and consequences. *Stress Management* includes the ability to be open to feelings and adjust them to promote development, even during adversity. People experiencing

specific and intense emotional changes should benefit from EI (Barrett, Gross, Christensen, & Benvenuto, 2001); however, research in this area remains scarce.

Discussion, Summary & Conclusion

Chapter two highlights the theoretical underpinnings of this study and the convergence of each. There have been many studies on academic success and retention (Tinto 1987, 2003; Astin 1993, 1996; Ishler and Upcraft, 2005; Pascarella and Terenzini 1991, 2005; Kuh et al, 2007; Schmitt and Duggan 2011), emotional intelligence (Pauk, 1962; Goleman, 1995; Salovey & Mayer, 1990, 1997; Bar-On, 1997, 2006; Mayer, Salovey & Caruso 2002), and resilience (Rutter, 1985; Wang et al, 1997; Richardson, 2002; Morales 2000; Masten, 2001; Luthar, 2006; Martin and Marsh, 2009; Mulloy, 2011). Relying heavily on the works of Tinto (1997 & 2003), student integration, academic success and subsequent retention is tied closely to the individual's ability to acclimate socially coupled with his/her ability to withstand the natural stressors associated with a new environment and increased academic rigor. The ability to adjust and acclimate in life, specifically to adversity, is known as resilience. Resilience scholars have defined the core characteristics of individuals with high levels of resilience as: tolerance, problem solving skills, support systems, self-efficacy, self-control, and goal orientation. Many of these "protective factors" are prominent in contemporary science on emotional intelligence which is defined as is an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures (Bar-On, 2003).

Given the shared components across these constructs there are a growing number of studies seeking to better define and illuminate potential bridges and implications (Reiff

et al., 2001; Ashkanasy & Dasborough, 2003; Barchard, 2003; Clark et al., 2003; Liff, 2003; Parker, Duffy, et al., 2005; Pekrun, 2006). While some studies have shown great promise in the merits of EI in relationship to academic success others have found little or no association without cognitive elements being coupled alongside EI (Barchard, 2003). Yet, as Lane and Gibbons (2007) state, student emotion undeniably affects academic success and the two cannot be separated. Furthermore, according to Drago & Wagner (2004), acknowledging intelligence as multi-dimensional is critical for institutions of higher education supporting a diverse student constituency with differing ways of knowing and learning. This study seeks to add to a burgeoning body of literature on the subject of emotional intelligence, resilience, and academic success and retention while potentially aid in clarifying any academic relationship and/or benefit to improving EI skills in college students. Specifically this study seeks to investigate EI as a framework linking these fields to one another in a causal relationship as opposed to previously, predominantly correlational studies.

CHAPTER 3

METHOD

Chapter 3 will discuss the methodology used in this action research study. Before delving into the details of the method, a short introduction to the study and context is provided. Subsequent sections will cover the various parts of the method including the setting, participants, role of the researcher, and instruments and data collection. The intervention or Emotional Intelligence Modulator (EIM) is then discussed in detail.

The purpose of this study was to investigate the influence of emotional intelligence via the EIM intervention on academic performance and resilience in first year students attending Meredith College. Meredith College has set a goal of retaining 85% of first year students to their second year. Presently, these students retain at 78%. According to Tinto's (1993) Interactionalist Theory on student departure, students' experiences and integration in both social and academic systems continually modify their intentions and commitments The EIM is designed to assess, elucidate, and augment emotional intelligence in students so they are better prepared to integrate with these systems and find successful experiences. The EIM intervention was based off the Bar-On model of social and emotional intelligence and the widely utilized EQ-i 2.0 assessment (Langley Group, 2012)

This study, featuring the EIM, is grounded in action research and utilized a mixed methods approach. The context for this research was three sections of a First Year Experience course, two sections that include the EIM and one section that served as a control group. Action research according to Mertler (2016) is systematic inquiry done to produce better understanding of a local context in order to improve practice. The current

study is the third iteration of inquiry into the emotional intelligence of first year students as it relates to their ability to succeed academically. Earlier iterations studied students on academic probation including their initial levels of EI and the effects of a EI training during their probation semester. This earlier research suggested that students with higher EI who face academic difficulty persist through the difficulty and retain at Meredith College at a higher rate than students will lower EI. As a result of this earlier work it was determined an intervention that could elevate EI in students prior to facing academic hardship could be more beneficial. The current study sought to continue this inquiry by boosting EI during students' first term on campus.

The EIM featured three distinct segments in which students were introduced to, engaged in, and reflected upon emotional intelligence. The initial or introductory segment included the EQi 2.0 assessment of emotional intelligence followed by an introductory class on what emotional intelligence is and how it is relevant. The second segment featured five class periods with each class period dedicated to a separate module within the Bar-On/EQ-i 2.0 model. The culminating segment included post-intervention interviews and written reflections on the content and the participants' impressions. Throughout the EIM, data was gathered to answer the research questions guiding this study:

RQ 1: How and to what extent does an FYE course that emphasizes emotional intelligence affect college students' emotional intelligence?

RQ 2: How and to what extent does an FYE course that emphasizes emotional intelligence affect resilience?

RQ 3: How and to what extent does an FYE course that emphasizes emotional intelligence affect academic performance?

Setting

Meredith College, is one of approximately 35 women's colleges remaining in the United States. Most undergraduates at the college live within two hours of the school and 96% reside in-state. First to second year retention is 78% and the four-year graduation rate is 52%. Situated on a traditional college campus in the heart of a major metropolitan area, Meredith College is buoyed by access to a plethora of local resources. It also faces a large number of competing institutions with more than 10 colleges and universities located within 20 minutes of campus. While considered a selective admission institution at 61%, a small enrollment and endowment mean that Meredith College is a tuition based institution. That is, the institution is dependent upon annual tuition and retention of students for its operating budget. Its small size allows for a supportive community and low faculty-to-student ratio. With more than 130 full time faculty the student-to-faculty ratio is 12/1, and the average class size is 17. With such favorable ratios, students are able to receive individual attention from faculty and develop quality relationships readily. The First Year Experience course (FYE 100) at Meredith College is a gateway course designed to leverage small class size (15 person capacity) with high level engagement to aid students in acclimating to collegiate life.

FYE courses at Meredith College are part of the larger First Year Experience program that is designed to welcome and engage traditional aged (18-24) first year, first time college students. FYE courses are credit bearing (1 hour), held once a week and are instructed by faculty or staff. All instructors are required to have completed graduate

work at the masters level or higher. Like many FYE courses offered across the country, these classes are designed to promote academic success and retention through personal goal setting, academic advising, and interactions with campus services (Pascarella & Terenzini, 2005). Meredith College's FYE addresses efforts through four main pillars; financial, academic, experiential, and career. Outside of these four elements, instructors have a wide breadth of flexibility in how to construct their syllabi and manage their course. Three FYE sections (N=44) were selected as the setting for this study. More information regarding the selection of these FYE section, the student participants, and my experience instructing these courses follows.

Role of the Researcher

Having worked in higher education and as an academic advisor for more than ten years, I have had substantial experiences advising college students across the achievement spectrum. As a seasoned advisor, I have witnessed the emotionally ill-prepared student struggle through acclimation and assimilation into the college community. This study will allow me to analyze students' emotional intelligence and potentially augment it to improve their academic success. Through this study I, as an academic advising administrator, sought to improve the EI of undergraduate students and in doing so improve the institution's retention and graduation rates. Given my professional position as both an administrator and front line practitioner, I acted as both an insider and outsider during the study. As an outsider, my more distal roles were that of an orchestrator and administrator.

As an *orchestrator,* I reviewed the literature, designed the intervention, conducted initial research cycles, and recruited participants. As an *administrator,* I was responsible

for collecting pre-intervention data to produce a baseline of EI for each participant. Additionally pre- and post-intervention survey data was collected as to ascertain any change in the students' resilience levels as a result of the innovation. Post intervention focus groups and micro-journaling were utilized to ascertain the level of absorption and utility of the intervention content. Lastly, I acted as an instructor for each of the three FYE sections implementing the innovation with first year students who were enrolled in two of the courses. The third section was instructed in the typical manner FYE sections are taught and acted as a control group to provide comparative data to the experimental sections.

As an insider I was affected by my professional role as an academic advisor. This role includes regular meetings with individual students as well as the visibility and other aspects of the job. In this role, I spoke to all incoming students during their summer orientation prior to their freshmen year. My role included explaining the course registration process, helping them create their schedules, and providing follow up. As a result, varying degrees of acquaintance with students occurred and many times I knew a student outside of their FYE section. Working closely with the participants and potentially having prior engagement presents a dichotomous situation as the action researcher. Relationships can prove to be both a liability and boon when equally applying the intervention to produce pure results. For example, students with whom there is a more established relationship may be more engaged in the content than the typical student might because they have had a positive encounter with me previously. They may answer or participate in a way they believe to be "correct" rather than how they would actually act without pretense. Similarly, as an advisor, students may know that they

intend to visit my office for advising and even though a relationship has not been established the potential for a continuing encounter may encourage participants to act out of character.

Participants

Participants in this action research study consisted of students who enrolled in one of three specific sections of FYE. Two of which featured the EI intervention and one section without the intervention. I acted as the instructor for all three sections. Participating students were first-time, first year, students, with an average age of 18. 61% of the sample size identified as white, 20% Hispanic, 10% African American or Black, 7% two or more races, 2% Asian. The sample was selected using quasi-random sampling. Quasi-random sampling is intended to convey the process in which students are assigned to FYE courses at Meredith College. Each summer a group of staff members at Meredith College creates each first year student's course schedule prior to the student's arrival on campus in the fall. The scheduling process is guided by the student's intended major and the courses suggested by faculty in their respective programmatic areas. After these suggested courses are scheduled, students are placed in a section of FYE. The only parameter by which a student is placed in a certain section of FYE is whichever section works best with their other courses. FYE is not a required course and students may change their section or drop the courses if they choose. It is also necessary to note that students in Teaching Fellows, Honors, and STEM related scholarship recipients are placed into their own first year seminar courses respective of each program and these have been excluded from this study. Utilizing this type of sampling with first-time, first year, traditional aged students allowed me to better

understand their emotional intelligence (EI) with regards to academic success of students who have not yet experienced collegiate life or other social/emotional or academic interventions on campus.

