

**Impact of Peer Mentoring Role on Mentors' Personal  
Development and Leadership Practices:  
A study among Undergraduate Emirati Female Students at  
a Higher Education Institution in the United Arab Emirates**

أثر الدور الارشادي على التنمية الذاتية للمرشد وممارساته القيادية:  
بحث بين الطالبات الإماراتيات الجامعيات في إحدى مؤسسات التعليم العالي في الإمارات العربية  
المتحدة

by

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of the requirements for the degree of  
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## Abstract

Many leadership programs were initiated to increase female's leadership and reduce gender barriers in most developed and developing countries. Among these programs, a great emphasis was put on the mentoring role due to the benefits it holds on developing females' self-confidence and leadership skills. Therefore, the purpose of this study was to explore the impact of peer mentoring role on mentors' personal development and examine the most exemplary leadership practices that the mentoring role nurture in Emirati female undergraduate student mentors in one university at the United Arab Emirates.

This study adopted a mixed methods research design in two sequential phases: a qualitative phase to explore mentors' perceptions followed by a quantitative phase to examine the exemplary leadership skills that the mentoring role has nurtured in them. One-on-one interviews with twenty-two mentors provided the study with an in-depth understanding of the peer mentoring role and its impact on mentors' academic, personal development, and career related skills. Four main categories were generated from mentors' responses. This study revealed the vital characteristics for effective mentors as described by the framework of Jacobi and Terrion and Leonard and uncovered new themes that are specific to the context and culture of the participants. For instance, "doing good to others" or, as it is known in Islamic culture, عمل الخير, was the most prominent theme in female mentor participants' responses regarding their reasons for joining the program.

Quantitative data was collected from 94 mentors and 142 mentees through the Student Leadership Practices Inventory Survey (SLPI) self and observer versions. Results from the quantitative analysis demonstrated significant correlations among all SLPI subscales. Quantitative results provided evidence for the association of the peer mentoring role with the development of one's leadership skills and practices. Among the five leadership practices, *Inspire a Shared Vision* was not correlated with the impact that the mentoring role has on the development of these exemplary leadership practices.

This study implies for curriculum developers in undergraduate programs to create curricula containing an array of peer teaching/mentoring experiences. Faculty role should be integrated and defined when designing the structure and roles of the peer mentoring program. Further research is recommended to explore the impact of peer mentoring programs with wider sample and with students from different backgrounds.

## الملخص

أنشئت العديد من البرامج القيادية بهدف زيادة المهارات القيادية لدى النساء والحدّ من الحواجز بين الجنسين في معظم البلدان المتقدمة والنامية. من بين هذه البرامج القيادية، تم التركيز بشكل كبير على برنامج قائم على التوجيه، وذلك بسبب الفوائد التي يقدمها لتنمية الثقة بالنفس والمهارات القيادية لدى الإناث. لذلك، فإن الغرض من هذه الدراسة هو استطلاع تأثير دور الإرشاد على التطوير الذاتي للمرشد واستكشاف الممارسات القيادية المثالية التي يراها هذا الدور لدى طالبات المرحلة الجامعية في إحدى الجامعات في الإمارات العربية المتحدة.

اعتمدت هذه الدراسة تصميمًا بحثيًا مزدوجًا في مرحلتين متتابعتين: مرحلة نوعية لاستكشاف تصورات المرشدات تليها مرحلة كمية لدراسة المهارات القيادية النموذجية التي نماها دور التوجيه فيهم. أجريت مقابلات فردية مع اثنتين وعشرين مرشدة وزودت نتائج هذه المقابلات الدراسة بفهم متعمق لدور التوجيه وتأثيره على التطوير الأكاديمي والذاتي وتنمية المهارات الوظيفية للمرشدة. كما أنشئت أربع فئات رئيسية من ردود المشتركات. كشفت هذه الدراسة عن الخصائص الحيوية للمرشدات الناجحات كما هو موضح في إطار Jacobi و Terrion و Leonard، كما كشفت عن مواضيع جديدة خاصة بسياق وثقافة المشاركات في البحث. فعلى سبيل المثال، "عمل الخير للآخرين" هو الموضوع الأكثر بروزًا في إجابات المرشدات لأنه محبوب ومرغوب في الثقافة الإسلامية مما حدا بالكثيرات بالانضمام للبرنامج.

جمعت البيانات الكمية من 94 مرشدا و 142 تلميذا من خلال الاستبيانات لمسح ممارسات القيادة لدى الطلاب (SLPI). وقد أظهرت نتائج التحليل الكمي بوجود ارتباطات كبيرة بين جميع فروع هذه الاستبيانات SLPI، وقدمت النتائج الكمية دليلاً على ارتباط دور الإرشاد بتطوير المهارات والممارسات القيادية لدى الفرد. من بين الممارسات القيادية الخمس، فإن "إلهام رؤية مشتركة" لم تكن مرتبطة بتأثير الدور الإرشادي على تطوير الممارسات القيادية المثالية هذه.

يدعم هذا البحث مطوري المناهج الدراسية في برامج المرحلة الجامعية بإنشاء مناهج تركز على تطوير الخبرات الإرشادية بين الطلاب. كما يجب أيضاً تحديد دور أعضاء هيئة التدريس عند تصميم هيكل البرامج الإرشادية وأدوارها. توصي الدراسة بإجراء المزيد من البحوث لاستكشاف تأثير برامج الإرشاد من خلال عينة أوسع ومع طلاب من خلفيات مختلفة.

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This dissertation is an evidence of a working mother's determination that proves that nothing is impossible when you want to fulfil a dream. My dream was to make my ambitions true and serve the education sector in my home country with the best knowledge and qualifications that I have. Serving others and improving their life in any way is my ultimate happiness. That is why, I was determined to accomplish my studies and learn the best from best in order to develop the status of education through nurturing an environment where diversity is appreciated and everyone is respected and their well-being matters. Additionally, my dream was to make my parents proud of what their daughter can achieve. I also tried to be a role model for my three daughters. I showed them how through commitment and resilience they can achieve the impossible. I demonstrated to them that learning has no limits and that they can aim for the stars.

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## **List of Abbreviations**

*AKS: Academic Subject Knowledge Support*

*ANOVA: Analysis of Variances*

*ELSA: Everyday Leadership Skills & Attitudes Inventory*

*ERM: Existence of a Role Model*

*GSC: Goal setting and Career path*

*LPI: Leadership Practices Inventory*

*MLQ: Multifactor Leadership Questionnaire*

*MT: Mentor*

*PSE: Psychological and Emotional support*

*SLPI: Student Leadership Practices Inventory*

*SPSS: Statistical Package for the Social Sciences Statistics*

*UAE: United Arab Emirates*

# CHAPTER 1: INTRODUCTION

## Background and Motivation

Peer mentoring, known as ‘peer tutoring’, ‘peer assisted learning’, ‘cooperative/collaborative learning’ and ‘peer collaboration’ is an efficient and inexpensive technique that offers students’ academic and personal support from other students. It is a way of teaching and learning in which students learn from each other, without the interference of a teacher. *Peer mentoring is not a novel idea; it is probably as old as any method of collaborative or community action and has taken place implicitly or vicariously* (Topping, 2005, p. 631). Originally the peer mentoring was employed only in main subjects like mathematics and reading, but it was expanded throughout the years into all subjects (Topping, 2005).

Peer mentoring is an additional support to improve students’ learning, and does not replace teacher learning activities (Schleyer et al., 2005). Its main function is to guide and support students’ learning of concepts that were previously explained by their respective teachers. In this cross peer mentoring practice, individuals with more expertise in the subject area support the ones with lower abilities. The relationship between mentors and mentees is then classified by the degrees of similarity and difference between students. At the higher education context, ‘near-peer’ mentors (undergraduate teaching assistants, tutors and counselors) are identified at a more advanced level than the learners, while ‘co-peers,’ (partners or work group members) are considered to be at the same level (Falchikov, 2005). Such peer mentoring is now being implemented across all disciplines as a kind of supplementary instruction in higher-level educational institutions (Boud et al., 2014; Colvin, 2007; Falchikov, 2005). Miller et al. (2010) have categorized five types of peer mentoring: class wide peer mentoring, cross-age mentoring, one-to-one mentoring, small group instruction, and home-based mentoring.

Peer mentoring is a technique by which one expert student teaches or mentors another novice student. This cross-peer mentoring, therefore, implies that teaching is not being undertaken by a professional (Boud, Cohen, & Sampson, 2014; Colvin, 2007; Moor & Walters, 2014). In the higher education setting, peer mentoring is described as a prominent strategy that aims to improve students’ learning, provide them with a better university experience life, and increase the retention rate especially for students at risk (Colvin & Ashman, 2010; Lynn, 2010). Research found that peer mentoring can achieve this whenever educational institutions

implement a higher quality of these programs (Lynn, 2010). In a higher education landscape, more formalized and accountable forms of peer tutoring programs are becoming increasingly popular. Surrogate mentoring, common at larger universities, involves giving mature students, often graduates or advanced undergraduates, some or all of the mentoring responsibility for undergraduate courses (Colvin, 2007; Falchikov, 2005). Mentoring programs could involve one-on-one or small group mentoring by students who are slightly ahead of other students, or who have successfully demonstrated proficiency with specific academic material (Mastropieri et al., 2006).

A variety of peer mentoring schemes currently operate in some UK schools and universities, and are practiced even for longer time in the USA where it is more commonly known as ‘supplemental instruction’ (Capstick et al., 2004; Colvin, 2007). The upmost targets of these programs are to enhance the first-year experience of higher education students and to provide them with an opportunity to discuss their academic difficulties in a friendly environment. Overall, mentors assist mentees on one on one basis or in small groups in solving their academic problems, developing their learning skills, and boosting their independent learning.

Peer mentoring occurs within the same social groups and it may be formal or informal. Peer mentoring occurs when one peer has more expertise or knowledge on a subject or topic than the others (Bond & Castagnera, 2006; Colvin, 2007). Additionally, flexibility in peer mentoring programs thus allows them to occur anytime outside formal class hours and often take place in more comfortable and autonomous learning centers within universities. The use of peer mentoring programs in the extracurricular education of university students has been implemented in worldwide universities, as these look for ways to augment their services quality, promote student learning and improve their results (Lassegard, 2008). To this end, numerous studies such as Aderibigbe et al. (2015), Colvin and Ashman (2010), Hudson (2013), and Shek and Lin (2015) investigated the perceptions, needs, and expectations of individuals involved in peer mentoring programs in order to determine their success.

Due to a multitude of reasons that include increasing student populations and the changing nature of student needs, peer advising programs are being established in a number of higher education institutions (Zabel & Rothberger, 2012). These programs are flexible, sensitive to students and institutions’ needs. For instance, peer advising can range from very friendly venue to a more intensive program in which peer advisors work with the majors and in group sessions. Furthermore, offering this peer support program on university campuses is economically viable

because it is inexpensive and sustainable. Sustainability of peer mentoring programs is a consequence of having a framework that clarifies the nature of relationships and interactions between peer mentors with mentees and with their community (Topping, 1996).

Peer mentoring program can be implemented across the entire colleges or can be applied to one program or to a subset of students (Topping, 1996). Peer mentoring programs were initially created to address the needs of novice and at-risk students (Nguyen, 2013). Individuals involved in peer mentoring programs benefited greatly from their participation. These benefits were categorized by students' academic and personal well-being. Career-related outcomes, personal development and competence, and interpersonal outcomes were three areas that improved as a result of peer mentoring activity within the university environment (Terrior & Leonard, 2007; Crisp & Cruz, 2009). The improvement of outcomes related to the first area is seen when students demonstrate motivation and commitment to the accomplishment of their work, their professional development, and towards their career aspirations and goals (Ehrich, Hansford, & Tenant, 2004; Haber-Curran, Everman, & Martinez, 2017). The second area refers to gains in their communication and leadership skills, confidence and self-efficacy, time management, organizational and planning skills, a sense of purpose, personal satisfaction and reward, and self-reflective learning (Beltman & Schaeben, 2012; Ehrich et al., 2004; Haber-Curran et al., 2017). The third area is about mentors' interpersonal outcomes. This is demonstrated when mentors are able to work effectively with people from different backgrounds. It is also seen when mentors build rapport and collaborate with mentees (Haber-Curran et al., 2017; Ehrich et al., 2004).

The principles of the constructivist theory are at the core of the peer mentoring practice when the cognitive skills of weaker students are developed through the scaffold provided by their stronger peers. The social interaction and collaboration between them enriched their psychosocial skills (Vygotsky, 1978). Consequently, the social learning connected to the peer mentoring experience promoted students' development in college. This development is claimed by Chickering (1969) to be related to students' intellectual, physical, manual, and interpersonal competence. As a result, students' self-confidence, self-awareness, and autonomy is nurtured and they become better able to manage their emotions. Moreover, whenever their social skills are developed, students will have the ability to build healthy, honest, and long-term relationships. This development is also noticed when students' behaviors and decision-making are in line with their beliefs and values. Hence, students become more competent in identifying their goals (Chickering, 1969). As such, students whose goal is to serve and support

others succeed in the peer mentoring role which in turn benefits them both cognitively and socially. Mentors' leadership skills are also developed and a set of both servant and transformational practices are demonstrated. To this end, mentors are expected to influence others and bring out their best performances (Bass, 1985). They are responsible for giving followers more freedom to demonstrate their abilities and empowering them to take ownership of their efforts (Greenleaf, 2002). As a result, an environment of trusting and positive relationships is established. Therefore, looking into servant leadership under the umbrella of the transformational leadership approach is the best paradigm to describe students' leadership practices more broadly.

In the United Arab Emirates (UAE), the 2020 vision plan of the Ministry of Education and Youth focused on developing a successful education sector in which student-centered strategies of teaching and learning were presented. The aim of this reform was to increase students' independency and engage them in activities that will enhance their self-confidence and self-efficacy (Abu-Samaha & Shishakly, 2008). To this end, teachers were trained by employing modern teaching approaches to develop students' critical thinking and problem-solving skills, as well as towards nurturing students' independent learning and autonomy (Ministry of Education, 2016). At the higher education level, several leadership opportunities were provided to prepare university students to be capable leaders of tomorrow. Undergraduate students were provided with the knowledge and skillsets required to promote their leadership skills in order to secure a better social and economic future for the country (Ministry of Education, 2016). Various leadership development programs were implemented in some of the university courses.

Other approaches such as taking on mentoring roles became widely common in larger universities around the globe (Cohen et al., 2011). This approach enhanced student engagement, boosted their confidence levels, and provided leadership development opportunities for students (Colvin & Ashman, 2010). These programs were initially designed to support newly joined students and help them discuss their challenges and difficulties. However, the practice of mentoring had greater benefits for both mentors and mentees. It advocated students' professional and personal growth, developed their sense of responsibility, commitment, and independence. It increased students' self-confidence and self-esteem (Colvin & Ashman, 2010; Crisp & Cruz, 2009; Joseph & Winston, 2005). As a result, students became more capable of solving their problems and managing their learning.



In light of the above, universities are encouraged to implement these programs in order to provide students with similar work experiences and encourage them to be future leaders who can positively contribute to their communities. Despite these acknowledged benefits of peer mentoring programs, they are not widely applied inside UAE universities (Aderibigbe et al., 2015). Both faculty and students reported their lack of confidence in student mentors' ability to mentor their peers. Additionally, challenges in the peer mentoring process such as difficulties in recruiting student mentors are discouraging the implementation of these programs in this context (Aderibigbe et al., 2015). However, where these programs existed, they were found to have several benefits for the peer mentors, their colleagues, and the university in the UAE (Aderibigbe et al., 2015). These benefits mainly tackled students' academic growth and personal development. In particular, leadership skills and self-confidence of student mentors in the UAE had developed since they joined the peer mentoring program (Aderibigbe et al., 2015).

Few tools were developed to measure leadership skills in students (Posner, 2004). That is why Kouzes and Posner (2002) identified five leadership exemplary practices that students could develop worldwide. Measuring leadership practices through the functions of modeling, inspiring, challenging, motivating and appreciating followers is the most accurate way to determine the level of student leadership development (Kouzes & Posner, 2002). Hence, this study will explore and explain Emirati female student mentors' perceptions about the impact of the mentoring role on developing their leadership practices in one university in the UAE. Participants are enrolled in a peer mentoring program inside both campuses in Abu Dhabi and Dubai. This program was implemented in 2011 to cater to the academic needs of all students across the campuses. It is a student support initiative where more experienced students, often from the same major or some other area of interest, mentor their peers, usually first-year students, in a supportive and encouraging relationship. The primary goal of this program is to provide support and assistance for students with their academic studies. This program caters to first year students at university, as well as the upper years. In implementing this program, students' retentions will increase by helping first year students' transition to university. Unlike other peer mentoring initiatives which tend to be college-based, this particular program draws on students from all colleges and holds this academic support in a general-purpose room that is easily accessible by all students on campus. Students who are interested in becoming a peer mentor must complete a three-step application process before being accepted as a peer mentor. These steps include an initial application form followed by two interviews. Upon acceptance,

a recruit then undertakes several training workshops to help them become fully acquainted with the program. Mentors are constantly supervised and evaluated at the end of each semester.

Leadership is usually measured through 360-degree feedback by collecting followers' and supervisors' viewpoints for more accurate and complete picture of leader's performance (Day, 2000). This multi-source feedback is a useful tool to increase individuals' self-awareness and self-knowledge of their impact on others (Day, 2000). To enhance the overall reliability of the feedback, it is necessary to use both quantitative and qualitative data to investigate mentors, mentees, and faculty views and perceptions. This type of feedback will produce various aspects of mentor's leadership practices (Day, 2000). The combination of both qualitative and quantitative methods will be most convenient to answer the purpose of this current study and enrich the literature with various perspectives of the link that peer mentoring has towards the improvement of leadership practices within this particular context (Cornelius, Wood, & Lai, 2016; Gunn et al., 2017; Topping, 2005).

Following the sequential exploratory data collection strategy, the researcher analyzed the datasets separately to determine if the data supported or refuted the other in order to better explain the phenomenon (Clark & Creswell, 2010). Therefore, the researcher began by conducting interviews to explore the impact of peer mentoring role on mentors' academic, personal, and leadership practices development and to provide a deeper understanding of the data. Then a survey design was used to collect quantitative data and assess the scores of the Students Leadership Practices Inventory (SLPI). Collecting and analyzing the quantitative data provided a general estimation of the research problem (Clark & Creswell, 2010). It also helped corroborating the responses in relation to the development of mentors' leadership practices and understand the differences in mentors, mentees, and faculty perceptions regarding the influence of peer mentoring on mentors' leadership practices development. Descriptive and inferential statistics were computed. Correlation and Analysis of Variances (ANOVA) statistical techniques were utilized to determine relationships.

## **Statement of the Problem**

The 2021 vision of the UAE government is to provide a world-class education by providing advanced standards of education, enhancing students' critical thinking, and creating intellectual autonomy (Ministry of Education, 2016). The UAE is also hoping to make use of

its citizens' potential roles in economic development by preparing students to be market-ready. As such, a great emphasis has been placed on preparing students academically and improving their management and leadership skills before they enter the workforce. Additionally, to reduce the gender gap in leadership positions, many government-funded organizations were established to endorse the economic and social interests of Emirati women and help them achieve their professional and leadership ambitions (Al Marzouqi & Forster, 2011).

Despite these initiatives of providing equal opportunities in the workplace, the number of Emirati women working in the private sector or in the industrial and technological sector remains low comparing to males (Al Marzouqi & Forster, 2011). In the World Economic Forum's Global Gender Gap Report, the UAE was ranked 121 out of 149 countries in the 2018 (World Economic Forum, 2018, p. 283). This suggests that despite government efforts over the last two decades, the sociocultural factors hinder the leader's vision (Mynard & Almarzouqi, 2006). The UAE is still characterized by a patriarchal culture, in which fathers or brothers control females' lives, education, and careers. The woman's role is mostly defined by what Muslims traditions indicate to be right or wrong (Mostafa, 2005). As such, the female's role is confined and placed under full control of their male relatives. Female leaders struggle in their work because they are unable to practice leadership in its real form due to ethical penalties placed on them if they don't adhere to Islamic rules and principles (Shah, 2010). Religious ethics in Muslim societies forced the veil on women, discouraged mixed-sex settings, provided a moral code for men and women operating in the public space, and defined communication rules between them, even telephone communication (Shah, 2010). For instance, women are not supposed to see or deal with male colleagues in other organizations unless accompanied by a male from their family. These interactions are avoided to maintain family honor. It would also be a violation of social norms to move into a male domain (Shah, 2010).

