American Journal of Humanities and Social Sciences Research (AJHSSR) e-ISSN :2378-703X Volume-6, Issue-3, pp-29-43 www.ajhssr.com Research Paper Open Access

# The Relationship between Emotional Intelligence and Self-Efficacy within the Higher Education Population

Zayda Costa, M.S. Albizu University

**ABSTRACT :** The following literature review examines the relationship between Emotional Intelligence (EI) and self-efficacy among the higher education population. Furthermore, this literature review examines if both constructs contribute to student success within higher education programs and if self-efficacy is more influential than EI as a contributing factor to student success. For this study, a total of eight articles were analyzed. The selected articles examine both constructs, together and separate, within the higher education context. This literature review demonstrates a correlation between the two constructs and that both constructs contribute to student success.

# I. INTRODUCTION

#### Literature Review

Emotional Intelligence (EI) captures how humans communicate and maintain awareness of their own emotions and the emotions of others in daily social environments (George, 2000). Emotional intelligence is an individual's ability to identify emotions and incorporate mental-analysis of logic and problem-solving based on emotions (Mayer, Caruso, & Salovey, 1999). Similar to Intelligence Quotient (IQ), EI measures an aspect of intelligence (Goleman, 1996). Therefore, being a determinant of intelligence, EI can potentially demonstrate levels of self-efficacy. Self-efficacy is the belief people hold in their capability of attaining desired aspiration(s) (Bandura, 1977 as cited in Author 1). Albert Bandura (1977 as cited in Author 1) believes that the strength of a person's self-efficacious beliefs contributes to their performance.

The current literature indicates a connection between self-efficacy and performance (Rathi & Rastogi, 2009). Recent research also suggests that an undergraduate student's cognitive-based performance is under the influence of EI (Lam & Kirby, 2002). Although the existing literature indicates a connection between performance and both constructs independently, there has not been much research conducted concerning the relationship of the two constructs and their impact on performance.

#### **Emotional Intelligence**

EI consists of appraising one's own emotions and the emotions of others, emotional expression, emotion regulation in ourselves and others, and the utilization of emotions when problem-solving. Aside from the previously mentioned, EI consists of verbal and nonverbal appraisals, the expression of emotions, and using emotions to motivate the utilization of more emotions (Mayer, Salovey, and Caruso, 2004). Rathi and Rastogi (2009) found that EI is an individual's understanding and use of emotions to reinforce reasoning. Daniel Goleman (1996) states EI plays a role in how people perceive, understand, and display emotions. EI has become an area of interest concerning methods for identifying other outlets of intelligence (Lam & Kirby, 2002). Furthermore, EI has become an area of interest in understanding a person's well-being and success (Fabio & Palazzeschi, 2008).

#### Self-efficacy

Self-efficacy is the perception an individual has in carrying out courses of action during adversity. Performance is said to be heavily impacted by the belief one has in what one can achieve (Bandura, 1982 as cited in Author 1). Bandura evaluated the levels and strength of self-efficacy in different circumstances. The degree of difficulty of a task is known as levels (Bandura, 1977; 1997 as cited in Author 1). Generality is the ability to carry self-efficacious beliefs across various activities. Strength is the assurance an individual has when performing (Bandura, 1977; 1997 as cited in Author 1).

2022

# EI and Self-efficacy within the Educational Population

There is limited research examining the relationship between EI and self-efficacy. However, the current literature suggests that EI contributes to a person's belief in themselves (Rathi & Rastogi, 2009). Petrides and Furnham (2003) found that self-efficacy is the perception one has in achieving desired outcomes within the emotional realm (emotional self-efficacy). Kirk, Schutte, and Hine (2008) identify self-efficacy as a dimension of adaptive emotional functioning according to the four branches model of EI (Mayer et al. 2004, as cited in Kirk, Schutte, and Hine, 2008). Further, they found that emotional self-efficacy is a reliable and valid construct with a significant relationship with both trait and ability EI.

Research within the educational context finds that undergraduate students' cognitive-based performance is influenced by their EI (Lam & Kirby, 2002). Current literature indicates that self-efficacy influences the cognitive-based performance of students considering the confidence and belief students must have when achieving academic success (Rathi & Rastogi, 2009). Other studies have focused on school teachers. Chan (2004) found that the level of EI and self-efficacy of secondary school teachers effectively impact their teaching. Findings demonstrate a significant and positive relationship between EI and self-efficacy in a group of secondary school teachers. He found a significant and positive relationship between EI and self-efficacy in a group of secondary school teachers. He found a significant and positive relationship between EI and self-efficacy in a group of secondary school teachers. He found a significant and positive relationship between both constructs as well. Fabio and Palazzeshi (2008) found that a good predictor of self-efficacy is a person's positive regulation. Atkins and Stough (2005) found that school teachers who control their emotions and efficacy are potentially more impactful with their students.

The study by Yazici, Sevis, and Altun (2011) suggests that both EI and self-efficacy predict academic achievement among high school students. Results demonstrate that classroom performance is positively affected by a student's emotions and self-efficacious beliefs. Furthermore, students being emotionally aware also contributes to academic performance.

The results of the previously mentioned studies suggest that both constructs engage with one another. Most of the research has been able to demonstrate a correlation between the constructs. More so, within the educational context. However, the relationship between EI and self-efficacy within the higher education population has not been thoroughly examined.

# **Theoretical Model/ Foundations/ Conceptual Framework**

#### **Emotional Intelligence**

EI consists of four branches (Mayer et al., 2004). Self-awareness is the first branch, which relates to the ability to interpret between different emotions in a person's face or voice and perceive those emotions (e.g., realizing that a person is sad as evidenced by the affect or sound of their voice). The second branch, self-management, implies using one's own emotions (i.e., controlling one's attitude and mood while making emotions "fit" the environment). Social awareness is the third branch. It relates to a person's capability to express both concern and empathy for others. Finally, the fourth branch is relationship management, which is the ability to handle one's emotions regarding the current surroundings. These four branches demonstrate what EI is and how it can be used (Mayer et al., 2004).

The way individuals behave concerning their environment is impacted by their emotions (Beverly, Williams, & Kitterlin, 2012). Stimuli, such as attention, cognitive processes, and specific behaviors, can influence emotions and reinforce external actions (George, 2000). Emotions can influence and signal motivated responses when in given situations (Mayer et al., 2004).

EI consists of skills that help people accurately process and develop emotional information, leading to experienced feelings and moods (Mayer et al., 1999). Emotions play a crucial part in cognitive processes and behaviors (George, 2000). Feelings, both positive and negative, about oneself, others, or objects stem from emotions. Additionally, organizational studies have found that EI contributes to an employee's actions and behaviors (Langhorn, 2004). Employees who understand and can manage their emotions handle adversity more efficiently (Fernandez, 2007). Research indicates that EI enhances occupational performance by 1) contributing to the enrichment of relationships and 2) enabling employees to better cope with aversive experiences (Lopes, Grewal, Kadis, Gall, & Salovey, 2006). Therefore, the concept of EI is a factor to consider when examining individual performances.

#### Self-efficacy

Self-efficacy is the belief one possesses concerning one's competency. It contributes to how much effort is invested when faced with adversity (Bandura, 1982 as cited in Author 1). Individuals with low levels of self-efficacy tend to be doubtful and insecure. Highly self-efficacious individuals tend to be strongly sure of themselves (Bandura, 1982 as cited in Author 1). Furthermore, highly self-efficacious people are more willing to invest their efforts when confronted with aversive experiences.

The development of self-efficacy stems from one's accumulative experiences (Bandura, 1982 as cited in Author 1). It is a person's cognitive appraisals and accumulative experiences that create his/her self-efficacy. Self-efficacy is composed of four components, that when combined, judgments concerning one's capabilities form.