There are typically twenty-five FYE sections offered each semester and each section has specific required content. The three sections in this study were not advertised differently than other sections of FYE as to remove self-selection bias from participants. However, two of the sections included the EI intervention that the other section did not. The third section in this study was taught in a manner akin to other traditional FYE sections (Appendix B) to act as a control group. 44 students completed the pre-test 5x5 Resilience Scale (5x5RS). Out of the 44 students who completed the pre-test 5x5RS, 41 completed the post-test 5x5RS. Two sections experienced an FYE EI intervention, section 1 (n = 14) and section 2 (n = 15) for a total experimental group n = 29. One section served as the control group and received the standard FYE curriculum (n = 12). All 29 students in the EI FYE sections completed the pre-test EQi 2.0 assessment. Out of the 29 students who completed the pre-test EQi 2.0, 26 completed the post-test EQi 2.0. A schedule for each course is in Appendices A and B. Participants in the experimental group largely omitted various on and off campus explorations (e.g. tours of the library), instead focusing on the various EI models. The goal of this sampling process was to have data relatable to other, traditional, sections of FYE and first year students.

Intervention – Emotional Intelligence Modulator (EIM)

The intervention was a series of five developmental sessions within the FYE curriculum (Appendices A and B) designed to assess and improve students' emotional intelligence. Each developmental session falls within a class period during the term. FYE

courses meet once a week for eighty minutes for fifteen weeks. The intervention; Emotional Intelligence Modulator or EIM, consisted of three segments (Introduction, Training, and Reflection) throughout the course of the fall semester. Of the six EI sessions, one occurred in the first segment and five in the second segment. *Introduction Segment 1 - Assessment and Introduction, Training Segment - Five modules of Emotional Intelligence, Reflection Segment - Application and Reflection.* According to Korrel Kanoy (ND) EI skills can be augmented through trainings in as little a one-half day. The duration of the EIM across the semester is designed to provide a similar range of EI training.

Introduction Segment. Participants were given the EQ-i 2.0 assessment (EQ-i 2.0) and a pretest in resilience (5x5RS) prior to the start of the first class. This was to minimize the amount of on-campus experience each student had and to create a baseline assessment. Administering the EQ-i 2.0 requires certification from Multi-Health Systems Inc. I successfully obtained this certification in May 2018. The EQ-i 2.0 requires approximately 20 minutes to complete and the 5x5RS requires no more than five minutes. Participants were asked to set aside 30 minutes for these two assessments. During the first class period, an introduction to the Bar-On model of emotional intelligence was provided. In addition, the structure for the intervention was shared and the potential value of EI was illustrated to participants through real world examples. The duration of the initial class meetings was approximately one hour and also included a review of the syllabus and other FYE requirements. The final portion of *introduction segment* was a one-on-one appointment with me to review the EQ-i 2.0 results. Results were given to the participant immediately after completing the assessment via automated delivery through

the assessment website. This appointment, which lasted roughly 45 minutes, was to continue the introduction into EI, to articulate the unique results of the EQ-i 2.0 into a development plan for each participant, and to prime the participants for the forthcoming module work. Understanding their strengths and weaknesses was a vital part of the work and improvement gained during the modules. Each of the items in segment one were completed prior to the second class meeting. This was done intentionally as the first of the EI intervention modules began in the second class meeting.

Training Segment. This middle segment included five classes lasting approximately 80 minutes each. Each class covered a specific EQ-i 2.0 module and their sub-scales based on Bar-On's (1997) model of Social and Emotional Intelligence as illustrated by the EQ-i 2.0: 1) Self Perception, 2) Self Expression, 3) Interpersonal, 4) Decision Making, and 5) Stress Management. Short homework assignments were given to precede each class, these included short videos or readings and acted as primers for application and discussion during class. Curriculum and activities (e.g. watching segments of TV sitcoms to identify a particular element of EI) largely followed the text *The Student EQ Edge; Emotional Intelligence and Your Academic and Personal Success* (Stein & Book, 2000) and were designed to actively engage students in understanding the components of EI and deploying EI skills in practical settings. Participants completed micro-journals (prompted reflections) at the conclusion of each of the five module classes.

Reflection Segment. The final segment in the EIM was designed to combine the modules into a coherent skill set. Students were asked to synthesize their experience in FYE and complete a 600 word written reflection, contemplating their development plan

created in segment one, any changes that resulted from the EIM experience, and how prepared they feel utilizing these new skills moving forward. Additionally, students were asked to participate in one-on-one interviews with the researcher or in-class focus groups to explore these same topics more in depth. A second researcher familiar with the EQ-i 2.0 and EIM content led both focus groups. A posttest for EI using the EQ-i 2.0 assessment and in resilience using the 5x5RS were given at the conclusion of this segment as well. The traditional FYE control group completed the posttest 5x5RS as a measure of resilience. This section did not participate in the focus groups or interviews. In addition to interview and focus group data, end-of-term GPAs were collected for each participant during this segment. The EIM intervention focused on emotional intelligence and leveraged the aforementioned development models from chapter 2 in skill building among first year college students.

EI Curriculum

The two sections of FYE that featured the EIM intervention shared the same curriculum. Through this curriculum participants were introduced to the vocabulary and concepts of emotional intelligence as it is described in the EQi 2.0. For each session on EI, the EQi 2.0 model was reviewed, the subscales within the module for that day defined, followed by class discussion of its application. Discussion of the application included real-world situations provided by the accompanying text (EQ Student Edge) or from my own relevant experience. To enhance discussion and understanding I showed videos to participants that highlighted particular EI elements. The videos featured segments of sitcoms where characters engaged in a variety of situations. Participants were asked to identify the EI elements in each video and discuss their findings with the

class, how they might be similar/dissimilar to real-world situations. Worksheet activities were also assigned that asked participants to think about and apply EI concepts in their own lives. For example, students were asked to identify "hot buttons" or emotional triggers. Another worksheet asked students to create a personal mission statement. These worksheets were derived from the EQ Student Edge text. Most activities were followed by pair-and-share or small group share and reflection. After sharing, pairs/groups were asked to tell the class what they learned from the activity and peer discussion. Each EI session followed this format for a duration of approximately 80 minutes. At the end of each session, participants were given a prompt to respond to. Prompts for each session were similar and asked participants to think about the EI concepts discussed and explain how they are applicable in their own lives, especially academically. Participants completed these micro-journals in class and submitted them prior to leaving each day. On average, students were given 10 minutes to complete their micro-journal.

Traditional FYE Curriculum

One section of FYE served as the control group and experienced a typical curriculum found in every section of FYE offered each fall. FYE is designed to introduce students to life in college. This includes academics, social aspects, campus supports, and local exploration. Participants in the traditional FYE course experienced on-campus scavenger hunts designed to introduce them to various involvement and support offices. Similarly they took a field trip to explore the city of Raleigh to begin acclimating to the community beyond campus. Other items in the traditional FYE that differed from the EI FYE sections included library tours, success skills coaching, and introduction to campus traditions.

Instruments and Data Sources

For this study, a mixed methods approach was utilized. Mixed Methods studies involve the collection or study of both quantitative and qualitative data in a single study (Tashakkori, Tashakkori, & Teddlie, 2003). For this study a convergent parallel design was utilized to better develop a complete understanding of the research problem by obtaining different but complementary data (Creswell & Plano Clark, 2011). Data was collected throughout the study and interpreted together during analysis. Both quantitative instruments and qualitative approaches were triangulated to better understand the influence of the EIM intervention on EI and academic success of first year students at Meredith College. Quantitative assessment data was obtained through the EQ-i 2.0 EI instrument during a pre and posttest. Additional quantitative data included pre and post-intervention resilience data as measured through the 5x5RS survey and the end-of-term Grade Point Average (GPA) as an indicator of academic success. Qualitative data was collected through micro-journals associated with each module in the EIM intervention as well as through post-intervention focus groups. Additionally to minimize any cognitive bias that results from the focus group, one participant from each FYE was randomly chosen for interviews as an alternative collection method.

EQ-i 2.0 Instrument The Emotional Quotient Inventory 2.0 (EQ-i 2.0) was developed to assess the Bar-On model of emotional-social intelligence. It is one of the first scientifically validated and one of the most widely used Emotional Intelligence instruments in the world (retrieved from: https://ap.themyersbriggs.com). The EQ-i 2.0 is a 133 item, self-report measure designed to measure a number of constructs related to EI.

Administered online, EQ-i 2.0 delivers an individual report that provides the participant with a picture of how they operate emotionally, their areas of strength and potential areas for development. The individual report provides an overarching total EI score as well as scores for 15 subscales categorized into five composite scores that correspond to Bar-On EI modules. Table 4 below illustrates the 15 subscales and five composite areas.

Table 4
EQi 2.0 Composites and Subscales

Composite	Subscales
Self-Perception	Self-Regard, Self-Actualization, Emotional Self-Awareness
Self-Expression	Emotional Expression, Assertiveness, Independence
Interpersonal	Interpersonal Relationships, Empathy, Social Responsibility
Decision Making	Reality Testing, Problem Solving, Impulse Control
Stress Management	Flexibility, Optimism, Stress Tolerance

5x5 RS Resilience Survey The 5×5RS is a 25 item self-report measure with the capability of assessing resilience and five associated protective factors. The 25-item measure utilizes a 5-point Likert scale ranging from 1 = very inaccurate to 5 = very accurate. Participants rated such statements as "I adapt easily to new situations" or "I look at the bright side of life." After reverse-scoring the negatively worded items, each subscale is scored by averaging the five associated item scores to yield five subscale scores ranging from 1.00 to 5.00. The 5x5RS is a contemporary resilience scale that correlates positively with the widely used resilience measure the Connor–Davidson Resilience Scale (CD-RISC) while explaining the variance in some criteria above and

beyond the CD-RISC. The five scales within the 5x5RS; Adaptability, Emotion Regulation, Optimism, Self-efficacy, and Social Support, overlay well with items included in the EQi 2.0 modules and thus are favorable for use in this study. The 5x5RS scale is also in use in other studies at Meredith College and use of this scale aided in the analysis and comparison of multiple study results.