Gender barriers are, to this day, obstacles in most developed and developing countries (Diaz, 2016). Female managers reported to be less self-confident about their leadership skills and practices in comparison to their male colleagues (McCormick, Tanguma, & López-Forment, 2002). Specifically, it affects Arabic societies where there are discrimination practices in the workplace and females feel they are excluded from networks as their relationships with men are limited (Akar & Mouchantaf, 2014; Mynard & Almarzouqi, 2006). Furthermore, females in senior positions reported to have lower promotion chances and fewer professional development opportunities compared to males. These women find difficulties to build

relationships outside the workplace and are rarely involved in high-profile projects and networks (Akar & Mouchantaf, 2014).

Hence, the lack of women leaders in Arab and western societies was raised as a concern in many studies (Akar & Mouchantaf, 2014; Archard, 2012; Diaz, 2016; Mynard & Almarzouqi, 2006). The mentoring role addresses this issue and assists in the development of future female leaders (Archard, 2012). Implementing peer mentoring programs in schools or universities improves female students' academic achievement, builds their confidence, changes their attitudes, and increases their interest in their respective courses (Archard, 2012). Despite their importance, there is a shortage of peer-mentoring programs in universities worldwide, specifically in the Arab and Gulf region where peer-mentoring programs are minimal and focus solely on strengthening students' writing skills (Alrajhi & Adhafri, 2015; Mynard & Almarzouqi, 2006). The lack of these programs in the Arab world is mainly caused by the doubts that both students and faculty have in passing the knowledge from student to student instead of teacher to student (Mynard & Almarzouqi, 2006). It could also be related to teachers' confusion between peer tutoring and collaborative learning approaches inside the classroom (Alrajhi & Adhafri, 2015). Additionally, there seems to be little attention paid to student to student mentoring in the literature overall (Boyle, Kwon, Ross, & Simpson, 2010) with only a few studies in the UAE (Aderibidge, Antiado, & Anna, 2015; Mynard & Almarzouqi, 2006).

Research on the mentoring role is no longer focusing solely on its influence on students' academic skills or motivation to learn but rather researchers are interested in investigating how peer programs can improve individuals' personal development and competence. Key findings in this area appear in studies like Colvin and Ashman (2010), Priest and Donley (2014), and Shek and Lin (2015) who investigated peer mentoring's impact on individuals' self-confidence, self-esteem and their leadership skills and behaviors. These skills were mostly developed due to the nature of peer mentoring that anticipates more experienced or knowledgeable peers to assist with the academic and psychosocial development of novice or less experienced peers. Thus, by helping others develop their skills and contributing to the development of the institution, mentors grow into effective leaders. Studies that investigated the benefits and challenges of the peer mentoring process at school or university indicated that mentors' leadership, communication, and teaching skills were among the highest benefits (Archard, 2012; Colvin & Ashman, 2010; Hudson, 2013; Shek & Lin, 2015). By mentoring lower skilled peers, mentors' self-confidence will increase and their knowledge about the material will deepen especially with diverse learners (Heirdsfield, Walker, Walsh, & Wilss, 2008).

## **Purpose and Objectives of the Study**

**The purpose of this study is to explore the impact of peer mentoring role on female mentors' personal development and leadership practices at a higher education institution in the United Arab Emirates.** The investigation of peer-mentoring programs in the Arab world is not drawing researchers' interest due to the lack of these programs and the confusion that educators have between peer collaboration and peer mentoring. Aderibigbe et al. (2015) were among the few studies that looked into the issues and challenges related to peer mentoring among undergraduate students in the UAE. Despite that these authors used mixed method approach to collect mentors' views, their small-scale study was limited on collecting mentors' views only. Thus, this current study presented a more robust snapshot of peer mentoring by exploring the views of mentors, mentees, and faculty in the same context. This mixed-method study investigated the perceptions of student mentors, mentees, and faculty on mentors' personal development and competence. A particular emphasis will be centered on identifying exemplary leadership practices that mentors use in a successful mentoring experience in one university in the UAE. This study aims to shed light on the attitudes that students have towards the overall mentoring experience and to which extent it is improving their cognitive and psychosocial skills. For instance, when students collaborate, a mutual trust and confidence is established between them. These trusting relationships helped mentors better understand mentees' academic needs consequently, student mentees' knowledge of a particular topic will improve and at the same time mentors will gain skills and competencies through "learning by teaching" (i.e., communication, assessment, and modelling) (Douglass, Smith & Smith, 2013).

Additionally, this study highlighted the importance of implementing peer mentoring in UAE universities due to the benefits they have on female mentor and mentees academic development and social well-being (Terrion & Leonard, 2007). Moreover, such programs are believed to be a platform for Emirati women and are in line with government initiatives and legislation against gender discrimination in secondary and tertiary education and numerous professions (Al Marzouqi & Forster, 2011). Peer mentoring programs will improve their academic performance and increase retention at the higher education levels. If implemented successfully, these programs will provide female students with a variety of psychosocial skills and prepare them for leadership positions.

While the mentoring relationship is a crucial element in enhancing the mentee's confidence and motivation (Terrior & Leonard, 2007; Zepke & Leach, 2010), the emphasis of this current study is to look at the impact of the mentoring role on female mentors' leadership practices in one university in the UAE. Leadership development plays a role in improving students' well-being and self-awareness. As such, student leaders will effectively contribute to the improvement of student mentees and to the educational institution as well. Measuring leadership practices through the functions of modeling, inspiring, challenging, motivating and appreciating followers is the most accurate way to determine the level of student leadership development (Kouzes & Posner, 2002). Both quantitative and qualitative data will be collected to investigate mentors, mentees, and faculty views and perceptions.

Hence, the purpose of the study helped shaped the following research objectives:

1. Investigate participants' self-perceptions of the impact of peer mentoring on mentors' personal development and competence.
2. Describe the relationship between participants' self-perceptions of the impact of mentoring role on self-perceived leadership practices.
3. Describe the relationship between participants' self-perceived leadership practices and participants' current involvement and leadership experience.
4. Explore the exemplary leadership practices that are mostly used by mentors.

Peer mentoring programs are formal support schemes "where a student is mentored by another student of greater ability and experience" (Topping, 1996, p. 32). Students' leadership practices are described as the leadership characteristics that student mentors display when they take responsibility for the development of others (Bennett, 2017; Crisp & Cruz, 2009; Velez, Cano, Whittington, & Wolf, 2011). These practices are seen when a student leader models the way, inspires a shared vision, challenges the process, enables others to act, and encourages the heart (Kouzes & Posner, 2002).

## **Research Questions**

The aim of this study is to uncover student mentors, mentees, and faculty views and attitudes regarding the leadership development practices that mentoring role is bringing to female mentors. The study also tries to find out the exemplary leadership practices that are mostly enacted by female mentors. Females in the Arab world are often reluctant to take on a leadership role. They feel that they are still underrepresented in leadership positions and that

their lives or decisions are controlled by the men in their family (Akar & Mouchantaf, 2014; Mynard & Almarzouqi, 2006).

Similarly, female students feel that they are still underrepresented in mentorship roles comparing to their male peers (Dennehy & Dasgupta, 2017). Despite this, research findings revealed the benefits of mentorship to females if they were to take this role. Mentoring programs improved female students learning, retained first year female students, and opened the door for female students to discuss their learning needs with their peers (Mynard & Almarzouqi, 2006). Moreover, mentoring role assisted with the development of student females' leadership skills and prepared them to be future leaders (Archard, 2012).

Despite their importance, there is a shortage in implementing peer mentoring in worldwide universities and specifically in the Arab and Gulf region where peer mentoring programs are minimal and focusing solely on strengthening students' writing skills (Alrajhi & Adhafri, 2015; Mynard & Almarzouqi, 2006). Additionally, there seems to be lack of attention on the topic of student to student mentoring in the overall literature (Boyle, Kwon, Ross, & Simpson, 2010) with only few studies in the UAE (Aderibidge, Antiado , & Anna, 2015; Mynard & Almarzouqi, 2006).

Hence, the central objective of this study is to investigate the relationship of peer mentoring role with their leadership practices in undergraduate female students. To address this objective, the main question is **(To which extent peer mentoring program develop undergraduate female mentors' personal development and leadership skills?)** To address this main question, this study will answer these five overarching research questions:

1. How do student mentors perceive the impact that peer mentoring has on their personal development and competence?
2. Are there significant differences among the Student Leadership Practices Inventory subscale scores for undergraduate female mentors and mentees?
3. Are there significant differences among the newly joined mentors and the ones with long experience based on the Student Leadership Practices Inventory subscale?
4. Are there significant differences in participant perceptions about the impact that the mentoring role has on the development of mentors' leadership practices?
5. What SLPI subscales are associated with each other and with participants' overall perceptions?

Overall, the testable hypothesis (H1) is that a significant relationship exists between the peer mentoring role and the development of leadership practices. The null hypothesis (Ho) for this study is that a statistically significant relationship does not exist between the mentorship role and the development of leadership practices.

## **Rationale and Significance of the Study**

Mentoring is often viewed as a primary component of leadership. Mentors are committed individuals whose goal is to serve others' needs and nurture their professional and personal growth. A pool of studies investigating students' leadership approaches and behaviors recognized the connection between the functions of servant and transformational leadership with the mentoring role (Diaz, 2016; Kouzes & Posner, 2002; Shek & Lin, 2015). As such, the mentor is expected to model, explain, coach and scaffold the mentee in order to meet their needs during activities (Shek & Lin, 2015; Roberts, 2000). These functions created an environment of trusting, positive, and pleasant mentor-mentee relationships leading to academic and personal development growth (Hussain, Anwar, & Majoka, 2011; Topping, Campbell, Douglas, & Smith, 2003; Yurt & Aktas, 2016). Thus, student mentors are regarded as servant leaders because the characteristics of servant leadership is connected to their role in identifying others' needs, as well as providing them with developmental opportunities, and facilitating their growth (Greenleaf, 2002). Moreover, both transformational and servant leaders share common characteristics related to the way they lead their followers. These characteristics are related to the way these leaders listen to others, mentor them, appreciate their efforts, and empower them. Transformational leaders lead others by influencing them and being their role models. They listen and respond to followers' concerns and needs in order to perform what Bass (1985) acknowledged as "individualized consideration".

While modern leadership models encourage the importance of mentoring role to nurture individual's skills to role model and influence others, it is still overlooked within the framework of leadership education and training (Shek & Lin, 2015). To this end, researchers are interested in investigating the improvement of students' leadership skills and practices through peer mentoring activities across different age groups and disciplines. Despite this interest, few studies have examined the impact on gender, specifically female students (Crisp & Cruz, 2009; Joseph & Winston, 2005). Female students are still underrepresented in mentorship compared to their male peers and miss out on the benefits that peer mentoring could have on their self-efficacy, motivation, retention, and post-college aspirations (Dennehy &



Dasgupta, 2017). More importantly, in female colleges, these programs were effective in improving the learning of female students who were reluctant to discuss their learning needs with their male instructors (Mynard & Almarzouqi, 2006).

The majority of peer mentoring studies often looked into the positive outcomes of mentoring on mentees rather than on mentors (Amaka, 2013; Johnson & Ward, 2001). During the peer mentoring process, mentees' academic well-being, communication skills and their ability to work more effectively with others are enhanced (Comfort & McMahon 2014; Quinn, Muldoon, & Hollingworth, 2002). Through modeling and sharing their prior experiences in the course, peer mentors were found to develop mentees' pedagogical knowledge and improve their planning skills and evaluation techniques (Hudson, 2013). As such, mentees' individualized learning is enhanced, their problem-solving skills are developed, and their level of independence increased.

The mentoring practice improves mentors' abilities as much as those of the mentees. The peer mentoring experience offers a great psychological support to mentors (Foster, Ooms, & Marks-Maran, 2015). For instance, mentors' well-being and attitudes improved when close relationships were formed. Consequently, mentors' capacity and interest in understanding others improved. Their sense of responsibility towards assisting others increased (Ragins & Kram, 2009). Additionally, these programs enhanced the peer mentors' personal development (i.e., leadership, communication, and organizational skills) and motivation towards learning (Colvin & Ashman, 2010; Crisp & Cruz, 2009; Joseph & Winston, 2005). Furthermore, a trusting, friendly, and relaxed environment was formed based on the relationships and interactions between mentors and mentees (Hussain, et al., 2011; Topping et al., 2003; Yurt & Aktas, 2016). On the other hand, peer mentoring was found to positively influence undergraduate students' self-concept in English language (Alrajhi & Aldhafri, 2015). Self-concept affect students' beliefs and behaviors related to the way they adapt to the academic demands (Alrajhi & Aldhafri, 2015). As such, developing a positive self-concept improves students' learning and engagement as well as their confidence, leadership skills, and well-being (Alhamodi, 2010; Benett, 2017; Bong & Skaalvik, 2003; Crisp & Cruz, 2009; Ribas, 2009).

Hence, expanding the investigation of leadership education in various contexts is a concern addressed by many scholars in this field such as Posner (2012; 2014). Measuring the impact of leadership development programs such as peer mentoring on one's leadership development is encouraged through a longitudinal study or through pre- and post-test conditions (Posner,

2014). However, due to a lack of related literature in the context of this study from one side and to the insufficient research and validation of peer mentoring programs from another (Alhamodi, 2010; Mynard & Almarzouqi, 2006), this study followed a mixed method approach to collect both quantitative and qualitative data. Adopting this approach will enrich the literature on this topic and provide reliable and valid results by having a strong study design that overcame the limitations posed if one single method was employed.

This study will be significant to literature and practice. Nurturing students' leadership is a crucial element in the 21st century due to the effects on their personal growth (Alpern, 2017). Students with low self-confidence or self-esteem fail to face their problems and manage their learning. Developing students' leadership skills is a crucial element in improving students' well-being and self-awareness (Huebner, 1991b; Huebner, Drane, & Valois, 2000; Karcher, 2008). Additionally, this study will inspire students to be future leaders who can positively contribute to their communities. This study will bridge the gap in the literature and strengthen arguments for implementing peer mentoring programs in universities, particularly female-only settings. This study will uncover the benefits that the mentoring role has on female students' leadership skills and practices.

In her study, Archard (2012) discussed the importance of role modeling for school-age girls in Australia, New Zealand, and South Africa. She found that through mentoring, female leadership was modeled to the younger and less experienced peers. Another important finding was that the mentoring role shaped females' leadership and practices. Being a mentor and a role model to others helped female students overcome some of the difficulties they could face while taking on a leadership role. Being exposed to a female leader (mentor) will assist female students' (mentees) in understanding and overcoming gender barriers they may face on their path to leadership roles in the future (Archard, 2012). Studying the impact of leadership development in a peer assisted learning program which is considered to be "the most powerful influence in undergraduate education, even more so than advisors and instructors" (Colvin, 2007, p.166) could have a tremendous influence on curriculum developers in undergraduate programs. Additionally, information gathered on the leadership practices developed through this program could motivate program directors to give a greater role and take peer-mentoring programs seriously by allocating necessary resources to foster mentors' overall university experience. Lastly, peer-mentoring programs will offer students training opportunities to develop the leadership skills needed for work itself (Day, 2000).

## Definition of Terms

The following terms are used in this study.

**Peer to peer mentoring:** Peer mentoring is one of the numerous strategies devised to support students' academic needs and learning across the globe. It is viewed as an effective practice in which students with greater ability (mentors) provide support for students with lower ability (mentees). Peer to peer mentoring often focuses on assisting first-year students to successfully transfer to college through developing certain skills and providing them with a sense of belonging (Crisp & Cruz, 2009). Peer mentors assist student mentees on one on one or in small groups to develop their learning skills, encourage their independent learning, and provide constructive feedback on their work (Boud et al., 2014; Hammond et al., 2010). The practice of mentoring is a useful way of supporting students throughout their academic development and building their knowledge (Lassegard, 2008). It also enhances students' intellectual, emotional, personal, and social dimensions (Lassegard, 2008).

**Leadership development:** "It is the expansion of a person's capacity to be engaged in leadership roles and processes...that enable groups of people to work together in productive and meaningful ways" (Day, 2000). In this study, the development of the practices of transformational leadership will be focused on. This type of leadership represents one of the leadership approaches paradigms in which the leader focuses on improving people and their situations by satisfying their needs and empowering them. This leadership approach is stressed on in the model of Five Practices of Exemplary Leadership developed by Kouzes and Posner (2002).

**Student Leadership Practices Inventory (S-LPI):** Two educators Jim Kouzes and Barry Posner developed this leadership assessment after thirty years of original research and data collected from over three million leaders. The S-LPI constitutes thirty items based on five main practices to assess and develop students' leadership behaviors: (1) Model the Way (2) Inspire a Shared Vision 3) Challenge the Process (4) Enable Others to Act (5) Encourage the Heart.

## Structure of Dissertation

This study is guided by the need to examine the impact of peer mentoring programs on female student mentors' personal development and leadership skills in a higher education in the UAE. Although peer mentoring generally has multiple outcomes on students, the focus of this study

is to link it with their leadership skills and practices. Chapter One presented an overview of the study and clarified the problem and the purpose of the research study. It described the significance of this exploration and its relevance to the UAE context. Furthermore, the present chapter identified four overarching research questions that will guide the study. Additionally, the researcher defined the term peer mentoring and showed how it is different from other types of mentoring. This chapter has also provided an overview of the UAE educational context, a description of the theoretical framework, and an overview of the methodology. The next chapter presents the conceptual and theoretical framework of the study. It also includes the relevant literature to situate the current study and explain the results of what has been found regarding the benefits and challenges of peer mentoring and their impact on students' leadership development. The third chapter outlines the methodology used, including the collection of two types of data. This chapter includes a description of the participants, the instruments used, data collection and analysis. Reliability and validity are also described. Results and description of findings are presented in Chapter Four. Finally, Chapter Five outlines the conclusion, discussion of the study's findings, and recommendations.

## **CHAPTER 2: LITERATURE REVIEW**

### **Overview of the Chapter**

Due to recent educational reform in the UAE, leadership skills are becoming more important and are now considered a key component of students' social and cognitive development. The Ministry of Education in the UAE has called for the establishment of programs that prepare student leaders (Ministry of Education, 2016). Peer mentoring programs are believed to be the effective practice for promoting students' leadership skills and behaviors (Crisp & Cruz, 2009). However, confusion and misconceptions about these programs in the UAE limited their expansion within educational institutions. While the development of students' leadership skills is imperative, there is a greater need to uncover the benefits of peer mentoring programs. Therefore, this study sought to investigate whether the peer mentoring role may be a tool for improving female undergraduate students' personal development and leadership skills.

Peer mentoring has been utilized for many years in business and educational organizations to enhance individuals' performance. It has increased schools and university students' academic development across the curriculum. Other benefits were also noted as a result of the peer mentoring experience, including career-related outcomes and both personal and interpersonal development (Beltman & Schaebe, 2012; Terrion & Leonard, 2007). This section presents the conceptual analysis, theoretical framework, and literature related to the perceptions of undergraduate female mentors about their personal and leadership practices development.

