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Emotional intelligence and teachers' performance in the classroom in Cairo, Egypt

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Graduate School of Education and Psychology

EMOTIONAL INTELLIGENCE AND TEACHERS' PERFORMANCE IN THE CLASSROOM IN CAIRO, EGYPT

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Wessam Refat

August, 2023

Kent Rhodes, Ed.D. – Dissertation Chairperson

This dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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VITA

Education and Training

Expected in 12/2022 Doctoral Degree: Doctoral of Education in Organizational Leadership

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> **Bachelor of Science**: Hotel Management **The High Institute of Hotels and Tourism -** Six of October, Cairo, Egypt

Some College (No Degree): Psychology Classes, Math, Algebra, Advanced English **City College of San Francisco -** San Francisco, CA

2/2019 to Current Property Manager

Personal Business - Long Beach, CA,

- Established and managed Air B & B unites.
- Educating clients on lease and rental agreements.
- Handling resident complaints and expedited maintenance requests.
- Increasing the property value by 25% because of property improvement.
- Increasing the rental profit by 20% attribute to property improvement.
- Coordinating general maintenance and repairs to keep facilities operational and attractive.
- Answering telephones to assist customers and resolve issues.
- Updating and maintaining rental agreement files and documents.

05/2005 to 05/2016 Salon Manager and Owner

Ooh La La Salon and Spa - San Francisco, CA

- Led startup and opening of business and provided business development, creation of operational procedures and workflow planning.
- Managed incrementally increases in the business yearly income with an average of 25%.
- With my business development plan, Oh La La Salon was ranked as number 1 salon in San Francisco on the Yelp and Google platform.
- Oversaw staff hiring, initiating new training and scheduled processes to streamline operations.
- Trained teams on specific operations, applicable procedures, and techniques for each job site.
- Supervised performance of 15 workers with goals of improving productivity, efficiency, and cost savings.

- Managed sales presentations to promote product and brand benefits.
- Analyzed client business needs and assisted in determining appropriate resources and strategies.
- Hosted special events to boost brand awareness and increase community engagement.
- Developed and implemented successful sales strategies to meet business goals.
- Created and implemented employee onboarding and training programs to promote employee retention and team collaboration.

Languages

Excellence in reading, writing, and speaking English & Arabic.

ABSTRACT

Effective teachers continue to be in demand in the workforce. Schools and universities need professional teachers who show passion for their jobs and high work performance. This research will investigate the association among teachers' age, gender, tenure, emotional intelligence (EI) scores, perception of emotional intelligence application in classroom, and perception of any potential impact on their prior year's self-reported annual teaching evaluations in Madinaty National School in Egypt. For this study, the researcher will utilize mixed methods for data collection based on concurrent design (Creswell, 2014; Kummar, 2014). For additional data collection of teachers' perspectives on (EI), the researcher will embed a qualitative questionnaire and demographic questions into Wong and Law's Emotional Intelligence Scale (WLEIS) survey (Wong & Law, 2002a).

The theoretical foundation of this study will be based on the work of Daniel Goleman (2005), who tested the EI of leaders and its influence on leaders' performance and followers' behaviors at work. In particular, he explored leaders' accomplishments, what it takes for a leader to be successful, and the importance of EI in comparison to intelligence quotient (IQ). In this study, teachers will be considered leaders in their jobs and students will be considered their followers.

The researcher will utilize MT for data analysis and interpretation (Creswell, 2014). The study population will be obtained using a purposive sampling type that promotes researchers to use their judgment to survey the appropriate participants who may have the needed data for collection (Kummar, 2014). This study will offer insight to readers from the educational sector about EI role in the workforce, adding information to the literature about EI and its association, if any, with teachers' age, gender, and performance.

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Chapter 1: Introduction to the Study

EI has become a popular topic among organizational researchers because of its strong impact on leaders and followers in the workforce (Druskat et al., 2006) Leaders' EI is associated with leaders' ability to identify their own and others' emotions and to discriminate emotions to guide their thoughts and actions with others (Goleman, 2004; Salovey & Mayer, 1990)

J. D. Mayer, a psychology professor at the University of New Hampshire, and Peter Salovey, a psychologist at Yale, conceptualized EI in 1990. Based on a review of literature in different areas such as psychology and artificial intelligence, the two psychologists published two articles in 1990, positing the existence of a human ability call EI and explaining that some individuals' logic and reasoning were more affected by emotions than others (Salovey & Mayer, 1990). Several studies have linked leadership effectiveness and success to EI (Dabke, 2016; Goel & Hussein, 2015; Goleman, 2004).

Furthermore, Meshkat and Nejati (2017) argued that there is no gender significance between male and female students in some of EI's constructs. For example, in their study, female students scored higher than males in self-awareness, empathy, and their relationship with others. Additionally, Sliter et al. (2013) and Sharma (2017) discussed leaders' age and EI in the workforce, finding a positive relationship between leaders' age and EI. This mixed method study will investigate the association, if any, between teachers' age, gender, years of teaching, their EI scores, teachers' perception of EI application in classroom, and their perception of any potential impact on their prior year self-reported annual teaching evaluations in a private school in Egypt. For this study, teachers will be considered leaders as they lead their classrooms and students will be their follower.

Teachers' daily work challenges can be stressful and can lead to teachers' lesser job satisfaction (Chang, 2022). Teachers face school budget cuts, which add more workload to teachers' stress. Furthermore, teachers deal with divers' students background and behaviors that may lead to miscommunication between students and teachers. Also, teachers' stress could also lead to teachers' poor performance in the classroom, which could lead to students' poor academic performance. Nevertheless, teachers' stress leads to less job retention and it is costly for schools to hire new educators (Chang, 2022). Researchers have explained the importance of training and development programs that can be generated in schools or online to prepare teachers with more skills and competence to decrease teachers' stress level (Tran & Phan, 2022) EI intelligence skills can facilitate teachers to understand emotions and to be able to regulate their thoughts to be less stress and better performance in the classroom (Tuyakova et al., 2022). The literature included the history of EI among many researchers. In 1964, Bedloch has coined the emotional intelligent term and its relationship to IQ. The EI term is also known as emotional quotient (EQ; Druskat et al., 2006) In 1990, Mayer and Salovey have presented the EI concept in an organizational context. In 1995, the scientist Daniel Goleman expanded the research of EI and its influence on the workforce and the term began to be popular among other scientists (Schuller & Schuller, 2018) Further, Goleman (2005) confirmed the essential of EI and its relevance to leadership.

Goleman (1998) described EI as the competency that best predicts who will become a leader from a group of employees who possess high IQ or technical skills. EI is important in organizations because, "From the perspective of work, feelings matter to the extent that they facilitate or interfere with the shared goal" (Goleman, 1998, p. 287). In the modern arena of knowledge and effective professional workers, EI has become as important as technical skills.

Organizations' success has become dependent on employees' effective communication and collaboration, which requires a high degree of EI (Druskat et al., 2006).

Background of the Study

Influential leaders are more likely to possess EI qualities (George, 2000). According to Goel and Hussein (2015), EI encompasses individuals' realization of their emotions, individuals' awareness of others' emotions, individuals' management of their emotions, and individuals' communication with others. Many researchers have discussed the importance of EI in the workforce and its impact on followers, especially because the leadership research views EI as a primary determinant of effective leadership (Ashkanasy & Tse, 2000; George, 2000). Bolkan and Goodbye (2009) found that teachers' EI plays an essential role in the quality of their performance and has a profound impact on their social interactions with students. J. D. Mayer et al. (2000) suggested that leaders who are capable of perceiving precisely, comprehending, and valuing others' emotions would be more socially influential, especially to their followers. Further, recent leadership theories have recognized the functionality of emotions in the relationship between leaders and their followers, indicating that level of EI may have a significant impact on teachers' performance.

Yukl (2009) defined leadership as occurring when leaders are capable to communicate effectively, motivate, and influence their followers. Furthermore, Dasborough and Ashkanasy (2002) and Graen and Uhl-Bien (1995) described leadership as the reflection of leaders' emotions that influence followers. One's emotions and self-motivation and how to motivate others can be attributed to Socrates, who classified emotions as "Extended emotions are therefore part of the Socratic method: Socrates uses them as a strategy and a tool to achieve the aporetic status and, through it, a cognitive transformation" (Candiotto, 2015, p. 243) Additionally,

Socrates described emotions as "the powers through which knowledge can impact our lives." (Candiotto, 2015, p. 243) Furthermore, Socrates classified emotions as the main aspect of people's response to life events (Brickhouse & Smith, 2010). Additionally, Socrates stressed the importance of knowing oneself (Chopra & Kanji, 2010). Goleman (2005) and J. D. Mayer and Salovey (1995) also asserted the importance of emotion and its impact on one's behavior. Emotions can predict one's motivation and performance giving one's level of emotional intelligence (Brickhouse & Smith, 2010).

The literature suggests many reliable instruments to measure EI such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; J. D. Mayer & Salovey, 1995), and Wong & Law's Emotional Intelligence Scale survey (Wong & Law, 2002a). Both instruments assess the four constructs of EI the ability to differentiate one's own and others' feelings (identifying emotions, the first EI construct), the ability to know how emotions affect our thinking (facilitating thoughts, the second EI construct), the ability to understand complex emotions and how they transition from one stage to another (understanding emotions, the third EI construct), and the ability to manage one's emotions and how to communicate with others (managing emotions, the fourth EI construct; J. D. Mayer et al., 2004). For this study, the researcher will utilize the WLEIS instrument for several reasons. The first reason is the convenience of the established trials of the WLEIS tool among multiple cultures and demographics, leading to the appropriateness of utilizing the survey in Egypt. The second reason is that the survey consists of 16 questions, which requires short time to take the survey. The third reason is that WLEIS is a better prediction tool for an employee job performance than other tests (People Matters, 2022) Hence, EI instrument tool can predict teachers' job performance and one's behavior. One's deficiency of one or more of EI branches could be developed (J. D. Mayer et al., 2001). Further,

if teacher leaders integrate training and development programs available for teachers, teachers can contribute to the overall improvement of the school environment. Training and development programs encompass the development of communication skills, self-motivation, empathy, and self-awareness and self-control, among others (Druskat et al., 2006). Based on the gained training and development programs, teachers with high levels of EI possess influential skills that can contribute to students' development and performance (Leithwood & Mascall, 2008). However, teacher leaders generally lack awareness of the importance of EI importance and its connection to teachers' performance (Isensee, 2017). Further, there is a lack of teachers' training and development programs associated with EI skills (Jacob & McGovern, 2015).

Problem Statement

EI is a relatively new subject in the educational system that researchers are still exploring (Dabke, 2016), given the complexity of human psychology and behaviors (Druskat et al., 2006). The problem is that most of the training and developmental programs for teachers do not develop EI because they are designed to enhance workers' intellectual learning (cognitive learning) instead of emotional learning (Goleman, 1998). J. D. Mayer (2002) defined cognitive learning as an expansion of knowledge attributable to experience. Cognitive learning can be distinguished from emotional learning on the basis that cognitive learning involves a change in the learner's knowledge, whereas emotional learning involves a change in the learner's behavior (Goleman, 2005).

If schools' leaders will not integrate effective teachers' training that encompasses EI skills, teachers and students' relationship in classrooms may lead to students' poor academic achievement (Elias et al., 2006). Prior literature indicates that students view teachers with higher EI as more effective performer in the classroom than teachers with lower EI (Elias et al., 2006).

Moreover, unfortunately, research Jacob and McGovern's (2015) suggests that these current cognitively focused professional development efforts are not having the desired effect. Many U.S. schools are making massive spending efforts to improve teachers' effectiveness, and yet teacher performance is not improving. Jacob and McGovern's (2015) study The New Teacher Project (TNTP) claimed that the largest 50 school districts in the U.S. spend almost \$8 billion per year on teachers' training and development, translating to nearly \$18,000 per teacher every year. The outcome of TNTP teacher surveys indicates that teachers spend almost 20 full school days per year on training and development activities. Despite these massive time and budgetary efforts, seven out of 10 teachers failed to show performance improvement within a period of 3 years. Further, TNTP outcome surveys of teachers' training satisfaction indicated that only 40% of teachers thought that the training and development program was worth their time. Teachers claimed that the type of training that school districts provide is not compatible with or tailored to the issues they face in the classroom (Jacob & McGovern, 2015).

Many researchers have pointed to the importance of teachers' EI and its impact on teachers' performance and student motivation (Dabke, 2016). Moreover, scientists have cautioned that cognitive intelligence is not a complete determinant of an employee's performance. Goleman (1995) and Gardner (1983) emphasized the power of EI in the workforce, noting that individuals who possess high EI may reach top positions in the workforce. They also explained the limited role of IQ that focuses on facilitating career-matching in a large population because IQ classifies individuals according to their technical experience. Goleman (1995) articulated that EI can lead to career and leadership success more than only focusing on employees' IQ.

In short, my position is that IQ will be a more powerful predictor than EI of individuals' career success in studies of large population over the career course because it sorts people before they embark in a career, determining which fields or professions they can enter. But when studies look within a job or profession to learn which individuals rise to the top and which plateau or fail, EI should prove a more powerful predictor of success than IQ. (p. 9)

In sum, integrating EI training programs in education system may develop teachers' performance (McQueen, 2003), which could improve students' grade as well (Elias et al., 2006).

Purpose of the Study

The purpose of this mixed methods study is to investigate the association among teachers' gender, age, tenure, EI scores, perception of EI application in classroom, and perception of any potential impact of EI on their prior year self-reported annual teaching evaluations in a private school in Egypt. Figure 1 is the researcher methodological design that reflects the interconnection of the study variables.

Figure 1



Interconnection of Study Variables

Also, the purpose of this study is to reveal whether education system may integrate educators' training that focuses on improving teachers' EI as a necessary competence to maximize their job performance. Pennsylvania State University (2017) study result stated that teaching is a stressful profession because of the many challenges it encompasses. For example, teachers must deal with difficult student behavior in the classroom, attributed to psychological differences among students (Brackett & Katulak, 2007; Markow & Pieters, 2011). Also, teachers must follow specific curriculum and create a positive learning environment while handling students' emotions. As a part of this study emphases is to explore the importance of one's emotional regulation that may lead to better job performance (Pennsylvania State University, 2017).

Research Questions

The involved variables of this study are teachers' EI score on the WLEIS survey, age, gender, and teachers' perspectives on EI and its usage in the classroom. The following research questions will guide this mixed-methods study:

- RQ 1– Is there a relationship between WLEIS scores and teachers' annual performance evaluation?
- RQ 2 Is there a relationship between age and EI as measured by the WLEIS?
- RQ 3– Is gender related to EI as measured by the WLEIS?
- RQ 4 Is teachers' tenure related to WLEIS scores?

The methodological approach of this study will be mixed methods. The researcher will utilize the WLEIS survey to measure teachers' EI level (Wong & Law, 2002b). The researcher will embed additional quantitative questions into the survey to collect data regarding teachers' tenure, age, and subjects they teach (Creswell, 2014). Further, the researcher will embed a

qualitative questionnaire to gather information about teachers' perspective on EI and its impact on their job performance in the prior year. The researcher will utilize methodological triangulation (MT) to facilitate data analysis and study validity (Creswell, 2014). Per this study, the researcher will organize row data in tables to draw conclusions utilizing his observations regarding the organized data, literature, and J. D. Mayer and Salovey's theory of EI.

Methodological Framework

The study design will be tailored to accommodate the data collection and facilitate answering the study's questions. Data collection will be based on concurrent timing design, which promotes presenting the combined instrument tools simultaneously to participants (Kummar, 2014). Data collection will be based on embedding a qualitative questionnaire into the quantitative survey for additional data collection about teachers' perception of their EI application in the classroom. Furthermore, the embedded questionnaire is to collect data about teachers' perception of what might impacted their previous year performance evaluation (Creswell, 2014). The WLEIS (People Matters, 2022) will be the quantitative survey to measure teachers' EI. The survey consists of four segments that measure the four constructs of EI selfemotion: Ones' self-awareness of their emotion, awareness of other's emotions, understanding feelings and emotions to manage thoughts, and knowing how to regulate emotions to manage relationships with others (J. D. Mayer & Salovey, 1995). The researcher will embed quantitative questions for additional demographic data to address teachers' age, gender, tenure, and the subjects they teach. For this study, MT will be utilized to analyze and interpret row data (Creswell, 2014; Kummar, 2014). MT will facilitate eliciting the association between the involved variables of this study population because of the various data resources (Creswell, 2014). Furthermore, MT will support the study's credibility because the instruments' results will

cross validate and confirm one another (Creswell, 2014). The researcher will analyze the qualitative and quantitative row data separately, organizing the data in tables. The researcher will utilize his observations of the organized data among the tables to elicit a conclusion that answers the research questions (Creswell, 2014).

The population of this study will be selected based on based on random sampling or probability sampling, which will allow an equal chance of selection of the study sample (Kummar, 2014). The population of this research will be teachers who teach secondary and high school at a private school in Egypt. The collected surveys' responses from 100 teachers will be the study population. The study participants will be males and females ranging in age from 25– 65 years old. Participants will have diverse experiences and educational backgrounds.

A letter of consent will be sent to all participants to address their volunteer contribution to the study, and it will require their signatures under Pepperdine Institutional Review Bord (IRB) protocol. The email will address the purpose of the study and a brief explanation of the topic (EI and teachers' performance). Participants will be allowed 1 week to complete the suggested survey. Once the researcher receives participants' responses to the surveys through Survey Monkey, the researcher will start the process of data analysis and interpretation. The process of data analysis and interpretation will be reported in Chapter 4.

All collected row data will be organized in tables to facilitate understanding and communicating with data. The collected data will be classified in tables according to teachers' age, tenure, and gender to facilitate the researcher to observe potential relationship between the study variables. As the researcher utilize his observation and his knowledge from the literature review to interpret the data, he will report the result and conclusion in Chapter 5.