Micro-Journaling. The term micro-journaling is used to indicate the simple journaling technique students participated in after class each week to promote successes and reflection on the use of EI in their academic and personal lives. Micro-journaling consists of a short reflection detailing three instances in-which the student successfully engaged in emotion awareness and control and three instances where they could have done better. A copy of the micro-journal outline is shown in Appendix B.

End of Term Reflection. The end of term reflection complements and informs the post-intervention interview. Thinking back to their initial one-on-one appointment with me and their development plan, students are asked to write approximately 600 words about their impressions of and experience in the EIM intervention. A copy of the end-of-term reflection can be found in Appendix C.

Post-Intervention Interview and Focus Groups. Both of the semi-structured, one-on-one interviews and class focus groups were held after the conclusion of the EIM intervention. I conducted both interviews while an additional researcher familiar with the EQ-i 2.0 conducted the focus group meetings at the end of the semester. This was to prevent response bias from participants due to my position as their instructor. The questions for these discussions were developed by me based on the modules and sub-scales within the EQ-i 2.0 and how students understand EI as it is applied to resilience

and academic success. Questions were open-ended to explore the absorption of EI components and gauge students' ability to operationalize EI information/skills in practical situations. Interviews took place in the Office of Academic Advising and were recorded. Focus group and interview questions are in Appendix C.

Course evaluations. End-of-term course evaluations from students in both experimental sections of FYE were collected. These evaluations were solicited anonymously through the Registrar's Office and then sent to the instructor of the course. These evaluations were analyzed for additional participant feedback on the EI content and personal satisfaction with the course.

End of Term Grade Point Average. Students' GPA were collected at the conclusion of the academic term. This metric was used in determining academic success and potential for retention. A summary of the data sources and timeline for collection are shown in Table 5 below.

Table 5
Data Collection Timeline

Measure	Collection Date
EQ-i 2.0	August 18-26, 2019
5x5RS	August 27th 2019 (first day of class) only if the student had not completed the assessment prior.
Micro Journals	Self-Perception September 17th 2019
	Self-Expression October 2nd, 2019
	Interpersonal October 16th, 2019
	Decision Making October 30th, 2019
	Stress Management November 13th, 2019
Semi-Structured Interviews and Focus Groups	November 20th, 2019
End of Term Reflection, EQ-i 2.0 & 5x5RS post-assessment	November 27 - December 4th, 2019
End of term GPA	December 17th, 2019

CHAPTER 4

RESULTS

The purpose of this study was to test whether an intervention aimed at improving EI could also impact resilience and academic performance in first year college students attending a small, liberal arts, single gender institution in the southeast. Chapter four presents the qualitative and quantitative analysis of these relationships and establishes potentially significant connections between the constructs. This study produced a variety of results. As the researcher I kept notes on each of the EIM classes as well as other pertinent happenings (attendance, engagement etc.) within the control and experimental sections. All three sections proceeded as expected with no deviation in curriculum or substantial aberrations. The traditional FYE section and the second EI FYE section experienced a greater number of absences (traditional FYE = 12, second EI FYE = 10) compared to the first EI FYE section (5). Even though as discussed in chapter three participants were randomly assigned, the first EI FYE section was more engaged. This section included three very engaged students. Their attendance was regular and they continually started and sustained discussion in class. I believe their influence helped the engagement of the entire section, perhaps leading to some significant differences compared to the other sections. The results presented in this chapter are not conclusive but I believe they do indicate a trend toward significance. This study was guided by three research questions:

> RQ 1: How and to what extent does an FYE course that emphasizes emotional intelligence affect college students' emotional intelligence?

RQ 2: How and to what extent does an FYE course that emphasizes emotional intelligence affect resilience?

RQ 3: How and to what extent does an FYE course that emphasizes emotional intelligence affect academic performance?

Quantitative data from this study was gathered through the EQi 2.0 assessment of emotional intelligence, the 5x5RS measure of resilience, and first semester GPAs of participating students. Only students who completed both pre and posttests in resilience and or emotional intelligence were included in this analysis.

Qualitative data was gathered through six reflections across the semester, one after each of the five modules on EI and a sixth as a final reflection on the participants' experiences in the course. Additionally the focus group from each EI FYE section and the two individual interviews provided additional qualitative data for analysis. Response rates across each of the qualitative measures varied for a variety of reasons. Students who were absent could not complete reflections or participate in focus groups. Not every student who attended the class submitted a reflection for that class. Not every student in the focus groups contributed. The unique responses to each of the qualitative measures is reported in Table 6.

Table 6
Response Count by Qualitative Measure

Self Perception Ref.	Self Expression Ref.	Independence Ref.	Decision Making Ref.	Stress Mgmt. Ref.	Final Ref.	Focus Grps	Interviews
24	19	21	22	19	27	12	2

The initial coding process was framed around the three research questions, looking for confirmatory statements of appropriately applied practice, intention, understanding; incorrect application or statements; and lastly statements of impact from elements outside the study. Table 7 shows the list of codes used during the initial coding process.

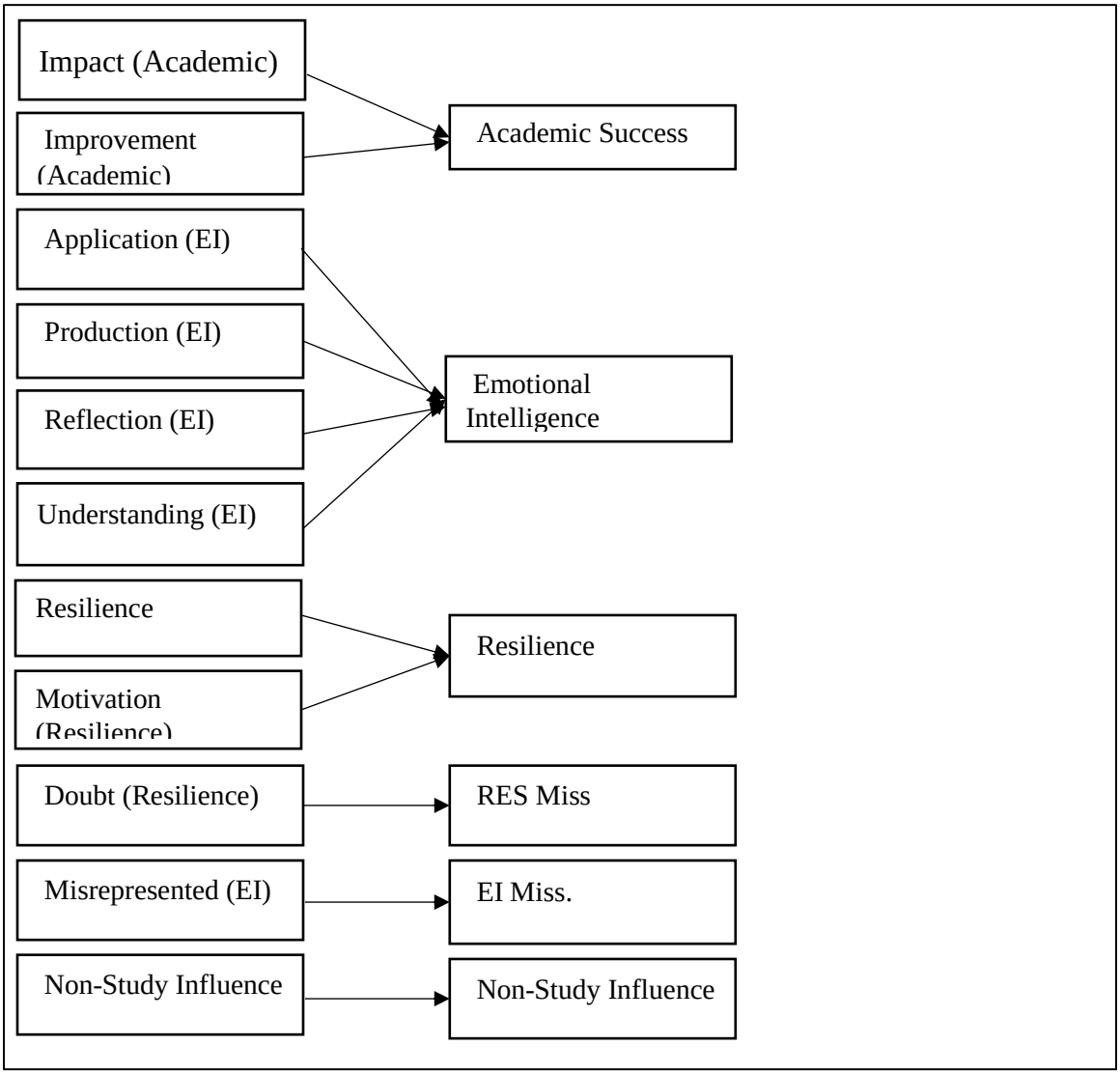
Table 7
Code Book

Code	Reasoning	Example
Impact (academic)	Participant indicated academic impact - potential	"I want to have a stable schedule between personal life and school life. I would weigh pros and cons and make sure I had time for school and making good grades and still time to chill."
Improvement (academic)	Participant indicated academic impact – actual	"I'm more aware of my weak areas and I feel like I have steps to use when I recognize I'm being weak. Like procrastinating, I am more mindful of it and I think I have been more productive with my school work because of it."
Application (EI)	Participant indicated appropriate EI application - potential	"I like to take a few minutes to digest what is happening. For me impulse control is hard so I like to take some time and be objective."
Production (EI)	Participant indicated appropriate EI application - actual	"I know people or different, have different perspectives so I put myself in their place, think about their perspective and try to find a common understanding or solution."
Reflection (EI)	Participant utilized EI reflective decision making process	"I find that I am better at evaluating situations and my own capacity. I utilize decision making to help

		determine how much I can handle in school and resist temptation."
Understanding (EI)	Participant illustrated understanding of EI term/definition	"In decision making I am aware of my emotions. I know I need to check those and be rational about the situation and what is best or right to do."
Resilience	Participant specifically mentioned resilience	"I know what I want to accomplish here at Meredith and I understand how certain emotions and behaviors might get in the way of that if I let it or dwell on it. Being aware of that I feel confident I will succeed and graduate."
Motivation (resilience)	Participant indicated motivation to improve	"My goal is to study more and I need to look at my choices. Like between studying and getting better or watching Netflix. I know what I need to do to reach my goal."
Doubt	Self-doubt in ability to utilize EI	"I have a lot going on and it's been difficult to stay focus and remember what we're learning in class."
Resilience Misconception	Resilience Misinterpretation	"I procrastinate sometimes and sometimes things pile up and I let it all go bc it too much stress. It's not healthy and I'll get past it."
EI Misconception	Misinterpretation/application of EI concept	"I live on campus and people ate my food over the holiday break. I rushed to anger and what I said was likely not considerate."
Non-Study	Non study related influence on RES	"A lot of classes I took this semester were things I was interested in or good at already and I think that helped my transition to college"

Following the initial round of coding, codes were narrowed into categories (Saldana, 2016) aligned with the research questions guiding the study. The overarching categories for this study were Resilience, Emotional Intelligence, Academic Success, Resilience Misinterpretation, EI Misinterpretation and Non-study. The original codes and the associated categories are shown in Figure 1.