The first component is known as enactive attainments. They derive from authentic mastery experiences (Bandura, 1982 as cited in Author 1). The repetition of successful experiences increases self-efficacy, whereas repeated failures decrease self-efficacy. The repetition of such experiences leads to outcome expectancies. Outcome expectancies are the judgments made about the possible consequences that follow the performance in question. (Bandura, 2006 as cited in Author 1). The second component, verbal persuasion, is when a person is convinced that they have the abilities necessary for success (Bandura, 1982 as cited in Author 1). Verbal persuasion contributes to success if 1) the boundaries of the appraisal are considered realistic, and 2) the credibility of the person (or persuader) making the appraisal (Bandura, 1982; Zimmerman, 2000 as cited in Author 1).

Vicarious experiences are judgments based on the observations one makes when witnessing someone similar to oneself attain success with a task (Bandura, 1982 as cited in Author 1). More so, with tasks that one may have little experience in (Bandura, 1982 as cited in Author 1). However, suppose the person who is being observed is perceived as more talented than oneself. In that case, the relevance of the observed performance will be dismissed (Zimmerman, 2000 as cited in Author 1).

The last component, physiological state, is the judgment an individual makes concerning their current health status. Performance tends to break down when an individual is under stress (Bandura, 1982 as cited in Author 1). When physical means are required for success, then judgment is based on health. Physical inefficacy occurs when failure is expected. Symptoms of physical inefficacy include exhaustion, flush feelings, heart palpitations, headaches, bodily aches, and sweaty palms (Bandura, 1982; Lunenburg, 2011 as cited in Author 1).

Self-efficacy is a multifaceted construct; therefore, people differ in terms of where and how much efficacy they foster and the levels in which efficacy develops from given pursuits (Bandura, 2006 as cited in Author 1). Self-efficacious beliefs influence a person's course(s) of action, challenges, goals, commitments, and efforts. It is the driving force behind one's judgment of capability to determine the choices and skills required to attain desired aspirations (Bandura, 1982 as cited in Author 1).

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

The literature suggests that there is a positive relationship between EI and self-efficacy. However, there has been limited research conducted that has focused on EI and self-efficacy among students pursuing higher education. This study aims to lay the groundwork for future studies to develop EI and self-efficacy in higher education programs. The researcher believes that if higher education programs can assist students in developing EI and self-efficacy, this would help students overcome the imposter syndrome <sup>1</sup>. If the imposter syndrome can be reduced then this may decrease the dropout rate in higher education programs and lead to higher rates of graduates. This study aims to investigate the relationship between EI and self-efficacy and examine if a better understanding of both constructs can lead to more success among higher education students.

#### **Research Questions and Hypotheses**

The current literature suggests a possible relationship between EI and self-efficacy. Furthermore, the current literature is suggestive that each of these constructs, separately and together, can influence student success. Therefore, it is hypothesized that there is a) a positive relationship between EI and self-efficacy, b) that both constructs contribute to student's success, and c) that self-efficacy is more influential in a student's success than EI among higher education students.

#### Search Strategy

#### II. METHODOLOGY

A systematic literature review was conducted exploring the current relationship between EI and selfefficacy among the higher education population. In searching for the right fit of articles, the search engine searches were limited to peer-review journals. The journal articles were retrieved electronically via the following databases: Google Scholar, Psych INFO (EBSCO), APA PsycArticles, ResearchGate, and Wiley Inter Science. The following keywords were utilized: "Emotional intelligence," "EI," "self-efficacy," "emotional intelligence and education," "emotional intelligence and educational population," "emotional intelligence and university students," "emotional intelligence and graduate students," "self-efficacy and education," "self-

<sup>1</sup> The imposter syndrome is a psychological pattern where an individual has feelings of inadequacy which in turn leads them to doubt their own accomplishments and talents. There is an overall fear of being exposed as a "fraud".

2022

efficacy and educational population," "self-efficacy and university students," "self-efficacy and graduate students," "emotional intelligence and self-efficacy," "emotional intelligence," self-efficacy," "emotional intelligence, self-efficacy, and university students," and "emotional intelligence, self-efficacy, and graduate students." A manual search of the reference lists in the identified articles was also conducted.

#### **Inclusion Criteria**

For this systematic review, the following inclusion criteria were identified: (a) published between 2010 and 2020; (b) scholarly or peer-reviewed; (b) studies that examined either undergraduate or graduate students; and (c) studies examining content consistent and relevant to keyword descriptors.

#### **Exclusion Criteria**

The following classifications of publications were excluded from the systematic review: (a) books; (b) case studies; (c) newspaper articles; (d) magazine articles; (e) literature reviews; (f) studies that were published before 2010; (g) studies that were submitted for publication before 2010; and (h) studies that focused on students who were not in higher education (e.g., students from a technical school; students in middle school).

#### **Article Selection Process**

Several articles were reviewed using the inclusion and exclusion criteria noted above. Due to a lack of relevance to the purpose of the systematic review, a few articles were dismissed. Expressly, articles were excluded if they: (a) did not include EI or self-efficacy in their study; (b) focused solely on students who were not in higher education; and (c) did not utilize validated measures or research design.

When searching for articles, peer-reviewed journals and the date of journal submissions were evaluated. At first, 500 articles were identified by the search databases. To narrow down the number of articles, studies were selected based on their abstracts, which allowed further elimination of the research contents that were not relevant to the keyword descriptors. This narrowed the articles to 150. Elimination of additional articles was done by selecting studies that did not meet the purpose of the study. This resulted in the final eight articles that were used.

Among the articles used for analysis, three assessed for EI and self-efficacy among undergraduate students, and one article assessed for EI and self-efficacy among graduate students. Two of the articles evaluated EI in undergraduate students, and two of the articles evaluated self-efficacy in postgraduate students. The studies were conducted in different countries (e.g., Spain; Ireland; and the U.S.). Three of the articles examined students from various disciplines (e.g., communications; Japanese studies). Two articles specifically focused on nursing students, one article focused only on psychology students, and one article focused on counseling students. One article only focused on students who study writing.

# III. RESULTS

#### EI and Self-Efficacy

Hashemi and Ghanizadeh (2011) assessed the relationship between EI and self-efficacy among Iranian university students studying English as a foreign language (EFL). The researchers sampled 97 students. The students were recruited via convenience sampling from different Iranian universities. The sample has an age range between 21 to 34. EI was evaluated with the Bar-On EI test (EQ-I), and self-efficacy was assessed with the Learner's Self-Efficacy Survey.

The results demonstrate that an EFL university student's EI enhances their belief in being capable of organizing and executing courses of action required for successful performance. In other words, there is a positive relationship between the two constructs, r = .35, p < 0.05. Multiple correlations assessed which components of the Emotional Quotient (EQ) test yield a positive correlation with self-efficacy. Out of all of the components, stress tolerance has the highest correlation with self-efficacy.

A regression analysis determined which factors of EQ are more predictive of a learner's self-efficacy and how other constructs contribute. Results demonstrate that students who yield high-stress tolerance and high self-efficacy could utilize debilitative emotional states and hold strong beliefs about their capabilities. The study finds that the relationship between self-efficacy and self-actualization is indicative of students who attempt to decipher their capabilities and who are aware of their true potentials. These individuals are expected to be highly confident in their abilities to perform the actions required of them.

Hashemi and Ghanizadeh (2011) found that EI accounts for 24% of the variance in self-efficacy. This study demonstrates no difference between EI and gender, and self-efficacy and gender. In conclusion, enhancing a student's EI improves their self-efficacy.