Definition of Terms

The following terms will be used operationally in the study:

- *Emotional Intelligence (EI)*. Having the ability to understand and manage one's own emotions, as well as the feelings of others (Goleman, 2005).
- *Emotional Intelligence (EI)verses Emotional Quotient (EQ)*. In the literature, both terms defined as to facilitate expressing individuals' emotions and maintaining relationship with others. Both terms are used interchangeably in literature (Andrews, 2021) Per this research, the researcher will use the term Emotional intelligence (EI).
- *Emotional Labor (EL)*. When one is controlling and scrutinizing emotional expressions while speaking with others at work (Hur et al., 2014).
- *Wong and Law Emotional Intelligence Scale (WLEIS):* Wong and Law designed this survey in 2002 to measure EI in the workplace (Wong & Law, 2002b).
- *Methodological Triangulation (MT)*. A research design tool that involves more than one method of data collection. It will be utilized to facilitate organizing the collected row data in tables (data analysis). Also, it will facilitate explain how the collected row data may have relationship between one to another (data interpretation). Further, MT will support the study validity and credibility (Creswell, 2014; Kummar, 2014).
- *Concurrent Design (CD)*. A research design tool characterized by embedding a secondary data collection method into a primary data collection method for additional data collection (Creswell, 2014).
- *Employee/Teacher Performance (TP)*. The actions and behavior that an individual does to accomplish work tasks (Shooshtarian et al., 2013).

- *Intelligence Quotient (IQ)*. A measurement of one's abilities, which encompasses the analytical, intellectual, and logical skills that they possess (Green, 2016).
- Job performance (JP). Job performance is not about outcomes; it is about what individuals do, their actions, and behavior. Also, it contributes to the consequences of employees' decision making (Shooshtarian et al., 2013). Job performance is "influenced by the employee's ability to use emotions to facilitate performance" (Sy et al., 2006, p. 462).
- *Leader*. A term used among organizations instead of manager or a director because a leader's vision helps employees establish goals and achieve those goals, thus allowing and enforcing effectiveness. Whereas managers or directors may execute the organizational goals based on the leader vision (Eken et al., 2014).
- *Effective Leadership (EL)*. Effective leaders can influence cooperative actions to meet overall objectives (Ramchunder & Martins, 2014).
- *Effective Communicator (EC)*. A leader is an EC if he/she has the "ability to verbally exchange ideas, feelings, and concepts with others" (Goleman, 2005, p. 194), is open to hearing both good and bad news, and can gain the support of his/her team (Batool, 2013).
- *Emotionally Unaware (EU)*. Leaders can be considered EU when they "lack the understanding of how their actions affect others" (Bradberry & Greaves, 2009, p. 66).

Significance of the Study

Educators' daily work can be challenging. They must follow a specific curriculum in class and face students' unruly behaviors. Also, they must create a class environment that allows students to understand and learn material easily. Moreover, sometimes teachers face school

budget cuts and service reductions, reducing teachers' job retention because of the overwhelming workload (Brackett & Katulak, 2007; Markow & Pieters, 2011). This study can contribute to the following:

- This study outcome may encourage schools' leaders and education law makers to integrate EI training to maximize teachers' performance and relationship with students (Brackett & Katulak, 2007; Markow & Pieters, 2011).
- EI skills could help teachers to identify, control, and better reflect on their emotions, reducing the stress level that typically accompanies their profession. As a result, teachers' emotional state could reflect positively on the school's overall cultural environment (Brackett & Katulak, 2007; Markow & Pieters, 2011).
- EI can also increase teachers' job satisfaction, retention, and decrease jobs' burnout (Brackett & Katulak, 2007), which could be cost-effective for schools hiring new teachers. Some studies shown that teachers' happiness is connected to their EI, and EI cornubites to teachers' academic and career success (Brandy, 2004; De Stercke et al., 2015)
- 4. Existing literature reflect controversial research results of the relationship between genders' differences and EI (Bar-On & Parker, 2000; Druskat et al., 2006; Eagly & Johnson, 1990; Petrides & Furnham, 2000), teachers' job performance and EI (Bar-On, 1997; Goleman, 1995; Law et al., 2008; Shih & Susanto, 2010; Slaski & Cartwright, 2003), and individuals age and EI (Anitei, 2007; Dimick, 2017; Fariselli et al., 2006; Jones, 2007; Okech, 2004; Uzonwanne, 2016). This study result will expand the knowledge of the literature regarding these controversial results to help lawmakers in making decisions about teachers' training and development.

5. The researcher's aim of this study is to share the study results with the American University in Cairo AUC, Egypt to contribute to the current relevant research and to the education methodology in the AUC.

Limitations of the Study

- Some of the participants' responses to the survey might not be accurate because of participants' personal biases. Hence, data analysis and interpretation could be inaccurate and further research will be required to confirm this study's results (Kummar, 2014).
- 2. Participants' unfamiliarity with the EI topic and its relevance to school system may influence their survey responses.
- 3. The study cannot be generalized. This study is limited to 100 teachers at one school in Egypt. The total responses of the 100 teachers will be the study's sample, which will not be sufficient to generalize the study's results to the entire educational system (Kummar, 2014).
- 4. Although the participants speak English, a language barrier could affect their understanding of the survey questions and their answers, which could affect the study's results.

Chapter Summary

EI appears to be a critical factor in effective work development and work performance; it is also linked to effective leadership (Ramchunder & Martins, 2014; Yadav, 2014). In this study, teachers are considered leaders in their jobs and students as their followers. Chapter 1 presented an introduction of the study that included the purpose of the study, the concept of EI and its relevance to teachers' job performance, the research questions, the significance of the study, the definition of terms that will be used, and the nature of the study.

Chapter 2 will present the study literature review that encompasses EI's history, development, and components. Also, Chapter 2 will discuss what previous researchers revealed about EI and this study variables.

Chapter 2: Literature Review

This literature review explores the historical context of EI and its constructs, as well as how it evolved within a century. This chapter will present the work of several psychologists and scientists who delineated the concept of EI. Furthermore, this chapter offers a thorough discussion of the relationship between EI and IQ, and the roles of both concepts in the workforce. The literature review will discuss in detail the work of the author and science journalist Daniel Goleman, as well as how the researcher will utilize Goleman's theory in this study. Finally, this chapter will link previous studies' findings regarding the relationship between teachers' EI and their job performance, age, and gender.

EI Background

Scientists have been very interested in EI for many decades because of its relevance to employees' job performance. Thorndike (1920) defined EI as "the ability to understand and manage men and women, boys and girls to act wisely in human relationships" (p. 228). Later, Leuner coined a profound term of EI in 1966. Leuner defined EI as the capacity to be aware of, perceive, control, evaluate, and express one's actions based on emotions and to handle relationships with others wisely and with empathy (Leuner, 1966). Eventually, J. D. Mayer and Salovey (1997) expanded Thorndike's definition, confirming that EI consists of a set of emotional abilities that include tracking one's emotional states and those of others.

However, the definition of EI remains controversial, and there is still a need to determine if EI is an ability, skill, or competency. Various researchers have referred to EI as a skill (Goleman, 1995), a range of abilities (J. D. Mayer & Salovey, 1997), or a combination of both (Roberts et al., 2001). Goleman (1995) described EI as the emotional skills that one may be aware of and utilizes in life events. In contrast, J. D. Mayer and Salovey (1997) believed that EI

reflects how well individuals can perform cognitive abilities, and how well one's cognitive abilities are increased with individuals' maturity and life experience.

Regardless of these discrepancies, many researchers have agreed on the idea that workers who score higher in EI are better able to assess and to manage their own emotion than workers who score lower in EI (Gardner, 2006a; Goleman, 1995; J. D. Mayer & Salovey, 1997). Furthermore, workers can predict what events would trigger them to be charged with anger and what events trigger happiness and calmness. Therefore, they can pursue suitable actions to redirect their emotions and thoughts to fit their life events. For example, workers who are less stressed from work and can manage their emotions and identify frustration tend to score higher in EI. These workers most likely are more resilient and productive because they know how to deal with the cause of their stress (Sy et al., 2006).

Organizational researchers also found similar links among high EI, job performance, and stress tolerance (Lopes et al., 2006). Lopes et al. (2006) found links among high employee EI, and interpersonal facilitation as ranked by colleagues. The researchers explained that work performance can be improved when employees possess EI skills. Lopes et al. claimed that EI facilitates employees' emotion regulation. Emotional regulation contributes to employees coping with work stress, working well under pressure, and being satisfied with their jobs. Ohira's (2020) research explained the importance of emotion and its contribution to one's thoughts and behaviors. Other studies have asserted that EI is associated with healthy thinking, resolution of societal issues, improved workforce performance, academic accomplishment, and higher quality of interpersonal relationships. Scientists have identified many people capabilities to classify and to understand emotions are relevant to EI (Bar-On, 1997; Goleman, 1998; J. D. Mayer & Salovey, 1997). These abilities encompass one's awareness of one's own and others' emotions.

Therefore, the theory of EI integrates emotion and intelligence (Ciarrochi et al., 2000; J. D. Mayer & Salovey, 1997; Roberts et al., 2001).

In 1990, Salovey and Mayer proposed that one's ability to be aware of one's and others' emotions made up a unitary EI. More specifically, the J. D. Mayer and Salovey (1997) model defines EI as involving the ability to do the following:

- Perceive one's and others' emotions precisely.
- Utilize emotions to help one's thinking.
- Comprehend the meaning of emotion.
- Manage emotions.

Perceiving Emotion

The most basic component of EI is the recognition of emotion through expression, which evolutionary biologists and psychologists claim to have developed in animal species as a form of communication. For example, facial expressions reflect feelings such as happiness, anger, fear, and sadness. Thus, researchers have expanded their studies to understand how humans became aware of their emotions through facial expressions (J. D. Mayer et al., 2000).

Using Emotions to Facilitate Thoughts

The next component of EI includes the capacity of emotions to direct the cognitive system. Scientists have pointed out that emotions control thinking. For example, when an event gets our attention, we respond to it emotionally. Therefore, an effective emotional system would guide thinking toward important matters. Researchers have also suggested that emotions are crucial for creativity. For example, a person's mood swings could affect their creativity (J. D. Mayer et al., 2000).

Understanding Emotions

Emotions supply information. Each emotion shows a pattern of signals and actions associated with them. A signal of anger could mean that a person may feel treated unfairly. In turn, a person's reaction might relate to specific possible actions, such as: attacking, punishment, and revenge, or seeking calmness. Comprehending emotional signals is an important aspect of this area of skill (J. D. Mayer et al., 2000). Thus, a person's awareness of such signals and actions would increase the capacity to reason with those emotional signals and actions (Erber, 1996; Larsen, 2000; J. D. Mayer et al., 2000).

Managing Emotions

Emotions can be regulated. One needs to understand the meaning of emotions and one's body signals of emotional reactions to be able to control thoughts. One could learn to accept emotional signals if they are not harmful and ignore those that are overwhelming. It is possible to manage emotions to promote one's own and others' goals. Various methods of emotional selfregulation have become a topic of increasing research recently (J. D. Mayer et al., 2000).

For example, Bean's (2020) research findings have shown a robust correlational relationship between teachers' emotional management and students' academic achievement. Additionally, the study found that a teacher's level of EI can predict students' level of academic achievement. A teacher's self-awareness of emotions is the predictor of this relationship. Bean's findings indicated a statistically significant positive association between EI and teacher-student-relationship (correlation coefficient r = .11). The study also found that teachers' self-awareness of their feelings strongly was correlated with their relationship with their students (r = .14, p < .01). Additionally, the teacher-student relationship was the most significant predictor of students' reading and math achievement. Later, multiple studies shared a new definition of EI

integrating personality traits, which combines the original EI abilities' cognitive construct with other factors, including behavior and mood (Bar-On, 1997, 2006; Boyatzis, 1982; Gignac, 2010; Goleman, 1995; McClelland, 1973; Petrides et al., 2007; Spencer & Spencer, 1993).

Emotion and Intelligence

Understanding the relationship between intelligence and emotions may inspire educators and leaders to think about their feelings before they react to life events. Doing so could enable educators to react to their jobs' tasks in a way that is more mindful of their emotions, which could result in better work performance.

Bradberry and Greaves (2009) explained that emotions emerge from the limbic system of the brain, whereas logic and rationality rest in the cortex or frontal lobe. The intellectual area of the human brain cannot avoid the emotional processes that are felt in the limbic system. Therefore, "emotional intelligence requires effective communication between the rational and emotional center of the brain" (Bradberry & Greaves, 2009, p. 7). This notion indicates why a person's response to an event could be associated with one's emotion state. Nevertheless, emotions could predict how humans respond to an event. Also, Bradberry and Greaves explained that when people experience life events, they cannot control what emotions emerge, but they can control their thoughts that emerge after their emotion experience. Further, the rational of people's reactions to life events are connected to the intensity of how they feel toward these events. Therefore, Bradberry and Greaves defined emotional intelligence as a person's "ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behavior and relationships" (2009, p. 17).

Neuroscience researchers have also explored the impact of emotions on our actions (Gardner, 2006b). According to Pally (2006), neuroscientists revealed that a human brain is the

center of processing emotions. The brain usually decides in advance a human response to an event based on previous experiences that a human encounter. Nevertheless, a human brain capable to memorize these patterns of reactions to predict what is the best response to an event to protect itself. Zadra and Clore (2011) suggested that "emotions routinely affect how and what we see" (p. 676) as well as our interpretation of what we perceive. Further, one's awareness of one's emotion facilitates responding appropriately to the emerged feelings in life events.

Relationship Between EI and IQ

This study will investigate the importance of EI's components and its role in teachers' performance. In this study, teachers are considered leaders and students are their followers. Despite most employers' belief that employees' qualifications are based on IQ, many organizational leaders became aware of the impact of EI in the organizational development (Fouts, 2019). According to CareerBuilder (2011), 71% of organizations value EI more than IQ. Fouts (2019) stressed that IQ is no longer a sufficient indication for individuals to become advanced in their career, explaining that developing EI is key to becoming advanced in the organizational hierarchy. According to a CareerBuilder survey, employers claimed that most organizations benefit greatly from employees who possess EI, explaining that these employees stay calm under work stress, can resolve problems effectively, empathize with other colleagues, and they to make effective business decisions. Furthermore, hiring managers observed that employees who possess EI are more aware of their emotions and have thoughtful discussions on tough issues. They are good listeners and handle criticism wisely.

Not only have organizational leaders stressed the importance of EI over IQ, but also behaviorist researchers have stressed why EI can be more important than IQ. IQ measures individual intelligence whereas EI combines emotional skills and cognitive abilities (Cherniss &

Goleman, 2001). Individual intelligence encompasses two competencies: technical skills such as programming software, and cognitive abilities such as data analysis. However, what distinguishes EI-based competencies from IQ is that EI competencies include emotional skills that are intertwined with cognitive skills. For example, a manager who possesses EI competencies will perform effectively in employee conflict resolution (Cherniss & Goleman, 2001). J. D. Mayer and Salovey (1995) defined EI emotional skills as one's ability to be aware of one's and others' emotions, facilitate thoughts, and to manage relationships with others. Furthermore, J. D. Mayer and Salovey predicted the impact of EI in organizational development and leaders' effectiveness.

Goleman (2005) explained that when organizations focus only on employees' technical skills, employers are limiting employees' potential and organizational development. Furthermore, he stressed the impact of employees' emotion on effective decision-making. Goleman believed that

IQ would be a much stronger predictor than EI of which jobs or professions people can enter. Because IQ stands as a proxy for the cognitive complexity a person can process, it should predict what technical expertise that person can master. Technical expertise in turn, represents the major set of threshold competencies that determine whether a person can get and keep a job in a given field. IQ, then, plays a sorting function in determining what jobs people can hold. However, having enough cognitive intelligence to hold a given job does not by itself predict whether one will be a star performer or rise to management or relationship positions in one's field. (Cherniss & Goleman, 2001, p. 8)

Many researchers have emphasized the role of emotions in our lives. Pennebaker (1997) argued that the various signals associated with emotions are reflected in human actions. In other

words, humans' emotions are reflections of what is going on around them. Wikins (2004) asserted that emotions are the root cause of humans' decisions, and without them, we wouldn't know what we feel toward our choices. Regina Pally, a psychotherapist in Los Angeles and a clinical professor at UCLA, stressed the importance of understanding one's and others' emotions to cope with life situations, stating, "To function well with other people, we need to understand where they are coming from so as not to misread their intentions" (as cited in Begley & Leonard, 2005, p. B1).

According to J. D. Mayer et al. (2000), EI meets traditional standards for intelligence because it can be branched into a group of mental abilities that are positively associated with traditional intelligence, and that improve with one's maturity and life experience. Traditional intelligence encompasses several abilities that humans possess to adapt to their surroundings (Sternberg, 2022). Ultimately, one's capability to manage one's emotions is based on one's EI level. The notion includes comprehending emotion and the process of emotion in the intellectual area of humans' brain frontal cortex. In other words, how we understand and regulate our emotions lead to the quality of relationships that we may have with others. Additionally, EI determines our ability to learn practical skills. Research shows that emotional conditions influence the brain's ability to generate information. If there is a connection between the qualities of EI and our thinking and decision-making ability, then we should train people to develop their EI (Bar-On, 1997; Goleman, 1998).

EI Theory

The concept of EI has developed and connected to the notion of social intelligence, which was coined by Thorndike in 1920. In 1912, Thorndike was a Harvard and Columbia-educated psychologist and past president of the American Psychological Association. Thorndike

developed the law of effect, which indicated that humans' reactions to life events and situations that cause humans happiness or satisfaction are desired, and situations that cause sadness or dissatisfaction are not desired (Cooper & Ng, 2009).

Thorndike (1920) identified human intelligences as human relations with one another (social intelligence), human interaction with artificial intelligence and logical level (abstract intelligence), and human relationship and understanding machines and objects (mechanical intelligence). Thorndike emphasized social intelligence as the ability to classify one's and others' feelings, manage or control that feeling, and communicate with others according to the understanding of this feeling. Thorndike expressed his opinion of observing social intelligence as an easy task as opposed to measuring it with traditional psychometric measurements (Hughes et al., 2009). The George Washington Social Intelligence Test (GWSIT) was one of the first tools used to measure social intelligence (Hunt, 1928). Utilizing measurement tools such as the GWSIT, psychologists could explore questions about social intelligence and its relationship with personality traits such as extraversion (Thorndike & Stein, 1937). Furthermore, Thorndike and Stein (1937) explained the potentials of GWSIT and the ideas "that differences in social intelligence tend to be swamped by difference in abstract intelligence" (p. 282).

Other theorists, such as social psychologist and Harvard professor Howard E. Gardner, expanded Thorndike's social intelligence theory, viewing EI with a different lens. Gardner wrote almost 30 books that addressed the dimension of social intelligence and its influence on the workforce. Gardner (1983) explained social intelligence based on human multiple intelligence (MI) theory in his book *Frames of Mind*, in which he identified eight different types of intelligence: intrapersonal, interpersonal, kinesthetic, linguistic, logical, musical, naturalist, and spatial, as well as possibly existential awareness, and moral awareness (Hughes et al., 2009).
Gardner's theories on MI were eventually developed by other psychologists and researchers (J. D. Mayer & Salovey, 1993; Goleman, 1995).