### **Outline of the Chapter**

In Chapter 1, peer mentoring was outlined as a form of collaborative learning that is aligned with a constructivist view of knowledge acquisition. It was also framed as an approach to gain psychosocial skills and a useful way of supporting students in the challenges experienced throughout their academic development. In this chapter, two main concepts will be described and analyzed to help the readers understand formal peer-to-peer mentoring at the higher education level and how it is connected to students' academic, psychosocial, and leadership development. The social learning and student development theoretical lenses will be used to explore the psychological and philosophical principles related to peer mentoring. Furthermore, the leadership theories will be discussed to assist with the understanding and interpretation of the results of this study. The review of the literature on mentoring practices and their effects

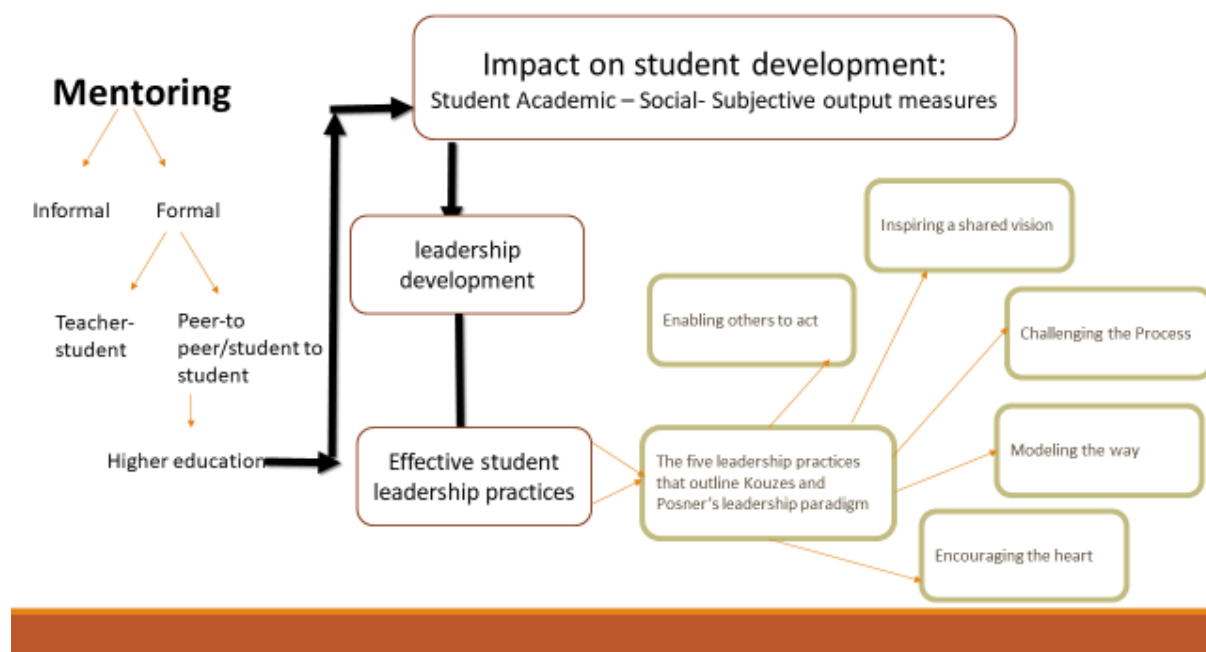
on mentors' and mentees abilities will be presented to provide a better understanding through different perspectives and contexts. Finally, a summary of this chapter will be presented, and a table will show key findings in order to situate this current study.

## **Conceptual Analysis**

Three main concepts will be described: First, the researcher will start by defining the peer mentoring programs and looking into the various types and levels that are connected with the mentoring activity. The researcher will focus on one specific type (formal peer-to-peer mentoring) at the higher education level and will identify its purpose and overall benefits. Second, an overview of prospective peer mentors' characteristics will be also described. The third concept is related to students' personal development. The researcher will explain the main effective practices of students' mentorship and how they serve in students' personal development. Additionally, the researcher will connect the mentorship activity with the five exemplary practices of leadership identified by Kouzes and Posner (2002), namely, 1) model their way, 2) shared and united vision, 3) challenge the process, 4) enabling others to act, and 5) encouraging the heart.

Figure 1 below shows the conceptual framework mind map as described by the researcher. It displays the two types of mentoring (informal and formal) and highlights the two forms of formal mentoring. The picture shows that the study will focus on the student to student mentoring in higher education. The second part of the picture pinpoints the impact of this form of peer mentoring on student development, in particular on their academic, social, and subjective output measures. The study will explore these three areas but will mainly focus on the leadership development as a component of their subjective output measures. As such, effective student leadership practices will be examined based on the five exemplary leadership practiced identified by Kouzes and Posner (2003): *Enabling others to act, Inspiring a shared vision, Challenging the process, Modeling the way, and Encouraging the heart.*

Figure 1. Conceptual framework mind map



## Peer Mentoring Programs Definition and Purpose

Peer mentoring, also referred to as ‘peer tutoring’, ‘peer-assisted learning’, ‘cooperative/collaborative learning’ and ‘peer collaboration’ is an efficient and inexpensive technique that offers students’ academic and personal support from other students. The practice of mentoring is a beneficial way of supporting students’ academic challenges and the construction of knowledge (Lassegard, 2008). Peer mentoring is a teaching and learning strategy in which students learn collaboratively from each other, without the interference of a teacher. This strategy developed students’ intellectual, emotional, personal and social dimensions (Topping, 2005).

“Peer mentoring is not a novel idea; it is probably as old as any method of collaborative or community action and has always taken place implicitly or vicariously” (Topping, 2005, p.631). Originally the peer mentoring was employed only in main subjects like mathematics and reading, but due to its success it was expanded throughout the years into all subjects (Topping, 2005). Peer mentoring is an additional support to improve students’ learning. It is not a replacement to the teacher learning activities (Schleyer et al., 2005). Its main function is to guide and support students learning of concepts that were previously explained by their respective teachers.

Definitions of peer mentoring differ depending on the type of peer mentoring programs that exist. Miller et al. (2010) categorized five types of peer mentoring class wide peer mentoring, cross-age mentoring, one-to-one mentoring, small group instruction, and home-based mentoring. Regardless of the type chosen, peer-mentoring remains a method by which one student instructs another student in material in which the former is an 'expert' and the latter is a 'novice.' This cross-peer mentoring, therefore, implies that teaching is not being undertaken by a professional (Boud et al., 2014; Colvin, 2007; Moor and Walters, 2014). Despite this understanding of the mentoring role, research findings until this date argue the need for clearer conceptions of mentoring and its purpose, especially for new joiners (Gershenfeld, 2014; Langdom et al., 2016).

Falchikov (2005) classified relationships between mentors and mentees by the degrees of similarity and difference between students and identified numerous types of peer mentoring used in higher education; some were classified as involving 'near-peers' (undergraduate teaching assistants, mentors and counselors) at a more advanced level than the learners while others used 'co-peers' (partners or work group members) at the same level of the learner. Such peer mentoring is now being used across all disciplines as a type of supplemental instruction or surrogate support in higher-level educational institutions (Boud et al., 2014; Colvin 2007; Falchikov 2005). With that being said, Terrion and Leonard (2007) indicated the significance of having both mentors and mentees in similar age, experience, and control to accomplish the desired task and support their psychosocial growth.

Noufou, Rezanian, & Hossain (2014) discussed that there is no one single approach to peer mentoring since it depends on students' individual needs. This is why they differ in types and sizes, but still provide a unified purpose. The latter is mainly to enhance newly joined students' experience and provide them with an opportunity to discuss their challenges and difficulties in a friendly environment (Haber-Curran, Everman, & Martinez, 2017). To this end, student mentors are often trained to offer educational assistance to their peers. They are usually rewarded for their services and supervised by qualified professionals (Newton et al., 2010).



## **Peer to Peer Mentoring in Higher Education**

Peer to peer mentoring is viewed as an effective practice in which students with greater ability (mentors) provide support for students with lower ability (mentees). Peer to peer mentoring often focuses on helping first-year students successfully adapt to college through the development of certain skills and providing them with a sense of belonging (Crisp & Cruz, 2009). Peer to peer mentoring is similar to any other indirect method of collaborative or community action (Topping, 2005). Peer to peer mentoring is a method by which one expert student teaches another novice student. This form of peer to peer mentoring, therefore, infers that teaching is not being undertaken by an expert (Boud, Cohen, & Sampson, 2014; Colvin, 2007; Moor & Walters, 2014). Mastropieri et al. (2006) added that proctoring programs involve one-on-one or small group mentoring by students who have successfully demonstrated proficiency in specific academic material. In general, peer mentors assist student mentees to develop their learning skills, assess their work, help them solve specific problems, and encourage their independent learning (Boud et al., 2014; Hammond, Bithell, Jones, & Bidgood, 2010).

Peer to peer mentoring is a valuable experience and a resource for both mentors and mentees in higher education (Amaka, 2013; Colvin, 2007; Lassegard, 2008; Paul, 2006). During this activity, peer mentors are trained to address curriculum content through modeling, advising and facilitating mentees' learning (Colvin, 2007). Mentors who are trained or skilled have successfully improved mentees' competence (Beasley, 1997). In turn, the mentoring activity increased mentors' retention and leadership skills like time management, personal confidence, and problem solving (Connolly, 2017).

In a changing higher education landscape, more formalized and accountable forms of peer mentoring programs emerged in the UK and US. Surrogate mentoring is a common program at bigger universities. It involves giving graduate students the responsibility to mentor their fellow undergraduates (Colvin, 2007; Falchikov, 2005). Implementing these programs in the UK or in the US aimed to improve the overall learning experience for the first-year undergraduate students by giving them the opportunity to freely discuss their difficulties and concerns (Capstick, 2004; Colvin, 2007). Through this "supplemental instruction" mentors assist their peer mentees mainly to: 1- develop learning skills, 2-encourage their independent learning, and 3- resolve specific problems (Capstick, 2004; Colvin, 2007). Peer mentoring

occurs within the same social groups and may be formal or informal. It involves one peer who has more expertise or knowledge about a subject than others (Bond & Castagnera, 2006; Colvin, 2007; Hall & Stegila, 2003). Additionally, flexibility in peer tutor programs allows them to occur outside formal class hours and can take place in more comfortable and autonomous learning centers within universities. Lassegard (2008) added that the use of peer mentoring programs as an extracurricular program for university students has been implemented in many universities worldwide, as universities look for ways to improve their services quality, promote student learning, as well as improve students' results.

### **Characteristics of Prospective Peer Mentors**

Mentoring practices were broadly used in fields such as medicine, psychology, management, and education (Crisp & Cruz, 2009; Jacobi, 1991). In business organization, pairing a junior manager with a more senior executive, a peer, or an external consultant were effective in developing the organization (Day, 2000). The opportunity to observe and interact with more experienced peers helped develop employees' intrapersonal competence and commitment. Consequently, the mentoring practice increased leadership skills capacity in others which lead to better performance management (Day, 2000). Ideal mentor characteristics in the management field were identified as: listening and communication skills, patience, knowledge of organization and industry, ability to read and understand others, honesty and trust. Whenever mentors displayed these behaviors and characteristics, a more beneficial and close mentoring relationship was anticipated (Day, 2000).

The goals of peer mentoring in education were mainly to improve students' academic achievement, competencies, and increase students' retention (Douglass et al, 2013). Peer mentoring programs at the undergraduate level were very effective in improving students' academic success only when the mentor was the right candidate to the job. A mentor's role is basically to coach, model, and sponsor less experienced students (Roberts, 2000). Studies to date confirmed that both academic and social competence are important in a mentor (Douglass et al., 2013; Heirdsfield et al., 2008; Jacobi, 1991; Terrion & Leonard, 2007). Based on Jacobi's (1991) dual-function model of mentoring, Terrion and Leonard (2007) conducted a literature review to establish characteristics of student peer mentors in higher education. In addition to the characteristics that supported the career-related and psychosocial functions described by Jacobi (1991), Terrion and Leonard (2007) discovered a third category of characteristics that

are important to consider when recruiting a mentor. They called this category “prerequisites for the student peer mentor”. Figure (2) below presents a visual of these vital characteristics that should be taken into consideration when selecting a peer mentor candidate.

To begin with the first function “career-related”, Terrion and Leonard (2007) discussed that mentors are expected to attend the *same program of study* or course in which they are coaching others. Having knowledge in the material and sharing the same experiences of learning enabled mentors to give the right advice and impact mentee’s educational outcomes (Douglas et al., 2013). Additionally, mentors who have *self-enhancement motivation* were found to value helping mentees with lower abilities and potentials. Assisting others had a great impact on one’s career goals. In other words, the majority of mentors joined the mentoring program in order to gain experience and skills that will help them in their career. Hence, having this characteristic will make the mentor focus on the immediate benefits of mentoring rather than focusing on building friendships with others. While this characteristic is considered essential for mentors’ career goals, having too much of it might change the mentoring environment and lessen the friendship and trust levels among mentors and mentees.

“Psychosocial characteristics” were at the core of an effective mentor. These are described by Terrion and Leonard (2007) as: communication skills, supportiveness, trustworthiness, having a reciprocal attitude and empathy, having a personality that matches with the mentee, and being enthusiastic and flexible. These characteristics were found to be common in several studies that looked at peer mentors’ role and characteristics such as Douglass et al. (2013), Heirdsfield et al., (2008), and Kocadere (2015). Communication skills is at the top of the psychosocial characteristics list. Having the ability to communicate, express oneself clearly, listen to others, and understand verbal and nonverbal behaviors were identified by mentees as the top quality of their ideal mentor (Douglass et al., 2013; Terrion & Leonard, 2007). Having strong communication skills allowed mentors to create a comfortable environment where mentees felt that they are encouraged and supported by them. Consequently, an environment of openness, honesty, and trust was developed. Trusting in one another increased the willingness of both mentors and mentees to share knowledge and learn from each other. This is what Terrion and Leonard (2007) defined as reciprocal attitude, or interdependent attitude to mentoring. By sharing personal and professional concerns, the relationship between both mentors and mentees became stronger. Hence, mentors felt more responsible and enthusiastic to support mentees’ academic and social integration at university.

Empathy was also described as an important characteristic in effective mentors. However, sympathizing with others will not provide positive outcomes if the mentor is not helpful in nature (Terrion & Leonard, 2007). To this end, mentor leaders are skilled in listening to others, and set immediate goals to help them overcome their difficulties. Furthermore, 15% out of the articles reviewed by Terrion and Leonard (2007) stated that mentees benefited more when they were mentored by an individual with a similar personality. Having matching personalities attracts mentees to a mentor. This characteristic proved to strengthen students' interpersonal relationships and resulted in positive mentoring outcomes (Terrion & Leonard, 2007). Additionally, mentors who show enthusiasm and passion for helping others will ensure mentees' attendance in the program and make a difference in the mentoring relationship (Terrion & Leonard, 2007). Finally, being flexible and tolerant of others' values is a common mentor characteristic found in 11% of the articles reviewed by Terrion and Leonard (2007). Effective leader mentors who made a significant change in mentees' academic and personal life had the ability to accept others' limitations and failures. Therefore, an environment of trust and friendship was develop and enhanced the mentoring experience.

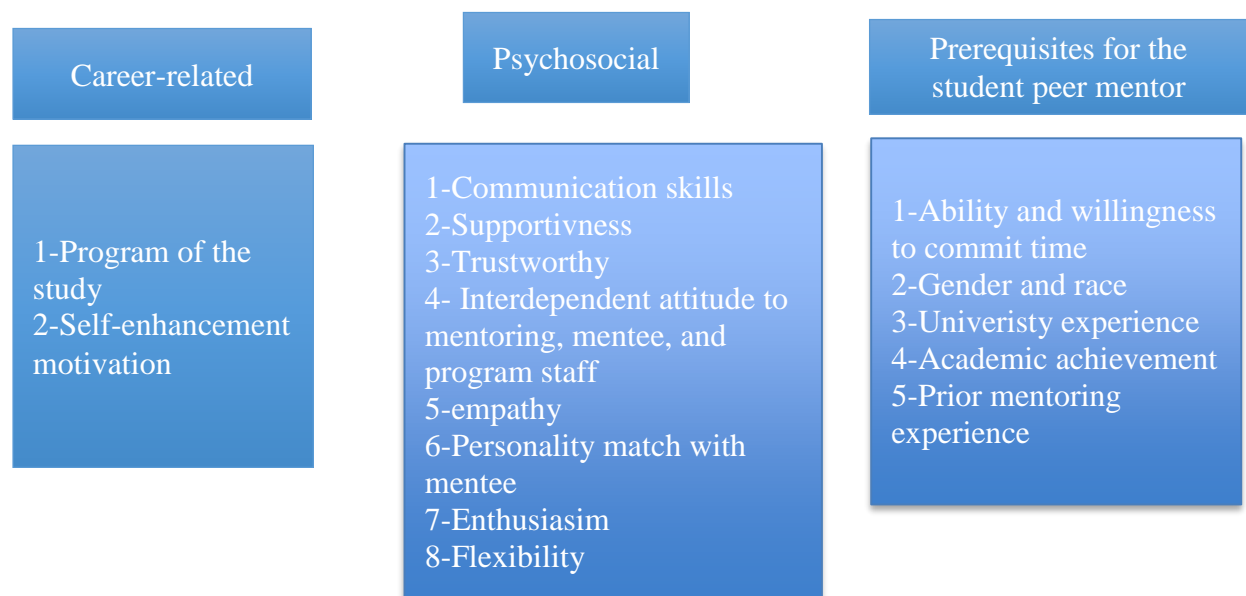
Terrion and Leonard (2007) discovered five additional characteristics as prerequisites for the student peer mentor: (1) Ability and willingness to commit time, (2) gender and race, (3) university experience, (4) academic achievement, (5) prior mentoring experience. Peer mentors are students who are pursuing degrees. Finding time in their busy schedule and commit to mentoring is a challenging process. Hence, organizing and managing their time will guarantee their commitment to the mentoring program. Furthermore, it was found that students attended mentoring sessions more when they shared the same gender with their mentor (Douglass et al., 2013; Mynard & Almarzouqi, 2006). Students of the same gender felt more comfortable and open about sharing their learning difficulties. They also felt more relaxed about building a friendship and extending their network. However, in their review, Terrion and Leonard (2007) suggested that having the same gender should be further investigated by other researchers because it is highly dependent on contextual factors (i.e., culture of university, characteristic of the students, and structure of the mentoring program).

Additionally, Terrion and Leonard (2007) found that university experience was cited in 13% of the articles reviewed. They explained that mentees felt more confident when they were tutored by a student who was familiar with the university environment. This is because these mentors are more capable of giving the right advice on how mentees can work in alignment with university standards. Academic achievement opened up a debate in the literature. While

it is not clear how academic achievement can influence mentoring functions, student mentees expressed that they relied more on assistance from mentors who had expertise in the field (Terrion & Leonard, 2007). This influenced the recruitment process in today's peer mentoring programs by accepting mentors who have a high GPA regardless of their intent or passion for the mentorship role.

Similar to Terrion and Leonard (2007), Heirdsfield et al. (2008) found that having prior mentoring experience is an important characteristic to look for when recruiting mentors. This is important to consider because it promotes the ability of the mentor to work one-on-one with the mentee. It also facilitated the mentoring process by understanding each student's needs and meeting them. Having prior experience is another component when selecting candidates for any type of work. Despite its importance, having prior mentoring experience is a difficult condition to consider when recruiting peer mentors in higher education. Particularly in the Gulf region, where many of these student mentors come from traditional teacher centered secondary schools that limit students' autonomy, creativity, and being involved in leadership roles (Mynard & Almarzouqi, 2006). Figure 2 below represents the career-related and psychosocial characteristics for effective mentors as identified by Jacobi (1991) and Terrion and Leonard (2007). It also shows the prerequisites for peer mentors discovered by Terrion and Leonard (2007) for a successful peer to peer mentoring experience.

*Figure 2. Representation of the vital characteristics for effective mentors as described by Jacobi (1991) and Terrion and Leonard (2007).*



Despite the abundance of these characteristics, it is important to highlight that both mentors and mentees cited having knowledge in the subject taught, previous enrollment in the course, and good communication skills as the most important skills that an effective mentor should have (Douglass et al., 2013). Moreover, when Won and Choi (2017) explored the mentoring experience of nursing students in a mentoring program in Korea, they recommended that organizers of such programs look at the altruistic motivations of students during the recruiting process of mentors. Having altruistic motivations generated great levels of mentors' self-satisfaction (Won & Choi, 2017).