Afifi, Shehata, and Mahrousabdalaziz (2016) conducted a study with students from Cairo University during the 2015-2016 school year. The sample comprises 152 nursing students and 194 media and mass communications students. The study sought to investigate the relationship between EI, self-efficacy, and academic performance. Emotional intelligence was evaluated with the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF). Self-efficacy was assessed with the General Self-Efficacy Scale (GSE), and academic performance was evaluated using the students' self-reported grade point average (GPA).

Compared to male students, female students have higher GPAs and EI scores (Afifi, Shehata, and Mahrousabdalaziz, 2016). Regarding EI, EI is higher for non-medical students with a mean of 29.16 and a standard deviation of 5.07. Medical students obtained a mean of 26.87 with a standard deviation of 2.99 for EI. Non-medical students have higher scores on EI-Global and all EI factors and self-efficacy. Female students display significantly higher mean scores on the following measures than males: EI-Global Score, EI-W, EI-E, and EI-So. The mean score of EI is highest among the group of students whose GPAs fall in the top 10<sup>th</sup> percentile. There is no difference between gender regarding self-efficacy.

In 2017, Huerta, Goodson, Beigi, and Chlup assessed the relationship between writing anxiety, selfefficacy, and EI among graduate students enrolled at an American university. Their sample comprises 174 students with an age range between 20 to 54. Within the sample, 52.9% identify as international students, 55.2% report English as their second language, and 60.8% identify as female. Participants were recruited between the summer of 2013 and the spring of 2015.

Writing anxiety was assessed with the Writing Anxiety Scale, and self-efficacy was assessed with the Writing Self-efficacy Scale. EI was evaluated using select test items from the EI scale created by Shutte, Malouff, Hall, Coope, and Dornheim (1998 as cited in Huerta et al., 2017). The authors excluded items from the scale that assessed for "utilization of emotions."

The authors ran a series of two-tailed t-tests to assess statistically significant differences between groups concerning writing anxiety, EI, and self-efficacy. When examining writing anxiety, results indicate a small to moderate effect size for gender and degree level (master's degree and doctoral degree). The Cohen's d for gender is .269. In contrast, Cohen's d for degree level is .307, exhibiting a small to moderate effect size for gender anxiety. Female participants have higher writing anxiety than male participants. Students enrolled in the master's program report higher writing anxiety compared to students enrolled in the doctorate program.

Concerning international students, these students report higher writing anxiety, and lower levels of selfefficacy compared to students whose native language is English.

Scores for EI differed between native English speakers and non-native English speakers with a Cohen's d of .305. Students whose first language is English have higher scores of EI compared to students whose first language is not English.

The study investigated if being exposed to writing services before the study influences a student's selfefficacy. Results demonstrate a moderate effect size among the students exposed to writing services compared to those with no prior exposure, p < .020, d = .357. Students with previous exposure to writing services have higher levels of self-efficacy compared to students with prior exposure.

To determine how well self-efficacy and EI can predict writing anxiety among graduate students, the authors ran three multiple regression models. The first model explains 6.2% of the variance in writing anxiety. The largest and most significant contribution to the model is language,  $\beta$ = .297, *p*< .031, followed by gender,  $\beta$ = .162, *p*< .037. Degree level also significantly contributes to model one,  $\beta$  = -.153, *p*< .040.

The second model includes variables already examined in Model one plus self-efficacy as the independent variable. Model two explains 55.1% of the variance in writing anxiety. Self-efficacy is the largest contributor to model two,  $\beta$ = -.747, *p* < .0001. Analysis of the partial correlation coefficients for self-efficacy, gender, and prior exposure suggest that self-efficacy explains 47.75% of the variance, gender explains for 2.3% of the variance, and prior exposure explains for 1.10% of the variance in writing anxiety.

The third model includes all of the variables above plus EI as the independent variable. The third model explains 55.2% of the variance in writing anxiety. Self-efficacy continues to have a strong relationship with writing anxiety,  $\beta = -.722$ , p < .0001, while EI did not contribute. Partial correlation coefficients for self-efficacy, EI, and gender indicate that self-efficacy explains 39.06%, EI explains for .36%, and gender explains for 2.25% of the variance in writing anxiety.

Pool and Qualter (2012) investigated whether it would be possible to improve EI and emotional selfefficacy (ESE) in university students using teaching interventions. Participants are second-and third-year undergraduate students from a university located in England. The students are from an array of disciplines, including psychology, fashion, public relations, etc. The sample comprises 164 participants. With some participants placed in the intervention group and others in the control group. EI was assessed using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). ESE was evaluated using the Emotional Self-Efficacy Scale (ESES), and GPA was used to measure cognitive ability.

The study's EI intervention was designed as a free choice elective. The intervention took place during the academic school years of 2008 to 2009 and 2010 to 2011. The elective class had between four to 18 participants, with the study's first author as the instructor. The course was taught weekly for two hours and consisted of 11 sessions based on the four branches model of EI by Mayer et al. (2004 as cited in Pool & Qualter, 2012). The participants completed both the MSCEIT and the ESES during their first class and their final class. Participants were given feedback to reflect on during their journaling assignments. The authors' intent with the EI interventions was to help the participants develop EI knowledge and skills to improve their ESE via process theory, practice, and reflective listening.

The authors ran t-tests with respects to the variables of cognitive ability and age. There is no significant difference in cognitive ability between the intervention group (and control group. There is a significant difference concerning age between the intervention group and control group. Eight mixed design groups (interventions v. control) x time (time 1 v time 2) repeated measures ANCOVAs were run, with "group" as the between subject factor and "time" as the within subject factor. Since age was found to be significantly different between both groups it was controlled for. Significant group x time intervention was found in regard to the MSCEIT branches. The results are as follows: understand emotions, F(1.91) = 8.90, p < .01, partial  $n^2 = .09$ , and managing emotions, F(1.91) = 4.88, p < .05, partial  $n^2 = .05$ . No significant group x time intervention was obtained for MSCEIT branches perceiving emotions and using emotions.

Significant group x time interactions were found in respect of all four subscales of the ESES. The statistical analysis of the data shows a significant effect of the intervention on ability EI understanding emotion and managing emotion scores. The analysis also found significant effects on emotional self-efficacy. The effect sizes indicate medium to large effects.

# Research Question #1: Is there a correlation between EI and self-efficacy among the higher education population? Research Question #2: Do both constructs contribute to a student's success in higher education?

Hashemi and Ghanizadeh (2011) sought to investigate the association between EI and self-efficacy. The results show a positive association between EI and self-efficacy. Meaning that the participants' EI enhanced the belief that they are capable of successful performance. This is consistent with the theoretical context of the literature, which states that self-efficacy is influenced by an individual's affective and emotional state.

Furthermore, the results demonstrate that stress tolerance and self-actualization are positive predictors of self-efficacious beliefs. The association between stress tolerance and self-efficacy suggests that those capable of utilizing debilitative emotional states hold stronger beliefs about their capabilities. This is consistent with Bandura's theory (1977 as cited in Hashemi & Ghanizadeh, 2011) that individuals with low self-efficacious beliefs view the situation as more demanding than actuality when faced with adversity.

The association between self-efficacy and self-actualization is suggestive that individuals who attempt to understand their capabilities and who are aware of their potential are expected to be highly confident in their ability to perform. The study confirms that 24% of the variation in self-efficacy is due to EI. Therefore, the results are indicative that enhancing EI strengthens self-efficacy. The study suggests that professors and faculty members should incorporate skills and abilities associated with EI in their curriculum.