Howard Gardner (1983) had a major hand in resurrecting EI theory in psychology. His influential model of MI included two varieties of personal intelligence, the interpersonal and intrapersonal intelligences; EI, as mentioned earlier, can be seen as elaborating on the role of emotion in these domains (Cherniss & Goleman, 2001, p. 4) Gardner emphasized that the development of MI concepts has come to the attention of business leaders and managers, indicating that "part of this interest [in MI] stems from the widespread attention being paid to EI, thanks to the pathbreaking [sic] writing of Daniel Goleman" (Gardner, 2006a, p. 243)

Gardner (2006b) emphasized the complexity of interactions among MIs that a person can encounter. He asserted that each person processes information differently, which could be attributed to the difference in people's profiles. He stated, "Such jaggedness or imbalance may arise from genetic endowment or the development of preference as a result of different experiences or differential access to types of information" (Gardner, 2006b, p. 218). For example, a person's musical intelligence could develop when they are exposed to an environment that involves music and arts. As another example, a person's bodily-kinesthetic intelligence could emerge when they are exposed to open areas such as parks or playgrounds. Nevertheless, Gardner identified peoples' profiles based on *laser and searchlight*, linked to the MI theory:

• A *laser profile* encompasses one or two intelligences a person can possesses, and it reflects strongly in one's career choices (Gardner, 2006a). For example, a person possessing a strong competency in solving mathematical problems and algorithm

might enjoy working in accounting. As another example, a person with a strong linguistic competency might like to teach language or work as a translator.

• A *searchlight profile* encompasses MIs that a person is aware of surroundings information that includes many events. The prototypical searchlight profile is most common among leaders such as politicians or CEOs (Gardner, 2006a).

Salovey and Mayer's EI Theory

The early popular definition of EI was developed by the psychologists Salovey and Mayer (1990). They introduced EI as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). J. D. Mayer et al. (2000) slightly adjusted their definition of EI, describing it as "the ability to perceive emotions, to generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in ways that promote emotional and intellectual growth" (p. 17).

The main theory used in the present study is based on the concept of EI that Salovey and Mayer (1990) introduced. J. D. Mayer and Salovey (1997) further divided EI's abilities and skills into four constructs: (a) the ability to perceive emotion, (b) using emotion to facilitate thought, (c) understanding feelings, and (d) managing emotion. From perceiving to managing emotions, the sequence of the four constructs represents the degree to which the ability is intertwined within the rest of one's major psychological subsystems that exist within an individual's overall personality (J. D. Mayer, 2001; R. E. Mayer, 1998). J. D. Mayer and Salovey (1995) have also stressed the impact of emotions on one's performance at work.

In this study, the researcher will employ J. D. Mayer and Salovey's theory and its constructs. The theory application will facilitate revealing the association among teachers' demographics, EI scores, perception of EI application in classroom, and perception of any potential impact on the prior year's self-reported annual teaching evaluations in a private school in Egypt.

Connection Between Emotion and Job Performance

A large body of research suggests that emotion and emotion regulation play an important role in guiding thinking, decision-making, and job performance (Loewenstein et al., 2001). Hence, emotional abilities can help people to achieve their goals in life (Barsade, 2002). J. D. Mayer and Salovey (1997) identified emotion management as one of the skills that people may acquire to improve their EI. Furthermore, emotional skills reflect the perception of emotion and engage the ability to identify feelings in individuals' facial expressions. It affects expression of emotion in the face, voice, and related communication channels (Ekman & Friesen, 1972; Nowicki & Mitchell, 1998; Scherer et al., 2001). Further emotional skill involves facilitation. It involves the ability of emotions to organize thoughts and thinking (J. D. Mayer & Salovey, 1997); therefore, one's planning and goals to be guided and accomplished smoothly when one's knowledge of the connection between thinking and emotions is increased (Izard, 2001).

Emotions can also have a profound influence on personal and group goals (Barsade, 2002). These goals may require incorporating good relationships with individuals, maintaining a healthy emotional balance, and establishing a successful work environment. For example, emotions might be involved in cooperating with coworkers, making constructive suggestions, developing workers' performance, and contributing to a positive work environment and group morale (Van Scotter & Motowildo, 1996).

Emotional status affects work performance and employees' motivation (J. D. Mayer et al., 2004). For example, positive thinking and feelings can facilitate divergent thinking and enhance creativity (Isen & Daubman, 1984; Isen et al., 1987). Conversely, negative thinking can attract attention to destructive and undesired actions, and it decrease reasoning and attention to detail (Isen, 1987; Palfai & Salovey, 1993; Schwartz & Clore, 1996).

Researchers have claimed that emotions can be interpreted in different way (Izard, 2007). Further, Izard explained that what motivate our emotions toward life situations in our daily lives still unclear (Izard, 2007). For example, Izard (2007) introduced a new paradigm that suggests that emotion is a root factor in arranging our thoughts and reactions. He explained that emotions play a critical role in formation, retention, and recall of memories. The greater the emotional impact of an event, the greater the chance that the event will be recalled. In other words, emotions are registered on one's consciousness, and they appear in the form of behavior as a response to life situations that is managed by the brain's limbic system.

Frijda (1986) defined emotion as "the experience of a form of biological response to environmental stimulus, resulting in physical and psychological changes and subsequent readiness for action" (p. 473). Further, according to neuroscientists, the physical and psychological changes that manifest in one's daily behaviors and actions are relevant to the interaction between the different regions of the brain. With this conceptual aspect of emotion, some researchers have claimed that emotions could reflect stored behaviors according to our previous experiences (Ekman & Friesen, 1972; Fischer et al., 1990; Izard, 1993). According to Ashkanasy and Dorris (2017), blood pressure, sweating, respiration, and heartbeat are physiological reactions derived from organisms' autonomic and endocrine systems, and they

reflect emotions. These reflections, in turn, symbolize evolutionary responses to the environment's influence and stimuli.

Ashkanasy (2003) defined emotion as "a set of endogenous and exogenous inputs to particular neural systems, leading to internal and external manifestations" (p. 14). Ashkanasy claimed that each person encounters feelings as a response to the surrounding environment based on our life experiences, and it result in our reactions to life events. Personal feelings or emotions are processed internally and reflected as a cognitive interpretation, whereas respiration, facial expression, and posture are identified as physiological factors.

Thus, perceiving and expressing emotions based on constructs one and three of EI, and how emotion manages thoughts based on construct two. In contrast, one's goals and plans are integrated and controlled by construct four, emotion management (J. D. Mayer & Salovey, 1997). Therefore, many studies suggest that emotion is extensively involved in social interaction, including job performance. For example, there is evidence that positive emotions can increase sociability and elicit constructive reactions from others, whereas emotions reflected from negative thoughts can drive other people away (Argyle & Lu, 1990; Furr & Funder, 1998). These emotions are manifested in various courses of action. First, expressions of emotions signal one's goals and intentions to others (Ekman, 1993; Keltner & Haidt, 1999, 2001). For example, people can change their greedy behavior because they emotionally are not satisfied (Tangney, 1995). Second, people who realize the impact of their behaviors on others' reactions. For example, peoples who empathize toward others (Clark et al., 1996; Eisenberg et al., 1989). Third, unconsciously, a person's feelings could be contagious and transferrable to another person during their interactions (Barsade, 2002; Hatfield et al., 2011). Fourth, a person who has negative thoughts could transfer his or her emotions while interacting with another person (Baumeister &

Tice, 1990; Csikszentmihalyi, 1992). Thus, positive, and negative emotions have an impact on social interactions, including job performance.

Intelligence

British psychologist Charles Spearman (1961) defined general intelligence (g factor) as the capability to perform abstract thought and the general capacity to learn and adapt to one's environment (Cherry, 2022; Terman, 1921; Wechsler, 1997; Wilson, 2017). Thurstone (1938) challenged Spearman's theory of general intelligence, testing people's abilities utilizing almost 60 experiments. Based on the test results, Thurstone specified basic mental abilities, as opposed to one general intelligence. Thurstone defined general intelligence (g-factor) as the meaning of seven primary mental abilities. The abilities are as follows:

- *Memory*. The ability to memorize life events.
- *Spatial visualization*. The ability to recognize shapes and lines and links it together in two- or three-dimensional figures.
- Verbal Comprehension. The ability to effectively understand words in a language.
- *Word Fluency*. The ability to use words effectively in tasks such as crossword puzzle and solving anagrams.
- *Numerical Ability*. The ability to compute numbers.
- *Perceptual Speed:* The ability to differentiate in detail similarities and differences in one's surroundings.
- *Inductive Reasoning:* The ability to understand given information and grasp the presented rules and principles.

Cherry (2022) confirmed that despite Spearman's intelligence theory based on general abilities, and Thurstone's theory based on specified abilities, their theories had been similar in

terms of one's mental abilities. Some of these mental abilities are associated with people's ability to remember life events, perform mathematical problems, differentiate objects from one another, visualize objects and understand their relationships to one another, understand words in a language, and speak a language fluently.

As stated previously, psychologist Howard Gardner (1983) believed that human intelligence is not based on one intelligence but MIs (Ruhl, 2020). Gardner (2006a) explained that almost every human being has the ability to develop all intelligences to an acceptable level of performance if they are situated in the right environment and offered encouragement. Some researchers explained that different types of intelligence are often distinguished from one another according to the kind of information they provide (Carroll, 1993; Horn & Cattell, 1966; Wechsler, 1997). Dawit (2019) research has given the MI approach example because class activities such as musical, artistic, or athletic programs could recognize each student's intelligence potential and embrace it. On the other hand, students who have poor performance and practice MI activities can develop their intelligence capacities in the classroom. Gardner (1983) suggested eight intelligences that articulated the MI theory follows:

- Linguistic intelligence: How well a person can use the appropriate words to express what they mean by writing and speaking effectively.
- Visual spatial intelligence: The ability to imagine shapes or think with pictures, images, shapes, and lines, as well as understand three-dimensional subjects.
- Naturalistic intelligence: The ability to understand the cycle of nature and study living species.
- Musical intelligence: The ability to understand the art of music that encompasses distinguishing rhythm, tones, singing, and instruments playing.

- Kinesthetic intelligence: The ability to coordinate the mind with the body's movement to express oneself.
- Logical-mathematical intelligence: The ability to count numbers, calculate and solve math problems, engage in critical thinking, generate hypotheses, and derive conclusions.
- Interpersonal intelligence: A social skill that encompass sensing people's emotions and motives and how to communicate with their emotions.
- Intrapersonal intelligence: One's ability to be aware of oneself as what one's feels and wants.

Gardner (2006a) offered a more refined definition of intelligence as a: biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture. They are potentials-presumably, neural ones-that will or will not be activated, depending upon the values of a particular culture, the opportunities available in that culture, and the personal

decisions made by individuals and their families, schoolteachers, and others. (p. 34) Gardner (1999) argued that our culture does not value intelligence sufficiently, emphasizing the importance of recognizing and developing all kinds of human intelligences because of their impact on our professional and daily lives. Barrington (2004) explained that MI theory can facilitate creative methods for teaching children (pedagogical methods), and it should also be used to support the wide variation of students' skills in college. Gardner (2006a) believed that each human being has one or two intelligences that are best for facilitating learning. For example, Gardner asserted the advantage of utilizing MI in education system to facilitate education programs (curriculum) designed to accommodate students' abilities for learning. For

example, some students may acquire learning transfer through visual tools that involve shapes, lines, and three-dimensional image (visual-spatial intelligence), whereas other students may prefer acquiring knowledge through reading and writing materials (linguistic intelligence).

Gardner (2006a) explained how the MIs can influence one another, proposing three types of interplay among MIs:

- *Bottlenecks:* Occurs when one intelligence constrain another. For example, a person performs poorly in linguistic intelligence and cannot speak well they will not have full capacity to express themselves and will have weak interpersonal intelligence.
- *Compensation.* Occurs when one intelligence makes up for another. For example, a person who has a strong interpersonal intelligence will be able to communicate effectively with others when he or she has a weak spatial intelligence and is located in unfamiliar environment.
- *Catalyst.* Occurs when one intelligence enhances or improve another intelligence. For example, "A strong spatial intelligence my lead a person who works with language to be more sensitive to the shape of linguistic symbols" (Gardner, 2006b, p. 221).

To compare the application of MI theory and traditional education methods, Yalmanci and Gozum (2013) conducted a study on third grade students and their retention of information on enzymes. Teachers taught the lesson to both the control group of 30 students and the experimental group. Teachers' measured students' information of the subject matter before and after the lesson. Four weeks later, teachers conducted a success test to determine students' retention of the information. Data analysis showed that the MI method that teachers applied with the experimental group had significant impact on students' retention of information.

Teachers' Job Performance and EI

The growing demand for qualified teachers has placed pressured on educator-leaders in the hiring process. Teachers' burnout from working long hours and exerting tremendous effort with students, as well as job dissatisfaction, may continue affecting teachers' job performance and students' grades (Erikson, 1950). However, if teacher leaders value EI (Druskat et al., 2006) and put fewer restrictions on teachers' creativity to accommodate students who need more attention, it will lower teachers' stress and enhance their job performance. For example, educational leaders pressure teachers to be aligned with and follow the curriculum within a set time frame. Given the imposed time frame, teachers become frustrated and stressed. They often must leave out different methods of teaching to accommodate their struggling students, which affects students' performance and grades. Nevertheless, most teachers want to help students with their academic achievement. However, when teachers leave any students behind, they become stressed, which affects their performance (Gomez, 2022).

Many researchers have argued for the positive impact of EI on job performance (Bar-On, 1997; Goleman, 1995; Law et al., 2008; Shih & Susanto, 2010; Slaski & Cartwright, 2003). Thus, if teacher leaders value EI and understand the intersection of teachers' EI and teachers' relationships among themselves, with students, and with their superiors, it may improve their job performance (Shih & Susanto, 2010). Research on job performance began with Cambell et al.'s (1990) handbook, *Modeling the Performance Prediction Problem in Industrial and Organizational Psychology*. Cambell's work was the first scholarly treatise to reveal the relationship between workers and their behavior at work. Since then, employee performance research continued to grow, gaining increasing traction in organizational and management research. Cambell has described an employee's job performance as a low individual-level variable that involves a task or a function that a single person accomplishes and can be affected by one's EI.

Various findings have shown a positive correlational relationship between employees' EI and job performance (Alferaih, 2017; Asiamah, 2017; Carrillo, 2019; Castillo & Del Valle, 2017; Cote & Miners, 2006; Devonish, 2016; Wong & Law, 2002a). Carrillo's (2019) study surveyed almost 130 working professionals in the U.S. using Survey Monkey software. The study used a regression analysis, revealing a strong positive relationship between EI and employees' job performance. Another study by Hwang (2007) tested the relationship between teachers' EI and their performance in the workplace. Hwang used the self-report Emotional Skills Assessment Process (ESAP) as a tool to measure teachers' EI competencies. Hwang also asked students to complete the Teacher Effectiveness Evaluation (TEE) as a part of the end of the course evaluation process to measure students' perceptions of teachers' effectiveness. According to Hwang (2007), his study resulted in a strong correlational relationship between teachers' overall EI scores and students' evaluation of their teachers' performance in class. The study's results support theorists' suggestion that individuals with a high level of EI can manage their emotions, leading to better performance in the workplace (J. D. Mayer et al., 2000).

Another study was conducted by the U.S. Air Force (USAF) to examine the impact of EI on occupational performance (Dimick, 2017). The purpose of the study was to determine if the study's results could be applied in recruiting the appropriate people for the job and increasing job matching. Specifically, the USAF wanted to know if EI assessment could help predict performance in military recruiters, developing their hiring of successful recruiters and being cost effective in the hiring process. The study examined 1,171 recruiters to determine the impact of EI on job performance. The study's sample involved individuals from all over the United States,

and the majority were Caucasian (75%) males (91%). The study population had an average age of 33 years old. To evaluate their EI, all participants were all given the EQ-I survey, and survey scores were compared with their performance as recruiters. The EQ-I test is widely acknowledged as a valid and reliable measure of emotionally intelligent behavior based on independent review (Plake et al., 1999). Recruiters' performance was evaluated using USAF criteria. The assessment criteria were as follows: high performance involved of meeting or exceeding 100% of participants' annual quotas, and low performance involved meeting less than 80% of their annual recruitment quotas. T-test results indicated that recruiters with high EQ-I scores had higher performance and recruiters with low EQ-I scores had lower performance.

EI and Teachers' Demographics (Age, Gender, Tenure)

EI and Age

There are many assumptions about age and intelligence in the literature (Anitei, 2007). Some studies have revealed no relationship between one's age and EI (Dimick, 2017; Jones, 2007; Okech, 2004). Jones's (2007) research's questioning the relationship between age and EI included participants with an average age (mean) of 39.69 years old of mixed genders. Participants' total EI score, measured by the MSCEIT, had an average score (mean) of 91.25. The Pearson's correlation coefficient (-.1458) revealed no correlation between age and total MSCEIT scores.

However, some studies revealed a strong relationship between age and EI (Fariselli et al., 2006; Uzonwanne, 2016), including several that have linked high EI and effective performance to elder leaders (Goel & Hussein, 2015; Goleman, 2004; Lall, 2009; Ramchunder & Martins, 2014; Yadav, 2014). Fariselli et al. (2006) tested 405 American people between 22–70 years of age using the Six Seconds emotional intelligence e-assessment (SEI). The study found a positive

significant but weak relationship between EI and age. These findings suggest that the more mature people in age, they are more likely to possess EI skills than younger people. Fariselli et al.'s study claimed that more senior people score higher on EI tests because of their accumulated life experience.