Hiring the right people for the program might be the most important aspect of maintaining a successful peer-mentoring program. Hence, recruiting mentors based on well-defined set of characteristics will guarantee an effective selection process. Consequently, a successful atmosphere with fewer challenges will emerge. Besides, the student turnover, especially first-year students, will be also reduced (Heirdsfield et al., 2008; Terrion & Leonard, 2007).

### **Leadership Definition and Types**

When describing leadership, Patterson (1993) argued that it is no longer about having everything "under control" rather it is about people participating in the decision-making process. He added that the key to successful leadership is when leaders believe in their team, value the diversity in perspectives, and embrace conflict during discussions. In doing so, leaders will be developing people's knowledge, encouraging them to make and acknowledge mistakes, take risks, and engaging them effectively in leadership roles and processes (Day, 2000). As such, the core value of these organizations is to create an environment that "honors people for saying what they believe and not what they think the organization wants to hear" (Patterson 1993, p. 28).

The fundamental notion of all leadership definitions is viewed as strategies used by a leader who has a "moral purpose" to inspire and motivate his team to work collectively for achieving realistic goals. Fullan (2007) explained that a leader who has a moral purpose would make a difference in his followers' lives. This leader studies the current situation of the organization, discover its needs, and satisfy them to ensure employees' satisfaction. This is a short but accurate explanation of effective leadership. Effective leadership surpasses individual self-interest. It is evident when leaders empower and inspire the team to work in alignment with the organization's shared interest (Burnison, 2012). Consequently, effective leadership is believed

to affect the social climate of the organization, which will in turn affect people's productivity and performance (Cutler, 2014).

Effective leadership promotes strong and powerful leaders. Power is the energy that feeds leadership and promotes self-efficacy. There are three pure types of exercising power in a legitimate way: rational, traditional, and charismatic. Charismatic power influences people to do anything requested of them. Although charismatic leadership is positively associated with the outcomes of the organization, it also holds a danger of manipulation (Gardner & Avolio, 1998). Hence, Tuomo (2006) argued that charismatic leaders must have good leading practices and a conscious effort on their part to satisfy both the organization and the followers' needs. Through their charisma, these leaders incite followers' efforts to work together towards this goal.

Leaders' characteristics are evident in their behaviors. Highly skilled strategic leaders, for instance, possess a high quality of interpersonal skills that enables them to develop extensive networks within the organization and its different stakeholders. They think strategically and display deep wisdom. They are the ones who see the picture as a whole, plan for the long term, inspire, and convey the vision of where the organization needs to go. Charismatic leaders, on the other hand, feel that they are invincible and can do no wrong, even when others warn them about the dangers of this path. Sharing, or distributive leaders, are similar to other styles and promote proper communication and strong relationships between themselves and their team. This allows them to assess their employees' weaknesses and capabilities and distribute tasks, responsibilities, and accountability fairly.

The leadership types mentioned above are all useful in different situations. However, in all types of businesses, "transformational leadership" is often the most effective leadership style because it foregoes leaders' integrity and emotional intelligence in favor of adapting to and promoting the development of the organization (Burns, 1978; Bass 1985a). Although leadership styles vary, research shows that high levels of management can possess a variety of leadership styles, depending on the prevalent situation. Bass' (1985a) identified three types of leadership (transactional, transformational, and avoidant).

Transactional leadership is a form of strategic leadership that is key to the organization's development. It helps a leader motivate his followers through a system of rewards and punishments in exchange for their performance (Bass, 1985a). These leaders lead by providing

assistance and resources to their team in return for their efforts and performance (Bass, 1985a). Transactional leaders on the other hand, ensure that rules are followed more than focusing on making changes to the organization. Transforming leaders on the other hand, recognize an existing need of their followers and seek to satisfy it (Burns, 1978).

Bass (1985a) named what Burns originally called ‘transforming leadership’ as ‘transformational leadership’. Leaders who are considered transformational influence and inspire others by motivating the team to work towards a common vision (Leithwood, Patten, & Jantzi, 2010). Transformational leadership, as stated by Leithwood, Patten and Jantzi (2010) has four dimensions: setting directions, developing people, redesigning the organization, and managing thriving employees’ inner commitment and reaching expected targets. Therefore, its main objective is to motivate followers and ensure high communication and visibility. Hence, it is fundamental that these leaders become familiar with the culture of the organization in order to encourage their followers to perform and accomplish the organization's goals. The third style mentioned in Bass’ (1985a) approach is laissez-faire or avoidant. Avoidant leaders delegate the tasks and responsibilities to their followers while providing little or no direction. This style lacks any leadership, control, or supervision from managers, which produce low outcomes and lack of cohesiveness and satisfaction.

Developing effective leadership is the main priority of organizations in order to adapt to the rapid change and complexities of today’s globalization (DeRue & Meyers, 2014). While there is no one-size-fits-all form of leadership, the emphasis on both leadership and leadership development becomes more dependent on the leader-follower interactions (Bass & Bass, 2008; DeRue & Meyers, 2014). Extensive research tracked the development of an individual leader’s knowledge, skills, and abilities for the benefit of expanding the leadership capacity of the organization (Day, 2000; DeRue & Myers, 2014). Individuals’ self-development often stems from their life experiences that create novel learning environments (DeRue & Myers, 2014). While individual leader development is viewed as human capital for the organization, the collective leadership development is perceived as its social capital (Day, 2000). Therefore, the emphasis is on strengthening the leader-follower and follower-follower relationships. Developing these social interactions will build the individual competency and nurture a setting of openness and trust inside the organization (Day, 2000). Hence, the building of trust between leaders and followers will create an engaging culture where shared responsibilities and decision-making will expand employees’ collective leadership and increase their performance (Cutler, 2014).



The description above makes a clear distinction between individual leadership development, collective development, and management development. Management development is acquiring specific types of knowledge, skills, and abilities to develop people's performance in managerial roles. Leadership development as stated above expands the capacity of people to work together in meaningful ways and in different situations (Day, 2000). In other words, leadership development is formed when organizations invest in training individual leaders with a set of skills and abilities that are focused on building networked relationships and creating organizational values. Leadership development takes place when organizations develop leadership capacity in all employees and prepare them to cooperate, share resources, and build commitments for the sake of the collective values (Day, 2000). Various practices such as 360-degree feedback, coaching, mentoring, and action learning are used to develop leaders and leadership in organizations (Day, 2000). Formal and informal mentoring were seen as very effective components of development inside the organization. Mentoring provides junior managers with the opportunity to observe and interact with more senior executives. This, in turn, will enhance those individuals' intrapersonal competence and create stronger human bonds as a result of greater trust, respect, and commitment (Day, 2000). Furthermore, when improving the quality of mentoring, the quality of leadership experienced by subordinates will also improve (Day, 2000).

As the importance of leadership in management is acknowledged, it is likewise essential in preparing undergraduate students to enter the workforce (Day & Harrison, 2007). As such, developing specific leadership training programs for undergraduates like integrating leadership assignments in the curriculum or dedicating developed leadership courses will effectively develop their leadership and management skillsets (Vanniasinkam, 2015). However, implementing these across many existing programs (i.e., health sciences fields) was challenging for several universities. Hence, mentoring became a prominent factor in students' personal growth and leadership development (Priest & Donley, 2014). The formation of strong relationships between mentors and mentees on one side and promoting mentors teaching skills from another nurtured their leadership capacity and experiences (Priest & Clegorne, 2015). Once these are developed, student mentors grow as leaders and their interpersonal relationships expand. Consequently, their social awareness and skills are nurtured, and they become more involved in the building of others (Culter, 2014). Mentors can do that because they listen and empathize with others' needs and are committed to making a difference in others.

## **Theoretical Framework**

### **Social Learning Theory Vygotsky (1978)**

The principles of Piaget's and Vygotsky's social learning theories are relevant to the effectiveness of peer mentoring. It is through these theories that we understand how people learn in their interactions and communications with others. According to the Vygotskian approach, learning takes place when students interact with their teachers and peers. He argued that learning happens when weak students are supported or guided by more competent learners through the zone of proximal development (which is the difference between a learner's performance that is unaided, and a performance supported by a more competent individual). The Vygotskian principle assumes that students' cognitive abilities are enhanced through social interactions between learners and their more knowledgeable peers (Vygotsky, 1978). He explained that before accomplishing tasks independently, students can perform them by collaborating with others and receiving some guidance and support (Crain, 2015, p. 244). However, students must be intrinsically motivated, enthusiastic, and actively involved to reach their potential for new learning (Crain, 2015). As such, students extend their understanding when they are actively engaged in collaborative communities where they are supported by another peer. The collaborative process of peer mentoring facilitates peer interaction which in turn promotes learning and knowledge transfer. The social interaction embedded in the peer mentoring experience facilitates the communication between the two peers and encourages students to feel more comfortable in asking for help (Douglass, Smith, & Smith, 2013).

Despite this, both constructivist theorists (Piaget and Vygotsky) believed in the individual's nature to explore, make their own discoveries, and formulate their own positions. Vygotsky believed that this intellectual development is not simply the product of their own discoveries. If this was the case, children's minds would not advance. The social and cultural contexts that we live in affect the structure of our cognitive world and our complex mental activities (i.e., voluntary attention, deliberate memory, problem solving) (Berk & Meyers, 2016). In other words, Vygotsky viewed the influence of the knowledge and conceptual tools (mental growth) as a consequence of social and cultural intervention (Crain, 2015). This notion of the sociocultural theory strongly emphasizes the significance of the interaction between students and their external social world where they are stimulated and guided by the existence of a more capable peer or adult. While this interaction undermines students' independence, Vygotsky

argued that minimal amounts of assistance and presenting activities that will stimulate, challenge, and engage them will increase their ability to solve harder tasks (Crain, 2015).

Vygotsky's zone of proximal development theory was applied mostly to preschool and school-age children. It is at the core of any school curriculum and teaching strategies. However, this form of teaching - known as scaffolding - promotes learning at all ages (Berk & Meyers, 2016). The interaction between a teacher scaffolding a student or a student scaffolding his/ her peer assists with the development of individual's cognitive and higher psychological functions (Berk & Meyers, 2016; Boud et al., 2014). In a higher education context, this form of scaffolding is also known as collaborative learning. It is seen when groups of students engage in exploration of knowledge. Consequently, they learn from and with each other (Boud et al., 2014). By collaborating, students share experiences and existing knowledge and skills. It is also believed that students are deeply engaged when working together and reflect more on tasks than they would in the presence of a teacher or a staff member (Boud et al., 2014). Similarly, the peer mentoring model suggests that students work together and collaborate in order to scaffold and develop the learning. As a result, students' cognitive abilities are developed, and their social and communication skills improve. This gain will make both mentors and mentees confident in what they have achieved. Therefore, students become intrinsically motivated to assist each other in achieving their goals and attaining success (Topping, 2008). Despite the acknowledged benefits of collaborative learning, Colvin and Achman (2010) argued that students' willingness to grant and take authority is key to a successful autonomous collaboration.

Connection to the study: When students work together collaboratively, they create reciprocal relationships and establish mutual trust and confidence. These relationships bring about a shared understanding of the purposes and goals that support students' learning. Consequently, the student mentee will gain knowledge on a particular topic and the mentor will gain skills and competencies through "learning by teaching" (i.e., communication, assessment, and modelling) (Douglass et al., 2013). The social learning theories connected to the peer-mentoring model place a great emphasis on students' cognitive and psychosocial development at school level as well as in college.

## **Social Cognitive Theory (Bandura, 1978)**

This theory is an extension of the social learning theory because it claims that what people learn is a result of their social interactions and observations of others' experiences. Bandura (1997) explained that what people do and the way they behave is a result of their interaction with the environment. As a result, individuals' cognitive abilities, beliefs, and attitudes are nurtured through their social interactions with the surroundings. Personal factors (P), behaviours (B), and environment (E) consist what Bandura (1997) called triadic reciprocal model of human agency. The three elements of this model are connected together and in direct constant relationship to produce outcome expectancies. For instance, self-efficacy as a personal factor (P) refers to the beliefs and abilities of individual's to accomplish a particular task in a specific situation and overcome the obstacles when coping with the environment (E) demands through executing certain behaviours (B) (Bandura, 1997; Bandura & Locke, 2003). Hence, individuals' behaviours that will generate certain outcome expectancies could be understood through the strengths or weaknesses of self-efficacy beliefs.

Bandura (1977; 1993) claimed that four sources could influence individual's reasoning: mastery learning, vicarious learning, verbal persuasion, and emotional arousal. He described mastery learning as learning through past success. To master a task, individuals are required to have perseverance and resilience to overcome obstacles and succeed. Once succeeded in this task, sense of self-beliefs in this area will form. Vicarious learning as learning from the experiences of others or from imagining oneself in a given situation. Observing our role model people mastering the tasks will increase our self-efficacy beliefs and capabilities in this area. Verbal persuasion means relying on words of encouragement and feedback to influence beliefs. Individuals who are encouraged and persuaded are most likely to put in the effort and overcome the challenges in order to master certain tasks. Emotional arousal means that our emotional cues and physiological signs influence our thinking and confidence in our capabilities, and performance.

These four sources of reasoning guide individuals' behaviors, beliefs, and choices that determine their own performance (Bandura, 1977, 1993). One particular belief was highlighted throughout Bandura's work, self-efficacy beliefs. These are described as a personal factor that can influence individual's behaviours and his/her environment (Bandura, 1997). Self-efficacy is an attribute that can directly influence leaders' behaviours and goals. Self-efficacy can do

this because it is interrelated to the choices and decisions that these individuals make (McCormick, Tanguma, & López-Forment, 2002; Schunk & Meece, 2006). Leaders who show high levels of self-esteem, self-confidence, commitment, assertiveness, and perseverance have high levels of self-efficacy beliefs (McCormick et al., 2002). Leaders with these traits work efficaciously to motivate leadership in other, to elevate their conscientiousness and extraversion, and to boost their collective efficacy and performance (Paglis, 2010). Thus, leaders with high level of self-efficacy have a better quality of leadership because they improve others' achievement through modelling a successful performance in managing challenging tasks and exhibiting problem solving skills (McCormick et al., 2002). Despite its importance, self-efficacy theory was contradicted by others theorists. Some of these suggested that it is the effect rather than a causal influence of individual's performance and behavioural change (Teasdale, 1978; Kirsch, 1980; McAuley, 1985). Others argued that in many cases, self-efficacy beliefs are themselves dependent on the anticipated outcomes (Teasdale, 1978). Which means that individuals' behaviours are not controlled by their self-efficacy beliefs as much as they are controlled by their outcomes expectations and the importance of the tasks that are required to accomplish these outcomes.

Despite these contradictions, Bandura expanded his work and proved in many situations that individuals' self-efficacy beliefs that are determined through their perceived capabilities to select types of performances and achieve specific results (self-efficacy) remain the main controllable factor of behaviour. Hence, self-efficacy beliefs remained a fundamental personal factor that is highly correlated with individual's academic achievement (Pajares & Schunk, 2001). The success or failure on achievement is in turn attributed to the individual's interpretation of the internal or external causes of their behaviours.

Connection to study: This theory is connected to this study particularly in two areas, namely, modeling/vicarious experiences and verbal persuasion. First, when mentors perform a behavior it is expected from the mentees who are observing them to engage in this behavior and replicate it. Mentors are acting as role models to others and providing as such an idealized influence for mentees to observe, repeat, and learn. Second, mentors are expected to promote mentees' achievement. One way to do that is through verbal encouragement or persuasion. As a result, mentees self-efficacy levels increase (Shaw et al., 2018).

### **Self-determination Theory (Deci & Ryan, 1985)**

This theory is concerned with the degree to which individuals' self-motivation and self-determination guide their behaviors and the choices they make. It is a framework of motivation that can be used to observe individual's development. Deci and Ryan (2000) differentiated between intrinsic and extrinsic motivation and proposed three main intrinsic psychological needs involved in self-determination. These needs are identified to be competence, autonomy, and relatedness. Autonomy and competence are essential for intrinsic motivation of individuals to freely engage in activities they find interesting and challenging (Deci & Ryan, 2000, p. 234). As a result, they are necessary to retain individual's motivation for learning (Neimiec & Ryan, 2009).

Self-determination theory was investigated within Education field to see how schools can improve students' performance and facilitate their growth. While the three needs (autonomy, competence, and relatedness) were necessary to be satisfied, autonomous motivation was in particular the most need that teachers would stimulate to engage students in interesting and valuable activities (Ryan & Deci, 2000). When students are intrinsically motivated they became eager and passionate to perform the task, and gained a sense of fulfillment and satisfaction when it is accomplished. Ryan and Deci (2000) proclaim that the sustainability of this motivation is dependent on the social environment surrounding the individual. As such, satisfying the competence, autonomy, and relatedness needs becomes fundamental to maintain individual's motivation.

**Competence:** Whenever individuals succeeded in performing activities and overcoming its challenges, a sense of intrinsic satisfaction was innate (Deci & Ryan, 1985). On the other hand, any negative imposition toward this process may weaken feelings of intrinsic motivation.

**Autonomy:** Intrinsic motivation cannot flourish without having both competence and autonomy needs satisfied. Autonomy support and encouragement are usually provided to individuals to perform certain tasks. Supporting individuals' choices and decision making and giving them constructive feedback will uplift their autonomous motivation (Ryan & Deci, 2000). In turn, their self-esteem levels increased (Grolnick & Ryan, 1987).

**Relatedness:** Ryan and Deci (2000) explained that autonomy support and relatedness should both exist together to promote individuals' intrinsic motivation. Relatedness is about individuals' sense of security and the degree they are attached with their environment. It is

noticed when students feel connected to their learning communities. The degree of this connection determined students' engagement in their learning and became an indicator of their performance (Grolnick & Ryan, 1987).

Connection to this study: Mentors who succeed in developing mentees growth and wellbeing satisfy their three psychological needs (competence, autonomy, and relatedness) (Shaw et al., 2018). Striving competence is when students are able to perform the task and have the confidence of doing it unaided. Mentors role is to develop this confidence in mentees to acquire this competence and increase their autonomy to eventually accomplish the task without their help. This notion is interrelated with the self-efficacious beliefs of individuals that they can successfully accomplish tasks (Bandura, 1977; 2012).

### **Student Development Theory (Chickering, 1969; Priest & Clegorne, 2015)**

Research on students' development linked their engagement in purposeful educational activities with their learning and development (Astin, 1993; Priest & Clegorne, 2015). As such, what students do in university matters because it shapes their identity and prepares them to be effective individuals in a diverse and changing world (Priest & Clegorne, 2015). When students engage in high impact practices such as sociocultural conversations with peers, participate in mentoring activities, and participate in community services and off-campus organizations, they develop their leadership capacity. Hence, students at the college level undergo several development changes including the leadership element. Chickering (1969) identified these changes as the seven vectors of development:

- 1- Achieving competence is seen when students' intellectual, physical, manual, and interpersonal competencies are improved.
- 2- Managing emotions is accomplished when students' negative emotions are not eliminated but rather controlled. Chickering (1969) discussed that students are able to manage these emotions (such as depression, anger, fear, and anxiety) whenever they become aware of what triggers them.

- 3- Developing autonomy is accomplished through the development of emotional and instrumental independence, and with the recognition of interdependence. When students, for instance, participate in off-campus activities it will positively contribute to their autonomy and leadership development (Priest & Clegorne, 2015).
- 4- Establishing identity is the fourth vector that involves an accumulation of all the vectors and is described by having individuals see themselves within a historical, social, and ethnic context and understand how they are viewed by others. Participating in high-impact discussions (i.e., social construction and ethnocentrism) will increase students' capacity to understand the self and others. Priest and Clegorne (2015) explained that fostering students' self-reflection and dialogue will challenge them to explore how the integration of their identity influences their own and others' values, perspectives, and actions.
- 5- Freeing interpersonal relationships is a fundamental vector in developing students' tolerance for a diverse group of people and building healthy, honest, and long-term relationships.
- 6- Developing purpose is the vector that helps students align their goals with a more meaningful purpose.
- 7- Developing integrity happens when individuals' behaviors and decision-making are guided through a set of beliefs and values (Chickering, 1969). For instance, when students participate in community services and off-campus experiences they become socially responsible (Priest & Clegorne, 2015). Consequently, new sets of values are created.