The study by Alfifi, Shehata, and Mahrousabdalaziz (2016) aimed to assess the relationship between EI, self-efficacy, and academic performance among undergraduate students. The results indicate that EI and self-efficacy are significantly correlated. The study found that EI-global and EI-sociability scores are associated with high GPAs (>3.7). EI can potentially be a predictor of self-efficacy, leading to better academic success; however, the results demonstrate that EI, not self-efficacy, is correlated with GPA.

Huerta et al. (2017) analyzed how well self-efficacy and EI could predict writing anxiety among graduate students. The study found that self-efficacy is significantly associated with writing anxiety explaining 48.9% of the variance. Therefore, the results suggest that fostering self-efficacy at universities can lower writing anxiety and increase writing development. Providing students with tools and models and supporting students to develop and improve their academic writing can help students become more self-efficacious in their writing. However, in regards to EI, EI accounted for little variability concerning writing anxiety, as the results are not significant.

Pool and Qualter (2012) found that increasing an individual's knowledge and understanding of EI was associated with increased self-efficacy. In other words, increasing EI, in turn, increases self-efficacy. Thus, demonstrating an engagement between the two constructs.

In conclusion, three of the studies empirically demonstrate a correlation between EI and self-efficacy (Hashemi & Ghanizadeh, 2011; Pool & Qualter, 2012; Alfifi, Shehata, and Mahrousabdalaziz, 2016). These same studies demonstrate that both constructs influence one another. Overall, the studies have shown that an association between EI and self-efficacy does exist and that mainly EI influences self-efficacy. EI explains 24% of the variance found in self-efficacy, according to Hashemi and Ghanizadeh (2011). Pool and Qualter (2012) found that as EI increased, so did self-efficacy. The studies demonstrate that both constructs can enhance academia for students. Therefore, both EI and self-efficacy contribute to student success.

#### Critical Analysis

Hashemi and Ghanizadeh (2011) were able to determine a positive relationship between EFL students' EI and self-efficacy. This study demonstrates that a students' EI enhances students' belief in their capabilities to organize and execute courses of action required for successful academic performance. The results by Hashemi and Ghanizadeh (2011) demonstrate that self-efficacy is under the influence of an individual's affective and emotional states. Therefore, empirically demonstrating that enhancing students' EI can, in turn, promote students' self-efficacy. A strength that this study has is that it used EFL students from several universities in Iran.

This study has a few limitations. The study's sample size is small, with 97 participants, all of whom are EFL students. As such, the sample's composition could limit the generalizability of the results, as EFL students may be trained differently compared to students from other fields. Another limitation is that the participants were asked to fill out the questionnaires at home rather than in a controlled environment (e.g., a lab). Extraneous variables such as noise or fatigue could have influenced the participants' responses to the questionnaires. It is also vital to consider that the participants' responses on the self-report questionnaires could have been affected by their personal biases or by loved ones or friends who could have helped the participants respond to the questionnaires.

Afifi et al. (2016) were able to establish that there is a significant and positive correlation between EI and self-efficacy. Their study notes that newer, more underclass students are more self-efficacious than senior students. Unlike previous studies that found no gender differences, this study found that female students have higherEI scores and GPAs than male students. The results found that nursing students have lower scores of EI and self-efficacy compared to students enrolled in media and communications (Afifi et al., 2016).

This study highlights the importance of educators understanding the concept of EI and implementing it into their program curriculums. EI is believed to be a contributing factor of professionalism among nurses considering that nurses work in environments and with people where they need to control their emotions, avoid job stress, and provide better care (Afifi et al., 2016). For nurses to establish a good rapport with their patients, they need to manage their emotions and the emotions of others. Therefore, a high level of EI is necessary to cope with the amount of emotional labor involved in daily mental health practice. Although the study only mentions the field of nursing, it should be noted that this concept can be applied to all areas of medicine, including psychology, physical therapy, occupational therapy, psychiatry, etc.

However, there are limitations. The authors collected a small sample size of 346. The students were enrolled in one of two disciplines, nursing or mass communications, limiting the generalizability of the findings to students outside those disciplines (e.g., psychology, education, etc.). Furthermore, this study was a cross-sectional study which limits the ability to determine causality.

Huerta et al. (2017) established a foundational understanding of the relationship between writing anxiety, self-efficacy, and EI among a sample of graduate students. This study illustrates the importance of programs preparing students with tools and skills that will enable them to communicate successfully. Huerta et al. (2017) have a few limitations with their study. The authors overlooked the cultural subtleties in their measure of EI. It could have skewed their results. The measurement used for EI may not have been culturally sensitive to use with non-native English-speaking participants. Furthermore, comparing non-native English-speaking participants to native English-speaking participants could have potentially been an unfair comparison. The results of the study are not generalizable, considering that their sample was derived from one university. Students may be trained differently at the sample university than at other universities (Huerta et al., 2017). Furthermore, the students from this study all come from one discipline, writing. This also limits generalizing the results to students who are in other fields.

Pool and Qualter (2012) demonstrate that positive changes in EI and ESE were made in both the intervention and control groups. However, results for the intervention group are more significant compared to the control group. The authors demonstrate that it is possible to improve EI ability regarding understanding emotions and managing emotions (Pool & Qualtar, 2012). Managing emotions is associated with academic achievement when considering that EI is related to problem-focused coping skills related to academic success. The results found that it is possible to increase students' self-efficacy regarding their emotional functioning by increasing their knowledge and understanding of EI (Pool & Qualtar, 2012). In other words, providing students with the knowledge and understanding of EI gives them mastery experience within that realm, which in turn creates and reinforces self-efficacy.

There are a few limitations. This study relied on the responses of its participants, which can include biases that were not controlled for. The study has a small sample of 134 participants from one university. As mentioned in the previous studies, training at the sample university may differ from other universities, impacting the generalizability of the results. Furthermore, students were in their third and fourth years at the university. Characteristics and other confounding variables may influence how these students perform compared to first- or second-year students.

#### **Emotional Intelligence (EI)**

Alconero-Camarero, Sarabia-Cobo, Gonzalez-Garcia, Ibáñez-Rementería, Lavín-Alconero, and Sarabia-Cobo (2017) conducted a study to analyze the relationship between EI, coping style, and satisfaction with one's own self-learning in nursing students. Simulated scenarios related to palliative care at the end of life were used to investigate all three constructs. The authors conducted a descriptive, observational, and correlational study of students in their second year of nursing at a Spanish University during 2015-2016. EI was assessed with the Trait Meta-Mood Scale-24 (TMMSE-24). Coping styles were assessed with the Questionnaire for Dealing with Stress (CAE). Satisfaction with one's learning was evaluated with the Student Satisfaction Self-Confidence Scale.

The study was conducted using a simulation laboratory of a virtual hospital. Before engaging in the simulation, the cases were explained to the participants, including the patient's history. The simulation laboratory consisted of two cases where the patients were diagnosed in the terminal phase (cerebral hemorrhage; lung cancer). In both cases, a low fidelity mannequin was used, which enabled the study's authors to observe simple physiological and non-modifiable responses. The laboratory consisted of 21 sessions, each one hour long, with three to four students.

The samplecomprises amean age of 20.3 years old with 91.4% of the participants being female. The mean results of the scores on all three dimensions of the TMMSE-24 demonstrate no difference between gender. The mean results of the scores on the CAE questionnaire also demonstrate no difference between gender for any of the measure's subscales. The results for the Student Satisfaction and Self-Confidence Scale yield Satisfaction with one's learning with the highest score and instruction intervention has the lowest score.

The authors ran a multifactorial ANOVA to establish relations between the subscales of all three measures. There is only a statistical significance between satisfaction with current learning- attention to emotions and FSP scales, F=1.91, p = 0.03, and for satisfaction with current learning-attention to emotions and open emotional expression subscales, F = 1.78, p = 0.04. The authors conducted a correlation to determine an association between the dimensions of the three measures; however, the results came out negative and weak.