This study will add more research results regarding the relationship between age and EI. The question is, to what extent, if any, do older teachers score higher in EI than younger teachers? The need to answer this question drove the review of literature on age and EI, which led to several findings. Zacher et al. (2011) suggested that the combination of age and agerelated developmental tasks may significantly influence teachers to create successful workplace outcomes. Some researchers have typically assumed that older leaders, compared to their younger counterparts, show more productive behavior at work, contributing to an organization's success. Erikson (1950) and McAdams and de St. Aubin's (1992) study results indicated that as people age, they prefer to achieve legacy in their career. Moreover, socioemotional selectivity theory (SST) states that how older people think and progress in their remaining life leads to prioritizing emotionally meaningful and generative life goals (Carstensen et al., 2006; Charles & Carstensen, 2007; Dahling & Perez, 2010; Grant & Wade-Benzoni, 2009). SST is based on the notion that older people's ability to understand and appreciate time develops more than younger people. For example, when people grow older, they prioritize their present emotional satisfaction by spending more time with friends and family. Also, as people grow older, they prioritize meaningful goals, short-term goals, and goals combined with positive emotions (Vinney, 2020).

Hur et al. (2014) suggested that aging is closely associated with the use of emotional labor. Emotional labor occurs when one controls and scrutinizes emotional expressions while speaking with others at work. In other words, the older people are, the more they are motivated

to focus on the moment and think positively, which can impact the dynamic of emotional labor selection. Furthermore, studies by Fariselli et al. (2006) have suggested that older people are more likely to be higher in EI than younger people. Accumulated life experiences likely contribute to higher EI.

In contrast, Van Dusseldorp et al. (2011) found no correlations between age and EI. One might assume that younger people have the urge to invest on climbing the workforce ladder because of personal goals than their older people counterparts. Van Dusseldorp et al.'s study indicated that mature people could be less motivated to build their career because their personal goals decrease in comparison to their younger counterparts. Given the differences in motivation, older leaders are expected to be different from younger ones because they lead based on differences in goals and motivation (Zecher et al., 2011).

EI and Gender

Only small differences in EI have been found along gender lines. One study using the MSCEIT to measure overall EI determined that females consistently scored higher than males on each of the four branches that comprise the MSCEIT: perceiving emotions, using emotions, understanding emotions, and managing emotions (Druskat et al., 2006). In contrast to the MSCEIT results, the Bar-On assessment has been given to both genders and statistically analyzed using the analysis of variance (ANOVA). The results of the analysis revealed no significant statistical difference in overall EI scores (Bar-On, 2004). However, the test results did not show significant differences between the two genders using the dimensions of the EQ-i: interpersonal, intrapersonal, adaptability, stress management, and general mood. Females scored higher than males on the EQ-I measurement of interpersonal skills, whereas males scored higher in intrapersonal capacities of adaptability and stress management. Additional studies examining

gender differences in EI revealed that females scored higher in social skills (Petrides & Furnham, 2000) and interpersonal skills (Druskat et al., 2006). Females also scored higher in empathy and self-awareness, whereas males tended to score higher in stress management (Cherniss & Goleman, 2001). An important notion of the study was that gender differences in EI were consistently insignificant. For example, within the five EQ-I scales, the differences between females and males accounted for 1% or less of the EQ-I scores in the scales of adaptability, stress management, and general mood. The EQ-I intrapersonal scale had a gender variance of 2.8%, and the interpersonal scale, which had the largest variance between genders, had a gender variance of 6.7% (Bar-On, 2004).

A reason that is said to account for to the gender differences found between the intrapersonal and interpersonal scales indicated that the score variance between females and males was demonstrated in the population. For example, males scored lower than female in terms of how to communicate with others (interpersonal qualities), including empathy and social responsibility, which could explain the higher percentage of psychopathy in males than in females. Females scored lower in intrapersonal abilities, such as stress management and adaptability, which could explain the higher frequency of anxiety-related problems in females than in males (Bar-On & Parker, 2000).

The MSCEIT and EQ-I are valid and reliable instruments self-assessments. However, it is also important to consider peer ratings of the EI of leaders as another dimension when comparing gender differences (Druskat et al., 2006). Peer rated EI skills in leaders show female leaders as possessing higher self-awareness than male leaders. A meta-analysis found that gender differences vary between males and females in terms of relationship and communication skills among colleagues and subordinates. Female leaders are generally more socially sensitive and

interested in others, which was consistent with the finding of EI self-assessments in which females scored higher than males in the interpersonal scale. The leadership style of females tends to focus on effective communication and personable relationships with people. The data analysis showed that females have the capacity to empathize with and relate to others' feelings to resolve employees' conflicts more than male leaders. In contrast, males' leadership style was focused on showing authoritative actions as a manifestation of their powerful image in an organization (Eagly & Johnson, 1990).

EI and Tenure

Teaching can be stressful career more than most other professions. Almost 75% of teachers and 90% of school principals in the United States claimed that they have a high level of work-related stress. Furthermore, almost 60% of teachers and 50% of school principals reported through a survey that they are burn out from their jobs (Morrison, 2022). However, some of the literature explained that the longer teachers stay in the teaching profession they develop tolerance to work-related-stress and burnout (Dewaele, 2018; Valente, 2020). The endurance teachers develop attribute to their daily work experience and to EI development.

The literature (Dewaele, 2018; Valente, 2020) indicated a positive correlation ship between teachers' years of teaching and their level of emotional intelligence. Valente (2020) found that teachers could develop more awareness of their own emotions and students' behavior because of the years of practice the profession of teaching. Valente's research included 634 teachers from both genders, and they had diverse years of teaching. The study result indicated that teachers who have been longer in the profession had more empathy, EI, and self-efficacy. Furthermore, the study showed that teachers can regulate their emotions and manage their thoughts than teachers with less experience in the teaching profession. Another research

Dewaele's (2018) found that teachers with more experience are better communicators with students and they enjoy their profession attribute to scoring higher in EI. Nevertheless, teachers with high emotional intelligence are more influential to their followers (students) and able to create a positive environment.

Teachers' EI and Students' Academic Accomplishments

This study will not measure the relationship between teachers' EI and students' academic achievement. However, a literature review was still conducted on this subject because of the important impact of teachers' performance on students' achievement and work environment. Learning touches the head and the heart (Kaufeldt, 1999). Many studies revealed the importance of integrating both rationality and emotion while teaching to best prepare students for adult life (Humphrey et al., 2007). Kaufeldt (1999) suggested that students cannot perform school tasks to their maximum capacity when they are under stress caused by poor communication with their teachers. Bolkan and Goodboy's (2009) study found a strong positive correlation between some components of teachers' transformational leadership style and students' outcomes attributed to effective communication that involves EI abilities.

Bean's (2020) study findings indicated a statistically significant positive association between EI and Teacher-Student-Relationship (TSR). The correlation between the dependent variable (teacher) and the independent variable is (EI; r = .11). Of the four EI domains, teachers' self-awareness had the strongest correlation with TSR (r = .14, p < .01). Additionally, when teachers scored high in self-awareness, students earned high grades in reading and math. Hence, in this study, teachers' self-awareness was the most significant predictor of students' reading and math achievement. J. D. Mayer and Salovey's (1995) research explained that one's awareness of one's own and others' feelings is imperative to initiating the proper course of action with others. However, Kaufeldt (1999) pointed out the importance of neuroscience and how it is linked to one's emotions, which is the primary aspect of EI. Kaufeldt stressed the importance of teachers understanding how the brain reacts and functions when a person encounters various life situations. Kaufeldt encourages teachers to be familiar with the link between neuroscience and EI for maximizing teachers-performance in the classroom.

Furthermore, understanding gender differences in brain structure could also help teachers utilize their EI skillfully. Karges-Bone (2011) and Xin et al. (2019) observed subtle differences in male and female brains. The differences are subtle and do not always occur the same way in every male or female. Gender differences in the brain can be used to enhance student learning. For example, Xin et al. stated that females store more information in short-term memory, even if the information is irrelevant. Males respond to visual cues more readily than to auditory cues. It takes males longer to process verbal responses than to auditory cues. It takes males longer to process verbal responses than it takes females. Males are spatial learners and need lots of room to spread out projects. Females may use both sides of the brain to sound out words.

In conclusion, further research is needed to support previous findings about teachers' EI, teachers' relationship with students, and its impact on students' academic accomplishment. Teachers may use this knowledge to plan learning experiences that integrate EI components that include teachers perceiving information, self-awareness of their and others' feelings, and managing their and others' emotions. By integrating their EI with gender-based brain differences, teachers may have a less stressful workload, perform better, and maximize students' academic achievement.

EI Advantages and Hypothesis

The idea that high EI may lead to personal and professional success has generated a great deal of excitement among the public, as well as managers, academics, and business consultants (Lam & Kirby, 2002). Goleman (1997) asserted, "Emotional intelligence gives you a competitive edge. Having great intellectual abilities may make you a superb fiscal analyst or legal scholar. Still, a highly developed emotional intelligence will make you a candidate for CEO or a brilliant trial lawyer" (p. 76). Other researchers such as Lam and Kirby (2002) affirmed that EI increases individual performance over and above the level expected from the traditional notion of general intelligence.

It is a common belief that task achievement quality may be questioned when one's performance is influenced by emotion, because emotions may either enhance or diminish performance. The involved emotions operate through two mechanisms: buffering and personal engagement. Buffering is a process that segregates and controls undesirable emotions that hurdle tasks at hand (Ashforth & Humphrey, 1995). Kahn (1990, 1992) hypothesized that one's high performance and motivation are highly promoted in tasks within personal engagement. Thus, emotion is an important aspect of task accomplishment, and emotion is also one of the main constructs of EI.

Another advantage of individuals with high EI is that they can control their and others' emotions, and they are less likely to fear taking on hard tasks. Additionally, they are usually confident, humble, and able to control negative emotions during team performance (Seipp, 1991).

Prati et al. (2003) attributed the lack of positive findings to EI being "a relatively new field of investigation [and that] there are unfortunately a small number of studies related to

leadership effectiveness" (p. 364). Although this may be the case, why are researchers not gathering data to demonstrate that EI matters for leadership? It has been nearly 100 years since Thorndike (1920) first discussed social intelligence and over 30 years since Salovey and Mayer (1990) refined the construct of EI. However, this lack of empirical evidence has not stopped researchers from creating theories regarding the importance of EI for leadership. Some of the suggested theories were developed and utilized in leadership (Raven, 1990).

Teaching EI

One key belief about EI is that it can be improved and learned (Goleman, 1995). The skills of EI, just like any other skills, can be acquired (Goleman, 1998; J. D. Mayer et al., 2004). As stated previously, Goleman (1995) defined EI as the ability to perceive, use, mange, and handle emotions. Further, Goleman defined EI as the array of skills and characteristics that drive leadership performance. These skills can be measured to determine and enhance one's level of EI. J. D. Mayer et al. (2004) developed the ability model test MSCEIT, which focuses on measuring an individual's ability to process emotional information and use it to navigate the social environment. The test's results can help people to improve their EI in terms of its four constructs.

Awareness of others' emotions can be taught. For example, a person who is not good at identifying other people's emotion can be taught which facial expressions indicate a person is sad or happy. Someone who lacks a solid emotional understanding can acquire a more sophisticated emotional vocabulary (Goleman, 1998; J. D. Mayer et al., 2004).

Effective training in and development of EI can be accomplished in several ways and must encompass trial and error experience along with intellectual practice. It is vital that individuals practice new EI skills in safe environment in which they feel comfortable, such as

their family and friends. Furthermore, EI group teaching is effective and cost-effective for organizations because most human emotions have a strong interpersonal component. Practicing in a group, therefore, gives each participant the cues they need to learn emotional abilities (Goleman, 1998; J. D. Mayer et al., 2004)

Chapter 2 Summary

Chapter 2 presented a literature review regarding background and development of EI. The chapter presented the definition of emotional intelligence, exploring its impact on the workforce and leadership. EI background included the early vision of EI by scientists such as Thorndike, Howard Gardner, Daniel Goleman, and Mayer and Salovey.

Thorndike in (1920) who identified human intelligences as human relation with one another, human interaction with artificial intelligence and logical level, and human relationship and understanding machines and objects. The next measure work achievement was coined by Gardner in (1983) explained social intelligence based on human MI. He asserted that every person process information differently. Further, he explained that each human being has at least one intelligent or more that he can utilize to achieve their goals. In 1990, Mayer and Salovey introduced a new definition of emotional intelligence that included four constructs of EI oneself emotional awareness, awareness of other's emotions, identifying emotions and emotions meaning, and regulating emotions to manage relationship with others.

The next psychologist Daniel Goleman (1995) who reported the importance of EI and its relevant to effective leadership. He also addressed the role of IQ in the workplace and the crucial role of emotional intelligence for employee to achieve a higher hierarchy (Leader) in the workplace. The literature also addressed Daniel Goleman's (1995) view of EI skills development that promotes better workers and leaders.

The literature presented views on the relationship among this study variables teachers' EI, age, gender, tenure, and work accomplishments. Thus, this study will add to the literature gap and expand readers' understanding of the importance of EI in the workforce. Chapter 2 also shared researchers' work of EI and its relationship to teachers' age, gender, and years of teaching. The literature introduced controversial researchers' opinions of EI and age. Also, the literature explained that there are no significant differences in EI among genders, however, females shown higher score in communication and empathy to others than their males' counterpars.

The next chapter will explore the study research questions and its relationship to the study variables. Chapter 3 will also explain the study methodological approach, the utilized instruments for data gathering, and then proposed data analysis and interpretation.

Chapter 3: Methodology

This mixed methods study will explore Egyptian private school teachers' perceptions of EI use in the classroom. The study will investigate the association among teachers' age, gender, tenure, EI scores, perception of EI application in classroom, and perception of any potential impact on the prior year's self-reported annual teaching evaluations. This chapter will discuss the study procedures, research questions, and tools for data collection. Furthermore, this chapter will present the proposed data analysis, data interpretation, study sample, study reliability and validity, and Pepperdine Institutional Review Board (IRB) procedures.

This mixed methods study will utilize a concurrent triangulation design (Creswell, 2014) to facilitate analyzing and interpreting row data and increase the creditability and validity of this study (Creswell, 2014; Noble & Heale, 2019). Per this research, concurrent design will combine the WLEIS survey (People Matters, 2022) with opened-ended qualitative questions. The proposed quantitative WLEIS survey will be used to measure teachers' EI. The researcher will embed a qualitative questionnaire into the quantitative survey for additional required data (Creswell, 2014). The qualitative questions will inquire about teachers' perception of their EI in the classroom, and the extent to which, if any, they believe their use of EI in the classroom might have influenced their performance in the prior year. Additionally, the researcher will embed three quantitative questions into the WLEIS to collect demographic data regarding teachers' age, tenure, and the subjects they teach.

Research Questions

The research questions of this study are as follows:

 RQ 1 – Is there a relationship between WLEIS scores and teachers' annual performance?

- RQ 2 Is there a relationship between teachers' age and emotional intelligence as measured by the WLEIS?
- RQ 3 Is gender related to emotional intelligence as measured by the WLEIS?
- RQ 4 Is teachers' tenure related to WLEIS scores?

RQ 1 will investigate teachers' perceptions of their most recent performance evaluation and its relevance, if any, to their EI scores. According to Gutierrez and Mullen (2016) and Shami et al. (2017), employees with higher EI had lower levels of job burnout and better performance. RQ 1 is aligned with the research problem statement presented in Chapter 1, which discussed the lack of effective programs to improve educators' performance (Jacob & McGovern, 2015). Further, many teachers training programs focus on cognitive learning instead of emotional learning (Goleman, 1998). RQ 2 will add information to the literature about the relationship, if any, between teachers' age and their EI scores. Some studies revealed a strong relationship between age and EI (Fariselli et al., 2006; Uzonwanne, 2016). However, other studies have revealed no relationship between age and EI (Dimick, 2017, Jones, 2007; Okech, 2004; Van Dusseldorp et al., 2011). Therefore, there is a need for more studies to reveal the relationship between age and EI.

The relationship between gender and EI has also attracted researchers' attention in recent years. RQ 3 will investigate the relationship, if any, between gender and teachers' EI scores. Parker et al. (2006) found that women scored higher than men on the interpersonal dimension of EI. However, several studies have shown no significant differences between males and females in their demonstrations of emotional and social intelligence competencies (Hopkins & Bilimoia, 2008; Singh, 2002). RQ 4 will investigate the relationship, if any, between teacher's tenure and teachers' EI score. Galanakis et al.'s (2021) study result indicated that there is no significant difference between teachers' years of teaching experience and their level of emotional intelligence.

Sample Size and Demographics

In this study, the researcher will utilize random sampling. Further, a participant's contribution or non-contribution to the study survey will not affect another participant's contribution decision (Kummar, 2014). For this study, teachers must range in age from 25–65 years old, be either male or female, and work at Madinaty Language School in Egypt. The school's curriculum based on American standards that supervised by Global Education Management Systems (GEMS) organization (See Appendix A for school curriculum). Participants have diverse backgrounds of education and teaching grades that set up between kindergarten to high school. The proposed genders will contribute to the study investigation about the relationship between males and females and EI scoring in the Egyptian context. Ali's (2016) study investigated the relationship between males and females and females (students) and their EI scoring in Minia University in Egypt. The study results revealed that there were no significant differences between both genders and their total EI scoring. However, Ali's study revealed a positive correlation ship between student's academic achievement and EI scoring.

Kummar (2014) explained, "In quantitative studies you collect information from a predetermined number or people, but in qualitative research you do not have a sample size in mind- instead you collect data until you feel you have reached to the saturation point" (p. 248). The researcher will send the questionnaire surveys via Survey Monkey to all teachers at one private school in Cairo, Egypt. This school employs a total number of 100 teachers. The collected responses of completed surveys from the teachers who respond will be the study's

sample. The conclusions drawn from the collected responses will be generalized to the total sampling population (Kummar, 2014).

Although "the size of the sample is important for testing a hypothesis or establishing an association" (Kummar, 2014, p. 247), a quantitative size sample is associated with how much a researcher wants to achieve accurate results. Kummar (2014) explained that a researcher should consider the following:

At what level of confidence do you want to test your results, findings, or hypotheses? With what degree of accuracy do you wish to estimate the population parameters? What is the estimated level of variation (standard deviation), with respect to the main variable you are studying, in the study population? (p. 247)

Data Gathering Instruments

The instruments utilized in study will be tailored to accommodate additional data collection. A qualitative method will be utilized "for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2014, p. 4). The researcher will embed the qualitative questionnaire into the quantitative survey. Creswell (2014) defined the purpose of the embedded mixed methods as a:

Design that involves as well either the convergent or sequential use of data, but the core idea is that either quantitative or qualitative data is embedded within a larger design and the data sources play a supporting role in the overall design. (p. 16)

The embedded qualitative questions will be as follows.