Figure 1
Codes and Themes



From 136 qualitative reflections and transcripts, 445 instances were noted. The frequency chart in Table 18 shows the percentage of codes found within each category for each qualitative collection. Emotional Intelligence references garnered the majority of responses ranging from 43% to 67%. While non-study influences were few, it should be noted that only the focus group and interviews prompted students for this information.

Table 8
Code Instances by % of Row

	Frequency by Data Source					
	Academic Success	Emotional Intelligence	Resilience	Resilience Miss	EI Miss	Non-Study
Self Perception	13%	56%	16%	5%	9%	0%
Self Expression	19%	43%	30%	4%	4%	0%
Interpersonal	17%	51%	17%	5%	10%	0%
Decision Making	7%	67%	18%	8%	0%	0%
Stress Management	20%	63%	12%	2%	2%	0%
Final Reflection	25%	53%	18%	0%	4%	0%
Focus Groups	14%	46%	20%	7%	6%	7%
Interviews	4%	44%	24%	7%	11%	9%

Both the qualitative and quantitative data are discussed in this chapter by research question.

RQ 1: How and to what extent does an FYE course that emphasizes emotional intelligence affect emotional intelligence?

The EQi 2.0 emotional intelligence assessment (EI) measures overall EI as well as the five composites and fifteen subscales that make up EI. Total EI and scores from the five composites (Self Perception, Self Expression, Interpersonal, Decision Making, and

Stress Management) are reported here. The EQi 2.0 is a 133 item report. For each item students respond on a five point scale of "never/rarely" to "always/almost always." EQ-i 2.0 standard scores are calculated from raw scores so that each scale has the same average (mean) score of 100 and a standard deviation of 15 (Multi Health Systems, 2011). Composite scores from 85-115 fall within the average range. Below 85 is considered a low score and above 115 is considered a high score. Scores in the average range indicate the respondent is effective in handling situational demands within that factor. High scores indicate the individual is well developed and strong in the factor and low scores identify skills that need to be improved to increase overall functioning and chances for success. Given these parameters, overall EI scores between 425 and 570 indicate an overall average range. This information is provided as reference for the purposes of reporting and later discussion. It is important to note that overall scores may mask deficiencies in certain composite or subscales. Only students in the EI FYE sections (N= 26) completed the EQi 2.0 pre and posttests.

Pre to Posttest EI score comparison. Pre and posttest scores in EI overall and in composites are illustrated in table 5. The mean pretest scores for EI were M = 428.08 (SD = 46.5). Only 48% of students scored in the overall average range for EI (425-570) and no participant score above 570. Posttest scores for EI were M= 438.18 (SD= 53.4) and 62% of students scored in the overall average range for EI (425-570). Paired samples t-tests were run for the overall EI scores as well as each of the five composite scores to look for significant changes. P values for each are also reported in Table 9.

Table 9
Pre and Post EI Scores (N = 26)

	Pretest	Posttest	Sig. (p)
Overall EI	428.08 (46.5)	438.19 (53.4)	.090[†]
Self Perception	90.31 (11.5)	93.81 (12.8)	.042[*]
Self Expression	78.19 (12.7)	79.42 (13.8)	.445
Interpersonal	91.12 (10.1)	91.77 (10.7)	.615
Decision Making	88.35 (11.1)	89.62 (11.2)	.343
Stress Management	80.12 (10.8)	83.58 (13)	.036[*]

[*]indicates significance
[†]indicates trend towards significance

Overall EI scores with a p value of .090 indicated that there was no significant change in EI scores. However these results did indicate a "trend toward statistical significance" based on suggestions from Thiese, Ronna, & Ott, (2016) for considering low P values (e.g., $P < 0.10$) "as trending toward statistical significance may be clinically relevant for improving practice, particularly in smaller studies" (p. 5). This trend toward significance was corroborated by the qualitative results. Table 8 shows that more than 50% of the instances coded reference EI directly or indirectly. The following are quotes from students on the impact EI training has had on them:

> *P147 – Final Reflection "it has really helped my interaction with people. I tend to isolate myself and find myself in conflict with others and now I feel like I have a process to avoid that behavior."*
>
> *P129 – Focus Group 1 "one of my professors this semester seemed to pull grades out of thin air and whenever I came to her after class to ask about it I felt that she*

was offended that I was there asking/questioning. I was frustrated and angry about not getting any answer but I gathered myself and made an appointment during her office hours. We were able to talk about my grade and I felt like we had an understanding and I felt better about the rest of the semester"

P141 – Interview 2 "one thing I've started doing is acknowledging and celebrating the good things. I usually only dwell on the negatives like grades or failing at something and beat myself up. When I would do something good I wouldn't spend really anytime on it or sharing it with anyone, but in this class we talked about the need to balance emotion and express the good and bad effectively. So I try to give myself a little more kudos now."

As the instructor I noticed a heightened level of engagement in the section 1 of the EI FYE classes as a result of the aforementioned students leading that class. To investigate potential difference in EI FYE sections paired sample t test were conducted for both. Section 1 of the EI FYE pretest (N = 11, M = 426.18, SD = 51.78) and posttest M = 431.09, SD = 57.96) conditions; t(10) = -.684, p = .51. Section 2 of the EI FYE pretest (N = 15, M = 429.47, SD = 44.15) and posttest M = 443.40, SD = 51.27) conditions; t(14) = -1.64, p = .12. Independently, neither section reveal statistically significant improvement.

Pre to Posttest EI composite score comparison Next, paired sample t-tests were run on the EI composite scores. There was a significant difference in Self Perception pretest (M = 90.31, SD = 11.5) and posttest (M = 93.81, SD = 12.80) conditions; t(25) = -2.14, p = .04. Cohen's d was calculated to assess effect size (d = .29) indicating a low level of magnitude. A significant difference was also found between Stress Management pretest (M = 80.12, SD = 10.87) and posttest (M = 83.58, SD = 13.02) conditions; t(25) = -2.21,

p = .03. Cohen's d was also calculated to test effect size (d = .29) indicating a low level of magnitude. Reviewing the course plans and recalling the instruction for the EI content I believe these results could be from the delivery as the instructor. Throughout the EI modules I repeatedly framed EI as an introspective conversation. Talking to oneself and evaluating an initial response to determine if it is the best response. I also stressed balance in emotions. In framing EI this way I believe students began to perceive themselves differently and utilized these skills to combat daily stressors. This can be seen in statements from students such as:

> *P120 – Interview 1 "I have found that I am more comfortable with family dynamics and friendships I've made here over the past few months"*
>
> *P126 – Decision Making Reflection "I am more thoughtful in my actions. I take more time to think about a decision before making it in the moment"*
>
> *P143 – Focus Group 1 "One step I have made is when my roommate does something that bothers me, I step back and think about things before I reenter the situation. Giving myself time to cool down."*

The quantitative data was inconclusive. Overall EI, Self Perception, and Stress Management data revealed meaningful changes while the qualitative data argued that practical effects may have been realized. Taken together the quantitative and qualitative data suggest that the EI intervention is having some effect on students' EI.

RQ 2: How and to what extent does an FYE course that emphasizes emotional intelligence affect resilience?

The association of emotional intelligence to resilience has been extensively corroborated by Desimone et al (2017), Edward & Warelow (2005), and Martin et al (2015). Isaak et al. (2007) identified four areas associated with students' lack of resilience: motivation, personal skill, emotion, and stress related factors. The 5x5RS resilience report was used in this study to measure resilience including the five related subscales of adaptability, emotion regulation, optimism, social support, and self-efficacy. For this study, a global score of resilience was calculated for each participant by reverse scoring appropriate items and taking the mean score of all 25 items, with higher scores indicating higher levels of resilience.

Pre-test and posttest scores on the 5x5RS between the traditional FYE course and the EI FYE are illustrated in table 8. Independent samples t-tests were used to determine if there were any significant difference in pretest scores between the traditional FYE ($M = 3.48$, $SD = .391$) section and the EI FYE sections ($M = 3.48$, $SD = .510$) conditions; $t(39) = -.018$, $p = .98$. There were no significant differences between overall 5x5RS pretest scores among sections. Additional investigation was conducted between group scores on subscales for each of the sections. No significant differences were found.