Maguire, Egan, Hyland, and Maguire (2017) investigated whether EI can be used to predict cognitive and affective engagement in a sample of undergraduate psychology students from Ireland (N = 91). All participants provided their basic demographic information (e.g., age; gender) and their Central Application Office points (CAO; CAO is equivalent to GPA) achieved in their Learning Certificate Examination. The participants completed two forms of the student engagement instrument (SEI), rating current engagement and retrospective secondary school, along with the trait EI (TEI) questionnaire. The students completed both versions of the SEI- one requiring them to rate their engagement at school retrospectively, and the other version was used to have them place their current level of engagement at college.

The SEI and the TEI were administered at three points throughout the academic year, enabling the authors to calculate an average for each domain. This was done to gain an accurate reflection of overall engagement throughout the year. There are two multiple regression models. One model is for affective engagement, and the other is for cognitive engagement. In addition to TEI, gender, prior academic performance (CAO), and retrospective school engagement (cognitive and affective domains) are additional predictors used. A multiple regression analysis determined the effect of the predictor variables on college cognitive and affective engagement respectfully. Primarily analysis is indicative of no violations of the assumptions of normality, linearity, and homoscedasticity within the study.

The first regression model investigating cognitive engagement is statistically significant explaining 19% of the variance in the cognitive engagement at college. TEI has the strongest predictive effect engagement,  $\beta = .44$ , p < .001, with CAO point also being a strong predictor,  $\beta = .30$ , p < .01. These results indicate that participants with high TEI and CAO points were likely to exhibit high levels of cognitive engagement.

The second regression model that investigates effective engagement is statistically significant explaining 27% of the variance in affective engagement. This is predicted by prior effective engagement at school,  $\beta$ = .40, *p*< .001, and TEI  $\beta$ = .29, and *p*< .01. Results indicate that participants who have high levels of effective engagement at school and TEI are more likely to exhibit high levels of affective engagement.

The bivariate correlations demonstrate that TEI is significantly related to cognitive engagement at college while both TEI and school effective engagement are significantly related to affective engagement at college. The two criterion variables of cognitive engagement and affective are also related, r = .56, p < .01.

The researchers ran a series of paired sample t-tests which found that overall engagement, affective, and cognitive engagement, significantly differ between school and college. In all cases, current engagement in college is rated higher compared to past engagement in school.

2022

Laurencelle and Scanlan (2018) assessed the development of self-efficacy among nurse educators who either held a master's or doctoral degree in Canada. The sample comprises 15 participants, all female, between the ages of 36-60. A hermeneutic phenomenological approach<sup>2</sup>was used in asking participants to explain their experience as graduate students to find a course development of self-efficacy (Laurencelle & Scanlan, 2018). A semi-structured interview was used.

The study revealed two themes- "The hurdles of learning" and "Being a graduate student," along with ten subthemes. The themes and subthemes describe how participants managed their graduate school experience. More so, how managing their experiences contributed to their development of self-efficacy while in school.

The following themes were found during the interviews: 1) "The hurdles of learning": participants describe the hurdles encountered during graduate schools, such as formal steps to complete the degree and balancing family, work, and school. 2) "Formalities of the process": applying to graduate school; exams; writing essays and papers. The accomplishment of each challenge laid the foundation for developing self-efficacy. 3) "Balance": learning to balance demands while in school. 4) "Life happens": Participants reported that significant and unexpected events occurred during their graduate school experience. Including both positive (e.g., the birth of a child) and adverse events (e.g., personal illness; death). 5) "The labor of learning": For example, the amount of work, such as exams and clinical hours, required to obtain a graduate degree 6) "The experience of being a graduate student" along with the amount of material there was to learn and to meet academic challenges. 7) Realizing what they did not know at the time: participants describe how obtaining an education stimulated their thinking and made them realize what they did not know; however, growing to understand what they did not know along with managing the challenges of the curriculum contributed to the development of self-efficacy. 8) Do they belong?: Their self-doubts as students pushed them to go further with their graduate education. 9) "Belief in lifelong learning" 10) "Finishing what you start" 11) "Using past experiences": participants explained that past successful experiences contributed to their graduate school success 12) "Support": via verbal persuasion from family, friends, peers, and employers.

Consistent with Bandura's theory (1977 as cited in Laurencelle & Scanlan, 2018), Laurencelle and Scanlan (2018) found that graduate students develop self-efficacy via mastery experiences. Participants from this study believe that their self-efficacy increased as their mastery experiences increased. Verbal persuasion is also found to be a contributing factor in the development of self-efficacy. The participants explained that receiving verbal persuasion from friends, family, peers, and even employers contributed to their self-efficacious beliefs. The encouragement reportedly received supports Bandura's self-efficacy theory that an individual's self-efficacious beliefs can be strengthened with verbal persuasion. Participants describe how stressful moments impacted their academic success. Participants were able to learn from these stressful moments and evaluate their reactions according to different learning conditions. This finding, in particular, supports Bandura's theory (1997 as cited in Laurencelle & Scanlan, 2018) which states that individuals perform at optimal levels when their sense of well-being is elevated and when that very sense of well-being provides an ability to reduce negative physiological states with self-efficacy.

Ikonomopoulos, Vela, Smith, and Dell' Aquila (2016) conducted a study that implemented a small series of single-case research designs (SCRD) to assess the effectiveness of using practicum to increase counselor self-efficacy. This study examines the effectiveness of practicum enclosed with direct counseling services, group supervision, and triadic supervision in increasing the self-efficacy of counseling students. The authors evaluate the participants' practicum experience by using SCRD to measure the impact on the participants' self-efficacy. Using SCRD to investigate the effectiveness of practicum and supervision was purposely done to provide insight concerning potential strategies that can increase students' self-efficacy. Using SCRD, the authors identified and explored trends of students' changes in self-efficacy while completing their practicum requirements.

The study comprises a small sample of Mexican-American counseling students (N = 11; master level students) in the United States. With an age range between 24 to 57. All participants were enrolled in practicum. Self-efficacy was measured with the Counselor Activity Self-Efficacy Scale (CASES). During the 14-week semester, participants received 12 hours of triadic supervision, 25 hours of group supervision, and 40 clinical hours. The authors used Lawson, Hein, and Getz's 2009 model that included pre-session planning, in-session strategies, administrative considerations, and evaluations of supervisees. The treatment effect was evaluated using an AB design while using scores on the CASES as an outcome measure. The baseline phase consisted of collecting data for three weeks. The treatment phase started after the third baseline measure (when the first triadic supervision session was included).

<sup>&</sup>lt;sup>2</sup>A qualitative research method, used primarily in human sciences and educational research, that is focused on subjective experiences of people and groups of people.

The results demonstrate that in all 11 cases, the practicum experience ranges from moderately effective, with a *PEM* of .77, to very effective, with a *PEM* of 1.00, for improving or maintaining self-efficacy during practicum. For most of the participants, their counselor self-efficacy improved as evidenced by scoring highly on select CASES test items such as "Helping your client understand his or her thoughts, feelings, and actions" and "Work effectively with a client who shows signs of severely disturbed thinking." The students report that having direct experiences with clients is what helped most in improving their self-efficacy. This finding is consistent with Bandura's 1977 theory of direct mastery experience (as cited in Ikonomopoulos et al., 2016). This theory postulates that individuals gain confidence in their ability to execute performances and actions successfully based on past successful experiences.

The students also report that obtaining feedback from clients and seeing their clients progress also contributed to their professional development. Other experiences deemed helpful include processing counseling sessions with a peer during triadic supervision, case conceptualization, and treatment planning during group supervision. Receiving feedback from peers and instructors concerning recorded counseling sessions during triadic supervision was also deemed helpful. The study demonstrates the qualitative benefits of supervision, including vicarious learning experiences, peer-learning opportunities, and supervision feedback.