- 1. How might your use of EI in the classroom have affected your most recent selfreported performance evaluation?
- 2. How did you use EI well in class? Please provide an example.

- 3. How did you use EI poorly in class? Please provide an example.
- 4. Check the box for Male Female

The quantitative WLEIS questionnaire will be used to measure teachers' EI. According to Creswell (2014), a quantitative method reveals the relationship, if any, between variables. Additionally, the researcher will embed the following quantitative questions into the WLEIS survey tool to gather additional demographic data:

- 1- What is your age group? A- (25–40) B- (41–65)
- 2- What are your total years of teaching?

For this study, the researcher will utilize the WLEIS instrument for several reasons.

- The first reason is the convenience of the established trials of the WLEIS tool among multiple cultures and demographics, lending to the appropriateness of utilizing the survey in Egypt (People Matters, 2022).
- The second reason is test accuracy because many researchers have tested the tool's reliability and validity (Acosta-Prado & Zárate-Torres, 2019; Jeong et al., 2020; Wong & Law, 2002a). Wong and Law developed the WLEIS tool to suit research in work enforcement (Acosta-Prado & Zárate-Torres, 2019). The survey was created based on J. D. Mayer and Salovey's definition of EI.
- The third reason is that the test consists of 16 items, which is time-efficient for test takers.
- The fourth reason is that this test model is distinguished from the Big Five personality model.
- The fifth reason is that WLEIS is a better prediction tool for an employee job performance than other tests (People Matters, 2022).

Nevertheless, the test items are designed to assess the four constructs of EI (the awareness of emotions in the self, the awareness of other's emotions, understanding feelings and emotions to manage thoughts, and how to regulate emotions to manage relationship with others; J. D. Mayer & Salovey, 1995). The survey items are designed based on a 7-point Likert scale start from 1 = strongly disagree, to 7 = strongly agree (People Matters, 2022). Using this scale, the researcher will calculate the scoring for each participant manually. Calculation will involve summing the items in the scale for each survey and then dividing this by total survey items (16) to calculate each participant's EI. The researcher will divide the sum of all participants' scores by the number of participants to calculate participants' average EI score.

The researcher will send the WLEIS survey tool with the embedded questionnaire to participants via Survey Monkey. Participants will have a 1-week period to answer the survey questions. The researcher will also send an introduction email prior to the Survey Monkey email to welcome participants and to briefly explain the topic, goal, and the purpose of the research. This email will also include a consent form that explains participants' confidentiality of information and anonymity. The researcher will provide the consent form in compliance with the Pepperdine IRB's requirements.

Description of Proposed Data Analysis Procedures

By conducting this study in compliance with the Pepperdine IRB and administering the proper instruments to measure the involved variables, this research will produce information about the sampled population (Creswell, 2014). Kummar (2014) explained that data analysis is the process of organizing and exhibiting row data to reveal patterns in the data. The researcher will present the results of data analysis in a narrative descriptive form (Kummar, 2014) in Chapters 4 and 5.

Quantitative Data Analysis

In this stage of analysis, the researcher will report the total number of responsive participants to the survey, which will determine the sample size of this research (Kummar, 2014). The collected data will be presented in tables that will accommodate the qualitative and quantitative responses. Per some quantitative collected data, the researcher will manually calculate the average scores of teachers' tenure and WLEIS survey scores. The researcher will utilize MT for data analysis, which will be described in the following section.

Triangulation and Data Analysis

Per this mixed method study, MT will be utilized for data analysis and interpretation. Kummar (2014) defined triangulation as involving more than one method of data collection to validate a study's results. In this study, the three elements involved in the MT are teachers' EI scores from the WLEIS survey, teachers' demographics, and teachers' perspectives on their EI application in the classroom (coding/themes). See figure 2 delineates data resources.

Figure 2

Triangulation of the Data



Teachers' WLEIS scores

The researcher will analyze qualitative and quantitative data by organizing row data of the three elements in sequential tables to elicit the relationship, if any, among the study variables. The researcher's observations and the study literature will be the dominant resources for data analysis and interpretation (Carvalho & White, 1997; Creswell, 2014; Kummar, 2014). Triangulation will enrich and confirm the study's credibility and validity (Creswell, 2014). According to Kummar (2014), triangulation facilitates the investigation of a phenomenon because of the diverse sources of data collection. MT helps to eliminate biases that might emerge from utilizing one method of a research, in addition to helping explain the complexity of human behavior in research (Carvalho & White, 1997; Creswell, 2014; Kummar, 2014).

Qualitative Data Analysis

Teachers' perspectives on EI and its application in the classroom will be elicited based on teachers' responses to the questionnaire embedded into the quantitative instrument. Kummar (2014) identified key steps for qualitative analysis, including reading through all the collected data to observe participants' overall thoughts and depth of their answers and organizing relevant data in chunks based on participants' responses verbatim to prepare the data for coding and themes. The researcher will elicit the main themes of the collected data, and how frequently those themes emerged in participants' responses. The researcher will limit the number of themes depending on the teachers' responses (Creswell, 2014). Creswell explained that limiting the themes numbers to 7 or 10 themes facilitate the researcher's observation between the study variables.

The researcher will utilize the entire themes in the appropriate tables among the study's variables to observe to what extent, if any, relationship between the elicited themes and the study variables. The process of revealing row data's themes is called coding (Creswell, 2014; Kummar, 2014). The researcher will manually identify the common themes as follows.

 Identify the main themes. The researcher will observe the repeated words that participants use to communicate their responses to the qualitative questions. Kummar (2014) explained the importance of selecting respondents' words to the opened-ended questions, noting that "It is important for you to select the wording of your themes in a way that accurately represent the meaning of the responses categorized under a theme." (p. 318)

- 2. Assign codes to the main themes. In this process the researcher will assign a number referring to how often a theme may be repeated in the participants' answers.
- Classify responses under the main themes. The researcher will observe the transcripts of participants' responses and classify selected words under the corresponding themes.
- 4. Integrate themes and responses into the text of the study.

Kummar (2014) explained researchers may choose how they want to emerge the findings of the themes into their studies. Kummar (2014) noted, "It entirely depends upon the way you want to communicate the findings to your readers" (p. 318). In a descriptive narration, the researcher will report the revealed themes and how often they appear in participants' responses using key verbatim responses to engage the readers in the study's findings.

Data Interpretation

Data interpretation is the process of eliciting insightful meaning of the analyzed row data (Kummar, 2014) that helps the researcher to reveal the relationship or connection, if any, between the study variables (Seth, 2021). For this study, the researcher will utilize MT to interpret the analyzed data and offer conclusions for each research question. The research questions for this study are as follows:

• RQ 1 – Is there a relationship between WLEIS scores and teachers' annual performance evaluation?

- RQ 2 Is there a relationship between age and emotional intelligence as measured by the WLEIS?
- RQ 3 Is gender related to emotional intelligence as measured by the WLEIS?
- RQ 4 Is teachers' tenure related to WLEIS scores?

The researcher will offer his observations regarding the data that has been organized in tables. Additionally, the researcher will utilize the review of literature and the theoretical framework to interpret the connections, if any, among the study variables (Creswell, 2014). Interpretation of the findings will involve numerical data such as teachers' male and female count per each age segment, average tenure, and average WLEIS score. Data interpretation will also describe the elicited themes from the coding process and their relevance to the study variables. The researcher will report data interpretation in a sequential narrative in Chapter 4 and offer conclusions based on the study's findings in Chapter 5.

A researcher can interpret qualitative research for different motives such as to convey personal meaning of the research, a research based, and actions meaning. A researcher's personal meaning could be derived from cultural and experiential points of view. A research-based interpretation can be derived from comparison between the involved study variables, literature, study results, and the information gathered. Actions meaning data interpretation is based on utilizing a research theory that a researcher may integrate into the research that could be compared to the research findings (Kummar, 2014).

Data Management

The researcher will store the collected data on a password-protected computer in his residence for 3 years. The collected data will not be identified, nor will it be linked to the participants' identity on that computer. However, for communication with participants, the

researcher will collect participants' names, emails, and phone number, or other identifiable information that will be stored separately from the collected data.

Reliability and Validity

Ensuring reliability and validity is a primary focus of this study, associated with all the utilized instruments and in the interpretation of data, mainly because "external validity threats arise when experimenters draw incorrect inferences from the sample data to other persons, other settings, and past or future situations" (Creswell, 2009, p. 162) Wong and Law are the original developers of WLEIS self-report inventory (Wong & Law, 2002a), which is based on J. D. Mayer and Salovey's definition of EI. The survey's four constructs are self-emotion appraisal, others' emotional appraisal, regulation of emotion, and use of emotion. The WLEIS's internal and external liability has been tested and retested in multiple cultures and demographics (People Matters, 2022). Furthermore, the test-retest reliability associated with the WLIES inventory scores has also been examined; the average (mean) score of the test item's reliability was found to range from .83–.90 (Wong & Law, 2002a). According to the results of test- retest and internal test reliability (coefficient alpha), the validity of the WLIES research instrument is credible (Wong & Law, 2002b).

Human Subjects Considerations

Prior to initiating any steps that involve any human contact for this study, the researcher will submit the research proposal to obtain written approval from Pepperdine University's IRB. Furthermore, this research will be conducted under the auspices of Pepperdine University in accordance with the U.S. Code of Federal Regulations (CFR), Title 45 Part 46 (45 CFR 46), titled Protection of Human Research Subjects, and Parts 160 and 164, titled Standards for

Privacy of Individually Identifiable Health Information and the California Protection of Human Subjects in Medical Experimentation Act (Pepperdine University, 2022).

Furthermore, this research will be conducted in a school district in Cairo, Egypt. The researcher will conduct the study in compliance with the accepted ethical principles established by the targeted school in Egypt. The sample of this research will be based on responses that the researcher will receive after sending out a survey to 100 teachers via Survey Monkey. The researcher will also send an introduction email prior to the Survey Monkey email to welcome participants and explain the goals and purpose of the research. This email will also include a consent form that explains the confidentiality participants' information and the anonymity afforded to each participant (Kummar, 2014). The researcher will provide the consent form in compliance with the Pepperdine IRB's requirements. Further, this email will be combined with an incentive gift card for volunteer participants to redeem.

All survey data will be password protected and will be stored on a password-protected computer. Data will also be backed up on a password-protected encrypted hard drive to which only the researcher has access. Once the data is analyzed and utilized to complete the study, all survey data will be destroyed upon completion of the study after the required 3-year period.

Chapter 3 Summary

Chapter 3 presented the goal of the study and its supported tools for data collection, data analysis and interpretation. This mixed methods study will investigate the association among teachers' demographics, EI scores, perception of EI application in classroom, and perception of any potential impact on the prior year's self-reported annual teaching evaluations. Chapter 3 also explained research tools' reliability and validity and provided examples of data analysis and interpretation that will be described in more detail in Chapters 4 and 5.

Chapter 4: Presentation of Findings

Chapter Overview

Recently, EI has become an important subject in organizational development (Druskat et al., 2006). This mixed methods study focused specifically on an education system to contribute to the literature and practitioners in the field of education. This study was based on Goleman's (2005) work indicating that leaders' ability to accomplish their jobs successfully and to influence their followers is associated with their EI. In this study, teachers were considered leaders and students their followers. This study investigated the possibility of the relationship, if any, between teachers' EI and its impact on their self-reported school evaluation from the previous year. This study also investigated the possibility of the relationship, if any, among teachers' age, gender, tenure, and EI. This chapter will report the collected data that are supported by charts and tables. The charts are based on the collected data related to the study variables by surveying participants. The reported data from the quantitative survey will be utilized to measure and compare participants' EI and to quantify participants' gender. The reported data from the embedded qualitative questions to the survey will be utilized to elicit themes or patterns of participants' perception of EI and its impact on their work accomplishment. The elicited themes will be supported by some of participants' exact responses to the qualitative questions. Further, this chapter will include data analysis and integration of the qualitative and quantitative findings, which will lead to the study's conclusion.

For this study, the researcher chose Madinaty Language School in Egypt to investigate the potential impacts of teachers' EI in an educational system in the Middle East. Madinaty Language School's curriculum and management is based on the American system of education

curriculum that is supervised by Global Education Management Systems GEMS (See Appendix A for school curriculum).

Participant Demographics

After receiving Madinaty's permission to conduct the study, the researcher sent an email to the school officials, including the purpose and the process of the study. Ninety emails were sent to the study population, containing an invitation to complete a brief survey, a consent letter, and a link to the survey itself. Those who responded formed the study's sample.

SurveyMonkey was utilized to administer the survey to ensure participant anonymity. Seventy-seven participants responded to the proposed survey within a 2-week period. The sample comprised five male participants and 72 female participants. Participants were between 25–65 years old. Madinaty's teachers serve grades kindergarten to high school and have earned bachelor of science degrees. The researcher divided teachers' experience in three segments in order to link their experience to their EI score; teachers' years of experience ranged between 0– 10 years, 11–20 years, and 21–40 years. The third segment, 21–40, comprised two decades because it reflected teachers who have been in their teaching career for 21 years or more.

Findings and Analysis - Quantitative Findings

Table B1 (See Appendix B) illustrates the 77 of participants' responses to the survey. The table includes WLEIS mean scores, age groups, gender, and tenure. Each participant's EI score and the total mean score for all participants were calculated utilizing Microsoft Excel software. The WLEIS questionnaire is based on Goleman's (2005) four constructs of emotional EI: self-awareness, self-management, social awareness, and social management (People Matters, 2022). The Participants' total EI mean score was 430.81.
The following tables, bar charts, and pie charts presented subsequently will reflect data in percentages. The bar and pie charts will integrate both research methods (qualitative and quantitative) to facilitate data analysis and findings.

Qualitative Findings

Table 1 summarizes the elicited themes from participants' answers to the qualitative questions. Table 1 demonstrates that participants reported twice in qualitative questions one and two their use of higher empathy toward their students that may have impacted their annual self-rating evaluation. See table 1.

Table 1

Elicited Themes From the Qualitative Questions

First Qualitative Question	Second Qualitative Question	Third Qualitative Question
Themes	Themes	Themes
Positive Effect	Positive Emotion	Negative Emotion
Negative Effect	Self-Awareness	Stress
Higher Empathy	Higher Empathy	Misjudging
Student High Performance		Never Used EI Poorly

First Qualitative Question

Regarding the first qualitative question "How might your use of emotional intelligence (EI) in the classroom have affected your most recent self-reported performance evaluation?" Respondents to the study directly reported their answers to the first question, which will be illustrated in Figure 3. However, some respondents voluntarily reported more information relevant to their use of emotional intelligence in the classroom, which will be illustrated in Figure 4. See the following table 2 that illustrates participants' answers.

Table 2

Themes in Participants' Answers to the First Qualitative Question and WLEIS Scores. "How Might Your Use of Emotional Intelligence (EI) in the Classroom Have Affected Your Most Recent Self-Reported Performance Evaluation?"

Participant Answer	Number of Responses	WLEIS Score	Mean
Positive Effect on Self Evaluation	38	3292	86.63
Negative Effect on Self Evaluation	1	31	31
Higher empathy	15	1447	96.47
No Answer	20	1843	92.15
Student High Performance	3	280	93.33

See the figure 3 that demonstrates participants' answers.

Figure 3

Themes in Participants' Answers to the First Qualitative Question, "How Might Your Use of Emotional Intelligence (EI) in the Classroom Have Affected Your Most Recent Self-Reported Performance Evaluation?"



Note. Number of responses in %.

Of the study participants, 49.4% (38 respondents) asserted that their use of EI in the classroom gave them greater confidence to rate themselves higher on the annual review. some examples of participants' responses to the first qualitative question are: "Helped a lot," "very

high," "yes," "very effective," "strongly effected," "positive," "effective performance," "many times," "it helps achieve high evaluation score," and "of course it affected my performance in class positively." Of the participants, 1.3% (one respondent) reported that they did not focus on utilizing EI in the classroom and it may have a negative impact on their previous year's self-reported evaluation. The participant used term "Slightly negative" in their answers to the qualitative question as they believed by not using EI in the classroom impacted negatively their self-reported evaluation. Of the participants, 26% (20 respondents) did not answer the first qualitative question. Of the participants, 23.4% is other themes that will be explained in the following Figure 4.

The following Figure 4 delineates the percentage of some participants who voluntarily reported to the first qualitative question that they believed using higher empathy in the classroom may had an impact on their annual self-reported evaluation. Also, some participants reported they believed that their use of emotional intelligence in the classroom has impacted students' performance. See figure 4.

Figure 4

Participants Who Voluntarily Reported Higher Empathy and Students' High Performance to the First Qualitative Question, "How Might Your Use of Emotional Intelligence (EI) in the Classroom Have Affected Your Most Recent Self-Reported Performance evaluation?"



Note. Number of responses in %.

Among the participants, 19.5% (15 respondents) reported that their use of higher empathy towards their students in the classroom had a positive impact on their previous year's self-reported evaluation. For example, one teacher stated, "I always use emotional intelligence with my students inside my classes as most of my students are sensitive and before receiving an information, they have to receive love and care first." Another said,

interacting with students, I treat each student according to the suitable way for him or her and I reach this quickly, I act like a mother before being a teacher, I control how I feel inside the classroom and pay attention to the students' feelings too.

Of the participants, 25.97% did not have an answer to the first qualitative question. Some participants answered, "I don't know." Among the participants, 3.9% (three respondents) of their answers to the first qualitative question were not directly related to their self-reported evaluation, and yet, it implied that their usage of EI in classroom has positive impact on students' performance and final evaluation. Example of participants' answers include:

- "Teachers who love teaching, teach children to love learning."
- "Emotional intelligence helps students better analyze situations."
- "It is not only helping students interact with others better, but also helps them tackle academic issues with greater panache."
- "The better a student can come to grips with a situation, the more in control they are of it."
- "I believe that EI development has been linked to improved decision-making, commitment, problem solving, and many other behaviors associated with effective performance in the classroom. Students need to learn that every action comes with a

consequence and it's okay to make mistakes. We learn from our errors. Errors need to be welcomed: The exposure to errors in a safe environment can lead to higher performance"Out of all participants, 76.6% reported directly to the first qualitative question as explained previously in Figure 3.

Figure 5 illustrates a positive correlational relationship between themes elicited in teachers' responses to the first qualitative question and participants' WLEIS mean scores. The elicited themes included higher empathy, positive effect on evaluation, and high student performance.