Connection to Study: These seven vectors will help in understanding the development stages of the students working in peer mentoring programs. Knowing these development stages will support the identification of the process and outcomes of students' leadership development. Looking at these seven vectors of students' development is at the core of the contemporary model of students' leadership development. Students' engagement of high leadership practices is a result of the degree to which they are personally developed. For instance, participating in peer mentoring programs could help students achieve their interpersonal competence through interactions with other peers. They will also allow students to develop purpose, establish



identity, gain integrity, become autonomous, manage emotions, and create interpersonal relationships. These will help students expand their ability and motivation to gain knowledge and attributes for leadership (Priest & Clegorne, 2015).

### **Transformational and Servant Leadership Theories**

To understand leadership behaviors, it is essential to look first at leadership approaches and how each approach can produce different behaviors. This section will describe the theories that are best suitable for this study. As such, the Trait Approach to Leadership provides an important framework to understand the relationship between characteristics or traits of leaders and their behaviors across many situations. The existence of these traits in people could help in differentiating people between leaders and followers. As a result, people who have more leadership traits are seen in higher positions. These leadership traits are seen through transformational, charismatic, transactional, and servant leadership approaches.

Transformational leaders go beyond their self-interests to inspire and motivate others (Bass & Riggio, 2006). They focus on improving their followers and their situations by satisfying their needs and empowering them. They are influential leaders because they demonstrate confidence, articulate goals, and have faith in their own beliefs. These leaders usually succeed in uniting their followers and motivating them to bring out their best performances (Bass, 1985). Bass and Riggio (2006) identified four behavioral dimensions of transformational leadership: (1) inspirational motivation through promoting set of values, (2) intellectual stimulation to encourage followers' problem solving, creativity, and innovation, (3) idealized influence by acting as a role model and bring out the best behaviors of followers, (4) individualized consideration through treating others as unique individuals and encouraging independent decision making.

Transactional leaders have similar effect on followers to that of transformational leaders but their followers are more dependent on the leader. This could limit their acting with free choice. Transactional Leaders are task-focused people who tend to work best in stable environments and avoid risks. Hence, followers meet the minimum expectations and leaders provide the essential needs of the followers (Bass, 1985). Transformational and transactional leadership

are both focusing on the relationship between leaders and their followers more than the actual behavior of leaders (Bass, 1985). Servant Leaders serve and meet the needs of followers rather than focusing on one's self. Hence, these leaders do not inherent the power hierarchically but through the growth of their followers (Greenleaf, 2002). They are responsible for giving followers more freedom to demonstrate their abilities and empowering them to take ownership of their efforts. As a result, an environment of trusting and positive relationships is established.

Servant leaders consider leadership as a learning process rather than a set of innate characteristics (Brown & Posner, 2001). While transformational leadership is mostly associated with organizational improvement, the emphasis of servant leadership is on the people who form the organization. Hence, to meet organizational goals, servant leaders believe their utmost objective is to improve people's progress and wellbeing (Greenleaf, 2002). Servant leadership has similar functions to the role of a peer mentor in leading, coaching, and role-modeling. However, looking into peer mentoring solely through the lens of servant leadership does not fit with the framework of this study. First, a peer mentor's goal could be developing their own skills more than serving others; Secondly, peer mentors act most of the time as influential role models whose job is to improve the collective performance of the team. Therefore, looking into servant leadership under the umbrella of the transformational leadership approach is the best paradigm to describe students' leadership practices more broadly.

Connection to the study: Studies like Diaz (2016), Roberts (2000), Shek & Lin (2015), and Shaw et al. (2018) showed that effective leadership and effective mentoring are analogous and that transformational and servant leadership behaviors are associated with effective peer mentorship. Mentors were considered mainly as servant leaders who serve others' needs and aspirations as well as individuals who can make an impact by developing and empowering their mentees. The dimensions of both transformational and servant leadership are interconnected and at the same time linked with the paradigm of the five practices of exemplary leadership practices developed by Kouzes and Posner (2002) as shown in figure 3 below.

*Figure 3. Visual representation of the consequential connection of theories*

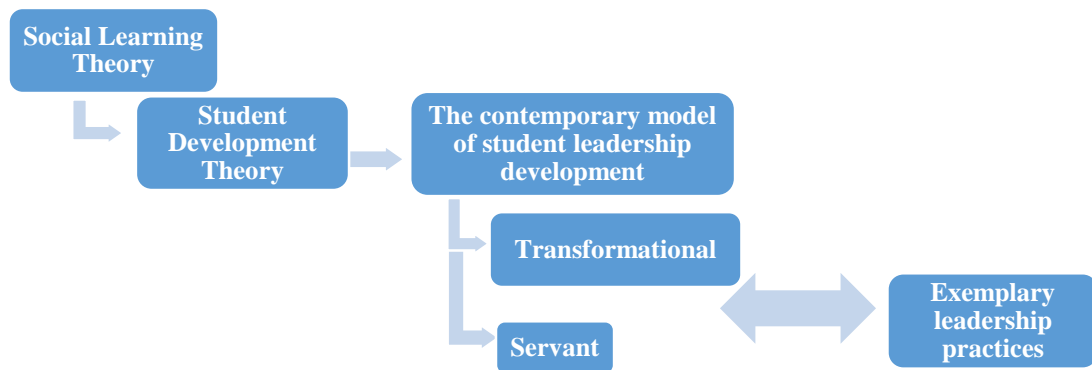


Figure 3 above shows how student development is a result of the social learning that happens during the peer to peer mentoring activity. Consequently, their personal and leadership skills will develop in particular, the components of transformational and servant theories. These two are proved to be interrelated with the exemplary leadership practices of Kouzes and Posner (2002) described in the section below.

### **Paradigm of the Five Practices of Exemplary Leadership Developed by Kouzes and Posner (2002)**

Leaders' success is determined by their actions and behaviors. While numerous studies (i.e., Bass, Avolio, & Atwater, 1996; Bass & Bass, 2008; Bass, & Riggio, 2006) looked at leaders' behaviors and practices in the management area, Astin and Astin (2000) and Kouzes and Posner (2002) stressed on the development of student leaders. Students' leadership development is viewed as the growth of their ability to be engaged in leadership processes and roles that motivate them to work collaboratively with others in productive and meaningful ways (Day, 2000). To this end, Kouzes and Posner (2002) developed a set of leadership practices in their S-LPI (Student Leadership Practices Inventory) model based on what they have observed in student leadership actions and behaviors (Posner & Kouzes, 1998). They found that student leaders who use specific leadership practices are more effective than those who do not. These

practices are considered exemplary for leaders to exhibit: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart.

For exemplary leaders to effectively guide their followers, they must model the behavior they expect of others. To **model their way**, leaders should first understand and clarify their own values and beliefs and demonstrate commitment to them through action. These represent both the leader's and team's values. While serving as role models within the organization, leaders encourage and engage others to work towards a **shared and united vision** to improve performance. "Having desire to make something happen, changing the way things are, and creating something that no one else has ever created before is a leader's vision for their organization" (Kouzes & Posner, 2007, p.17). Having an idea and communicating it to others is what allows leaders to make a difference. Therefore, leaders take risks and **challenge the process** within the organization in order to change the direction of the organization and its people. These leaders step into the unknown to look for ways to grow and improve. Hence, they take risks and initiatives, and learn from their mistakes and failures. To do so, these leaders must be skilled at **enabling others to act** by building and stimulating collaboration towards a united goal. Leadership is doing things through people. By fostering collaboration and building relationships, leaders succeed in engaging people and gaining their commitment. Hence, a culture of trust and shared power in the organization is created. As a result, **encouraging the heart** is at the center of this people-centered approach to leadership where leaders regularly recognize and acknowledge the efforts of the team to maintain their moral engagement. Recognizing people's contributions and celebrating their victories will motivate the team to carry on and perform at their best (Kouzes & Posner, 2007).

These five practices are incorporated in the dimensions of transformational and servant leadership. A transformational leader sets direction towards a common goal, works on developing the team and thrive their inner commitment to the goal. This type of leadership is more related to ethics, values, and social justice whereby changes to the whole organization are made for the benefit of society (Leithwood et al., 2010). An exemplary leader is responsible of the growth of others and succeeds in building a community inside the organization. These are the characteristics of servant leaders who listen to people's needs, empathize with them and serve them (Greenleaf, 2002). Therefore, building relationships and trust between the leader and the follower is the cornerstone of leadership (Kouzes & Posner, 2007). Similar to Kouzes and Posner (2007), we assume that leadership is not inherited. It is a set of skills and abilities that anyone can possess. One may have the skills of a transformational or servant leader, but

these won't make a difference without the existence of strong relationships between leaders and followers.

A series of studies showed that student leaders who reported using the five leadership practices described above developed their leadership skills (Posner, 2012; 2014). Interestingly, their observers reported the same. The observers perceived that student leaders who used the five leadership practices developed their leadership skills to a greater extent than those who did not use these practices. These five exemplary practices were found common across various sample populations. Collecting data about the exemplary leadership skills through using the same SLPI surveys from different racial, gender, and ethnic groups was found to be relatively stable (Posner, 2012; 2014).

Hence, this model is important for this study because it is at the core of adult students' leadership development. Astin and Astin (2000) described students' leadership as a transformative process that values the creation of an environment where students grow with one another. Student leaders in college are empowered to create a positive social change inside the institution by modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. As a result, "they build a community of shared responsibility where every individual is respected and their well-being matters" (Astin & Astin, 2000, p.21). Ultimately, students' leadership practices and behaviors become the cornerstone of understanding the promotion of their personal development and competencies in the university.

## **Review of the Related Literature**

The following review presents the foundation for this research study. Specifically, this review of literature is presented in six sections: (a) Implementation of peer mentoring in higher education (b) Benefits of peer mentoring on mentors and mentees (c) Challenges of peer mentoring programs (d) Peer mentoring impact on students' leadership. This section will highlight the development of transformational and servant leadership as a result of peer mentoring experience and a connection of these two leadership theories will be integrated within the model of student leadership practices inventory. Then section (e) will present an Overview of peer mentoring in Arab and Gulf region and section (f) will discuss the peer to peer mentoring in higher education. Lastly, a chapter summary will follow these sections to conclude the key findings and situate the study.

## **Implementation of Peer Mentoring in Higher Education**

Several studies showed that the implementation of peer mentoring programs in the university was a valuable, worthwhile experience and a learning resource for students (Amaka, 2013; Colvin, 2007; Hall and Stegila, 2003; Lassegard, 2008; Paul, 2006). Many of these programs focused on the curriculum content but they also aimed at increasing retention rates and targeting high-risk courses rather than high-risk students. Like this, peer mentors are trained in advising, modeling, and facilitating, more than addressing the content of the curriculum (Colvin, 2007). Other studies investigated the benefits of the formal mentoring experience among faculty. Among the various benefits found, it mostly promoted novice faculty retention and increased their success and well-being (Ingersoll & Strong, 2011). For instance, during the mutual mentoring process, senior female faculty shared experiences and knowledge, assisted one another, and strengthened the relationships with each other (List & Sorcinelli, 2018). In this context, the mentoring program presented a platform where females can discuss confidential concerns and support each other to solve their problems. Mutual mentoring fostered the expansion of female mentors' leadership capacity. Female mentors were seen taking initiatives and creating a change in their department. Consequently, they felt higher satisfaction and fulfillment in their job (List & Sorcinelli, 2018).

Topping (2001a) recommended that institutions planning to implement peer learning programs should consider the following variables:

- 1- The local context
- 2- The objectives aimed for by establishing the program
- 3- The curriculum area
- 4- The participants and how to train them and assure that they are qualified
- 5- The mentoring technique and whether it will be newly designed or previously used
- 6- Contact as in the session duration and frequency
- 7- The materials and resources required
- 8- Trainings for staff, mentors, and mentees
- 9- Quality assurance and monitoring of the process
- 10- Assessment of the peer mentoring process and peer mentors.

Implementing peer mentoring held advantages for the educational institution itself, such as possible improvement in retention rates and course grades (Capstick, 2004; Parkinson, 2004). Colvin (2007) argued that peer-mentoring programs are presented as an effective system to make the university a more ‘humanized’ environment with support networks and closer ties between their elements, thus facilitating academic success and institutional development. Peer mentoring programs have, therefore, developed and integrated with traditional programs in universities to help meet the needs for accountability, better assessment, and improved outcomes for the various stakeholders.

Many research studies investigated the implementation of peer mentoring at various fields in several universities around the world. For instance, one study was conducted by Riggio et al. (1991) on a Reciprocal Peer-Tutoring (RPT) program at California State University. The program required students in an Introductory Psychology course to meet with other student partners periodically throughout the course to quiz each other as well as discuss the main ideas of each unit. The program was found to be extremely successful in both respects. When compared to other students who participated in other supplementary activities, RPT participants showed higher academic achievement on unit tests, and they rated themselves as more satisfied with the class. Additionally, they were better adjusted psychosocially and frequently used their RPT partner as a supportive resource in the course.

A similar study was carried out by Lidren, Meier, & Brigham (1991) at Washington State University on the utilization of a peer support program in an introductory psychology class. Students were given a choice of attending weekly supplemental discussion sessions led by senior undergraduates (peer tutors). Those who opted for these supplemental additional discussion sessions were assigned to a group of a maximum of six students to one peer tutor, while the other group of twenty students only attended the specific lecturer’s classes. As a result, students who took the additional peer tutorial sessions performed significantly better on the course exams than the students who only had a professor.

Regardless of where and how these programs were implemented, the objective of these educational institutions was to increase student retention rate, particularly first-generation students (Garcia, 2010). Involving these students on campus and inside the classroom increased students’ learning success and retention rate (Astin, 1993). Being involved in peer mentoring offered a great opportunity for these students to be involved in campus activities and socialize with the staff, faculty, and peers (Fischer, 2007). Indeed, first generation student mentors’

interpersonal skills improved as a result of meeting with peers and professors, and participating in leadership positions (Connolly, 2017). They appeared empowered to make decisions without the assistance of staff or faculty members. Consequently, their self-confidence, communication, and problem-solving skills increased (Connolly, 2017). Whether student mentors were first generation students or not, they all perceived themselves as being role models and their core value was to serve others' needs (Colvin, 2007; Connolly, 2017).

Despite this clear description of peer to peer mentoring, literature is not informing student mentors' perceptions and feelings towards their role activity nor does it highlight how they manage their challenges (Terrion & Leonard, 2007; Zepke & Leach, 2010). In fact, very few studies examined the role of peer mentoring and the personal qualities that successful mentors should have. This is why research has always suggested the necessity of training peer mentors and supporting peer-mentoring schemes (Colvin & Ashman, 2010; Connolly, 2017). Furthermore, there is little data about how students approach peer mentoring, how they cope with any issues that may arise, and how they feel once they have gone through the peer mentoring programs (Noufou, Rezaia, & Hossain, 2014). To this end, a successful design and implementation of peer mentoring program is always dependent on understanding and considering students' perspectives (Noufou, Rezaia, & Hossain, 2014).

On the other hand, research showed that students responded favorably to the social aspects of the peer learning sessions. Mentees enjoyed learning with mentors and valued their perspectives. Additionally, mentees appreciated the opportunity to discuss their concerns away from their instructors (Hammond et al., 2010). Furthermore, students who served as mentors for less experienced peers had successfully helped them in required areas of learning while increasing mentees' and their own confidence levels for teaching (Gilles & Wilson, 2004). Recognizing mentors' efforts with financial compensation or through certificates or symbolic awards strengthened their commitment to the mentoring program (Noufou, Rezaia, & Hossain, 2014). Consequently, results indicated that both groups (mentors and mentees) benefited from their interactions with teammates and professional development experiences (Colvin & Ashman, 2010; Gilles & Wilson, 2004; Heirdsfield et al., 2008; Jacobi, 1991).



## **Benefits of Peer Mentoring on Mentors and Mentees**

John Hattie (2009, p. 22), in his book 'Visible Learning,' claimed that "the biggest effects on student learning occur when teachers become learners of their teaching, and when students become their teachers". He argued that when students change from being recipients to being teachers, it becomes necessary for them to comprehend the material at an expert level. Hence, with peer tutoring programs, students practice recovery of information by recalling it. This recovery practice of information is beneficial to foster the learning of more complicated concepts (Karpicke & Blunt, 2011). Additionally, it was determined that the act of reconstructing knowledge in itself augments learning, retention of content, and increases mastery of the content (Karpicke & Blunt, 2011). According to Mazur (2014), many students focus on learning methods or problem-solving tactics without comprehending the fundamental notions; this comprehension is necessary for the retention of information and teaching it to others. Nevertheless, students who teach what they learned in the peer mentoring programs become involved in self-evaluating, self-assessing, and self-learning (Hattie, 2009). It was suggested in some studies that the success of the peer mentoring process is because the mentor and student mentee share similar knowledge and cognitive ability. Therefore, it permits the peer mentors to use language that mentees understand better and to explain complex concepts at a more comprehensive level (Kunsch et al., 2007; Topping, 2008).

A Vygotskian perspective underpins these peer mentoring support programs. As such, peer mentoring develops students' cognitive skills when they interact with others and their environment. A pool of research discussed the positive outcomes that peer-to-peer mentoring offers to mentors, mentees, faculty, and institution. It promoted mentees' learning by encouraging them to understand the concepts and ideas rather than relying solely on memorization of the information (Cui, Huang, Cortese, & Pepper, 2015). It helped international students feel comfortable in sharing their learning difficulties while they could not do the same in formal lectures classrooms (Cui et al., 2015). Peer mentoring initiatives had major benefits for tertiary students' academic well-being in Computer Literacy, Languages, Economics, Medicine, Mathematics, and Physical Education as well as the attainment and retention of first-year students who were at risk of failing (Comfort & McMahon 2014; Quinn, Muldoon, & Hollingworth, 2002).

Additionally, such programs were found to have positive consequences on students' learning. For instance, they were effective in boosting students' individualized learning and developing

their autonomous skills and problem-solving. Furthermore, peer mentoring had positive effects on the mentees' psychological and emotional well-being. A study conducted by Paul (2006) found that peer mentors are more sensitive than adults in noticing nonverbal signs. Additionally, peer-mentoring programs provided mentees with the opportunity to receive more attention from the peer mentor and more time to speak. This allows them to take an active part in building their knowledge. They also receive more attention which makes students feel valued and more open to interacting with a peer mentor. This gives them a sense of happiness and fulfillment. First-year students had the most gains from these programs which helped them adjust to university life and improve their study skills (Comfort & McMahon 2014; Quinn et al., 2002). It also helped them attain a clearer view of the learning outcomes and a better understanding of the course or subject being taught (Comfort & McMahon, 2014; Park, Sim, & Roh, 2008).

Moreover, it was argued that peer mentoring programs supported students' ability to recall information, foster learning of complex concepts, and assist in reconstruction of knowledge (Karpicke & Blunt, 2011). This supplemental learning sustains the retention of information and increases students' mastery of the content. In this case, mentors become learners of their teaching and mentees change from being students as recipients to being productive teachers (Hattie, 2009). This is more likely to occur if the material is well understood and the language used to explain concepts is easy to comprehend between peer-teachers and learners (Mazur 2014; Topping, 2008). Consequently, students' academic improvement will develop their feelings of comfort, confidence, and self-esteem, leading to more positive emotions.

While the mentoring outcomes for mentors are numerous, they were always characterized based on the mentoring framework of Crisp and Cruz (2009). This framework summarizes the functional mentor roles into four domains: (1) Psychological and Emotional Support (PSE), (2) Goal Setting and Career Path (GSC), (3) Academic Subject Knowledge Support (AKS), (4) the Existence of a Role Model (ERM). Examples of each domain are cited below:

PSE: Being a peer mentor nurtured mentors' communications skill and made them better at understanding students' needs (Bennett 2017; Crisp & Cruz, 2009; Gunn, Lee, & Steed, 2017; Skaniakos, Penttinen, & Lairio, 2014). Mentors built new friendships with others and motivated them to engage in their learning (Colvin & Ashman, 2010; Gunn et al., 2017). Communication is the most prominent factor that will strengthen students' cooperation and understanding of each other's needs. In business settings, communication is highly stressed for

the purpose of organizational learning. Strong channels of communication help leaders know the skills of their team in order to allocate tasks based on each individual qualifications and abilities. Hence, leaders master the art of prioritizing and allocating the responsibilities necessary for organizational learning (Senge et al., 2012). In doing so, leaders have the space for their own professional development and learning.