The results indicate that practicum experience is most effective in increasing and maintaining counselor self-efficacy. Individual CASES scores demonstrate that for nine of the participants, the practicum experience is efficient. In conclusion, this study found that direct services with clients, triadic supervision with peer and group supervision as part of the practicum experience enable counseling graduate students to improve their self-efficacy.

### Research Question #3: Does self-efficacy alone contribute to a student's success in higher education?

Maguire et al. (2017) sought to establish if TEI would impact affective and cognitive engagement after controlling for the influence of prior academic performance, school engagement, and gender. Although the researchers found that previous academic ability and retrospective school engagement have different roles in predicting the two aspects of engagement, TEI is the only significant predictor for both domains of effect and cognition. Overall, these findings are suggestive that EI should be better understood since it is a factor in student engagement.

The study by Alconero-Camarero et al. (2017) sought to analyze the connection between EI, coping styles, and satisfaction with one's learning. The authors found an association between satisfaction with learning and the attention subscale of EI and two specific types of coping. Thus, partly confirming the study's hypothesis. The results indicate no association between EI, coping styles, and satisfaction with learning. However, the results suggest that implementing activities that increase EI and coping styles for stress can increase student satisfaction with learning. Therefore, it is not enough for schools to implement programs that only focus on knowledge and skills acquisition. Instead, programs should also focus on the psychological aspects of EI and coping styles for students to become more satisfied with their learning.

Studies that have only assessed EI among higher education students demonstrate that EI contributes to students' satisfaction with their learning and engagement at school. This can potentially enhance academic success. These studies show the possibilities of how EI can be used to influence student success.

Laurencelle and Scanlan (2017), explore their participants' experience as graduate students and how self-efficacy supported their academic success. The results are consistent with Bandura's theory (1977) which states that mastery experience contributes to the development of self-efficacy (as cited in Laurencelle & Scanlan, 2018). Participants believe that their self-efficacy increased as their mastery experience increased.

Another component deemed helpful in the development of self-efficacy is verbal persuasion. The participants explain that receiving verbal persuasion from others contributed to their self-efficacious beliefs. The encouragement received supported Bandura's theory of self-efficacy. Bandura (1977, as cited in Laurencelle & Scanlan, 2018) suggests that an individual's self-efficacious beliefs can be strengthened with verbal persuasion.

During the study's interviews, participants describe how stressful moments in school impacted their academic success. Participants were able to learn from these stressful moments and evaluate their reactions accordingly to the given pursuit. This finding, in particular, supports Bandura's theory (1977) which states that individuals perform optimally when their sense of well-being is uplifted and when that very sense of well-being reduces negative physiological states (as cited in Laurencelle & Scanlan, 2018).

Ikonomopoulos et al., (2016) evaluated practicum experience and its impact on the development of self-efficacy among graduate students. Results demonstrate that practicum is effective in improving and maintaining counselor self-efficacy. Direct experience with clients helped the most in increasing self-efficacy. This is consistent with Bandura's theory of mastery experience. Receiving feedback from peers and supervisors also increases self-efficacy which is consistent with Bandura's theory (1977 as cited in Ikonomopoulos et al., 2016) of verbal persuasion. Lastly, watching recorded counseling sessions of oneself and fellow peers enables the improvement of self-efficacy, which is consistent with Bandura's theory (1977 as cited in Ikonomopoulos et al., 2016) of vicarious learning.

Both studies demonstrate that the development of self-efficacy alone is a contributing factor in student success. Laurencelle and Scanlan (2018) found that if faculty members were to provide feedback, it can foster self-efficacy and encourage students, especially during times of stress and adversity. The literature suggests that faculty members should remind students of their past successes (mastery experiences) to enhance self-efficacy. Doing so can decrease the imposter syndrome, increase retention, increase the graduation rate at schools, and reduce dropout rates. Ikonomopoulos et al. (2016) suggest that having practicum experience along with triadic supervision can significantly increase self-efficacy. Higher education programs should consider teaching self-efficacy to their students and discuss how the practicum can improve the development of self-efficacy. Part of the discussion should include assessing for self-efficacy at several points during the practicum experience.

#### Critical Analysis

Alconero-Camarero et al. (2017) illustrate essential points to consider when studying EI among higher education students. Although their study found no association between EI, coping styles, and satisfaction with learning, it did find that implementing activities that increase EI and coping styles for stress can increase a student's satisfaction with their learning. Doing so can reduce stress, which leads to more engagement and acquisition of knowledge. The results support other studies that indicate EI can be a protective factor for stress considering that high levels of EI can reduce the adverse effects of stress.

Alconero-Camarero et al. (2017) suggest that the quality of the methodological design of learning can increase a student's confidence in learning. This increased confidence, in turn, can increase the student's EI and coping style for stress which subsequently can increase satisfaction in learning. The more satisfied a student is with their learning, the more successful they will be in their academics. Therefore, it is not enough for a higher education program to focus on knowledge and skills acquisition but should also focus on psychological aspects of EI and coping styles to enhance the academic performance of its students.

This study has a few limitations. The study consists of a small sample (N = 74) of nursing students from one university. These students could have been more advanced in their academic and professional development. Limiting the sample to only one university decreases generalizability. Since the study only sampled one university, there lacks a comparison to other nursing schools. Lastly, internal conditions of the participant may have affected results, such as participant fatigue or stress experienced from personal events during clinical placements.

Maguire et al. (2017) found that understanding a student's EI level could indicate how well a student can adapt to college life. Most students who go into higher education for the first time may find the course load to be more advanced and demanding. There is a level of independence and self-discipline that many may not have developed before college. An advantage of this study is that the authors measured both engagement and EI over the academic year, which offers a diversified perspective on the relationship between these two constructs (Maguire et al., 2017). This study is one of the few that systematically examined how both cognitive and affective engagement can be predicted by EI while controlling for retrospective experiences and performances. However, there are some limitations. It had a small sample (N = 91). Participants were at different stages of their academic careers, limiting the generalizability of the results to other cohorts. This study only evaluated students who were majoring in psychology which can also reduce the generalizability of the result to other fields.

The study by Ikonomopoulos et al. (2016) illuminates the importance and benefits of practicum. Results found that practicum is an effective strategy in increasing the students' self-efficacy as counselors. Additionally, results show that practicum combined with triadic supervision is a promising approach in improving students' self-efficacy (Ikonomopoulos et al., 2016). This is important to consider with programs that train students in specific competencies before graduating (e.g., psychology, nursing, surgery, physical therapy, etc.). For a professional to be self-efficacious in their work, they must first be a self-efficacious student. Another advantage is the sample's age range. This extensive range allows for diversity within the sample, increasing the ability to generalize the findings to a breadth of ages.

One limitation of the study is the design. The authors did not use an ABA design with withdrawal measures. Using an ABA design would have provided a much stronger internal validity to evaluate the observed changes. This study only investigated counseling students at the master's level from one school. Students enrolled in a master's program may be trained differently compared to students enrolled in a doctoral program. Furthermore, students at this particular program may be taught differently than at other programs.

Laurencelle and Scanlan (2018) did an in-depth investigation of what it entails to develop self-efficacy at both the masters and doctorate levels. This study brought into light an understanding of what students experience while in school and how self-efficacy can lead to success if supported and developed. The authors found that understanding how self-efficacy is developed and the sources from where it is derived can assist educators in preparing students for graduate studies and better facilitate recruitment and retention (Laurencelle & Scanlan, 2018).