Table 10
5x5RS Pretest & Posttest Scores

		N	Pretest Mean (SD)	Posttest Mean (SD)	P Value
Overall	Traditional FYE	12	3.48 (.39)	3.44 (.60)	.691
	EI FYE	29	3.48 (.51)	3.61 (.44)	.060†
Adaptability	Traditional FYE	12	3.08 (.31)	3.38 (.34)	.023*
	EI FYE	29	3.06 (.49)	3.33 (.49)	.014*
Emotion Regulation	Traditional FYE	12	2.90 (.55)	2.85 (.86)	.804
	EI FYE	29	2.80 (.86)	2.90 (.82)	.547
Optimism	Traditional FYE	12	3.65 (.67)	3.58 (.88)	.698
	EI FYE	29	3.85 (.69)	3.86 (65)	.921
Self Efficacy	Traditional FYE	12	3.95 (.66)	3.80 (.69)	.332
	EI FYE	29	3.82 (.57)	4.11 (.52)	.010*
Social Support	Traditional FYE	12	3.80 (.59)	3.57 (1.01)	.175
	EI FYE	29	3.87 (.70)	3.83 (.66)	.661

*indicates significance
†indicates trending towards significance

Pre to Posttest 5x5RS overall score comparison between groups. Paired samples t-tests were conducted on both control and experimental groups to investigate pre to post 5x5RS scores (see table 10). The traditional FYE section pretest (M = 3.48, SD = .39) to posttest (M = 3.44, SD = .60) conditions; t(11) = .408, p = .6 showed no significant change. The EI FYE section pretest (M = 3.48, SD = .51) to posttest (M = 3.61, SD = .44) conditions t(28) = -1.95, p = .06 indicated a trend towards significance. Statements from students in both EI FYE sections also suggest an influence on resilience.

> *P124 – Final Reflection "I feel like I've improved my weaknesses and can push myself in a positive way. I feel better prepared to handle my hot button issues."*

P136 – Final Reflection "In the past I've reacted badly, not been objective and irrational. I've learned to take a little time and not lose sight of what's important and keep that in mind, keep moving forward."

As mentioned in the discussion of RQ1, I noticed a heightened level of engagement in the section 1 of the EI FYE classes as a result of the aforementioned students leading that class. Continuing to evaluate potential differences between EI FYE sections the 5x5RS scores were review by class within the EI FYE group. Table 11 shows the results from the paired samples t-tests between EI FYE sections.

Table 11
5x5RS EI FYE sections

	Overall Score Statistics			
	N	Pretest Mean (SD)	Posttest Mean (SD)	P Value
EI Section 1	14	3.51 (.52)	3.73 (.49)	.003
EI Section 2	15	3.45 (.52)	3.48 (.35)	.744

EI section 1 showed significant change from pretest (M = 3.51, SD = .52) to posttest (M = 3.73, SD = .49) conditions; t(13) = -3.62, p = .003. Cohen's d was calculated to determine the effect size (d = .43) suggesting a low-moderate effect size. No significant change was found in EI section 2 5x5RS scores from pretest (M = 3.45, SD = .52) to posttest (M = 3.48, SD = .35) conditions; t(14) = -.33, p = .74. A repeated measures ANOVA was then run between all three sections to further investigate effects of time and the differences between section scores. Figure 2 illustrates the results of the ANOVA test including errors bars for each section.

Figure 2
5x5RS - Repeated Measures ANOVA

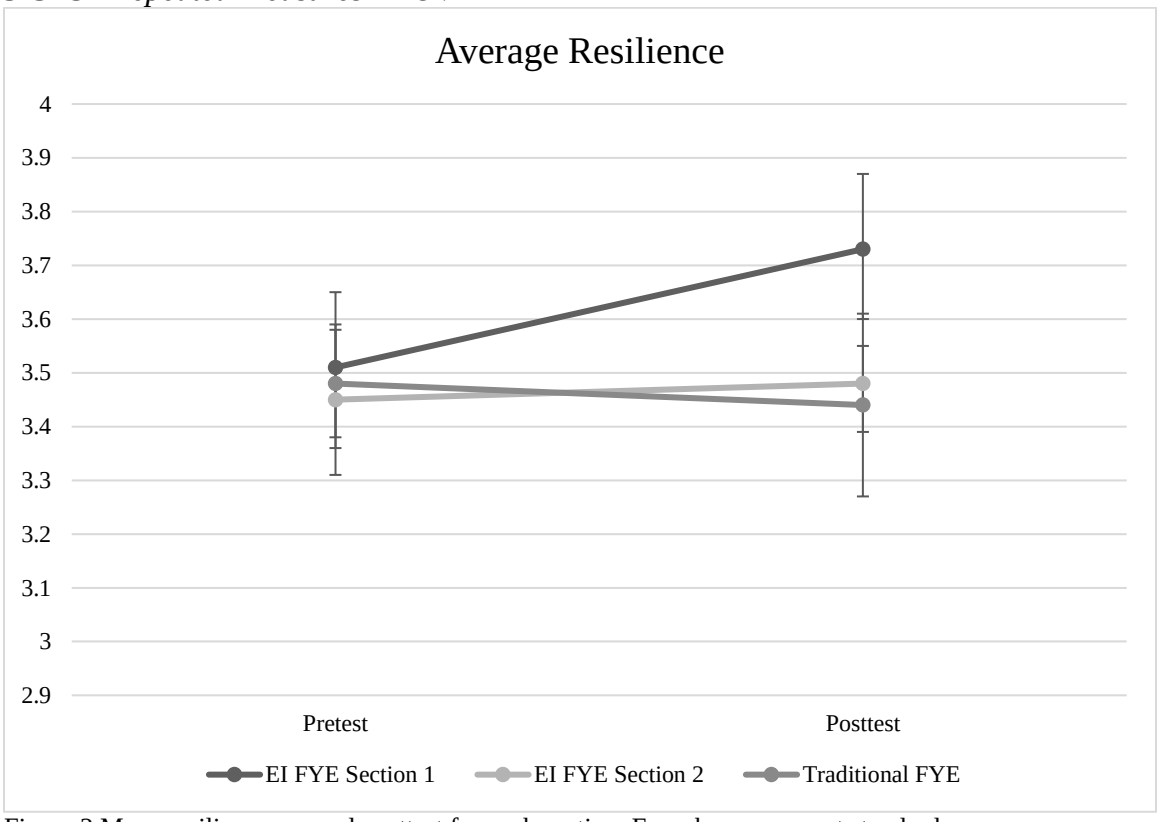


Figure 2 Mean resilience pre and posttest for each section. Error bars represent standard errors.

These results confirm a higher level of resilience in the first section of EI FYE. However the large amount of variability in scores among each section questions the significance of that difference.

Pre to Posttest 5x5RS subscales score comparison between groups. To investigate resilience further, subscale scores within the 5x5RS assessment were then evaluated between the traditional FYE and EI EYE sections to test for significance. Table 10 shows the subscale score for each group in the study. The EI FYE sections showed significant improvement in self efficacy from pretest (M = 3.82, SD = .57) to posttest (M = 4.11, SD

= .52) conditions; t(28) = -2.77, p = .01. EI FYE sections also showed significant improvement in the adaptability subscale from pretest (M = 3.06, SD = .49) to posttest (M = 3.33, SD = .49) condition t(28) = -2.63, p = .01. Qualitative statements like this from P133 illustrate improved Self Efficacy as well; "throughout this semester, because of the EQi, I've been able to work on my deficiencies. I feel more capable." Similarly, P147 spoke about her improved adaptability saying "I feel like I'm a better student. I can recognize when I'm struggling and can adjust. I can change my actions and find a new or better way." The traditional FYE section was also found to have significant improvement in adaptability from pretest (M = 3.08, SD = .31) to posttest (M = 3.38, SD = .34) conditions; t(11) = -2.64, p = .023. Cohen's d was then calculated for each to gauge effect size for each of these subscales. For the Self Efficacy subscale (d = .53) suggested a moderate effect. Effect size for Adaptability in the EI FYE sections (d = .55) suggested a moderate effect. Effect size for the traditional FYE Adaptability (d = .92) suggested a large effect size. Empirical data from previous cycles suggested that subscales Emotion Regulation and Self Efficacy would see a statistical difference from pre to post scores. As stated, the Self Efficacy data affirmed this assumption. However, no significant change was detected in Emotion Regulation.

Impacts of EI on 5x5RS post scores. As reviewed in chapter 2 EI and resilience share many attributes and studies have shown significant correlations between EI and resilience. To investigate the hypothesis of a relationship between EI and resilience, Pearson Correlations were computed between post EQi scores (N = 26, M = 438.19, SD = 53.43) and post 5x5RS scores (N = 26, M = 3.56, SD = .436). There was not a significant correlation r = -.128, p = .533). To further examine potential relationships

within these constructs, Pearson Correlations were computed for all EQi composites and post 5x5RS scores and all 5x5RS subscales and post EQi total scores and none were significant.

RQ 3: How and to what extent does an FYE course that emphasizes emotional intelligence affect academic performance?

Data collected to assess academic performance consisted of participants' high school GPA (HSGPA) and first semester GPA (FSGPA). High school GPA was utilized to determine if potential academic differences existed between sections. Independent samples t-test on the traditional FYE group (M = 3.36, SD = .42) and the EI FYE groups (M = 3.44, SD = .44 conditions; t(39) = -.546, p = .58. No significant variations were found. FSGPA was then collected for the traditional FYE and EI FYE sections as a measure of academic success after the first semester. Independent samples t-test were used to examine FSGPA between sections to assess significant difference between scores. Between traditional FYE (N = 12, M = 2.96, SD = .82) and EI FYE section (N = 29, M = 3.30, SD = .72) conditions; t(39) = -1.31, p = .196 Between EI FYE section 1 (N = 14, M = 3.33, SD = .65) and section 2 (N = 15, M = 3.31, SD = .81) conditions; t(27) = -.051, p = .96. These p values indicate that no statistical significance exist between FSGPA among sections.