GSC: While peer mentoring provided undergraduate students with a good work experience, they helped mentors build their one's own career (Won & Choi, 2017). A mentor's career path was to guide mentees and be a good support in their learning and increase their motivation and improve their university experience (Gunn et al., 2017; Heirdsfield et al., 2008; Skaniakos et al., 2014).

AKS: Mentors' learning was reinforced by instructing others. Mentoring helped mentors relearn the course material (Crisp & Cruz, 2009; Gunn et al., 2017). Through strong communication channels and mutual trust, mentors are encouraged to share explicit and tacit knowledge with mentees. As such, mentors align their own values and beliefs with the goal of improving others' and their own learning and creating a meaningful change inside the institution (Senge et al., 2012).

ERM: Studies showed that mentoring others helped mentors become role models through teaching experiences, and improved their self-confidence, organization and leadership skills (Bennett 2017; Crisp & Cruz, 2009; Gunn et al., 2017; Skaniakos et al., 2014).

Furthermore, the direct interaction between mentors and mentees promoted active learning, built teamwork, and increased network opportunities for both mentors and mentees. During peer mentoring activities, students supported and encouraged each other and appreciated each other's knowledge. In terms of emotional and social gains, it was found that learners who become teachers of their learning in peer mentoring programs are involved in self-evaluation, self-monitoring, and self-learning which in turn have increased their self-confidence and self-esteem (Hattie, 2009; Karcher, 2008). The growth of self-confidence and self-esteem is key to the development of one's leadership skills.

Additionally, the peer mentoring experience offered a feeling of trust and comfort to students, especially first-year students, because it is built on the interaction between mentors and mentees. These interactions promoted an environment of teamwork and supportive relationships (List & Sorcinelli, 2018). They also enhanced the social competence and

communication skills which elevated oneself emotional well-being (Crisp & Cruz, 2009). As such, individuals felt engaged, motivated, and developed a sense of value or purpose (Capstick, 2004; Parkinson, 2004; Topping, Miller, Thurston, McGavock, & Conlin, 2011). On the other hand, serving others' needs increased one's personal satisfaction and reward. Once their mission is done, mentors will feel a great sense of accomplishment and fulfillment (Beltman & Schaeben, 2012; List & Sorcinelli, 2018). Serving mentees' needs and making a positive impact will also develop mentors' personal growth and pride (Bass, 1985; Beltman & Schaeben, 2012).

As a result of such positive gains in individuals' academic and emotional well-being, peer-mentoring programs are implemented as an alternative instructional process combining and exploiting aspects of both teaching and peer relationships (Egbochuku & Aihie, 2009; Liu, 2009; Manning, 2007; Marsh & Martin, 2011; Topping, 2005). Through a controlled and supervised program, peer mentoring can assist mentees in receiving individualized and targeted instruction that they may not otherwise receive. Unlike a traditional structured class, peer-mentoring programs allow all participants to share knowledge, ideas, and experiences in a much more personal and collaborative way, providing opportunities for the creation of trusting and positive relationships (Colvin, 2007; Lassegard, 2008). Additionally, the peer-mentoring role and activities nurture mentors' confidence, self-esteem, and leadership skills. In being a leader and a role model, mentors become responsible for serving mentees' needs and empowering them. Ultimately, mentors' intrapersonal characteristics will grow and lead to the improvement of one's leadership skills and well-being.

## **Challenges of Peer Mentoring Programs**

Despite the acknowledged benefits, literature showed that mentors and mentees reported several obstacles in the peer-to-peer mentoring process. Improper mentor selection was one of the major problems in peer mentoring. It could threaten the mentoring purpose, increase the turnover rate, and discourage mentees from seeking guidance through these mentoring sessions (Heirdsfield et al., 2008; Terrion & Leonard, 2007; Sim, 2003). Other challenges discussed were related to the self-reported perception of mentors not taken seriously by mentees (Kocadere, 2015). "Student hesitancy" is stated as a possible concern in using peer mentoring programs (Sim, 2003). As such, some students may feel that being mentored by another student

makes them feel lower to that student and become less enthusiastic to work with their peer. Hence, they may not be committed to the mentoring program (Sim, 2003). On the other hand, mentees were hesitant to get help from mentors since they could not be as effective as the teacher (Kocadere, 2015). This is due to the directive and knowledge-telling strategy that mentors choose when mentoring others instead of the facilitative and constructivist-oriented strategies that teachers generally adopt (Berghmans, Neckebroek, Dochy & Struyven, 2013; Kocadere, 2015).

Faculty and academic staff perceptions were explored to investigate the benefits of a bilingual peer-mentoring program at a university in Australia (Cui et al., 2015). Findings showed that the program succeeded to improve students with educational benefits (i.e., better understanding of the academic content) that could not be accessed through formal teaching hours. However, participants of this study expressed potential concerns and negative attitudes towards such programs. It was found that students were using the program as an alternative to teaching hours. Faculty were concerned about the low attendance rate of students in class compared to their attendance in the program. They were also concerned that the bilingual peer mentoring program would be a “quick fix” at exam time and replace deep learning of the material (Cui et al., 2015). Other challenges were reported to be about the obstructive instruction, or the outdated material provided by the peer mentor to the mentees. Moreover, faculty were concerned that mentors might be giving the answers directly to the mentees instead of promoting deep and independent learning (Cui et al., 2015). This is expected somehow since that the majority of mentors have null or minimal teaching experience which limit their capability to construct others knowledge (Berghmans et al., 2013).

Other potential problems with peer mentoring were related to the lack of confidentiality which lessens the attendance of mentees at these sessions. Mentees reported that they fear lack of privacy whenever they discuss their concerns with mentors (Sim, 2003). Parents who were anxious about their children’s academic achievement conveyed that peer mentoring may be a waste of time for mentors who should be focusing on their studies instead of teaching others. Moreover, scheduling conflicts was a common challenge reported by both mentors and mentees. For instance, mentors had negative feelings whenever mentees did not show on time or did not show at all to their sessions (Sim, 2003).

Therefore, in order for any mentoring program to be implemented successfully within any organization, it is suggested that having a proper structural design with clear goals, roles and

relationships will lead to a better learning experience (DeFoe, 2013). As such, the learning process is more successful when it follows a cycle path that enables people to improve by: 1- observing previous actions, 2- reflecting in what they have done, 3- using that observation to decide how to change next action, 4- applying that decision to another action, 5- learning from mistakes (Senge et al., 2012). When applying this cycle path to a peer mentoring program, it is fundamental that the structure of the program allow flexibility for both mentors and mentees to learn from each other's mistakes and reflect on how they can enhance their learning. Practically speaking, collecting data for assessing the needs and areas that need to be improved is one way to do so. Feedback on mentors' teaching skills and knowledge is another way.

Despite these numerous challenges, the benefits of these programs outweighed the disadvantages. In particular, the social aspects of the mentoring activity increased students' satisfaction and well-being (Crisp & Cruz, 2009; Gunn et al., 2017). To further elaborate on this, when collecting students' perceptions in regard to the peer mentoring experience, Manning (2007) discovered that students valued (1) obtaining other people's perspectives, (2) learning with others, and (3) having the opportunity to express their concerns and viewpoints away from faculty. Hence, it is assumed that these mentoring sessions have largely contributed to students' enjoyment of learning by promoting individuals' positive emotions (Manning, 2007).

### **Peer Mentoring Impact on Students' Leadership**

Previous studies related to students' personal development when participating in peer mentoring programs in high schools and colleges helped frame the purpose of this study. Literature has widely examined leadership capacities in youth. Leadership is the element that enhances both individual and organizational learning because it creates a trusting and collaborative climate where individuals are encouraged to take initiative and take risks (Senge et al., 2012). Developing students' leadership skills is the current focus of universities and higher education institutions to prepare them for the job market (Yarrish, Zula & Davis, 2010). Having leadership skills and self-confidence is necessary for individuals to succeed in their careers during the Information Age. As a result, many trainings and mentorship programs were created to provide mentors with a good work experience (Heirdsfield et al., 2008).

Interestingly, peer-mentoring programs were the focus of many studies that aimed to understand how student mentors identify themselves as leaders. These studies looked at the leadership characteristics that student mentors display when they take responsibility for the development of others (Benett, 2017; Crisp & Cruz, 2009; Velez et al., 2011). In a study done at a university in western United States, student mentors identified their role as being: “connecting link, peer leaders, learning coach, student advocate, and trusted friend” (Colvin & Ashman, 2010, p.130-131). These findings remained aligned with the ones of the critical review done by Crisp and Cruz (2009) for the literature between 1990 and 2007. They reported that student mentors viewed themselves as servant leaders who coach, serve, teach, and role model others. Being a servant leader is an underpinning notion of a friend leader whose purpose is to develop others’ well-being and meet their needs (Greenleaf, 2002). Hence, the greater benefit resulting from the mentoring role is the opportunity to make connections and become a part of an overall network (Colvin & Ashman, 2010). This opportunity will strengthen mentor’s communication skills, self-confidence, and increase the trust in one’s leadership skills (Crisp & Cruz, 2009; Joseph & Winston, 2005).

Literature highlights two main approaches connected with mentors’ leadership: servant and transformational (Diaz, 2016; Roberts, 2000; Shek & Lin, 2015). Based on the role of mentor as identified above, mentors are considered mainly as servant leaders who serve others’ needs and aspirations. These leaders are individuals with a vision, role models and pioneers, and most of all appreciate others and empower them. These attributes of servant leadership are found to be connected with the ones in transformational leadership.

### *Transformational leadership*

Transformational leadership, as stated by Burns (1978) is centered on the idea of making change through the development and empowerment of others. Transformational leaders, similar to servant leaders, lead with ethics and values to maintain a smooth and efficient work environment. They set clear goals and share these with their team. They assign roles and design a structure for transparent communication channels to achieve their vision and improve the organization’s performance (DeFoe, 2013).

Research showed that when school principals follow a transformational leadership style, they secure better pedagogical quality and improve overall school performance. Studies like Geijsel, Sleegers, Leithwood, and Jantzi (2003) and Marks and Printy (2003) indicated that the common

practices of transformational principals were found to be included, but not limited to, meeting students' and teachers' needs, providing guidance and inspiration, and encouraging positive and respectful relationships among students, teachers, and administrators. Moreover, transformational principals are expected to empower teachers' leadership and make organisational changes to improve students' achievements. To do so, Fullan (2014) argued that principals should master five core capacities where they should lead with a purpose in mind and moral vision focused on student achievement. They should be able to build strong and trusting relationships with teachers and staff. They should be capable to delegate tasks and provide others with learning opportunities as they should be committed to nurture teachers' leadership. Lastly, principals should understand and adapt to the changes that educational institutions go through in a challenging and demanding context (Fullan, 2014). To this end, principals should recognize the nature and processes of the educational change for the benefit of the school overall.

Four main attributes and behaviors are usually exhibited by a successful transformational leader, namely, (1) idealized influence, (2) intellectual stimulation, (3) inspirational motivation, and (4) individualized consideration. A leader with a vision is a person with "an ideal and unique image of the future" (Kouzes & Posner, 1995, p. 95). Having a vision and sharing it with the followers is a central element to keeping them committed to accomplishing whatever is required of them (Greenleaf, 2002). This notion is a key to transformational leadership. Therefore, both servant and transformational leaders uphold their personal values and beliefs, inspire, and influence others to accept and follow their shared vision (Kouzes & Posner, 1995). To do so, leaders must lead from their personal values and beliefs in order to stimulate and motivate their followers. The authenticity and willingness of these leaders make them and their followers committed to achieve their goals.

In their exemplary practices of leadership, Kouzes and Posner (1993) identify a moral leader as the one who has personal values and beliefs. These will influence leaders' behaviors and their relationship with their followers (Burns, 1978; Kouzes & Posner, 1993). They will also affect leaders' moral reasoning and their ability to judge theirs and others' decisions (Burns, 1978; Gardner, 1993). Judging with ethics and values will promote these leaders become role models for others. They will lead by example. Furthermore, empowering others is another crucial attribute in both servant and transformational leadership approaches. Empowering others to work and succeed is not only exercised through the traditional notion of sharing power and decision-making responsibilities. Empowering others involves trusting others with



authority and responsibility. In doing so, they ensure the personal growth of followers, stimulate their intellect, and encourage their learning.

### *Servant Leadership*

Servant leadership, as Greenleaf (2002) proposed, is basically about being a servant who possesses valuable characteristics that can benefit him and his organization. These characteristics are identified as: 1) Listening: servant leaders should listen to others. 2) Empathy: servant leaders must accept and recognize their team. 3) Healing: Servant leaders should recognize the emotions of others. 4) Awareness: servant leaders should be aware of issues, including ethics and values. 5) Persuasion: servant leaders must convince their followers of their vision rather than coerce others. 6) Conceptualization: servant leaders are expected to have a vision of the future whilst maintaining day-to-day activities. 7) Foresight: servant leaders should have the ability to foresee the outcomes of a situation and identify the likely consequences of their future decisions. 8) Stewardship: servant leaders should motivate their team to maintain trust for the benefit of the community. 9) Commitment to the growth of people: servant leaders should be committed to improving their followers as well as the advancement of the organization. 10) Building community: servant leaders motivate people and align them with shared goals in order to work collaboratively for the pursuit of building community.

Servant leadership is different from all other theories and models. It gives primary importance to the individual's needs and aspirations. As such, these leaders lead from the back to give space for the team to utilize their skills and participate in the decision-making process (Cutler, 2014). Doing so, will make people feel good and trusted, and they will put their maximum capacities to achieve the final objective. Hence, the power is no longer flowing from the top-down, but rather from the bottom-up (Cutler, 2014). As such, authority is delegated among followers and the leaders' role is to ensure that it is directed towards the interest of the people and the organization. While transformational leaders inspire and influence others, servant leaders make the needs of others a main priority and ensure that all resources are allocated for them to reach their objectives. Hence, this type of leadership helps create a culture inside the organization where employees' beliefs, values, and attitudes are shared.

Mentoring leadership characteristics were shown to be linked with the practices of servant and transformational leadership that guide the paradigm of the five practices of exemplary transformational leadership developed by Kouzes and Posner (2002). These practices include model the way, inspire a shared vision, challenge the process, enable other to act, and encourage the heart. Mentors are role models by standing up to their own beliefs and translating them into action. By being in such a leadership role, mentors have the power to develop a vision (i.e., improve students' academic performance) and inspire others to work towards the same vision. Additionally, this leadership role encourages mentors to take risks and challenge the process in order to innovate and improve the peer mentoring experience. According to Kouzes and Posner (2002), student leaders promote collaboration, create effective teamwork, and build a culture of trust and respect. Lastly, peer mentoring reinforces mentors' leadership practices and qualifies them to maintain others' morale and engagement. They can do so by regularly recognizing and acknowledging the efforts of the team (Kouzes & Posner, 2002). Figure 4 below highlights the main attributes of servant leadership defined by Greenleaf (2002) and transformational leadership described by Bass & Riggio (2006) and shows how these attributes are interrelated with the five practices of exemplary leadership identified by Kouzes and Posner (2002).

*Figure 4. Connection of servant and transformational leadership functions with the model of Leadership practices Inventory (LPI) developed by Kouzes and Posner (2002)*

<b>Servant leadership</b>	<b>Transformational leadership</b>	<b>Five practices of exemplary leadership</b>
Vision	↔ Idealized influence + Inspirational motivation	↔ Inspire a shared vision
Role models	↔ Idealized influence	↔ Model the way
Pioneers	↔ Intellectual stimulation	↔ Challenge the process
Appreciate others	↔ Inspirational motivation	↔ Encourage the heart
Empower others	↔ Individualized consideration	↔ Enable other to act

Based on a survey questionnaire administered to over seventy-five thousand people around the globe, Kouzes and Posner (2007) found the top four characteristics of admired leaders to be: honest, forward-looking, inspiring, and competent. To be followed and model the way to others, an exemplary leader must be honest, truthful, ethical, and principled. Consequently, an

environment of trust and confidence will be developed which will strengthen their followers' commitment to achieve the envisioned goals. Hence, having a vision and being forward-thinking is another characteristic that leaders must demonstrate in order to make a difference. Exemplary leaders envision a meaningful future for the organization, communicate this clearly with the team, inspire, and challenge the followers into this pursuit. Inspiring is the third characteristic that is essential for creating positive emotions and moving people upward and forward. Therefore, leaders must be competent in guiding people and getting things done. Despite that peer mentoring programs empowered both male and female mentors, their leadership skills were viewed differently (Alexander, 2011). While males were more task-focused, females' dependence on relationships was a major component in their leadership approach (Payne & Cangemi, 2001). Additionally, females viewed effective leaders as being role models who inspire others and meet their needs (Alexander, 2011). For them, effective leaders should lead with a goal and have a moral reasoning and competency to judge others (Alexander, 2011). To be able to do that, leaders are responsible to build strong relationships and caring settings with their followers (Lewis, 1996). This supports the early findings of Carole Gilligan in 1977 who discovered that females' moral development and behaviors are focused on their interpersonal relationships and their conceptions of care and social responsibility toward others (Crain, 2015).

To this end, female leadership could be linked with charismatic and transformational approaches (Bass, Avolio, & Atwater, 1996; Diaz, 2016). In a study done in Mexico with a sample of 153 MBA students, Diaz (2016) found that females were transformational leaders as much as males in the five-exemplary leadership model developed by Kouzes and Posner (2012). Females modeled the way, inspired a shared vision, challenged the process, enabled others to act, and encouraged the heart similarly to males with no statistical significance differences in means. Hence, gender does not have a moderator role with transformation leadership behaviors (Bass et al., 1996; Diaz, 2016).

## **Overview of Peer Mentoring in Arab and Gulf Region**

Overall, the existing research findings spanning more than forty years from around the world have revealed a remarkable, empirically designed framework that supports peer mentoring at the college level (Velez et al., 2011). However, when focusing on peer mentoring programs in many Arab and Gulf region states, there has been a reluctance or cynicism in implementing

them. Some instructors fear that peer mentors may provide students with incorrect info, or are worried that mentors are incompetent to detect students' weaknesses accurately (Beasley, 1997). This is mainly linked to faculty's traditional belief that knowledge should be transmitted in a linear fashion from instructor to student, and that peer mentoring programs do not promote this view (Mynard & Almarzouqi, 2006). Nevertheless, in the Arab context where peer-mentoring programs exist, they were found particularly beneficial in settings where the instructors are mostly expatriates coming from different educational and sociocultural backgrounds of their students (Mynard & Almarzouqi, 2006).

In the UAE, female students might be reluctant to discuss learning problems with their male instructors. They would rather be supported in their education by a peer mentor (Mynard & Almarzouqi, 2006). Additionally, peer-to-peer mentoring in an English language program at a women's university in the UAE has improved mentors' own learning and given them the chance to feel valued. It also promoted their leadership skills and developed friendship channels with others. More importantly, Emirati female mentors were satisfied, happy, and grateful to be engaged in a part-time job in a society that does not usually favor women in the workforce, especially when they have to interact with men (Mynard & Almarzouqi, 2006). As for mentees, their level of self-confidence and usage of English language improved. In the same study, one sociocultural factor stood out as a new and unique challenge in this particular context. It was reported by participants that, from a religious viewpoint, they are required to help others regardless of what is asked of them. For instance, it was difficult for them to refuse their mentees' requests for help with a project, piece of homework, or an exam. This influenced the sense of responsibility that mentors felt towards helping others. It also limited mentees' independence and autonomy in their homework (Mynard & Almarzouqi, 2006).