This study has a few limitations. The study consisted of a small sample of nurse educators, limiting the generalizability of the results. The study only utilized nursing graduates in their sample, and as such, the difficulties encountered by this particular discipline may be different from those in other disciplines. This study, in particular, used a phenomenological approach. When using a phenomenological approach, the interpretation of data may differ depending on the investigators and the purpose of the study. Furthermore, due to the subjectivity of the interpretation of results, the findings may also be affected by the biases of the researchers.

#### **Summary of the Findings**

#### IV. DISCUSSION

Hashemi and Ghanizadeh (2011) found that the EI of EFL students enhances their belief in organizing and executing necessary actions for successful performance. Results show that students with high levels of stress tolerance also have high levels of self-efficacy. Therefore, indicating that students who can utilize debilitative emotional states have strong beliefs about their potential (Hashami & Ghanizadeh, 2011). The relationship between self-efficacy and self-actualization suggests that students who attempt to understand their capabilities and are aware of their potential are expected to be highly confident in their ability to perform required actions. There are no differences between gender. Hashemi and Ghanizadeh (2011) found that EI accounts for 24% of the variance in self-efficacy. Therefore, enhancing EI, in turn, enhances self-efficacy.

Afifi et al. (2016) found that female students have higher GPAs and higher EI scores than male students. I was higher for non-medical students compared to medical students. There are no differences between gender and self-efficacy. The mean score of EI is highest among students whose GPAs fall within the top  $10^{th}$  percentile.

Huerta et al. (2017) found a small to moderate effect size for gender and the level of degree (e.g., master's or doctorate) in regards to writing anxiety. The authors found that female students have high levels of writing anxiety than males. Students enrolled in the master's program have higher writing anxiety levels than doctoral students (Huerta et al., 2017).

Students whose second language is English have higher writing anxiety levels than native Englishspeaking students. Students whose second language is English have lower levels of self-efficacy. Students who report English as their native language have higher levels of EI than students whose second language is English. Non-international students have higher levels of self-efficacy than international students. Students exposed to writing services before the study have higher levels of self-efficacy than students who did not have prior exposure (Huerta et al., 2017).

This study found that high levels of writing anxiety and low levels of self-efficacy were found among students who are reportedly female, had no prior exposure to writing services, and whose second language is English. Overall, self-efficacy has a more substantial relationship with writing anxiety than EI. Self-efficacy and not EI explains 48.9% of the variance in writing anxiety (Huerta et al., 2017).

Pool and Qualter (2012) found no difference in cognitive ability between the intervention and control groups. Differences in terms of age were found between the intervention and control groups. The results demonstrate that increasing a student's knowledge and understanding of EI increases their ESE. Positive changes in EI and ESE resulted in both the intervention and control groups (Pool & Qualter, 2012).

The relationship between EI, coping style, and satisfaction with one's learning among nursing students, was examined by Alconero-Camarero et al. (2017). In regards to self-confidence, there are no differences between gender. Satisfaction with one's learning scored the highest, whereas instruction intervention obtained the lowest score (Alconero-Camarero et al., 2017). After an ANOVA was run, a statistical significance between satisfaction with current learning attention to emotions and FSP subscales of attention to emotions and open emotional expression was obtained. The correlation between the dimensions of the three measures came out negative and weak (Alconero-Camarero et al., 2017).

Maguire et al. (2017) found that students with high TEI and high CAO points were likely to exhibit high levels of cognitive engagement. Students who demonstrate high levels of affective engagement at school and TEI demonstrate high levels of affective engagement. Results show that TEI significantly relates to cognitive engagement at the college level. TEI and school effective engagement are associated with students who exhibit high levels of affective engagement (Maguire et al., 2017).

Laurencelle and Scanlon (2018) investigated the development of self-efficacy among graduate nursing students. The authors found that students develop self-efficacy via mastery experiences. Former students found that their self-efficacy increased as their mastery experiences increased (Laurencelle & Scanlon, 2018). Verbal persuasion is also deemed influential in the development of self-efficacy. Stressful moments encountered in graduate school are deemed impactful in academic success.

Ikonomopoulos et al. (2016) found that practicum is moderately effective to very effective in improving and maintaining self-efficacy. The students report that having direct experience with their clients helped the most in increasing their self-efficacy. Supervision, feedback from clients, client progress, and feedback from peers were deemed as contributing factors to the development of self-efficacy as well (Ikonomopoulos et al., 2016).

#### **Interpretation of Findings**

The literature reviewed determined the following research questions: 1) if there is a positive correlation between EI and self-efficacy among higher education students; 2) if both constructs contribute to a student's success, and 3) if self-efficacy is more influential than EI in student success.

In answering the first research question, three of the studies determine a positive correlation between EI and self-efficacy among the higher education population (Hashemi and Ghanizadeh, 2011; Pool & Qualter, 2012; and Alfifi et al., 2016). In answering the second research question, three of the studies establish that EI and self-efficacy do influence one another. These studies demonstrate an existing link between EI and self-efficacy and that EI influences self-efficacy, as EI explains 24% of the variance found in self-efficacy (Hashemi and Ghanizadeh, 2011). Pool and Qualter (2012) found that as EI increases, so does self-efficacy. Further, Alfifi et al. (2016) suggest that EI can be a predictor of self-efficacy, which can enhance academic success. The studies mentioned above demonstrate a positive correlation between EI and self-efficacy among the higher education population and that both constructs are influential in student success. Therefore, answering research questions one and two.

Maguire et al. (2017) found that TEI is the only significant predictor of affective and cognitive engagement among undergraduate students. TEI is a contributing factor to students' engagement which can contribute to student success. Alconero-Camarero (2017) found that program curriculums should implement activities that promote EI and coping styles for stress which can increase a student's satisfaction with their learning and in turn enhance academic success. Both studies have only assessed for EI among higher education students. Demonstrating that EI may be a contributing factor in a student's satisfaction for their learning and engagement at school which can enhance success.

Laurencelle and Scanlan (2018) found that providing students with feedback by individuals that students may esteem (e.g. faculty members; supervisors) contributes to the development of self-efficacy, and in turn enhances student success. Furthermore, it can help students overcome the stress that is endured in higher education programs. The study suggests that there are cost-effective ways to increase self-efficacy among students. For example, faculty can simply remind students of their past successes (mastery experiences) (Laurencelle & Scanlan, 2018).

Another cost-effective way to enhance self-efficacy is by providing students with verbal persuasion. Participants explain that receiving encouragement (verbal persuasion) contributed to their self-efficacious beliefs. Receiving encouragement from others supports Bandura's self-efficacy theory that an individual's self-efficacious beliefs can be strengthened with verbal persuasion. Ikonomopoulos et al. (2016) suggest that implementing practicum along with triadic supervision can increase self-efficacy and how the practicum can assist in their development of self-efficacy. Part of the discussion should include assessing for self-efficacy at several points during practicum.

The studies by Laurencelle and Scanlan (2017) and Ikonomopoulos et al. (2016) demonstrate that selfefficacy alone can contribute to student success. The studies by Alconero-Camarero (2017) and Maguire et al. (2017) also demonstrate that EI alone can contribute to student success. However, considering the results from Hashemi and Ghanizadeh, (2011), Pool and Qualter (2012), and Alfifi et al. (2016), EI strongly influences selfefficacy. Therefore, even though self-efficacy alone is sufficient for student success it is not more influential than EI. The literature shows that EI influences self-efficacy. Further, because there have been no studies that demonstrate that self-efficacy is a catalyst force behind EI, it can be said that self-efficacy is not more influential than EI when concerning student success. Therefore, not support research question number three.