Figure 5

Themes in Participants' Answers to the First Qualitative Question Using WLEIS Mean Scores, "How Might Your Use of Emotional Intelligence (EI) in the Classroom Have Affected Your Most Recent Self-Reported Performance Evaluation?"



The results presented in Figure 5 imply that teachers who believed they showed higher empathy to their students in the classroom scored the highest (96.47) in WLEIS mean, teachers who claimed that EI use in the classroom had a positive impact on how they rated themselves in their self-reported school evaluation scored 86.63 in WLEIS mean, and teachers who claimed that EI has a positive impact on students' performance in the classroom scored 93.33 in WLEIS mean. In contrast, 1.3% of total participants claimed that they did not focus on utilizing EI in the classroom scored 31 in the WLEIS mean. For example, of one of the teachers' responded, "I didn't use it." Of the participants who did not answer the first qualitative, 25.97% earned a 92.15 in EI mean score, which is a high score in comparison to participants who showed higher empathy or did not answer this question.

Second Qualitative Question

The second qualitative question asked, "How did you use emotional intelligence (EI) well in class? Please provide an example." Table 3 illustrates to what extent participants' usage of EI in the classroom may have affected their previous year's self-reported performance evaluation.

Table 3

Thematic Patterns of Participants' Answers to the Second Qualitative Question and Their WLEIS Scores, "How Did You Use Emotional Intelligence (EI) Well in Class? Please Provide an Example."

Participant Answer	Number of Responses	WLEIS Score	Mean
Positive emotion	27	2432	90.07
Self-Awareness	5	389	77.8
Higher empathy	38	4543	93.24
No Answer	20	1712	85.60

Table 3 presents themes and patterns from participants' answers to the second qualitative question and participants' WLEIS scores. Out of participants, 49% (38 respondents) of teachers reported that showing higher empathy with students in the classroom was reflected their usage of EI. Additionally, those teachers who showed higher empathy toward their students earned the highest on the WLEIS mean score (96.47). For example, one teacher answered, "I found some psychological cases among the students, and I treated them well" Another teacher indicated that they show higher empathy toward students when the students are angry, stating, "I always be

calm and absorb the anger of others" Also, 27 respondents to the study who showed positive emotions toward students in the classroom under stressful situations earned high score (90.07) on WLEI mean in comparison to those who showed higher empathy toward their students. Five respondents to the study reported that they used their EI well in the classroom by being aware of their emotions, self-regulating their emotions, and acting according to situations toward their students. One teacher reported, "I leave me negative emotion outside the classroom" Another teacher responded, "I control how I feel inside the classroom and pay attention to the students' feelings too."

Figure 6 illustrates themes elicited from participants' answers in percentage to the qualitative question 2, "How did you use emotional intelligence (EI) well in class? Please provide an example."

Figure 6

Themes in Participants' Answers to the Second Qualitative Question, "How Did You Use Emotional Intelligence (EI) Well in Class? Please Provide an Example."



Note. Number of responses in %.

Participants' number of responses are demonstrated in percentages. Of the participants' answers, 18% believed that they were affectionate and communicated well in class with their

students using EI skills. Teachers' effective communication and affection toward their students were translated in coding process as positive emotions. An example of a teacher's response that showed their affection and effective communication in the classroom were as follows:

Let the students be involved in all the class activities, I communicate with my kids by hugs and emotions, whenever I'm in a good mood I try to cheer up my students & play games, when a kid crying for missing his or her mom, I always put myself in other people shoes so I can understand the motive behind their actions and act reasonably and mercifully

Of participants' answers to the second qualitative question, 7% percent of respondents reported that teachers' self-awareness of their emotion, how they regulate their emotion, and how they manage their relationship with students accordingly were a part of their EI communication. Some examples of teachers' answers reflecting their awareness of their emotion and how they managed their relationship with their students are as follows: "control my anger and understanding student feelings," "if my student makes a noise or doesn't pay attention, I clap three times or I stair to them with sad face emotional," and "I always try to leave negative feeling outside class." Of the participants, 49% (38 respondents) of participants believed that showing higher empathy toward their students reflected their utilizing their EI. 26% of participants did not answer the second qualitative question.

Figure 7 illustrates the possibility of a relationship, if any, between teachers' EI and their answers to the second qualitative question.

Themes in Participants' Answers to the Second Qualitative Question Using WLEIS Mean Scores, "How Did You Use Emotional Intelligence (EI) Well in Class? Please Provide an Example."



Teachers who showed positive emotion and higher empathy in the classroom toward their student scored (86.63 and 96.47, respectively) on WLEIS. Of the study participants 26% did not answer the second qualitative question scored (92.15) on WLEIS mean. Teachers who were aware of their emotions (7%) while communicating with their students scored 31 on WLEIS mean, which is considered a low EI score comparing to teachers who showed higher empathy toward their students.

Third Qualitative Question

The third qualitative question asked, "How did you use emotional intelligence (EI) poorly in class? Please provide an example." As shown in Table 4, eight participants claimed that their actions and communication with their students in the classroom combined with negative emotion when they used EI poorly, and yet they earned a high score on the WLEIS mean (95.5)

Table 4

Thematic Patterns of Participants' Answers to the Third Qualitative Question and Their WLEIS

Participant Answer	Number of responses	WLEIS Score	Mean
Negative Emotion	8	764	95.5
Stress	15	1315	87.67
Misjudging	2	206	103
Never used (EI) Poorly	8	711	88.88
No Answer	44	3744	85.09

Of the 15 participants who did respond, they claimed that workload stress in addition to personal stress contributed to their using EI poorly in class. These participants scored moderately (87.67) on WLEIS mean. Two participants claimed that sometimes they do not communicate well with students because they cannot understand why students misbehaving. One teacher reported "I don't know why students cry to go home for no reason" As a result, they misjudge students' behavior and do not manage or control their emotions in the classroom, yet they earned the highest score on the WLEIS mean in comparison to the other respondents.

Eight participants claimed that they never used EI poorly in the classroom, however, their WLEIS mean score does not reflect a high score in comparison to those who misjudged students' behavior or to those who had a negative emotion toward their students in the classroom. Forty-four participants did not answer the third qualitative question, and their WLEIS mean score was the lowest. See figure 8.

Themes in Participants' Answers to the Third Qualitative Question, "How Did You Use Emotional Intelligence (EI) Poorly in Class? Please Provide an Example"



Note. Number of responses in %.

Of participants, 10% claimed that they never used EI poorly in class. Some of the participants' answers were just one word or two. Example of participants' answers are "there was no incident that I use EI poorly in class, I did not, I don't use it, never;" 57% of participants never answered the third qualitative question and left it blank. Ten percent of participants claimed in their answers they used EI poorly in class. They believed that showing negative emotions or acts in some situations toward their students in the classroom reflected how poorly they used their EI. Examples of participants' answers that reflected their negative acts toward their students in class are "when I am angry, I don't smile in class, use punishment" 20% of teachers related their poorly usage of EI to their stress in the classroom because of students' inappropriate behavior and the overwhelming curriculum that teachers are obligated to deliver. Additionally, some teachers addressed that they have health issues that impact their behavior toward students in the classroom. Examples of participants' answers that reflected their stress "when a kid crying without real reason, I use it poorly when I see a student that always cries and she wants to be home without any reasons of hating school, sometimes physical illness is a

barrier of applying positive environment inside the class" 3% of participants believed that they poorly used their EI skills when they misjudged or did not assess students' feelings fairly and response properly. Further, those respondents reported that sometimes in the classroom they were not aware of their emotion, they are not regulating their emotion, and they communicated poorly with their students. Examples of teachers' answers are "by judging students without listening to them, it can affect my decisions sometimes, when I am highly provoked, lost my temper."

Figure 9 illustrates elicited themes from teachers' answers of the third qualitative question and the WLEIS mean score. This chart implies that teachers (10%) who claimed they never poorly utilized their EI in class scored 88.88 on the WLEIS mean. Teachers (20%) who poorly utilized EI because of stressful curriculum and their physical illness scored 87.67 on the WLEIS mean. Teachers (57%) who did not answer the question scored 85.09 on the WLEIS mean.

Figure 9

Themes in Participants' Answers to the Third Qualitative Question Using the WLEIS Mean Score, "How Did You Use Emotional Intelligence (EI) Poorly in Class? Please Provide an Example."



Although, 10% of teachers expressed their EI poorly and their actions were combined with negative emotions toward students, they still rated themselves high (95.50) on the WLEIS mean in comparison to those who claimed that they never used EI poorly in class. These teachers were able to answer the EI survey questionnaire, but they were managing their emotions in the classroom improperly, which they attributed to their overwhelming workload or physical illness in their responses to the qualitative questions. Further, the (3%) of teachers who reported misjudging students' behaviors and feelings scored the highest 103 on the WLEIS mean.

Figure 10 illustrates participants' age groups using percentages. The study population encompasses 77 participants from Madinaty Language School. 79% of teachers were aged 25–40 and 21% between the ages of 41–65.

Figure 10

Participants' Age Groups and Number of Responses Using Percentages



Figure 11 illustrates that both teachers' age groups (25–40, 41–65) earned almost the same EI mean score (89.52 and 89.50, respectively)

Participants' Age Groups and EI Mean Score



Figure 12 illustrates that females' teachers were dominant participants in this research.

Five males and 72 females participated in the study.

Figure 12

Percentage of Male/Female Study Respondents



Figure 13 reflects the percentage of the involved genders in the study population (77 participants). Males are represented 6% of the sample and females represented 94% of the sample.

Participants' Gender



Note. Number of responses in %.

Figure 14 illustrates female teachers (who represented 94% of the study participants) scored higher on the WLEIS mean (89.71) than male teachers (86.80).

Figure 14

Participants' Gender EI Using WLEIS Mean Score



Figure 15 delineates three segments of teachers' tenures in terms of percentage. Fifty-one percent of participants have been teachers for 0–10 years, 40% of participants have worked as teachers for 11–20 years, and 9% of participants have worked as teachers for 21–40 years.

Participants' Tenure in Percentage



Figure 16 delineates teachers' tenure and their WLEIS mean scores. The chart shows that teachers' who have been teaching from 11–20 years had the highest WLEIS mean score (92.00). Teachers who had been teaching from 21–40 years had the lowest WLEIS mean score (83.71). Teachers who have been teaching from 0–10 years had an intermediary WLEIS mean score (88.59).

Figure 16

Participants' Tenure and WLEIS Mean Score



According to Table B1 (See Appendix B), 39 females' teacher out of the 72 had 0–10 years of teaching experience and were between 25–40 years old. They scored 88.59 on WLEIS mean, which falls between the other tenure groups. Four out of five total male participants fell between 11–20 years of teaching experience, and their average WLEIS mean score was 92.5.

According to Table D1, regardless of participants' gender, teachers who fell between 11–20 years of teaching experience had the highest WLEIS mean score (92.00). In contrast, teachers with 21–40 years of experience had the lowest WLIES mean score (83.71).

Data Collection and Findings

The researcher designed a questionnaire administrated by SurveyMonkey that included the Wong and Lang Emotional Intelligence Scale survey (WLEIS) to measure participants' EI. This instrument allows participants to rate answers from 1 = *strongly agree* to 7 = *strongly disagree*. The questionnaire also contained embedded quantitative and qualitative questions for additional data collection and robust results (Creswell, 2014). The survey remained open and available to participants for a period of 2 weeks, then was closed. Once data was received from 77 participants, the researcher begun organizing the row data in tables to facilitate an analysis of possible associations between the study variables. To review, the research questions for this study were as follows:

- 1. Is there a relationship between WLEIS scores and teachers' annual performance evaluation?
- Is there a relationship between age and emotional intelligence as measured by the WLEIS?
- 3. Is gender related to emotional intelligence as measured by the WLEIS?
- 4. Is teachers' tenure related to WLEIS scores?

First Research Question

To address research question one, the researcher utilized WLEIS (See Appendix C) to measure teachers' EI average mean scores. Teachers' annual performance (See Appendix D) was measured using the following qualitative questions:

- 1. How might your use of emotional intelligence (EI) in the classroom have affected your most recent self-reported performance evaluation?
- How did you use emotional intelligence (EI) well in class? Please provide an example.
- How did you use emotional intelligence (EI) poorly in class? Please provide an example.

Some of the participants' answers to the qualitative questions reflected Goleman's EI four constructs and some participants did not answer the qualitative questions. The researcher studied participants' answers to these questions multiple times before proceeding with coding. Coding is the process of comprehending the collected data to possibly link it to the research questions. Further, coding entails organizing row data and creating themes that emerge as repetitive patterns in participants' answers that may imply a meaning relevant to the research questions (Creswell, 2014). Per this mixed methods study, the researcher organized and integrated qualitative and quantitative data in tables and charts to maximize internal validity (Kummar, 2014). Kummar (2014) asserted that data collection and analysis are most supported when mixed methods are utilized in research because participants' answers gathered via method could be confirmed or complemented by the second method. Therefore, the researcher utilized the following tables and pies to integrate participants' answers from both methods to arrive at robust conclusions.

The first research question asked, "Is there a relationship between WLEIS scores and teachers' annual self-reported performance evaluation?" Data analysis implied that almost 50% of the study population believed and confirmed their belief that utilizing EI in the classroom positively influenced their annual self-reported teaching evaluation. This group scored 86.63 on

the WLEIS mean. In contrast, 1.3% of participants confirmed that EI in the classroom had no impact on their recent year school evaluation; these participants earned lower score on the WLEIS mean 31. Bolkan and Goodboy's (2009) study found a strong positive correlation between some components of teachers' transformational leadership style and students' outcomes attributed to effective communication that involves EI abilities. In this study, 3.9% of teachers said they believed their use of EI had positive impact on students' performance, all of whom earned a relatively high score on the WLEIS mean (93.33).

Second Research Question- Age and Emotional Intelligence

Research question two asked, "Is there a relationship between age and EI as measured by the WLEIS?" Data analysis showed that the percentage of teachers in Madinaty Language School in the 25–40-year-old age group was much higher (79%) than teachers in the 41–65-year-old age group (21%). Both age groups scored almost the same (89.52 and 89.50) when they took the WLEIS.

Table 5 illustrates the relationship, if any, between participants in age groups 25–40 and 41–65 and their WLEIS mean score. The table reflects that there is no significant difference between the two age groups of participants and their WLEIS test results. In other words, the average WLEIS mean score for participants who were 25–40 years old are almost the same as the scores for those who were 41–65 years old.

Table 5

Participants' Age Groups and WLEIS Scores

Age Group	Number of Responses	WLEIS Score	Mean
25–40 years	61	5461	89.525
41–65 years	16	1432	89.500

Third Research Question: Gender and Emotional Intelligence

Research question three asked, "Is gender related to emotional intelligence as measured by the WLEIS?" Data collection reflected that females' teachers were more dominant participants in the study (94%) than their counterpart males. Additionally, females earned a higher EI score (89.71) than their male counterparts (86.80). According to their answers to the qualitative questions, female teachers expressed more effective communication with students by utilizing higher empathy and compassion with students in the classroom.

Table 6 illustrates the relationship, if any, between participants' gender and their WLEIS score. The table reflects those female teachers scored higher (89.7) in EI than their counterpart males teachers (86.8)

Table 6

Participants' Gender and WLEIS Scores

Gender	Number of Responses	WLEIS Score	Mean
Male	5	434	86.8
Female	72	6459	89.7

Fourth Research Question: Tenure and Emotional Intelligence

Research question four asked, "Is teachers' tenure related to WLEIS scores?" Teachers who scored the highest on the WLEIS mean (92.00) had career experience between 11–20 years and teachers who scored the lowest on the WLEIS mean (83.71) had career experience between 21–40 years. Teachers who had 0–10 years career experience scored (88.59) on the WLEIS mean.

Table 7 illustrates the relationship, if any, between participants' tenure and WLEIS score. Teachers' tenure was divided into three segments: 0–10 years, 11–20 years, and 21–40 years. The 31 teachers who have been in the teaching career between 11–20 years scored the highest (92) on average WLEIS mean score. Teachers who have been in their careers the longest 21–40 years scored the lowest (83.7) in WLEIS mean score. For teachers who are building their experience in education 0–10 years, their WLEIS mean score (88.590) fell between the other two tenure segments.

Table 7

Participants' Tenure and WLEIS Scores

Teachers' Tenure	Number of Responses	WLEIS Score	Mean	
0–10 years	39	3455	88.590	
11–20 years	31	2852	92.000	
21-40 years	7	586	83.714	

Summary of Chapter 4

Chapter 4 reported the collected data from these mixed methods of this study. The collected data was organized in tables and charts to integrate the qualitative and quantitative methods and contributed to the process of data analysis. The purpose of data analysis was to reveal the extent to which teachers who scored highest on WLEIS mean also gave themselves high scores in their self-assessment. The data analysis presented in Chapter 4 also contributed to the literature regarding teachers' age, gender, tenure, and teachers' EI.

Chapter 5 will discuss and explain in detail the collected data. Further, Chapter 5 will demonstrate the connection among this study's variables, results, and the review of literature regarding EI. The researcher will share the study's conclusion, limitations, and validity. Additionally, the researcher will share suggestions that may benefit school principals and educators to improve teachers' performance and students' academic achievement.

Chapter 5: Discussion, Conclusions, and Recommendations

Chapter Overview

This chapter will present a summary of this study, including study's problem, theory, methodology, and conclusion. The chapter will link the study findings to literature and recommendations for future research. The researcher will suggest recommendations for practice based on the study's results and conclusions.

Study Problem

The problem that this research address is that most of training and developmental programs for teachers do not develop their EI because they are designed to enhance workers' intellectual or cognitive learning instead of their emotional learning (Goleman, 1998). Mayer (2002) defined cognitive learning as an expansion of knowledge attributable to experience. Cognitive learning can be distinguished from emotional learning on the basis that cognitive learning involves a change in the learner's knowledge, whereas emotional learning involves a change in the learner's knowledge, whereas emotional learning involves a change in the learner's behavior (Goleman, 2005).

Theoretical Framework

The theoretical foundation of this study is based on the work of Daniel Goleman (2005), who tested the EI of leaders and its influence on leaders' performance and followers' behaviors at work. In particular, he explored leaders' accomplishments, what it takes for a leader to be successful, and the importance of EI in comparison to IQ. In this study, teachers were considered leaders in their jobs and students were considered their followers.