An important distinction should be noted here that while a statistically significant difference was not detected between the traditional FYE and EI FYE groups, practical analysis between a 2.93 and a 3.31 suggest otherwise. A 2.96 is considered an average of a C on Meredith College's grading scale, while a 3.31 is an average of a B. This equates

to an entire grade-level improvement and can have a variety of implications for students including academic standing and scholarship requirements/qualifications. Student sentiment also suggested an association between EI and academic success:

> *P146 – Final Reflection "One area I've improved is my impulse control. I concentrate more on doing the things I need to do for school and getting them done before hanging out with friends or going home on the weekends."*
>
> *P122 – Decision Making Reflection "I would say my decision making has improved. Especially weighing whether or not I can handle certain things or more things on my plate. I used to just say yes to everything, but I am more aware of what I can handle and be successful."*

In addition to overall GPA comparisons EI FYE and Traditional FYE groups were examined with academic probation in mind. Table 12 below shows the percentage of students in each participant group and the overall freshmen cohort who's GPA fell below the academic standing GPA of 1.8

Table 12
Percent of Student Below 1.8 GPA

	# of Students	% below 1.8
EI FYE	29	3%
Traditional FYE	12	16%
Freshmen Cohort	376	12.5%

Interestingly, only 3% of EI FYE students fell below the 1.8 GPA cutoff compared to 16% in the control condition and 12.5% of the overall freshman cohort

Summary

First semester college student emotional intelligence The mean EQi 2.0 score on the pretest was 428.08, on the lower end of the average range (425 – 570). The posttest EQi

2.0 average was 438.18. With a p value of .090 and corroborating qualitative statements there was evidence of a trend towards significance. Two subscales within EI were found to have significantly improved. There was a significant difference in Self Perception (M = 93.81, SD = 12.80) with a p value of .04 and Cohen's d of .29 as well as in Stress Management (M = 83.58, SD = 13.02) with a p value of .03 and Cohen's d of .29. Again, qualitative statements from students also suggested effective use of EI in these composite areas.

Emotional intelligence and Resilience The EI FYE sections showed a trend toward significance in the 5x5RS scores (p = .06) and EI FYE section 1 showed significant improvement (p = .003). The relationship between post EQi scores (N = 26, M = 438.19, SD = 53.43) and post 5x5RS scores (N = 26, M = 3.56, SD = .436) were found to have no significant correlation. Student statements illustrated effective attribution of EI skills towards resilient behaviors.

Emotional intelligence and Academic Success First semester GPAs between the traditional FYE group (2.97), and EI FYE group (3.31) were not found statistically different. However qualitative evidence from participants as well as practical evaluation of these numbers suggest effective use of EI and improvement in academic success. Investigation in correlations between FSGPA and EQi total scores and composite scores were insignificant. In addition to overall GPA, students in the EI FYE were found to have fewer students below the academic standing threshold of 1.8.

CHAPTER 5

DISCUSSION

The purpose of this mixed methods study was to explore the efficacy of an emotional intelligence intervention and its impact on resilience and academic success of first year college students. In this chapter I will discuss study findings and draw conclusions on emotional intelligence (EI) training for students in a college setting. I will also examine the results through the lens of the literature reviewed in chapter 2 to compare and contrast existing knowledge on EI and its confluence with resilience and academic success. Much of the extant literature on EI in higher education is inconclusive with some studies that show positive results for a connection between EI and resilience while others show no relationship. Similarly the results of this study are mixed. While some aspects of this study were in-line with previous findings, there were other unexpected outcomes. I will explore these and make suggestions for future research.

Increasing Emotional Intelligence in Students Data gathered suggested that students benefit when they receive EI training early in their college careers. The first research question investigated the efficacy of an emotional intelligence intervention. Did the intervention improve students' EI? Studies on teaching EI are plentiful (Ashkanasy & Dasborough, 2003; Bar-On & Handley, 1999; Goleman, 1995; Liff, 2003; Schutte & Malouff, 2002; Stein & Book, 2000). Bar-On (1997) and Stein and Book (2000) found that EI is not static, that it can be increased, and that it naturally improves over time. The general consensus is that EI is teachable, however appropriate duration and timing for measurement is still unclear.

In this study, the 26 students who completed the EI intervention did show a mean score increase from 428 to 438 on the EQi 2.0. Paired samples t test found a p value of .09 indicating a trend towards significance. In addition, two composite scores within EI did show significant improvement; Stress Management ($p = .036$) and Self Perception ($p = .042$). The administrator of the EI measurement (EQi 2.0) suggests six months between assessments though shorter time frames have been utilized. Though sample size is a consideration here, I believe the results of this study reiterate the six month minimum timeline. While subtle improvement was seen in each of the composite scales and overall in EI, the post assessment was likely too close in time to the pre-test which may have assimilated scores. The qualitative data suggests that EI information was readily imparted upon students. EI references accounts for nearly 53% of the coded data from all qualitative collections. Multiple direct and indirect statements from students indicated the intervention delivered and improved EI in students. P141 from reflection 2 said:

> *"I can use information from this week's lesson on stress management to make sure I take time for myself and understand that if I am doing the best that I can that it is okay and it'll be okay."*

During the second focus group, when asked about procrastination P126 said:

> *"I'm a big procrastinator but I feel like I've decreased that behavior after this class. I think more about the process now and bigger picture. If I wait, I'll get behind so I find myself being more proactive about starting assignments."*

Qualitative statements also confirmed the quantitative significance in stress management and self perception. When prompted about self perception, P128 said:

"I work on campus in Tech services on the help desk and I have professors calling with issues that I don't necessarily know how to fix and I like to be self-sufficient, but I had to learn, and this class helped me, to be ok asking for help from peers and my three bosses. So I've really learned that it's not a sign of weakness but rather a strength to ask for help."

When asked about how EI has effected stress management during Interview 1 P142 commented that:

"I've started waiting 24hrs. Whenever there is a problem. Like over the weekend there were huge family problems. So taking a day, I just need to sleep on it and see how I feel. To see if I need to worry about this problem and if I do I can do something about it."

Implications The results of this study indicate that this emotional intelligence intervention had some impact on first year college students in a First Year Experience course. Multiple studies have demonstrated (Goleman, 1995; Bar-On & Haddley, 1999; Liff, 2003; Ashkanasy & Dasborough, 2003) that emotional intelligence is a necessity to a successful life. In separate studies, Bar-On & Haddley (1999) and Stein & Book (2000) found that EI could predict 27-45% of a person's success. First Year Experience curriculum should continually evolve to meet the changing needs of students (Friedman & Marsh, 2009). Stress and anxiety are very present and becoming more prevalent among university students (Gallaher, 2008, Mackenzie et al 2011). Institutions looking to accommodate these changes in student generations could look to EI training. Concepts from this study could be reviewed and incorporated into future First Year Experience curriculum. Given the mixed results of this study and the suggested timeline for

reassessing EI by the EQi administrators, I suggest that EI training be implemented across a longer timeline, for example a yearlong first year experience. Or perhaps infused in different ways across the student life cycle include sophomore programming, career advising, tutoring, or student leadership training etc.

Emotional Intelligence and Resilience The second research question asked how and to what extent does an emotional intelligence intervention impact student resilience. 85% of the participants' (N = 41) average score on the 5x5RS pretest assessment was above a 3 or moderate. Only six students scored below a 3 and would be considered low in resilience. These results add to existing research that suggest similar levels of general resilience in college students (Aiena, Baczqaski, Schulenberg, & Buchanan, 2015; Arnekrans et al., 2018; Brown, Pipe, Gueci, Jimenez, 2019). Brown et al (2019) studied 111 college students and found a mean of 3.5 on a similarly scored resilience scale. The average overall resilience score among college student participants was also categorized as *moderate* (Aiena et al., 2015). Interestingly one section in the experimental condition experienced a significant increase in resilience across the semester while the other section did not. However the second section did experience a statistically significant increase in the resilience subscale of Emotion Regulation. Resilience in the traditional FYE class regressed slightly. From my perspective the first EI FYE section consisted of more attentive and engaged students versus the second. From my researcher notes the first EI FYE section required much less lecturing from me, creating more discussion among themselves. Whereas I lectured more and had to solicit participation more often in the second section. Similarly, the focus group from the first section lasted nearly 10 minutes longer than the focus group from the second. Participant attendance was more regular in

the first section as well. These attributes may account for some of the difference in resilience scores between the two sections.

Overall scores for EI and resilience were not significantly correlated. Reviewing the EI composites and resilience no relationship was witnessed. Surprisingly there was no significant correlation found between resilience scores and EI scores. This is contrary to other research that showed a significant relationship between EI and resilience (Javadi & Parv, 2009; Jayalakshmi & Magdalin, 2015). While the quantitative data did not reveal a significant relationship the qualitative data suggests that some relationship does exist. Resilience was either directly or indirectly mentioned nearly 20% of the time in reflections, interviews and focus groups. For example in the decision making reflection, P133 said EI will "help me accomplish what I want during my time in college" and in the self expression reflection P144 said "I feel like I can be more confident when conflict arises." Comments like these illustrate a potential increase in resilience in students within the study.

Implications Given the relationships between EI and resilience from the literature, I believe the results of this study suggest more direct work with resilience is warranted. When prompted to reflect on resilience (e.g. in the focus groups) students responded with higher rates of resilience related comments. Written reflections did not ask students explicitly about resilience whereas interviews and focus groups had questions directly referencing resilience and EI. Resilience made up 22% of the responses from the interviews and focus groups and only 16% in the written reflections. Considering the means for the EI FYE overall EI and resilience scores both increased ($p = .09$ and .06 respectively) and the qualitative data present there is a need to continue to

study the relationships between these constructs as well as the development mechanisms for each. This could be accomplished through a variety of methods. Within the First Year Experience (FYE), the curriculum could be revised and expanded to include more focus on resilience and the application of EI to improve resilience. Institutions with FYE courses that span two semesters could expose students to EI and resilience training across an academic year as opposed to a single semester. Additional student support programs could also engage in improving the resilience of first year students by integrating EI and resilience across campus for example, in other courses, residential life, student leadership training etc.

Emotional Intelligence and Academic Success The third research question asked how and to what extent did the EI intervention impact students' academic success. High School GPA (HSGPA) was utilized as a pre-test for academic success and first semester GPA (FSGPA) as a proxy for post-measure. In their work on college completion Brown et al (2009) found that HSGPA was highly predictive of completion. Interestingly in this study, however, HSGPA was not significantly correlated to FSGPA and could be a result of the intervention. The literature has studied the relationship of HSGPA to college completion, college completion is not synonymous with FSGPA and may explain the lack of relationship found in this study. It was also found that the FSGPAs of the experimental groups and the control group were not statistically different. Though practical significance could be argued in that the traditional FYE class FSGPA averaged a letter grade lower than the EI FYE group. EI FYE student were also found to be less likely to finish with GPAs below a 1.8 which results in academic probation. Research from Scalise, Besterfield-Sacre, Shuman, & Wolfe (2000) found that 59% of first year

students who enter academic probation leave the institution. Additionally, Budny, Lebold, & Bjedov (1998) found first semester GPA among first-year students to be positively related to retention rates. As such the results of this study are quite promising and suggest EI could be a significant contributor to academic success and retention. The traditional FYE group experienced no EI intervention and the mean resilience score actually dipped slightly (pretest 3.48, posttest 3.44). No significant relationship was detected between FSGPA and EI or its subscales. This aligns with work from Ekman (2008) and Barchard (2003) that found either limited or no relationship. However, looking at the qualitative data suggests that a relationship between EI and academic success may exist. Academics were referenced 15% of the time through reflections and interviews and focus groups. For example P134 said in the self expression reflection; "One step I've made with improving my emotional intelligence is that I speak up more in class. I try not to let psych myself out or worry what others might think." Similarly, P129 in the stress management reflection said "This information has given me the ability to handle my anxiety better, especially during tests and I think this will be reflected in my grades."