#### Limitations of the Study

Limitations of this study include the lack of research conducted examining EI and self-efficacy, both separate and together, among the higher education population. This particular study included studies that use different types of EI and self-efficacy (e.g., TEI; ESE; counselor self-efficacy). This could have impacted the results considering that the definition and criteria of those constructs (e.g. ESE, TEI, EI) may differ among themselves. Further, the present literature review is a qualitative study and depends heavily on the author's skills. As such, the results may be influenced by the author's personal biases and idiosyncrasies.

V.

# RECOMMENDATIONS

This literature review should be used as a basis for future studies. Future studies should consider investigating the effectiveness of interventions that enable higher education programs to develop EI and self-efficacy. Higher education programs may consider incorporating such interventions into their curriculum. It will allow students to develop the constructs mentioned above and increase their knowledge, understanding, and skills within these constructs. Future qualitative studies should consider exploring how self-efficacy and EI function and develop within the context of the classroom. Studies regarding student experience should examine the challenges and adversity students face (e.g. the imposter syndrome) and the different modalities that can be used to overcome such challenges and adversity.

# VI. CONCLUSIONS

In conclusion, this literature review found a positive correlation between EI and self-efficacy among the higher education population. Most of the studies demonstrate that both constructs, together and separate, contribute to student success. Although it was hypothesized that self-efficacy would be more influential than EI in contributing to student success, the literature suggests that EI enhances self-efficacy and not the other way around.

Educators should understand the concept of both EI and self-efficacy and examine the likelihood of incorporating the constructs as mentioned earlier into their program curriculums. Incorporating interventions that foster the development of EI and self-efficacy among students can potentially decrease imposter syndrome, reduce the dropout rate, increase retention, and increase graduation rates. Programs may consider having student services such as tutoring or writing services as part of their on-campus experience to enhance students' self-efficacious beliefs of competency and knowledge. Based on the literature, self-efficacy increases as mastery experience increases. Therefore, students should be reminded of their past successes and be given verbal persuasions such as oral and written feedback and grades.

Higher education programs that implement practicum in their curriculum should investigate how different aspects of practicum enables the development and maintenance of self-efficacy. Triadic supervision should be merged into the practicum experience of students. Further, practicum should include having students watch recorded sessions of themselves and peers to foster self-efficacy via vicarious experiences.

Furthermore, programs in which mental health and physical health is of focus should implement ways to develop and increase EI. Future health care professionals should have high levels of EI to improve the quality of patient care and establish rapport. As future health care providers, they need to be able to manage their emotions while also being able to empathize with the emotions of others. A high level of EI is necessary to cope with the amount of emotional labor involved in daily medical practice more so, in medical areas where interpersonal interactions are a must (e.g. psychology; nursing; physical therapy; psychiatry, etc.).

#### REFERENCES

- [1] Afifi, M., Shehata, A.M., & Mahrousabdalaziz, E. (2016). Emotional Intelligence, Self-Efficacy and Academic Performance among University Students. *IOSR Journal of Nursing and Health Science*, 05, 26-33.
- [2] Alconero-Camarero AR, Sarabia-Cobo CM, González-Gómez S, Ibáñez-Rementería I, Lavín-Alconero L, Sarabia-Cobo AB. (2017). Nursing students' emotional intelligence, coping styles and learning satisfaction in clinically simulated palliative care scenarios: An observational study. *Nurse Educ Today*. 61:94-100.
- [3] Atkins, P. & Stough, C. (2005, April). Does emotional intelligence change with age? Paper presented at the Society for Research in Adult Development annual conference, Atlanta, GA.
- [4] Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191–215.
- [5] Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*(2), 122-147.
- [6] Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: W.H.Freeman.
- [7] Bandura, A. (2006). Guide for Constructing Self-Efficacy Scales. *Self-Efficacy Beliefs of Adolescents*. Greenwich, CT: Information Age Publishing.
- [8] Beverly, D., Williams, J. A., & Kitterlin, M. (2012). Leaders exhibiting high emotional intelligence are more dedicated to their job performance. *OJL Open Journal of Leadership*, *1*(4), 37-41. Author 1
- [9] Chan, D. W. (2004). Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong. *Personality and Individual Differences*, *36*(8), 1781-1795.
- [10] Fabio, A. D., & Palazzeschi, L. (2008). Emotional intelligence and self-efficacy in a sample of Italian high school teachers. *Social Behavior and Personality: An International Journal*, *36*(3), 315-326.

- [11] Fernandez, C. S. (2007). Emotional intelligence in the workplace. *Journal of PublicHealth Management and Practice*, *13*(1), 80-82.
- [12] George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53(8), 1027-1055.
- [13] Goleman, D. (1996). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- [14] Hashemi, M.R., & Ghanizadeh, A. (2011). Emotional Intelligence and Self-Efficacy: A case of Iranian EFL University Students.
- [15] Huerta, M, Goodson, P, Beigi, M and Chlup, D (2017) Graduate Students as Academic Writers: Writing Anxiety, Self-Efficacy, and Emotional Intelligence. *Higher Education Research & Development*, 36 (4). pp. 716-729. ISSN 0729-4360
- [16] Ikonomopoulos, J., Vela, J.C., Smith, W.D., & Dell' Aquila, J. (2016). Examining the practicum experience to increase counseling students' self-efficacy. *Professional Counselor*, 6(2), 161-173
- [17] Kirk, A. B., Schutte, S. N., & Hine, W. H., (2008). Development and preliminary validation of an emotional self-efficacy scale. *Personality and Individual Differences*, 45 (5), 432-438.
- [18] Lam, L. T., & Kirby, S. L. (2002). Is emotional intelligence an advantage? An exploration of the impact of emotional and general intelligence on individual performance. *The Journal of Social Psychology*, *142*(1), 133-143.
- [19] Langhorn, S. (2004). How emotional intelligence can improve management performance. *International Journal of Contemporary Hospitality Management*, *16*(4), 220-230.
- [20] Laurencelle, F. & Scalan, J. (2018) Graduate Students' Experiences: Developing Self-efficacy. International Journal of Nursing Education Scholarship, 15 (1) 1-10
- [21] Lopes, P.N., Grewal, D., Kadis J., Gall, M., & Salovey, P. (2006). Evidence thatemotional intelligence is related to job performance and affect and attitudes atwork. *Psiocothema*, *18*, 132-138
- [22] Petrides, K. V. & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation concerning established trait taxonomies. *European Journal of Personality*, 15, 425-448
- [23] Maguire, R., Egan, A., Hyland, P., & Maguire, P. (2017). Engaging students emotionally: the role of emotional intelligence in predicting cognitive and affective engagement in higher education. *Higher Education Research and Development*, 36(2), 343-357
- [24] Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267-298.
- [25] Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Target Articles: "Emotional intelligence: Theory, findings, and implications." *Psychological Inquiry*, *15*(3), 197-215.
- [26] Pool, L. D., & Qualter, P. (2012). Improving emotional intelligence and emotional self-efficacy through a teaching intervention for university students. *Learning and Individual Differences*,22(3), 306-312.
- [27] Rathi, N., & Rastogi, R. (2009). Assessing the relationship between emotional intelligence, occupational self-efficacy, and organizational development. *Journal of the Indian Academy of Applied Psychology*, *35*(Special), 93-102.
- [28] Salami, S. (2007). Relationships of emotional intelligence and self-efficacy to work attitudes among secondary school teachers in southwestern Nigeria. *Pakistan Journal of Social Sciences*, 4(4), 540-547
- [29] Yazici, H., Seyis, S., & Altun, F. (2011). Emotional intelligence and self-efficacy beliefs as predictors of academic achievement among high school students. *Procedia - Social and Behavioral Sciences*, 15, 2319-2323.
- [30] Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25, 82-91.