Study Methodology

Data collection was based on concurrent timing design, which presented combined instrument tools to participants simultaneously (Kummar, 2014). The researcher created a

customized survey that embedded a qualitative questionnaire into the quantitative survey for additional data collection (Creswell, 2014) about teachers' perception of their EI application in the classroom. Furthermore, the embedded questionnaire collected data about teachers' perceptions of what might have affected their previous year's performance evaluation. The WLEIS (People Matters, 2022) is the used quantitative survey used to measure teachers' EI. For this study, MT was utilized to analyze and interpret row data (Creswell, 2014; Kummar, 2014). MT entails using more than one tool to measure the study variables and to analyze the gathered data. MT will also involve previous literature and any other available data to derive the study's conclusions (Creswell, 2014). MT also facilitates eliciting the association, If any, between the involved variables of this study population because of the various data resources. Furthermore, MT supports the study's credibility because the utilized instruments' results will cross validate and confirm one another (Creswell, 2014). SurveyMonkey was the tool used for data collection. A total of 77 participants responded out of 90 emails were sent out initially. The study population was based on teachers of both genders employed at Madinaty Language School in Egypt. The researcher organized collected data in tables and charts to facilitate observation and interpretation of the study variables and their link to the literature. The researcher calculated teachers' EI mean by utilizing a Microsoft Excel spread sheet. Some of the data were converted to percentages and demonstrated in bar and pie charts for data analysis. Coding process was utilized to analyze the qualitative questions in order to elicit patterns from participants' answers that helped answer the research questions.

Key Findings

First Research Question

The first research question asked, "Is there a relationship between WLEIS scores and teachers' annual performance evaluation?" Data analysis implied the following:

- Out of the study participants, 49.35% of the study sample believed that utilizing EI helped them in the classroom and they rated themselves higher in the self-reported annual evaluation.
- Higher empathy and managing one's emotion in the classroom associated with WLEIS high mean score. Of the study participants, 49.35% scored 96.47 in WLEIS mean and utilized higher empathy toward their students.
- Out of the study population, 1.3% confirmed that EI in the classroom had no impact on their recent self-reported teaching evaluation. These participants earned low (31)
 WLEIS mean score.
- Out of the study sample, 3.9% of respondents said they believed their use of EI had positive impact on student's performance. These participants earned high (93.33)
 WLEIS mean score.

Second Research Question

Research question two asked, "Is there relationship between age and EI as measured by the WLEIS?" Data analysis implied the following:

• This study found no significant correlation between teachers' age and EI mean score; teachers between the ages of 25–40 years old earned WLEIS mean scores almost identical (89.52 and 89.50) to those of teachers between the ages of 41–65 years old.

Third Research Question

Research question three asked, "Is gender related to emotional intelligence as measured by the WLEIS?" Data analysis implied the following:

- This study's result shown that gender is related to emotional intelligence as measured by the WLEIS test.
- Female participants earned a higher mean score 89.71 on the WLEIS than their counterparts' male teachers who earned less mean score 86.8 on the WLEIS.
- Female teachers reported that they expressed more effective communication with students by utilizing higher empathy and compassion with students in the classroom.

Fourth Research Question

Research question four asked, "Is teachers' tenure related to WLEIS scores?" The study analysis implied the following:

- Teachers who scored the highest mean score on the WLEIS survey (92.00) had career experience between 11–20 years.
- Teachers who scored the lowest mean score on the WLEIS survey (83.71) had career experience between 21–40 years.
- Teachers who are building their experience in education (0–10) years, their WLEIS mean score on WLEIS (88.59) fell between the other two tenure segments.

Overall Conclusions

The literature has emphasized on the importance of EI in leadership and its' influence on leaders' accomplishments (Bar-On, 1997; Goleman, 1995; Law et al., 2008; Shih & Susanto, 2010; Slaski & Cartwright, 2003). Goleman (1995) and Gardner (1983) emphasized the power of EI in the workforce, noting that individuals who possess high EI may reach top positions. Many researchers have pointed to the importance of teachers' EI and its impact on teachers' performance and student motivation (Dabke, 2016; Wang, 2022). Prior literature indicated that students view teachers with higher EI as more effective performers in the classroom than teachers with lower EI (Elias et al., 2006). In this study, nearly half (49.35%) of participants who scored high on the WLEIS believed that they used EI positively in the classroom. They also rated themselves higher on their annual self-evaluation over respondents who did not believe that EI has an impact on their self-reported evaluation. Additionally, 27 out of 72 female respondents' answers indicated that teachers who believed in reflecting positivity, communicating well with their students, and by listening with higher empathy to students also earned high mean score on the WLEIS (90.07). Further, when teachers were asked how the usage of EI in the classroom affected their prior year's performance evaluation, 3.9% of teachers believed that using EI in the classroom not only affected their performance, but also motivated students for better performance and final grades. This finding aligns with Chapin's (2015) suggestion that students are more motivated and productive when teachers create a healthy class environment, can manage stressful situations in classroom, and engage in sound decision making. Teachers may also have more influence on their students when they use EI skills to understand students' feelings and to respond accordingly (Hong, 2016).

Furthermore, many researchers (Gardner, 2006a; Goleman, 1995; J. D. Mayer & Salovey, 1997; Miao et al., 2017) have agreed that workers who score higher in EI are better able to assess and to manage their own emotions than workers who score lower in EI. From this study's conclusions, participants reported that their EI skills were combined with higher empathy toward their students. Teachers who also scored high in EI were more aware of their emotions, and they could utilize their EI skills to process and reevaluate their emotions and respond to situations

accordingly. Further, the qualitative and quantitative findings of this research reflect that teachers' motivation to progress their carrier and self-awareness of their emotions are strongly linked to one another. These findings confirm that effective classroom teachers who are managing their feelings associated with EI can make the class environment more interesting for learning transfer (Layne, 2012). Moreover, teachers' stress from their workload and students' unruly behavior could be reduced when they are able to manage their emotions and student-teacher relationship.

These findings confirm that school evaluation of teachers' performance is associated with EI (Drew, 2007), however, there are other factors to which previous researchers have alluded that perhaps affect individuals' EI such as age, gender, and tenure (Anitei, 2007; Dewaele, 2018; Druskat et al., 2006; Valente, 2020).

First Factor

The first aspect that may have an impact on teachers' EI is teachers' age. Some studies have found no relationship between person's age and EI (Dimick, 2017; Jones, 2007; Okech, 2004). However, some studies have shown a strong relationship between age and EI (Fariselli et al., 2006; Uzonwanne, 2016). In this study, there was no significant difference in EI score (89.52, 89.50) between both the two age groups (25–40 years old and 41–65 years old).

Second Factor

The second aspect is gender differences. Druskat et al. (2006) claimed that females consistently scored higher than males in each of the EI four branches (perceiving emotions, using emotions, understanding emotions, and managing emotions). In contrast, Bar-On (2004) found no significant statistical difference in overall EI scores between males and females. Additional studies have examined gender differences in EI, revealing that females scored higher in social

skills (Petrides & Furnham, 2000) and interpersonal skills (Druskat et al., 2006). Females also scored higher in empathy and emotion self-awareness, whereas males tended to score higher in stress management (Cherniss & Goleman, 2001). In this study, female teachers earned higher EI mean score (89.71) than their male counterparts (86.80).

Third Factor

The third factor that may affect teachers' EI is how long teachers have been teaching, as well as their accumulated experience. The literature indicated a positive correlation between teachers' years of teaching and their level of EI (Dewaele, 2018; Valente, 2020). Dewaele (2018) found positive association between teachers' experience, communication with students, and earning high EI score. However, in this study, teachers who have been teaching for 21-40 years earned the lowest in EI scores (83.71). Valente (2020) found that teachers could develop more awareness of their own emotions and students' behavior because of the long years of practice the profession of teaching. In contrast, some literature argued that new hires with less work experience can have poor communication skills. Dewaele found that teachers with less experience are not effective communicators with students and tend to score low in EI. Yet, in this study finding, teachers who had (11-20) years of teaching experience scored the highest in WLEIS mean (92.00), which could be an opportunity for further research to investigate the underlying cause for this result. Therefore, there is no definitive answer regarding teachers' tenure, and teachers' level of EI. Also, further studies may continue revealing other aspects such as personality traits, surrounding environment, and genetic influences on individuals' EI levels.

In this study, 26% of participants did not answer when asked how they utilized EI well or poorly in the classroom, and yet they scored high mean on the WLEIS test (92.15). Perhaps these participants did not understand what EI is and its dimension practice in the classroom. Also,

perhaps they communicated their emotion in classroom with their innate personality traits. In other words, they follow their feelings and instincts and utilize their work experience to manage their emotions and to direct their thoughts (J. D. Mayer & Salovey, 1995; Valente, 2020). From the researcher's observation to previous literature, EI may involve genetic traits that intertwined with the big five personality factors that some individuals may innately possess and reflect in their daily life as a part of their social skills (Vernon et al., 2018). Further, Kosonogov et al. (2019) explained that for people with high EI some of their brain areas are associated with brain chemical activities relevant to EI. According to a report from Aspenridge Recovery (2007) decision making, moods, and behaviors could be affected when individuals encounter deficiencies in our brain chemicals, dopamine and serotonin. According to this notion, some individuals may genetically lack the necessary traits elements to be able to utilize EI in their daily lives. Hyland (2007) explained that dopamine and serotonin can be inheritably deficit, attribute to lack of the concentration of some of some enzymes that are required for the neurotransmitters cycle in the brain. Therefore, genetic factors could impact the use of an individual's EI.

Implications for Practice

The education system's leaders and Egypt's ministry of education could benefit from this research because they search for teaching improvement and more qualified teachers for learning transfer and treating students fairly. The benefit of this research is based on comprehending the essentiality of EI and its association to educators' performance, gender, age, and tenure.

Given the concept of EI that encompasses understanding and guiding emotions while communicating with others (Salovey & Mayer, 1990), the implication of this study supports the study's theoretical framework that is based on Goleman's (2015) social skills theory. Goleman

asserted that leaders with high EI are capable to communicate effectively with social events. Further, the findings of this research confirmed that the teachers in this study who scored higher on the WLEIS also reported being more empathic towards students. Further, this study agrees with Salovey and Mayer's (1990) findings that teachers or leaders with high EI are better at problem-solving in the classroom, decision making, dealing effectively with stress, and communicating with students. For teachers, more exposure to and opportunities for training that focuses on emotional learning (Goleman, 1998) could enhance their level of EI, increase their ability to think critically in the classroom, support more efficient problem solving, and enable them to become more influential communicators with students (Isensee, 2017). By developing teachers' EI, teachers' instructional performance could improve and reflect positively on students' productivity and engagement in the classroom (Isensee, 2017). Additionally, Skaalvik and Skaalvik (2016) asserted that teachers with high EI have more control over job-related stress, performance, school evaluation, and emotional stability in and out the work environment. However, teachers' age was one of the factors that drawn researchers' attention and its association with teachers' EI.

The relationship between age and EI has been unclear to researchers (Anitei, 2007). Some studies have revealed no relationship between one's age and EI (Dimick, 2017; Jones, 2007; Okech, 2004), whereas others have revealed a strong relationship between age and EI (Fariselli et al., 2006; Uzonwanne, 2016), including several studies that have linked high EI and effective performance to elder leaders (Goel & Hussein, 2015; Goleman, 2004; Lall, 2009; Ramchunder & Martins, 2014; Yadav, 2014). For this study, there were no significant relationship between the two age groups (25–40 years old and 41–65 years old) and their WLEIS mean scores. The opportunity exists for further research to determine if younger teachers may have more motivation to pursue life goals and consequentially have a higher level of EI versus mature teachers who have been too long in their careers and lost their motivation (Van Dusseldorp et al., 2011) School human resources departments may also consider that only small differences in EI have been found along gender lines utilizing the Mayer Salovey Curoso Emotional Intelligence Test MSCEIT (Druskat et al., 2006). However, in contrast to the MSCEIT results, the Bar-On assessment has been given to both genders and statistically analyzed using the analysis of variance (ANOVA). The results of the analysis revealed no significant statistical difference in overall EI scores (Bar-On, 2004) with a slight deference between genders' EI scores (females = 89.71, males = 86.8). This finding shows that females scored slightly higher on EI test than their males counterparts. This result could be used as a guidance for school administrators to evaluate teachers' EI and to reinforce cost effective inhouse training courses and to be managed by female teachers who scored high in EI. Madinaty's school educators may consider factors associated with teachers' level of EI such as teachers' age and experience and provide the proper training that focuses on emotional learning. Madinaty's human resources may provide EI evaluating test for current and newcomer teachers to determine teachers' EI level to determine the proper courses according to teachers' EI test results.

The results of this study regarding teachers' tenure and EI can help school administrators and human resources departments to develop better balance in the hiring process that benefits the teachers' and students' productivity. Human resources departments could focus on hiring teachers with 11–20 years of career experience because, according to this study's findings, they scored higher in the WLEIS mean. Madinaty's human resources departments may create school activities and training programs that target EI development involving teachers with 21–40 years of career experience. Further, human resources departments could evaluate teachers' EI

internally to identify teachers with low EI scores and provide the proper courses to enhance their EI.

Recommendations

According to the results of this study, it is suggested that academic advisors and human resources departments identify teachers' EI level in the hiring process by administering EI assessment tests, just as Fortune 500 companies do (Ramanauskas, 2016). Additionally, it is vital to provide enhancement courses to assess and develop current teachers' EI on a regular basis. The design of such development courses can be customized according to the four EI constructs: self-awareness, regulating and redirecting emotions, managing oneself, and managing others' emotions (Goleman, 2015). According to this study's findings, teachers who have been dedicated to an educational career over 21 years scored low in WLEIS test, which may require a specific or customized EI enhancement course. Also, further research could explore the underlying reasons why teachers' who stayed over 21 years in their educational career are declining or not utilizing EI effectively to avoid the declining gap.

Study Limitations

- The study results are based only on Madinaty Language School in Cairo, Egypt. The school curriculum and teacher evaluation system are based on the American system intertwined with Middle Eastern culture. Cultural values and traditions are uniquely different from one culture to another, which could have affected teachers' answers to the survey.
- 2. The study's data were gathered from 77 responses to 90 emails, which limits the validity of the study results to be generalized on other schools.

- 3. In this study sample, the female count is much higher (72) than their counterparts male count (five), which limit the validation of research question three "Is gender related to emotional intelligence as measured by the WLEIS?"
- 4. Of the participants, 25.97% didn't answer the first qualitative question, "How might your use of emotional intelligence (EI) in the classroom have affected your most recent self-reported performance evaluation?" However, they scored high in WLEIS mean (92.15). Of the participants, 26% didn't answer the second qualitative question, "How did you use emotional intelligence (EI) well in class? Please provide an example" However, they scored high in WLEIS mean (92.15). Of the participants, 57% did not answer the third qualitative question, "How did you use emotional intelligence (EI) well in class? Please provide an example" However, they scored high in WLEIS mean (92.15). Of the participants, 57% did not answer the third qualitative question, "How did you use emotional intelligence (EI) poorly in class? Please provide an example" However, other participants scored (85.09) on the WLEIS mean. The high percentage of participants who did not answer the qualitative questions may limit the study's validity. Participants may have failed to answer these questions for one of the following reasons:
 - a. Participants may not have understood the questions because of their limited knowledge of the term EI.
 - b. Participants may not have understood the questions because English is their second language.
 - c. Participants may not have been comfortable expressing how they were really feeling toward their students out of fear that their answers would have been shared with the school administrators.

The suggested options above (a, b, c) may limit the accuracy of the study because participants had scored high in EI. If participants had answered the qualitative questions properly, they would have been categorized as appreciated EI in their recent year school evaluation. As a result, the percentage of teachers who agrees to positive association of EI and school evaluation would have been much higher.

Internal Study Validity

The researcher utilized the validated and reliable WLEIS to measure teachers' EI. The embedded qualitative and quantitative questions were chosen carefully and peer reviewed. The researcher carefully scrutinized row data and transferred data to the designated tables and charts. A triangulation method (TM) was utilized in this study. TM is a form of collecting mixed methods data by mixed methods and analyzing the collected data by integrating and comparing data results for a robust result (Kummar, 2015). In this study, the consistent results from the mixed methods, including the literature, indicated that teachers' EI has an impact on their self-reported performance evaluation.

The researcher paid consistent attention to participants' privacy, the process of data collection, and data analysis. Participants' information was kept in a locked desk and password protected laptop to which only the researcher had access. The researcher was always cautious about his bias during data collection and analysis to avoid favoring a particular age group or gender.

Recommendations for Future Research

The researcher recommends further studies to investigate the impact of utilizing teachers' EI in classrooms on students' motivation, academic accomplishment, and grades. Further, interpersonal skills such as active listening, responsibility, leadership, motivation, and patience

are traits that facilitate individuals' communication. Individuals' EI levels might be associated with these interpersonal traits. Further research could analyze these personal traits and reveal their relevance to EI. Individual level of EI could also be genetically related, which could be future opportunity for research to determine to what extent individuals' genes may impact EI's four constructs. Future studies could also explore the proper courses and training to enhance individuals' interpersonal traits.

Further research could investigate gender and EI score. According to this study and previous research, females tend to score higher than males in EI. Females tend to possess a better social and communication skills than their male counterparts. Further studies could potentially reveal the relevant personal EI traits that females possess. These studies' conclusions could help human resources departments create the proper trainings for male teachers to improve their personal trait and skill deficits. Potentially, when male teachers improve their EI skills, they would be able to contribute more effectively to students' academic achievement and to their own job satisfaction and retention.

Sullivan (1998) referred to senior teachers as having lost their career motivation, which may impact their EI level. This study's findings confirm Sullivan's notion. In this study, teachers who have been teaching for over 21 years scored much lower in EI than those who have been teaching from 11–20 years. Further research could investigate teachers who have been in their carrier for over than 21 years and their career motivation, as well as their level of EI and its impact on students' academic achievement.