Another more recent study done by Aderibigbe et al. (2015) in a private university in the UAE showed that peer mentoring is understood by undergraduate students to be a collaborative process in which students learn from each other and personal relationships are built. However, students are hesitant to acknowledge their need for help. In the same context, mentor participants viewed the peer mentoring process as a way of helping students 1- become familiar with the university campus and its facilities, 2- prepare for the exams, 3- receive guidance on the right course, and 4- provide emotional support. Participants also reported several benefits this program offers toward their interpersonal and professional skills development. Similar to other studies (i.e. Benett, 2017; Colvin & Ashman, 2010; Crisp & Cruz, 2009; Velez et al., 2011), mentors reported that the peer mentoring experience promoted their communication and

leadership skills and increased their confidence level. Consequently, their ability to manage their studies and assist their colleagues grew. Additionally, mentors conveyed that the mentoring role prepared them for their future career. They stated this experience could be useful for their future personal and professional development. As for the program benefits to the faculty, mentors believed that mentoring students reduced stress for faculty members. By participating in activities outside the university, mentors promoted the university image and reputation.

Despite all these benefits, mentor participants reported inadequate recognition and cooperation from the faculty and higher management, lack of trust from their colleagues, difficulties in recruiting new members, and lack of trainings as the main challenges that affected the peer mentoring process. Participants raised their voices in demanding trainings for professional development (i.e., stress management, time management) but they also expressed a need for training regarding their own role in the mentoring process. Considering all of the above, it is evident that the benefits of peer to peer mentoring program overcome its challenges. Researchers in the Arab world are more intrigued to investigate its benefits for the institution and towards students' cognitive skills, psychosocial skills, and wellbeing. A recent study was carried out on a sample of 125 undergraduate students in Oman found out that peer-mentoring program has positively influenced students' English self-concept which in turn could affect students' lives (Alrajhi & Aldhafri, 2015). Self-concept is identified to be an important influential concept for students' learning, engagement, and well-being (Alhamodi, 2010; Bong & Skaalvik, 2003; Ribas, 2009).

Overall, in the Arab region, there is still insufficient research and validation of peer mentoring programs in higher education. Mentors and mentees are not well aware of their roles and of the importance of mentoring sessions to their personal development and to the transition, success, and retention of first-year students (Aderibigbe et al., 2015).

## **Peer to Peer Mentoring in Higher Education**

A pool of studies have investigated peer mentoring in higher education settings in a variety of contexts and subject areas. Although these studies were diverse in terms of participants and areas of teaching, they provided support and insights for this exploration in an undergraduate peer-to-peer mentoring program in the UAE. Data from 784 mentors from 20 Finnish higher

education institutions revealed that peer mentoring is a multifaceted activity with various personal and psychosocial benefits (Skaniakos et al., 2014). Evidence of peer mentoring benefits on mentors and mentees are also found in literature review studies conducted by Jacobi (1991) and Crisp & Cruz (2009). Before looking into these benefits, it is important to examine characteristics that peer mentors should have. In the literature review conducted by Jacobi (1991) it was identified that suitable mentors should have certain psychosocial and career related characteristics. For instance, being enrolled in the same program of study as their mentees and being motivated for self-enhancement reasons will increase mentors' satisfaction and their willingness to address mentees' needs. As for the psychosocial skills gained, they ranged from communication skills, support, trust, openness and willingness to learn from each other, empathy, having similar personality with mentee, enthusiasm, and flexibility.

Moreover, in the literature review done by Terrion and Leonard (2007) on 54 published articles, they discovered five characteristics in addition to the ten previously identified by Jacobi (1991) that are related to the career-related and psychosocial functions. Despite the fact that some of these characteristics are culture-bound, they are still prerequisites for effective mentors to have in other countries. Terrion & Leonard (2007) argued that only mentors who have these characteristics are suitable to fulfill the mentoring role. First, mentors should have the ability and willingness to commit their time to mentoring activities. Second, matching gender and race between mentors and mentees is likely to increase their satisfaction levels. Third, mentors should have knowledge of and experience in the university environment. Fourth, having high academic achievement or expertise in the area of instruction is a prerequisite for the peer mentor. Fifth, mentors should have prior mentoring experience. However, the latter could be disputed since the majority of students begin their university experience with little or no experience in mentoring or any other voluntary work.

In a mixed method study done by Douglass et al. (2013) at an undergraduate education program in the USA, the characteristics of suitable mentors were similar to the ones that were found in another study done previously by Heirdsfield et al. (2008). Students described that mentors should have knowledge of the area of instruction, to be previously enrolled in the course, to have good communication skills, and to be trustworthy and supportive. Additionally, both students and peer mentors cited the mentor's gender, prior mentoring experience, and availability as less important (Douglass et al., 2013). Omani undergraduate students reported that while having a small age gap between tutor and tutee is an important characteristic, sharing the same social culture with the tutor is the lowest related factor especially since students are

exposed to faculty from multiple nationalities (Alrajhi & Aldhafri, 2015). Despite this, having a small age gap between tutor and tutee was found to be an important factor in having a successful mentoring experience, Topping (2005) emphasized in his review the greater ability or experience that a mentor should have compared to the mentee. This difference in abilities and experience will generate a significant cognitive benefit and more scaffolding since that the older the mentors were the more experienced and credible they become (Topping, 2005).

When examining the factors that affect students' willingness to mentor and address their peers' needs, Noufou, Rezanian, & Hossain (2014) suggested the recruitment of altruistic students as prospective mentors. While this is an interesting finding, we argue that it is not always easy to identify and separate altruistic from non-altruistic students. To this end, Noufou, Rezanian, & Hossain (2014) stated that universities are responsible for promoting student interest in peer mentoring programs by fostering a culture of support and mutual help. Additionally, the Noufou, Rezanian, & Hossain (2014) study looked at students' altruism as a personality-related factor without considering other personal traits that could influence students' willingness to be in a mentoring role.

As for the benefits of the program on students, Terrion and Leonard (2007) highlighted in their literature review that peer mentoring is an effective intervention to ensure the success and retention of students at risk. They also concluded that it has positive outcomes on individuals' (1) psychological and emotional support, (2) goal setting and career path, (3) academic subject knowledge support, (4) the existence of a role model. These findings were also supported by another mixed method study done by Douglass et al. (2013) where mentors noted an improvement of their instructional abilities. The peer mentoring role and provision of constructive feedback made them "think like a teacher". Interestingly, peer-mentoring practice strengthened mentors' self-efficacy (Heirdsfield et al., 2008).

In reviewing peer learning forms from 1981 until 2004, Topping (2005) argued that peer mentoring programs promote both mentors' and mentees' confidence in their achievements. It also reinforces their belief that success is the result of their efforts. As for the findings of the survey collected from 20 Finnish Higher education institutions, Skaniakos et al. (2014) discovered that peer mentoring is an opportunity for peer mentors to engage and interact with the community. Additionally, they found that peer mentors' professional attributes were enhanced (Skaniakos et al., 2014). Similarly, through a survey and focus group discussion, students of a Bachelor of Commerce program in a North American University conveyed that

peer mentoring helped students prepare for the transition from high school to university, guided them through university programs, and helped them transition from university to the workplace (Noufou, Rezania, & Hossain, 2014).

Furthermore, findings of Skaniakos et al. (2014) study were in line with previous studies such as Heirdsfield et al (2008) who discovered that being a peer mentor was regarded as a good work experience for students. For the first-generation peer mentors, the psychological function was found to be more important than the career-related function (Terrion & Leonard, 2007; Skaniakos et al., 2014). As such, peer mentoring was regarded for first-year mentors as a place where they made friends with others and gained communication, organization, and leadership skills (Skaniakos et al., 2014). Haber-Curran, Everman and Martinez (2017) emphasized the crucial need of peer mentoring to enhance newly joined students experience and provide them with an opportunity to discuss their challenges and difficulties in a friendly environment. This need was explored in a phenomenological research study looking at college students' personal and educational gains while serving as mentors to high school students with similar backgrounds. Interviews with fourteen participants revealed that mentors' self-development and awareness grew significantly. The major theme generated from this study was the development of mentors' self-confidence resulted from their interactions and communication channels inside the group. Other themes emerged from participants' explanations. Mentors participants described that the peer mentoring role gave them a greater sense of purpose and responsibility. They stated, "The best part of the peer mentoring job is when you actually feel like you had a good impact" (Haber-Curran, Everman, & Martinez, 2017 p. 493).

Another theme was related to self-development and awareness gains was "broadened perspectives". By working with students from different backgrounds, mentors appreciated different perspectives (Haber-Curran, Everman, & Martinez (2017). Similar to other studies (i.e., Beltman & Schaebe, 2012; Terrion & Leonard, 2007) Haber-Curran, Everman, & Martinez (2017) concluded that the peer mentoring activity enhanced mentors' organizational, interpersonal, and communication skills. It also steered mentors' career focus toward a career in which they can help others (Haber-Curran, Everman, & Martinez, 2017). Sadly, findings of this study are limited and cannot be analyzed due to its phenomenological nature and self-reported data collected through interviews only. Haber-Curran, Everman, and Martinez (2017) acknowledged that direct observations of mentors during their mentoring activity would have added more insight into mentors' growth and development.



Connolly (2017) examined the impact of these experiences on first-generation peer mentors' academic and leadership development. Although a control group was not available, Connolly (2017) gained a deeper understanding of the peer leadership experience through a mixed methodology. She conducted focus groups with all thirty-four participants and interviewed nine of them. Findings of this study revealed that first-generation students who were serving as peer mentors learned how to solve conflicts and how to manage their time effectively. Participants also conveyed that they excelled and grew into this position despite its challenges. Other leadership themes that emerged from the qualitative interpretations were role modeling, making decisions, and general leadership growth such as self-confidence, problem-solving, and communication skills. Connolly (2017) also looked at the relationship between peer mentoring with students' retention and grade achievement by comparing peer mentors' grades and registration records with those of their university peers. Despite finding a small difference, peer mentoring has positively impacted grade point average and retention rate of first-generation students. However, this does not represent a causal link between the two (Connolly, 2017).

Peer mentoring's impact on student leadership development was also explored in a case study conducted by Priest and Donley (2014) on three mentors and four mentees pursuing a Minor in Leadership Studies. Through the semi-structured interviews at the beginning and conclusion of the formal pilot program, participants described how the mentoring activity supported their leadership development, particularly in three areas: career transition, personal growth, and application of their leadership education to real-life situations (Priest & Donley, 2014). Through role modelling, mentors showed others how to make decisions and take action toward their goals. They challenged others to look for development opportunities for their own personal and professional growth (Priest & Donley, 2014). In their study, Priest and Donley (2014) concluded that any leadership education initiative could make use of formal or informal mentoring as a means for student development.

As for the mentees, Comfort and McMahon (2014) and Douglass et al. (2013) discovered that the program offered particular academic benefits to learning that traditional courses did not provide. It also created a trusting and comfortable environment where students felt better about going to their peer mentor for help. They felt less intimidated than asking their instructor for help (Douglass et al., 2013). Furthermore, peer mentoring supported the successful transition for first-year students (Heirdsfield et al., 2008).

In a women's only university in the UAE, Mynard and Almarzouqi (2006) explored the benefits of peer mentoring in an English language program for both mentors and mentees. Active and former mentors, mentees, and faculty participated in the study. It was found that mentors benefited mainly in learning through teaching and becoming more responsible while doing something worthwhile to help others. Mentors who were all female reported their happiness in being mentors because it gave them the feeling of being at work. Considering the sociocultural factors in the UAE, young Emirati women are often discouraged to work by their families. Hence, fulfilling a mentoring role gave these females 'the sense of doing something that has value' and 'being a useful member in a community' (Mynard & Almarzouqi, 2006 p.17). Other benefits including leadership skills, developing friendships, and being more responsible were also reported. As for the mentees, their benefits included improved levels of self-confidence and English language aptitude.

In another quantitative study done in Oman, Alrajhi and Aldhafri (2015) revealed that peer mentoring had positive effect on students' English (as a foreign language) self-concept (what students believe about themselves). This latter is important because it affected students' behaviors and performance. As a result, students felt comfortable and motivated to attempt different tasks despite their mistakes since that mentors are students like them, and they do mistakes just as them. Hence, peer mentoring has not only improved students grades in the subject matter but was a cost-free solution to the university to improve traditional classroom teaching and students learning (Colvin & Ashman, 2010; Douglas et al., 2013).

Despite all the above benefits reported, peer mentoring was criticized by mentors and faculty to create high learning dependency levels from the mentees on mentors (Mynard & Almarzouqi, 2006). For instance, Emirati female mentees expected their mentors to do their homework (Mynard & Almarzouqi, 2006), mentors failed to attend the mentoring sessions on time and were not always able to offer appropriate assistance to mentees (Mynard & Almarzouqi, 2006). Noufou, Rezania, & Hossain (2014) explained that the latter may be due to lack of understanding or willingness on the part of mentors to address each student's specific needs. As such, Noufou, Rezania, & Hossain (2014) recommended that educational institutions create a culture of mutual help. This can be done by encouraging and strengthening mentors' commitment to the mentoring program by recognizing their efforts and providing financial compensation, certificates, or symbolic awards (Noufou, Rezania, & Hossain, 2014).

Furthermore, dealing with shy students who often hide their needs is a challenge that most mentors faced (Mynard & Almarzouqui, 2006). Even in cases where mentors were trained, they were unable to identify mentees' needs if they did not communicate them clearly. Effective interaction and cooperation with the faculty is believed to enhance the mentoring experience (Skaniakos et al., 2014). Providing ongoing training and assistance to mentors by the faculty is needed to support mentors in achieving their goal (Mynard & Almarzouqui, 2006). On the other hand, Priest and Donley (2014) urged mentees to come prepared to the sessions and to be open to constructive feedback in order to be more engaged in the mentoring process. To truly take advantage of the mentoring process, Priest and Donley (2014) emphasized that mentees must be willing to listen to mentors' advice and act on it.

Colvin and Ashman (2010) were interested in examining the roles, risks, and benefits of peer mentoring relationships in a large public university in western United States. The mentor program in their study was created in 1990 where more than 400 students served as mentors to more than 15,000 students. Mentors were recruited, trained, and guided by their faculty to set the goals for each semester. They were also required to do weekly reflections on their roles and responsibilities. After observing mentors' activities, weekly classes and meetings, and other interactions in both formal and informal settings, Colvin & Ashman (2010) were surprised to find that students, instructors, and mentors had different perspectives about the mentor's role. Peer mentor roles were identified as a connecting link, peer leader, teaching coach, student advocate, and trusted friend. Benefits also differed between females and males. Males saw that the program had major benefits on their learning while females' responses were more centered on the relationship side (i.e., having a friend and a support system). Despite that the roles and responsibilities of peer mentors were acknowledged, the nature and dynamics of the relationships between mentors and mentees are still vague. Therefore, Colvin and Ashman (2010) argued that assumptions could not be made about the understanding of these relationships and roles. To this end, more clarifications of these roles, especially for the first-generation students, would be helpful. Consistency of job descriptions and roles of mentors can ensure their success and alleviate any confusion. Receiving more trainings on how to maintain and manage relationships is also recommended (Colvin & Ashman, 2010).

As a solution to the above challenges, Heirdsfield et al. (2008) concluded in their study that preparing and training mentors is key to enhancing the mentoring experience. Additionally, Mynard and Almarzouqui (2006) and Connolly (2017) suggested many improvements to the peer mentoring program. They recommended that faculty involvement be increased, improve

tutees' awareness of the aims of the program, and provide additional assistance to tutors. Connolly (2017) stressed that continuous trainings including leadership training should be reinforced for first-generation student mentors. These trainings will assist them in overcoming the difficulties of a peer mentoring position.

On the other hand, Noufou, Rezanian, & Hossain (2014) concluded that for peer mentoring programs to be successful they should be flexible enough to meet students' needs. Listening to mentees' needs and expectations is key to finding an adequate mentor who is able to satisfy them (Noufou, Rezanian, & Hossain, 2014). Additionally, pairing mentors and mentees based on similar career interests and background knowledge would produce more fruitful relationships (Priest & Donley, 2014). The success of these relationships depends on whether the mentors were open-minded, good listeners, compassionate, flexible, caring, supportive, and understanding. Priest and Donley (2014) argued that in addition to these skills, mentors are expected to share their success and failure stories with mentees. In qualitative and quantitative studies done by Heirdsfield et al. (2008) and Alrajhi & Aldhafri (2015) respectively, it was evident that understanding the mentors and mentees experiences in the program is fundamental to ensure the success of the program. Additionally, participants in Oman reported that sharing similar experiences in learning is an important factor in a successful peer mentoring experience (Alrajhi & Aldhafri, 2015).

The fifteen studies presented in this section offered a conclusive summary of peer mentoring programs benefits, challenges, and practical improvements as well as an overview of fundamental characteristics that potential mentors should have. Table 1 below describes the prominent studies with their aims, method, key finding, and claims.

*Table 1. Prominent Studies with their aims, method, key findings, and claims.*

<b>Author</b>	<b>Aim</b>	<b>Method</b>	<b>Key findings</b>	<b>Claims</b>
Aderibigbe et al. (2015)	Explore the issues in peer mentoring for undergraduate students in a private university in the United Arab Emirates	Qualitative	Program benefited students' interpersonal and professional skills development. Students are hesitant to acknowledge their needs for help.	Mentors and mentees are not well aware of their roles and the importance of the mentoring session to their personal development and to

				retentions of first year students.
Alrajhi & Aldhafri (2015)	Examine the effect of peer tutoring on Omani Students' English Self-Concept	Quantitative	Positively impacted students' English learning, engagement in the lesson, and improved their emotional well-being.	Having a small age gap between mentor and mentee and sharing similar experiences in learning are important for successful mentoring.
Beltman & Schaeben (2012)	Investigate the benefits of peer mentoring on mentors in higher education institution	Quantitative	Mentors organizational, interpersonal & communication skills increased.	Peer mentoring programs are beneficial for mentors' altruistic, cognitive, social, and personal development.
Bennett (2017)	Examine the relationships among peer teaching experiences and self-reported leadership practices of higher education students	Mixed method	Mentors were able to better manage their studies and assist their colleagues.	Peer mentoring experience promoted mentors' communication and leadership skills
Colvin & Ashman (2010)	Examine the roles, risks, and benefits of peer mentoring relationships in a large public university in western United States	Mixed method	Increased mentors' confidence level. Improved students' grades in subject matter. Benefits of peer mentoring differed between females and males.	The nature and dynamics of the relationships between mentors and mentees are still vague
Comfort & McMahon (2014)	Examine the Effect of peer Tutoring on higher education students' academic achievement.	Quantitative	Improved students' academic benefits to learning that traditional courses did not provide.	Created a trusting and comfortable environment where students felt better about going to their peer mentors for help.
Connolly (2017)	Investigate the impact of peer mentoring on students' academic achievement in higher education	Mixed methods	Improved problem-solving skills at first year mentors. Developed their time management, communication, and leadership skills such as: role modeling, making decisions, and self-confidence.	Continuous trainings including leadership training should be reinforced for first-generation student mentors.

Crip & Cruz (2009)	Conduct a critical review of the literature between 1990 & 2007 on the impact of mentoring on college students	Literature review	Students' interpersonal and professional skills developed as well as their self-confidence, their academic and cognitive development, and prepared them for future career.	Peer mentoring programs represent this platform where students collaborate and learn from each other and where mentors leadership skills and behaviours developed.
Douglass et al. (2013)	Explore the characteristics of undergraduate peer-mentoring relationships	Mixed methods	Mentors instructional abilities improved. The mentoring role and provision of constructive feedback made them think like teachers.	Mentors should have knowledge in the area of instruction, being previously enrolled in the course, having good communication skills, being trustworthy and supportive. Mentors gender, prior mentoring experience and availability were less important.
Haber-Curran, Everman & Martinez (2017)	Explore mentors' personal growth and development in a college access mentorship program.	Phenomenology Qualitative using semi-structured interviews	Mentors self-development, self-confidence, & awareness grew. Interactions & communication channels increased.	Peer mentoring enhanced newly joined students experience and provide them with an opportunity to discuss their challenges and difficulties in friendly environment.
Heirdsfield et al. (2008)	Explore the experiences of peer mentors for first-year teacher education students	Qualitative	Successful transition for first year students. Being a peer mentor was regarded as a good work experience. Peer mentoring strengthened mentors' self-efficacy.	Peer mentoring is a place where mentors made friends and gained communication, organization, and leadership skills.