Current studies (Bail, Zhang & Tachiyama, 2008, Denhart, 2008; Hoyt & Winn, 2004, DeWitz, Woolsey, & Walsh, 2009) have explored the intersection of EI and academic success for a variety of student age groups with mixed results. Liff (2003) and Ashkanasy and Dasborough (2003) specifically studied college aged students and found positive correlations between EI and academic success. While Ekman (2008) determined that no relationship existed between the two. Much like the literature illustrates this study is inconclusive.

Implications The association between EI and academic success remains inconclusive. This study adds to the murky nature of the relationship but suggests continued investigation is necessary. Qualitative data from the written reflections did not ask students explicitly about academics whereas interviews and focus groups had questions directly referencing academics and EI. Academic references accounted for 25% of the responses from the focus groups. FYE instructors or those working with EI should be more intentional about the connection to academics. It could be that EI's association to academic success would be more evident across a broader expanse of time. Additional studies that diffuse EI across multiple semesters or years and compare academic success at similar intervals may produce more definitive results. Infusing EI into academic skills coaching may also provide students an additional skillset that could prove beneficial alongside test taking or textbook reading etc. Similarly, researchers or institutions could explore implementing EI into aspects of tutoring and learning centers for example, tutoring practice that develops the social-emotional skills in addition to subject matter (i.e. anxiety, impulse control).

Limitations

There are limitations to this study that should be considered. The first limitation was the sample size (N = 44) and institution. The site for this research was a single gender (female), private, liberal arts college. With a smaller sample size and an institution that likely attracts a specific type of student this may affect the applicability of these results to the larger higher education community. As sample size increases so does the likelihood of finding significance. It is possible that if the entire freshmen class were studied more significant results would have been found. Relatedly, with an all-female

sample size and a male instructor/researcher there may have been some unintended and uncontrollable impact on students' comfort level. It should be noted however that this is less of a limitation in an action research study, such as this, as opposed to other methodologies. Action research is educational research performed by educators for themselves. A systematic inquiry done to produce better understanding of a local context in order to improve practice (Mertler, 2016). Being context specific, the sample size in this study is more appropriate to the institution studied.

Another concern was the duration of the study and timing of the EQi 2.0 post-test. While it was discussed earlier that EI can be altered in as little as one half day of training (4 hours) and this intervention totaled approximately six hours over the course of a semester. It could be that the total amount of time spent on EI was limiting. Also, it is suggested that the EQi 2.0 be administered approximately six months apart for optimal results. In this study the post test was taken three months after the pre-test. This time frame could have impacted the results of the assessment.

A third limitation concerns the qualitative coding process and the lens of the researcher. The coding process is intrinsically linked to the research analysis and interpretation of findings and will reflect the constructs, concepts, language, models, and theories that structured the study in the first place (Saldana, 2016). Also, the genre of qualitative inquiry (e.g., case study, ethnography, phenomenology) and ontological, epistemological, and methodological issues influence and affect coding decisions (Creswell, 2013). For example the phenomenological aspects of this study (reflections, focus groups, and interviews) provide different mediums through which data was

collected. Participants may respond differently in one form versus another. Triangulating and interpreting these data may not reflect these nuanced responses.

Recommendations for Practice

As the researcher I kept a journal where I recorded impressions and thoughts for future iterations. The three sections were similar in many ways, yet the first EI FYE class displayed greater engagement than either of the others. The meeting time for the first class was 11 am while the second EI FYE class met at 12:30 and the traditional FYE at 2:00. It may be that a late morning time period is optimal for student engagement due to less fatigue generated by back-to-back classes (Haggag, Patterson, Pope, & Feudo, 2018). The duration for this class was also one hour and twenty minutes, one day a week. I found that this amount of time for EI content was too long. Engagement would wane in the final 15-30 minutes. Continued work is necessary to design course content to get and keep students engaged. It could be beneficial to solicit current student perspectives to ensure content is timely and of interest. Adjusting the length of EI content during class, frequency of meetings, and or considering when classes are offered should be explored.

Additionally, one of the more influential elements of the curriculum, as referenced throughout the qualitative data, appears to have been the influence EI had on students' decision making process. For example P137 said in the decision making reflection "The decision making model from class is an easy to remember and use acronym. When I stop and reflect on a situation it's a step-by-step process." Early in the curriculum the ABCDE model of decision making was introduced and is referenced and reinforced throughout the curriculum. The ABCDE model was derived from Albert Ellis' ABC model (1991) in his work on rational-emotive behavior therapy. The ABC model

represents the notion that “activating events (A) do not cause emotions (C), but beliefs (B) and, in particular, irrational beliefs do” (Sarracino et al., 2017). The D stands for the disputing those beliefs and E stands for the new effect, the result of holding healthier beliefs (Jorn, 2016). It is suggested that this technique be retained and utilized in the curriculum.

Participants also mentioned multiple times, throughout the study that they were a “certain type” when referencing their behaviors and interests. For example, when commenting on asking others for help in the interpersonal reflection P118 said “I’m the type of person who would just rather do it on my own because I know it will be done correctly.” Similarly, P125 said in the self perception reflection “I haven’t decided on a major yet, but I am not a science-y person so I don’t even worry about those majors.” I believe it would help students if some time was spent early in the curriculum discussing how mindsets can be developed and that the right mindset can influence your resilience (Yeagar & Dweck, 2012). Similarly, an improved belief in the ability to change could reduce resistance to EI attributes that are not familiar to the students and help improve overall EI.

Additionally, as the instructor of these courses I was certified as an EQi 2.0 coach. The EQi 2.0 is a robust assessment tool and provides a plethora of supporting documents and texts to accompany the instructions process. I believe the training aided me in facilitation and discussion during class. For institutions who do not have the resources to certify multiple or even one instructor to aid in the First Year Experience course there are a variety of assessments, supporting information, and training

tools/techniques available online. Without the EQi certification the process could be more laborious but I believe the curriculum could be duplicated with alternative methods.

Future Directions for Research

Research has shown that emotional intelligence is a necessity for life and leadership (Goleman, 1995; Bar-On & Haddley, 1999). What is still unclear is the application and relationship to resilience and academic success. Continued research into the connections between these elements is required. Additional studies should investigate other institution types, coed populations, alternative populations (e.g. students on academic hardship) and larger sample sizes. This study could be replicated, however adjustments should be made taking into account the suggestions made previously. Most notably the duration of the intervention and time between EI assessments should exceed a single semester. Attention should also be given to evening-out the attention to resilience and academic skills to better balance EI content.

Continued research on the current participants could also be conducted. GPA for subsequent semesters and retention rates could be monitored. Additional resilience, EI, and qualitative assessment could be administered at important intervals in the student lifecycle for example sophomore year and graduation. Specific research could be conducted with class 1 in the EI FYE group given the positive results from their resilience assessment. Questionnaires or interviews designed to glean more information on the experiences that might have impacted their resilience over the course of the semester.

The second EI FYE and traditional FYE classes both showed significant improvements in Adaptability within resilience. The first EI FYE class also showed

improvement in Emotion Regulation. These specific subscales could be investigated further to look for clues to improving student resilience. Following up with participants from each group and exploring experiences that may have contributed to these improvements may provide useful information for curriculum changes and resilience support from institutions. Similarly, the EI FYE showed significant improvement in both Stress Management and Self Perception EI composites. I believe this is due to the students' utilization of the decision making model and the instruction that encouraged students to self-evaluate. Continued research on these subscales is encouraged.

This study explored the efficacy of an EI intervention as well as implications on resilience and academic success. Results were mixed but researchers and institutions are encouraged to conduct the EQi 2.0 and 5x5RS as pretest to establish baseline levels of resilience and EI. This information can guide instruction and help tailor curriculum application to individual student needs. Implementing these pretest for populations such as those on academic probation may provide additional venues for intervention and application of EI training. Utilizing the EQi 2.0 and 5x5RS as posttest will help determine the effectiveness of the intervention and guide continued adjustments.

Conclusion

The issue of student success and retention has been the focal point of higher education institutions across the country for some time. Historically research and institutions have explored a variety of factors that have been found to influence integration and academic performance and thus retention (Tinto, 1997). These factors can be grouped into two categories, student elements and institutional elements, both of

which center upon intellectual and environmental inputs. Emotional intelligence and resilience theory have sought to address these issues from a less linear perspective. Many researchers (Alvardo et al., 2017; Arnold, 2016; Brown et al 2019; Chang, 2006; DeWitz et al, 2009; Haktanir et al., 2018; Javadi & Pary, 2009; Jayalakshi & Magdalin, 2015; McLafferty et al., 2012; Leedy & Smith, 2012; Liff, 2003; Pekrun, 2006; Reivich et al, 2011; Walsh-Portillo, 2011; Wang et al., 2012) have explored emotional intelligence or resilience in college students but less attention has been given to the overlap of these constructs, specifically as they might pertain to academic success. Even though the results of this study were mixed, they contribute to this gap in the research in a variety of ways.