Closing Comments

This study's results supported the work of theorists such as Goleman, Mayer, and Salovey that stressed the importance of EI in the work environment and its potential impact on

followers' productivity. The topic of EI enticed me as a researcher because of my own personal experience throughout the years of my education experience. I experienced teachers who possessed EI skills that created fun and inviting learning environments, which positively affected my learning transfer experience. Teachers' effective communication in the classroom, including higher empathy and social skills, contributed to my academic accomplishments and productivity. However, it is vital that future researchers to consider the genetic impact on the relevant aspects of human EI. It is also important for future researchers to reveal what steps could be taken to enhance individuals' EI.
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APPENDIX A

National Schools Curriculum American Standards

GEMS National Schools Curriculum American Standards (NSCAS)



Scope and Sequence

Subject	area : Mathematics			Grade level	: Grade 3			
Date	Standards	Unit / Lesson	Objectives	Skills	Prior knowledge	Essential Questions	Cross - Curricular link / Integration STEAM Approach	Moral Education
Week 1	OPERATIONS AND ALGEBRAIC ILINKINS 2.0A (1) Students extend their understanding of the base-ten system. This includes ideas of counting includes ideas of counting including comparing. Students understand multi-ligel numbers (up to 1000) written in base- ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is shundreds + Stens + 3 ones). (2) Students use their understanding of addition to develop fluency with addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable	 General Revision : Reading & Writing Hundreds , place value, ,Value, order and compare numbers up to 3 digits. Adding and subtracting Types of lines and polygon Fraction Measuring weight and length 	1- Reading & Writing Hundreds, identify the place value &Value: 1-Identify the meaning of hundreds. (DOK1) 2-Read and write numbers that have three digits. (DOK1) 3-Differentiate between hundred, tens and ones. (DOK1) 4-Identify the place value and value for number consisting of 3 digits. (DOK2). 2_ Adding and subtracting : Identify how to add and subtract up to 3 digits with caring up and borrowing. .(DOK3). 3- Types of lines and polygon:	-Cognitive Analytical thinking. -problem solving. -Observing. -Socialization -Analytical thinking. -problem solving. -Observing. -Comparing.	 Read any number consisting of two digits. Visual comparing for the number sequence knowing the place value and the value of ones and tens They know how to cut the pizza into half and thirds &quarters. Divide the whole (circle, rectangle) into equal parts. Write the fractions of sets. Relate the fraction into real life problems. 	 What number will come after 99?.(DOK1) what will be the greatest and the smallest 3 digits numbers?. (DOK1) What is the place value of 3 in number 356? .(DOK1) What will be the value of 5 in number 549.(DOK1) Color the half of the whole?.(DOK2) Color the third of the whole?.(DOK2) You have 5 balls, 2 are red & 3 are white, 	English: Can read word problem about adding and subtracting - <u>English Departme</u> nt How to understand the story problems. -Art Departme nt : Draw different line and shapes and measure them.	Character & ethics Introducti on to moral & human values

APPENDIX B

Participants' EI Scores

Table B1

Participants' EI Scores Using the WLEIS

	01	02	0.1	04	05	06	07	08	0.0	0.10	011	012	013	014	015	016	SUM	MEAN	ACE	GENDER	TENUR
#Respondent 77	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	96	6.00	25-40	FEMALE	010
#Respondent 77	6	7			6	6	6	6	0	6	6	6	6	6	2	0	90	6,00	25-40	FEMALE	0.10
#Respondent 76	0		0	- /		0	6	0	4	0	4	-	5	0	3	4	86	5.38	25-40	FEMALE	0-10
#Respondent 75	0	3	0	0	7	7	0	6	6	0	6	7	7	0	0	0	97	6.06	41-65	FEMALE	21-40
#Respondent 74	6	4	6	0	6	0	6	6	7	6	6	0	6	0	6	0	95	5.94	25-40	FEMALE	11-20
#Respondent 73	5	5	7	6	6	3	6	6	7	6	6	6	7	6	5	6	93	5.81	25-40	FEMALE	11-20
#Respondent 72	5	6	4	6	6	6	6	6	6	4	4	6	4	4	3	4	80	5.00	25-40	FEMALE	0 -10
#Respondent 71	6	6	7	6	7	5	5	6	7	5	4	6	5	6	5	5	91	5.69	25-40	FEMALE	11-20
#Respondent 70	5	6	5	7	6	6	5	6	6	6	6	7	6	6	5	6	94	5.88	25-40	FEMALE	0 -10
#Respondent 69	0	6	6	6	7	7	6	7	6	6	7	7	6	0	7	5	101	6.31	25-40	FEMALE	0 -10
#Respondent 68	1	7	7	7	7	7	7	7	7	7	7	7	6	6	5	7	102	6.38	25-40	FEMALE	11-20
#Respondent 67	6	6	6	7	5	6	7	7	7	6	6	6	7	4	5	5	96	6.00	25-40	FEMALE	0 -10
#Respondent 66	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	96	6.00	41-65	FEMALE	21-40
#Respondent 65	2	,	2	6	6	6	7	6	6	2	6	2	2	5		5	73	4.56	25-40	FEMALE	0 -10
#Respondent 64	0	7	0	0	7	7	5	7	7	0	4	0	5		4		93	5.81	41-65	FEMALE	11-20
#Respondent 63	5	6	6		7	6	5	6	4	6	7	6	4	5	6	6	90	5.63	25-40	FEMALE	0-10
#Respondent 62	0	0	0	0	0	0	0	6	4	4	3	0	0	0		6	90	5.63	25-40	FEMALE	0 -10
#Respondent 61	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	109	6.81	25-40	FEMALE	0 -10
#Respondent 60	0	6	6	0	6	0	6	6	0	0	6	0	6	0	0	0	96	6.00	25-40	FEMALE	0 -10
#Respondent 59	6	6	5	6	5	4	6	2	6	2	4	6	4	6	2	5	75	4.69	25-40	FEMALE	0 -10
#Respondent 58	1	6	4	7	2	6	4	4	6	7	7	7	6	6	4	6	83	5.19	25-40	FEMALE	11-20
#Respondent 57	6	7	6	7	4	4	5	5	6	6	6	6	7	7	6	6	94	5.88	25-40	FEMALE	0 -10
#Respondent 56	5	7	7	5	6	6	6	5	6	4	6	4	6	6	5	5	89	5.56	25-40	FEMALE	0 -10
#Respondent 55	6	4	6	6	6	6	6	6	6	6	6	6	6	0	6	0	94	5.88	25-40	FEMALE	11-20
#Respondent 54	1	7	7	7	6	6	6	6	6	3	7	7	6	6	6	6	93	5.81	25-40	FEMALE	0 -10
#Respondent 53	6	7	7	6	6	7	6	6	6	6	6	7	7	7	5	6	101	6.31	41-65	FEMALE	11-20
#Respondent 52	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	112	7.00	25-40	FEMALE	0 -10
#Respondent 51	/	4	0	1	6	0	0	6	0	6	0	1	7		7		101	6.31	25-40	FEMALE	0-10
																					1110
#Respondent 49	7	6	7	7	7	6	7	7	6	6	6	7	6	1	7	7	100	6.25	41-65	FEMALE	11-20
#Respondent 48	5	6	7	7	5	6	6	6	6	7	6	7	6	4	3	3	90	5.63	41-65	MALE	11-20
#Respondent 47	5	5	5	4	6	4	5	4	6	6	6	6	6	6	5	6	85	5.31	41-65	FEMALE	21-40
#Respondent 46	6	6	6	6	6	6	7	7	7	5	6	6	6	6	6	5	97	6.06	41-65	FEMALE	21-40
#Respondent 45	4	5	5	5	5	5	7	5	6	6	5	6	2	1	1	1	69	4.31	41-65	FEMALE	11-20
#Respondent 44	6	7	5	7	5	6	6	6	7	5	5	7	7	6	6	5	96	6.00	25-40	FEMALE	0 -10
#Respondent 43	6	7	6	5	3	3	4	6	5	4	6	4	3	5	5	5	77	4.81	25-40	FEMALE	0 -10
#Respondent 42	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	96	6.00	25-40	FEMALE	0 -10
#Respondent 41	6	6	6	4	5	5	6	6	6	2	6	6	6	4	5	5	84	5.25	25-40	FEMALE	0 -10
#Respondent 40	6	6	5	7	6	6	6	4	7	7	7	7	6	6	6	6	98	6.13	25-40	FEMALE	11-20
#Respondent 39	5	5	5	5	6	6	6	5	5	4	6	3	6	4	6	5	82	5.13	41-65	MALE	21-40
#Respondent 38	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	96	6.00	25-40	MALE	11-20
#Respondent 37	6	4	7	7	7	7	7	6	6	6	6	6	6	5	3	5	94	5.88	25-40	FEMALE	0 -10
#Respondent 36	7	6	6	7	6	6	7	6	6	5	7	7	6	2	6	6	96	6.00	41-65	FEMALE	11-20
#Respondent 35	6	7	7	7	7	6	6	7	7	7	6	7	7	6	6	7	106	6.63	25-40	FEMALE	11-20
#Respondent 34	6	7	6	7	5	6	6	7	6	4	6	7	7	6	5	6	97	6.06	25-40	MALE	11-20
#Respondent 33	7	7	7	6	6	6	6	7	7	7	7	6	7	6	7	7	106	6.63	25-40	FEMALE	0 -10
#Respondent 32	5	6	6	6	6	6	7	7	6	4	6	5	1	2	5	6	84	5.25	25-40	FEMALE	0 -10
#Respondent 31	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	96	6.00	25-40	FEMALE	11-20
#Respondent 30	7	6	6	7	7	6	7	6	5	5	4	4	3	4	3	3	83	5.19	25-40	FEMALE	0 -10
#Respondent 29	6	5	6	6	7	6	7	7	6	6	6	6	6	6	6	6	98	6.13	25-40	FEMALE	11-20
#Respondent 28	6	6	6	6	5	5	6	6	6	6	6	6	6	6	3	3	88	5.50	25-40	FEMALE	0 -10
#Respondent 27	7	7	7	7	7	7	6	6	5	5	5	6	6	6	6	6	99	6.19	25-40	FEMALE	0 -10
#Respondent 26	6	6	5	6	6	6	6	6	5	3	3	2	3	4	3	4	74	4.63	25-40	FEMALE	11-20

APPENDIX C

WLEIS Survey Model

				visit www.emotiv	ior more	: 501-055055	ments
How Emotionally Intelligent are You? (Wong and Law E	motiona	l Intellig	ence Scale, '	WLEIS)		
Instructions Here is a short 16-item measure of emotional intelligen Law Emotional Intelligence Scale (WLEIS) is based on th complete this questionnaire, mark the extent to which y	ce, developed for use in e ability model of emotic rou agree or disagree to e	management mal intellige each of the s	nt research nce. A list o tatements.	and studies. The f statements are	items on tł provided Ł	ne Wong elow, an	and Id to
	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Stron Agr
1. I have a good sense of why I feel certain feelings m time.	ost of the						
2. I have a good understanding of my own emotions.							
3. I really understand what I feel.							
4. I always know whether I am happy or not.							
5. I always know my friends' emotions from their beh	aviour.						
6. I am a good observer of others' emotions.							
7. I am sensitive to the feelings and emotions of othe	rs.						
8. I have a good understanding of the emotions of per around me.	ople						
9. I always set goals for myself and then try my best t them.	o achieve						
10. I always tell myself I am a competent person.							
11. I am a self-motivating person.							
12. I would always encourage myself to try my best.							
13. I am able to control my temper so that I can handle	2						
difficulties rationally.							
difficulties rationally. 14. I am quite capable of controlling my own emotions	•						
difficulties rationally. 14. I am quite capable of controlling my own emotions 15. I can always calm down quickly when I am very ang	şry.						

Retrieved from: https://www.peoplematters.in/article/life-at-work/how-to-measure-emotionalintelligence-the-wleis-scale-18313?media_type=article&subcat=employee-relations&title=howto-measure-emotional-intelligence-the-wleis-scale&id=18313

APPENDIX D

Teachers' Annual Performance Self Evaluation Criteria



Teacher Self- Evaluation

Teacher Name

Stage: primary

Subject/ Grade: Math

Dax ID :

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Hiring Date: 1-9 -2019

5- Excellent.

- 4- Very good; very effective in this part of my work.
- 3- Good; an acceptable level of performance.
- 2- Fair; needs my attention; must update my performance in this part of my work.
- 1-Poor; dissatisfied with this part of my work; must take immediate steps to improve in this regard.

Evaluation Areas

1- Class Instruction			
A. Planning and Preparation	Teacher	HOD	HOS
Demonstrates knowledge of content and related pedagogy	4	4	
Demonstrates knowledge of development characteristics of age group	4	4	
Demonstrates knowledge of how students learn	4	4	
Demonstrates awareness of student skills and knowledge	5	4	
Demonstrates awareness of student interests and culture	4	4	
Demonstrates knowledge of resources for teaching and student resources	5	5	
Designs instructional materials and activities	5	5	
Designs and structures lessons	4	4	

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Follows the timeline which is adequate to the tasks planned	5	5	
The plans listed in the plan book are being implemented	5	4	
B. Teacher/Student Relationships	Teacher	HOD	HOS
Student demonstrates respect for teacher	5	5	
Teacher demonstrates positive attitude and openness to students	5	5	
Teacher demonstrates ability to personalize the instructional program for students	5	4	
Teacher demonstrates a willingness to be flexible	5	5	
C. Class Management	Teacher	HOD	HOS
Teacher creates a stimulating and effective learning environment for learning	4	4	
Teacher establishes and maintains a disciplined environment	4	4	
Teacher demonstrates effective planning and organization skills	4	4	
Teacher is effective in directing and organizing the class	5	5	
Teacher has established procedures that govern the handling of routine administrative matters	5	5	
D. Management of Student Behaviour	Teacher	HOD	HOS
Teacher has established procedures that govern student verbal participation during different types of activities (whole class instruction, small group instruction, etc.	5	5	
Teacher has established procedures that govern student movement in the classroom during different types of instructional activities	5	5	
Teacher frequently monitors the behaviour of all students during (whole-class, small group and seat work activities and during transitions between instructional activities)	5	5	

Teacher stops inappropriate behaviour promptly and consistently, yet maintains the dignity of the student	5	5	
E. Instructional Time	Teacher	HOD	HOS
Materials, supplies, and equipment are ready at the start of the lessons or instructional activity	5	5	
Students are on task quickly at the beginning of each lesson or instructional activity	5	5	
Teacher maintains a high level of student time on-task	5	5	
F. Instructional Presentation	Teacher	HOD	HOS
Introduces the lesson or instructional activity and specifies learning objectives	5	5	
Speaks fluently and precisely	4	4	
Presents the lesson or instructional activity using concepts and language understandable to students	5	5	
Provides relevant examples and demonstrations to illustrate concepts and skills	4	4	
Assigns tasks appropriate to student level and relevant to the lesson	5	5	
Asks appropriate levels of questions	4	4	
Conducts lessons or instructional activities at an appropriate pace	5	5	
Facilitates smooth and effective transitions between instructional activities	5	5	
Provides opportunities for the application of concepts and skills and makes assignments clear	5	5	
Summarizes the main point(s) at the end of the lesson or instructional activities	4	4	
G. Instructional Monitoring of Student Performance	Teacher	HOD	HOS
Maintains clear, firm and reasonable work standards and due dates	5	5	

Circulates during class to check all students' performance	4	4	
Routinely uses oral, written or other work products to check student progress	4	4	
H. Instructional Feedback	Teacher	HOD	HOS
Provides prompt feedback on assigned work	5	5	
Affirms a correct oral response	5	5	
Provides sustaining feedback after an incorrect response	4	4	
I. Facilitating Instruction	Teacher	HOD	HOS
Develops an instructional plan based upon school and adopted curricular goals	5	5	
Uses diagnostic information from tests and other assessment procedures to develop and revise objectives and/or tasks	5	5	
Develops an instructional plan that matches/aligns objective, learning strategies, assessment and student needs at the appropriate levels of difficulty	4	4	
2- Interpersonal/Professional Responsibilities	I		
A. Communicating with Families	Teacher	HOD	HOS
Teacher participates in school's activities, provides information to parents about the instructional, behavioural, and attendance program and the student's progress on a regular basis.	5	5	
Teacher responds to parent concerns in a professional manner	5	5	
B. Maintaining Accurate Records	Teacher	HOD	HOS
Teacher fairly and promptly marks quizzes, exams and assignments.	5	5	
Teacher's system for maintaining information on student completion of assignments, student progress, behaviour, and attendance is effective	5	5	

C. Contributing to the School and the District	Teacher	HOD	HOS
Teacher maintains professional working relationships with staff including supervisor	5	5	
Teacher cooperates with colleagues to fulfil school required duties	5	5	
Teacher participates in school events when assigned	5	5	
Teacher actively and constructively participates in and makes a contribution to school or district projects	5	5	
D. Shows Professionalism	Teacher	HOD	HOS
Teacher shows respect for students, parents, peers and administration by being punctual and prepared for class, work and meetings	5	5	
Teacher participates in activities that will enhance his/her professional skills, follows the policies, regulations, and procedures of the school	5	5	
Teacher addresses and/or reports student language, bullying, harassing, hostile, prejudicial or belittling statements and/or behaviours	5	5	
Completes duties accurately and promptly.	5	5	
3. General Code of conduct (75 Marks)	Teacher	HOD	HOS/ HR
Attendance (25 Marks)	23	23	
Punctuality (25 Marks)	25	25	
Attitude (25 Marks)	25	25	
TOTAL	342 /360	339 /360	/360

Teacher's Signature:	Date:		
Division Supervisor's Signature: _	Date:		
Head of Stage's Signature:		Date:	

Head Of Department and Head Of Stage Teacher's Evaluation



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Class Observation MLS

HOD/HOS Name:	
Teacher's Name.	
Subject:	
Stage:	
Grade	
Class:	

Items	Not Applicable	Poor	Average	Good	Outstanding
Students are able to connect their prior knowledge to the new learning situations.					
Students are enthusiastic and show interest in learning.					
Students take the responsibility for their own learning in sustained ways. (They are motivated and eager participants in their learning, they inquire, interpret/analyze data).					
Students focus well and respond correctly to Instructions.		19 19 19			
Students are reflective and analyze learning situations in order to discover the best solutions.					
Students choose the best ways to complete tasks within group, pairs, or individual settings.					
Students collaborate effectively with one another by contributing ideas and listening to one another.					

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EDUCATION	Not	New Street Sci			
termational assessment during lessons the	· Applicable	Poor	Average	Good	
for example, questioning by teachers, adds to the overall view of students' attainment and progress.			0	0000	Outstanding
reacher has a thorough knowledge of individual tudents' strengths and weaknesses.					
reacher provides challenge, support, feedback and ollow-up.		and the second			
Students are routinely involved in assessing their own learning.					
Overall Evaluation of Class & Teacher's Performance				<u>riy</u> oldus Circle	
HOD Observations, Comments & Suggestions:				51957 (519577)	
Teacher comments					

HOD Signature

Teacher Signature

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