Some elements (subscales and composites) of emotional intelligence and resilience indicated the intervention had an effect. The qualitative data provided a fidelity check in these areas reaffirming that some level of impact did occur on the participants. Eaton (2014) found that students who can navigate the social and emotional challenges of college demonstrate resilience and Leary & DeRosier (2012) underscored the need for adequate support services given the prevalence of stress and anxiety in first-year college students. As colleges face shrinking numbers of students (Barshay, 2018) the importance of retaining the currently enrolled population increases. From chapter 1, retention is significantly important to funding patterns, facilities planning, academic curricula offered (Heisserer & Pareete 2002), and institutional rankings. Colleges and universities must commit resources to developing the resilience and retention of their students. This study has shown the topics of EI and resilience need additional investigation.

First Year Experience is considered a high impact practice in higher education (Ruffalo Noel Levitz, 2018) but just as student populations evolve so must FYE. EI and resilience provide an opportunity for that evolution.

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APPENDIX A

UNIVERSITY APPROVAL FOR HUMAN SUBJECT TESTING

ASU Knowledge Enterprise Development

APPROVAL: EXPEDITED REVIEW

Ruth Wylie
Division of Educational Leadership and Innovation - Tempe
480/727-5175
Ruth.Wylie@asu.edu

Dear Ruth Wylie:

On 8/7/2019 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Emotional Intelligence and Resilience Intervention
Investigator:	Ruth Wylie
IRB ID:	STUDY00010390
Category of review:	(7)(a) Behavioral research
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Control Group overview, Category: Technical materials/diagrams; • Alex Davis IRB Protocol_08072019 (1).docx, Category: IRB Protocol; • Resilience assessment, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Student Recruitment Letter (EXPERIMENTAL GROUP).pdf, Category: Recruitment Materials; • Experimental group overview , Category: Technical materials/diagrams; • Focus Group/Interview Questions, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Parental-Permission.pdf, Category: Consent Form; • Meredith College IRB approval, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Emotional Intelligence assessment, Category:

APPENDIX B

EMOTIONAL INTELLIGENCE INTERVENTION GROUP SCHEDULE

- The EQi 2.0 2.0 model will be incorporated into 5 of the 15 weeks of the FYE Course.
- Students will complete the EQi-2.0 Higher Education Assessment
- Initial reflection* on EQi 2.0 summary results
- Individual Debrief meeting with EQi-2.0 coach**
- Creation of EQi 2.0 Personal Development Plan*
- EQi 2.0 model lessons infused into curriculum w/ corresponding assignments (5 weeks)*
- Reflections after each lesson (6)
- End of term reflection assignment*

* Materials created/provided by researcher
** EQi-2.0 coaches are certified and undergo specific training

Intervention Outline

Day	Topic	Assignment Due/Event
Week 1	Introductions, expectations, and goals, overview of Strong Points & syllabus	
Week 2	Emotional Intelligence (EQi 2.0 model)	Initial Reflection Assignment (due at debrief meeting) Schedule debrief meeting with instructor (meeting must be completed by end of week 3)
Week 3	Meet with instructor for individual coaching session by end of Week 3. Bring a copy of initial reflection assignment. Create EQi 2.0 Personal Development Plan (due Week 4).	
Week 4	Self-Perception	Self-Perception Student EQ Edge Exercise(s) [in class] Reflection [homework]
Week 5	Student Involvement – UG research and Student Panel	
Week 6	Self-Expression	Self-Expression Student EQ Edge Exercise(s) [in class] Reflection [homework]
Week 7	Fall Break	
Week 8	Interpersonal	Interpersonal Student EQ

		Edge Exercise(s) [in class] Reflection [homework]
Week 9	Academic Advising & Four Year Planning	
Week 10	Decision Making	Decision Making Student EQ Edge Exercise(s) [in class] Reflection [homework]

APPENDIX C

EMOTIONAL INTELLIGENCE CONTROL GROUP SCHEDULE

Day	Topic	Assignment Due/Event
Week 1	Introductions, expectations, and goals, overview of Strong Points & syllabus	Take 5x5RS assessment
Week 2	Campus Resources – Scavenger Hunt	
Week 3	Meet with instructor for individual check-in session by end of Week 3.. Create Personal Development Plan (due Week 4).	
Week 4	Exploring Raleigh	Letter to Future me Due, Sept StrongPoints journal
Week 5	Student Involvement – UG research and Student Panel	Thinking about Careers
Week 6	Library	
Week 7	Fall Break	
Week 8	Thinking Global and Study Abroad	
Week 9	Academic Advising and Four Year Planning	
Week 10	Alumnae Garden service	
Week 11	Thinking about Careers*	Nov StrongPoints Journal
Week 12	Ethics and Communicating	
Week 13	Making Good Decisions	
Week 14	Thanksgiving Break	
Week 15	Money Management	Take 5x5RS assessment
Week 16	Final	StrongPoints reflections due. Dec StrongPoints Journal

APPENDIX D

FOCUS GROUP/INTERVIEW QUESTIONS

1. (Stress Management) Pretend you tried to do something in class or on campus and failed. How would react to that failure?

2. (Decision Making) Think about a conflict that has or could occur here at Meredith College, that made you feel frustrated? Pretend you're in a similar situation now. How would you react to that conflict?
    a. What are possible results of your reaction?
    b. Is it important to consider these results?

3. (Self Perception) Think of a time when you received some negative feedback from a professor, roommate, or classmate. Pretend you have just received some unexpected negative feedback, how do feel?
    a. How do you react?
    b. How does that reaction help or hinder you moving forward?

4. (Interpersonal) Can you tell me about a time you needed to ask for help? Pretend you need help with a class or homework you're struggling in. How does that make you feel, how do you react?
    a. What are some outcomes of these feelings and reactions?

5. (Stress Management) Pretend you're working on a project for class with another students. Your partner unexpectedly withdraws from class and has not completed her portion of the assignment. The assignment is due in two days and you have an exam tomorrow afternoon that you must study for. How do you feel?
    a. How do you respond?

6. (Self Expression) When you are upset or excited about a grade you received; or having issues with a roommate how do you express yourself?
    a. Why do you act his way?

7. (Interpersonal) Think about a time when (or pretend) you disagree with the actions or decisions of your faculty, RA or RD, or roommate, or friend. How would you approach the situation?
    a. What was the outcome?

8. (Decision Making) Do you bargain with yourself in situations in which you need to change?
    a. Do you take action?
    b. Why or why not?

9. What is Emotional Intelligence?

    a. Is it important? How or why?

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10. Outside of this class, are there experiences from this semesters that you think affected your resilience positively or negatively?

11. What is something new you've started this semester at Meredith (a friendship, a group, declared a major, started going to the gym)?
    a. Has that affected your experience here? Explain.

12. How have you transitioned to college level academic work? Have there been struggles? What have you learned through those situations?

APPENDIX E

EQ-i 2.0 INSTRUMENT

EQ-i 2.0

assess. predict. perform.

Please complete one of the following (First/Last Name or ID):

First Name: _____ Gender (optional): M F

Last Name: _____ Age (optional): _____

ID Number: _____ Today's Date: _____/_____/_____
MM DD YYYY

Instructions:

The EQ-i 2.0 provides you with an opportunity to describe yourself by indicating the frequency with which you feel, think, or act in the way described by each statement. There are five response options for each statement: *Never/Rarely, Occasionally, Sometimes, Often,* and *Always/Almost Always.*

Read each statement and decide which one of the five response options best describes the frequency of your thoughts, feelings, or actions. Indicate your response choice by circling the appropriate number.

If a statement does not apply to you, respond in such a way that will give the best indication of how you would possibly feel, think, or act. Although some of these statements may seem unclear or vague to you, choose the response option that seems to describe you best. There are no "right" or "wrong" answers and no "good" or "bad" choices. Answer openly and honestly by indicating how you actually are, and not how you would like to be or how you would like to be seen. Although there is no time limit, work at a steady pace and make sure that you consider and try to respond to each statement. This assessment must be completed in a single session.

	Never/ Rarely	Occasionally	Sometimes	Often	Always/ Almost Always
1. I keep calm in difficult situations.	1	2	3	4	5
2. I make rash decisions when I'm emotional.	1	2	3	4	5
3. I back down even when I know I am right	1	2	3	4	5
4. It's hard for me to make decisions on my own.	1	2	3	4	5
5. I interrupt when others are speaking.	1	2	3	4	5
6. It's difficult for me to change my opinion.	1	2	3	4	5
7. I say "no" when I need to.	1	2	3	4	5
8. I accomplish my goals.	1	2	3	4	5
9. It's easy for me to make friends.	1	2	3	4	5
10. Looking at both my good and bad points, I feel good about myself.	1	2	3	4	5
11. I act in an environmentally friendly way.	1	2	3	4	5
12. It's hard for me to enjoy life.	1	2	3	4	5
13. I'm aware of how others feel.	1	2	3	4	5
14. I see situations as they really are.	1	2	3	4	5

Continued on the next page...

APPENDIX F

5x5RS RESILIENCE INSTRUMENT

Age: _____

First Year Experience (FYE 100) section number _____

The following 25 survey items are modified from the DeSimon et al. (2017) Five-by-Five Resilience Scale to determine levels of resilience and five related protective factors. Please answer all of the following questions using the scale 1 – Strongly Disagree (SD), 2 – Disagree (D), 3 – Slightly Disagree (SLD), 4 – Agree (A), 5 – Strongly Agree (SA)

		SD	**D**	**SLD**	**A**	**SA**
	Question	**1**	**2**	**3**	**4**	**5**
	Adaptability					
1	I can switch gears easily					
2	I am open to change					
3	I do not like the idea of change					
4	I adapt easily to new situations					
5	I dislike the unknown					
	Emotion Regulation					
6	I experience my emotions intensely					
7	I am not easily affected by my emotions					
8	I can keep my emotions under control					
9	I am very sensitive and easily hurt					
10	I get overwhelmed by emotions					
	Optimism					

11	I see difficulties everywhere					
12	I expect things to fail					
13	I look at the bright side of life					
14	I Fear for the worst					
15	I have a dark outlook on the future					
	Self-Efficacy					
16	I am good at analyzing problems					
17	I can handle complex problems					
18	I am less capable than most people					
19	I excel in what I do					
20	I can tackle anything					
	Social Support					
21	I can make friends easily					
22	I feel empty in my relationships					
23	I tend to find social situations confusing					
24	I feel comfortable around people					
25	I feel isolated from other people					