Mynard & Al Marzouqui (2006)	Evaluate the English language peer tutoring program in order to highlight benefits and challenges in one university in the UAE	Qualitative	Faculty believe that knowledge should be transmitted from instructor to student. High learning dependency on mentors. Mentors felt being at work and were happy by doing something that has value. It improved their leadership skills and developed channels and friendships with others.	Peer mentoring programs represent a platform for female students to discuss their learning problem and get the necessary support. Mentors benefited in learning through teaching and becoming more responsible when doing something worthwhile to help others.
Noufou et al.(2014)	Measure and explore factors affecting students willingness to engage in peer mentoring	Mixed methods	Peer mentoring programs helped students prepare for the transition from high school to university, guided them through university programs and helped them transition from university to workplace.	Universities are responsible for promoting students' interest in peer mentoring programs by fostering a culture of support and mutual help. They should recruit altruistic students as prospective mentors.
Priest & Donley (2014)	Assessment of a mentoring program between current students and alumni of a leadership studies minor program.	Qualitative (case study- semi-structured interviews)	Mentors leadership skills such as role modeling, decision making, and taking actions toward their goals improved.	Mentors were able to challenge others to look for development opportunities for their own personal and professional growth.
Skaniakos et al. (2014)	Explore mentor's perspectives in peer group mentoring program in Finnish higher education	Quantitative	Professional attributes of peer mentors were enhanced.	It is an opportunity for peer mentors to engage and interact with the community. Effective interaction and cooperation with the faculty is believed to enhance the mentoring experience.

Terrion & Leonard (2007)	Explore the characteristics of student peer mentors in higher education	Literature review on 54 articles	Discovered 5 prerequisites in addition to the psychosocial and career-related functions described by Jacobi (1991) (commitment, similar gender and race, knowledge and experience in university environment, high academic achievement, and prior mentoring experience).	Peer mentoring is an effective intervention to the success and retention of students at risk. Having these 5 prerequisites promote students for the peer mentoring role.
Topping (2005)	Explore trends in peer learning	Literature review	Promoted mentors and mentees confidence in their achievement. It reinforces their beliefs that success is the result of their efforts.	Mentor should have greater experience compared to the mentees.
Velez et al. (2011)	Describe the impact of peer teaching on both the students and the classroom environment on students enrolled in two introductions to teaching courses in agricultural and extension education	Qualitative (discourse analysis, textual analysis, individual interviews, and focus group interviews)	Peer mentors displayed elements of metacognition, self-reflection, and career formation. Mentors believed that by supporting other students they are reducing stress for faculty.	Mentors promoted the university image and reputation. The peer teaching environment facilitated student interaction and engagement in learning.

## Chapter Summary

In this section, we included a review of the literature on peer to peer mentoring and its impact on students' academic and social abilities, the theoretical lens to understand and interpret the results of this study, and literature relevant to peer mentoring in higher education in an international context as well as an Arab context.

The literature on peer mentoring revealed positive outcomes for students' interpersonal and professional skills development as well as for their academic and cognitive development (eg. Benett, 2017; Colvin & Ashman, 2010; Crisp & Cruz, 2009; Velez et al., 2011). As explained



by the constructivist principles, students' cognitive and expansion of knowledge is made through their active engagement in collaborative learning communities where individuals interact and support each other (Vygotsky, 1978). As such, peer mentoring programs represent this platform where students collaborate and learn from each other (Colvin & Ashman, 2010; Crisp & Cruz, 2009; Johnson, 2013).

Several research studies documented the cognitive and social learning benefits of peer mentoring (Johnson, 2013; Lassegard, 2008). Research found specific gains for mentors in the following areas: time management skills, confidence, self-efficacy, communication skills, organization and planning skills, self-reflection learning, personal satisfaction and reward, sense of personal purpose, and leadership skills (Beltman & Schaeben, 2012). Additionally, studies like Colvin and Ashman (2010), Priest and Donley (2014), Shek and Lin (2015) have found peer mentoring to be successful in promoting students' self-confidence and well-being. Although studies provided evidence of these gains, in-depth and focused explanation of mentors' gains are still lacking and there is a limited amount of research on this topic across different age groups and disciplines (Beltman & Schaeben, 2012; Haber-Curran, Everman, & Martinez, 2017). Previous peer mentoring studies often focused on the positive effects that mentoring had on mentees rather than on mentors themselves (Amaka, 2013; Johnson & Ward, 2001) and very few studies have examined the impact it has on gender, specifically female students (Crisp & Cruz, 2009; Joseph & Winston, 2005). As such, a more in-depth examination of the impact that peer mentoring has on the development of female students' leadership skills and behaviors is needed (Beltman & Schaeben, 2012; Haber-Curran, Everman, & Martinez, 2017).

Despite there being no theoretical framework or model outlining peer mentors benefits and gains (Haber-Curran, Everman, & Martinez, 2017), the limited exploration of mentoring within the literature focused in higher education revealed that peer mentoring is an activity by which the mentor supports and assists mentee in personal, professional or career development (Colvin & Ashman, 2010; Crisp & Cruz, 2009; Jacobi, 1990). In this case, peer mentoring is framed as an act of leadership development strategy for mentees (Priest & Donley, 2014). To this end, recent research focused on examining in depth peer mentoring connection with leadership skills and practices development (e.g. Benett, 2017; Velez et al., 2011). Nurturing leadership skills and practices in students will not only assist them in overcoming their challenges, but it will also inspire them to be role models to their peers. Additionally, student leaders are skilled in promoting collaboration, creating effective teamwork, and building a culture of trust and

respect (Kouzes & Posner, 2002). In doing so, a collaborative learning community is created to engage and support students' overall learning.

Although scholars have agreed that there is no single definition for effective leadership that is a one-size-fits-all for any organization or school (Mesterova et al., 2015), a consensus is reached on the fact that effective leadership is about cultivating leadership in others (Fullan, 2014; Marks & Printy, 2003; Mesterova et al., 2015). In schools, it is considered an integration of both instructional and transformational leadership that influences teachers' leadership and commitment (Marks & Printy, 2003). Schools' leadership has been viewed so far through the leadership styles of principals and teachers. Very few studies focused on student leadership despite its importance to their achievement, retention, and engagement. Kouzes and Posner (2012) addressed this gap by developing an inventory for student leadership exemplary practices. They have identified five practices students can strive to achieve. These include model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. Interestingly, the UAE education strategic plan is centered on nurturing students to become future leaders (Ministry of Education, 2016). As such, it makes sense to look at students' leadership in the UAE with a particular focus on females.

Recent studies raised the concern about the lack of women leaders in Arabic and western societies (Akar & Mouchantaf, 2014; Archard, 2012; Diaz, 2016; Mynard & Almarzouqi, 2006). Female managers were found to be less self-confident about their leadership practices in comparison to males, and they also felt discriminated against in their workplace (McCormick, Tanguma, & López-Forment, 2002; Akar & Mouchantaf, 2014; Mynard & Almarzouqi, 2006). The mentoring role was found to have three main outcomes for various types of students: career-related, personal, and interpersonal development. Among the personal development areas, leadership skills were given a great emphasis by researchers due to the consequences it will have on their self-confidence, well-being, and future career growth (Crisp & Cruz, 2009; Conolly 2017). With that being said, Diaz (2016) called for a need to address female students' leadership in western societies. In her study, female mentor students were identified as transformational leaders as much as males in the five-exemplary leadership model developed by Kouzes and Posner (2012). While in the UAE female students still struggle to deal with their male instructors (Mynard & Almarzouqi, 2006), giving them the opportunity to become peer mentors is believed that it will strengthen their leadership skills and practices which are necessary for their self-confidence and well-being.

Despite research showing successful cognitive, social, and emotional benefits, peer mentoring programs in the Arab world were few and limited only to developing students' writing skills (Alrajhi & Adhafri, 2015; Mynard & Almarzouqi, 2006). Hence, this study will add value to the literature in the Arab world by revealing the significant outcomes these programs could have for university students. Additionally, it would be important for this study to address student females' leadership in the Arab world and highlight the benefits that peer mentoring programs have in strengthening their self-confidence and academic achievement.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **Overview of the Chapter**

This chapter offers a description of the methodology applied for this study. Sections of this chapter include a restatement of the purpose, the theoretical foundations of the methodology, the research approach and design, the selection of the context, site, and population sample, the instruments used to collect the data, the procedures and ethical considerations, the data analysis, the reliability and validity of the data, and a chapter summary. This research examined the impact of peer mentoring on mentors' personal development, competence, and leadership skills and practices. The following research questions were addressed:

1. How do student mentors perceive the impact that peer mentoring has on their personal development and competence?
2. Are there significant differences among the Student Leadership Practices Inventory subscale scores for undergraduate female mentors and mentees?
3. Are there significant differences among the newly joined mentors and the ones with long experience based on the Student Leadership Practices Inventory subscale?
4. Are there significant differences in participant perceptions about the impact that the mentoring role has on the development of mentors' leadership practices?
5. What SLPI subscales are associated with each other and with participants' overall perceptions?

### **Research Approach**

Paradigms or Worldviews as described by Creswell (2009, p.6) are defined as "a general orientation about the world and the nature of research a researcher holds". They are considered by Blackstone (2017) to be a representation of the way we frame what we know and how we can know it. Creswell (2009) described that three main things can shape our worldviews in adopting a particular design in a research study. The discipline area of the researcher, the type of beliefs the researcher holds, and past research experiences control our scientific assumptions and the type of knowledge that we seek (Creswell, 2009). The types of beliefs drive researchers to adopt quantitative, qualitative, or mixed methods approaches.

In social sciences, four different worldviews/paradigms are highlighted. Each has its own significant perspective; positivism, social constructionism, critical paradigm, and postmodernism (Blackstone, 2017). While constructivism is mainly based on qualitative research, another more current paradigm called the post-positivism is based on a quantitative approach. The post-positivism paradigm views reality as one while the constructivism views it as many. The social constructivism beliefs are built on the meanings of individuals' life experiences. Post-positivists beliefs are founded on the impression that cause justifies the outcome (Creswell, 2003). Thus, the focus of post-positivist researchers is to identify and measure the causes that impact the outcomes. Furthermore, this particular approach defies the absolute truth about knowledge and claims that one cannot be certain about anything when studying human behavior or actions. That is why researchers begin their study with a theory in mind and investigate how this theory is applied in the studied context. Hence, their intention is to carefully measure the objective reality existing 'out there' (Creswell, 2014). Post-positivist researchers aim to test the variables that are influencing the outcomes. Thus, they begin with a theory and they develop quantitative measures to study and verify participants' behavior to collect data that either supports or disproves the theory. Then, they pose research questions or hypothesis to explain a causal relationship between the variables. It is required that these researchers prove validity and reliability of their quantitative measurements for the purpose of increasing objectivity and generalizability of results (Creswell, 2014).

Researchers who viewed the world through both quantitative and qualitative lenses adopted a pragmatism approach that combined both positivist and constructivist positions. Creswell (2003) explained that *pragmatism is based on the fact that claims of knowledge are usually the result of actions, situations, and consequences that are different from the previous ones* (p.11). Pragmatist researchers often combine the interpretivist with the constructivism paradigm (Creswell, 2014). Adopting the constructivism paradigm helps researchers build and construct knowledge from subjective individuals' life experiences in a specific context (Creswell, 2009b). The constructivism paradigm uncovers the underlying beliefs, values, and motivations of individuals' behavior in a specific cultural setting. It is used in a qualitative research method and 'attempts to make meanings from individuals' complex views on their experience of the situation being studied (Creswell, 2014 p. 8). Hence, constructivist researchers focus on the interactions between participants and the context in which they live and work (Creswell, 2014). Constructivist researchers collect data by asking participants broad and open-ended questions and allow them to freely express their understanding of the studied situation (Creswell, 2009b). In this paradigm, the researcher is an instrument of data collection. To this end, it is essential

for researchers to acknowledge that their interpretations of the reality could be shaped by the influence of their background, and personal and cultural experiences. Unlike the post positivism paradigm, the constructivism paradigm is inductive. It seeks to generate a theory by identifying patterns in participants' interactions among themselves, with the context, and with the community (Cohen et al., 2007; Creswell, 2014).

The combination of both qualitative and quantitative approaches in a pragmatism paradigm strengthens the research outcomes and overcomes the limitation imposed when choosing a single research method. Pragmatists put a great emphasis on the research problem and adopt all viewpoints available to unravel it. Pragmatism is the key in philosophical underpinning for adopting mixed methods approaches to obtain a better understanding of the topic studied (Cohen et al., 2007).

Because the purpose itself determines the methodological design of any research study (Fraenkel & Wallen, 2009), a mixed methods design was applied to answer the research questions above. This design is also based on three key features described by Morgan (2007): (1) the epistemological beliefs that inform the study about the nature of relationships between the topic investigated and what can be known about it (Cohen et al., 2007). (2) The philosophical paradigm (i.e., postpositivism, constructivism, and pragmatism) in order to understand and discover the nature of the reality investigated. (3) The methodology that is concerned with particular techniques and procedures utilized to collect and analyze data (Cohen et al., 2007). While the data collected will be either qualitative or quantitative, all paradigms can use both forms of data.

This study adopted a pragmatism philosophical stance to accept different assumptions or worldviews about the peer mentoring phenomenon. According to Patton (1990) and Creswell (2003) adopting the pragmatism philosophical stance gives attention to the research problem, which requires pluralistic approaches to derive knowledge. Since the majority of mentoring research in higher education is incomplete (Budge, 2006), following different perspectives from both objectivism and constructivism will combine the external reality and subjective individual beliefs to provide a comprehensive picture (Johnson & Christensen, 2008). As such, through a pragmatism lens, the researcher will have the freedom to choose more than one approach and methods of data collection that could best answer the research questions and provide a practical understanding of the phenomenon (Creswell, 2003, 2014; Fraenkel & Wallen, 2009). In addition, the rationale behind choosing this philosophical stance is directly

related to the novelty of the topic within the studied context and the ambiguity of the concepts related which are making it hard for the researcher to depend on a sole assumption or worldview.

First, the researcher adopted the humanistic constructivism paradigm to explore participants' subjective views regarding the impact of peer mentoring on their personal development. Then, the researcher followed the post-positivist paradigm to test the hypothesis and produce objectivity and scientific reasoning of participants' perceptions (Creswell, 2003). This design is called a mixed methods design. Creswell (2003, 2008, and 2014) identified four types of mixed methods:

- 1- Triangulation (concurrent or parallel) mixed methods design to collect both quantitative and qualitative data simultaneously. The researcher gives equal priority to both methods by collecting data concurrently to understand the problem. Hence, the researcher focuses on the results and outcomes to find any similarities. The strength of this design is in its combination of results to find similarities in outcomes and overcome the weaknesses imposed by choosing a single data collection method.
- 2- Embedded mixed methods design is adopted to answer the purpose of the research by collecting quantitative and qualitative data simultaneously. This design prioritizes a major data collection form which is quantitative and then supports it with qualitative data collection. The results generated in one form will support the other data form. The strength of this design lies in providing an additional source of information which was not given by the main data collection form.
- 3- Explanatory mixed methods design is quantitative and qualitative data that is not collected at the same time, but in a sequential manner. Thus, the first phase is collecting and analyzing the quantitative data. Phase two consists of collecting and interpreting the qualitative data. This design is chosen when the purpose of the research is answered by providing a general overview of the situation through the quantitative data while the qualitative data aims to further explain and refine the general overview provided by the quantitative results.
- 4- Exploratory mixed methods design is the opposite of the explanatory design. In this design, the researcher first gathers qualitative data to explore the phenomenon. The second phase is collecting the quantitative data to explain the relationship in the qualitative data. The emphasis in this design is placed on the qualitative data rather than the quantitative data. As such, the goal of collecting quantitative data is to explain the

initial qualitative results and findings.

This study followed the exploratory sequential design. It began by gathering and analyzing qualitative data to explore the phenomenon and gather different views around the benefits of peer mentoring on mentors' personal development and leadership practices. After that the researcher collected and analyzed quantitative data to explain the initial results and findings of the qualitative data (Creswell, 2012, 2015). This part of the study was important to corroborate the results that are related to the leadership component and identify the exemplary leadership practices that are mostly enacted by mentors. The bulk of the research on peer mentoring programs focused on theoretical approaches for application and evaluation of these programs (Falchikov, 2001; Topping, 2005). However, due to the ambiguity of the term and its different forms (informal/formal and traditional/non-traditional) and the various implications of its effectiveness in higher education, there is not yet a reliable methodology in understanding how peer mentoring forms operate within higher education (Budge, 2006). Thus, a qualitative approach was used to collect individuals' perceptions and attitudes regarding the impact of peer mentoring on students' self-efficacy and social interaction (Foster, 2014; McCullough, 2016).

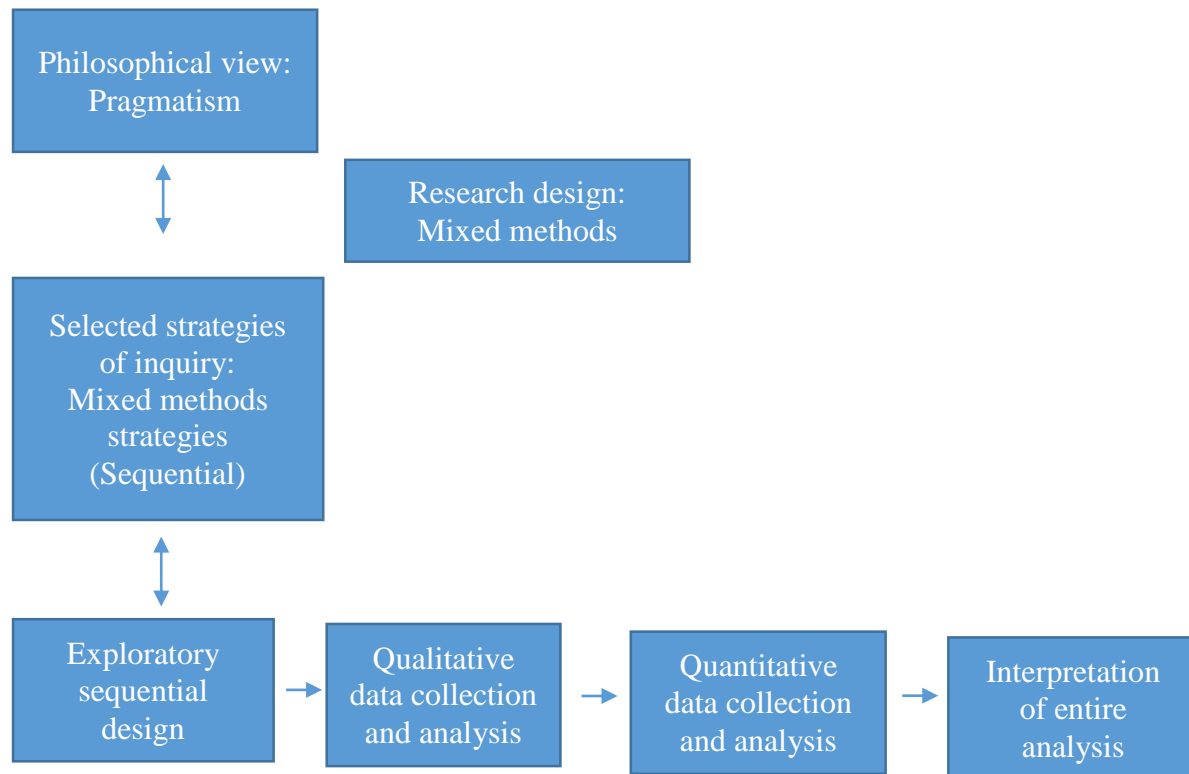
Leadership skills or practices were usually reported through quantitative or mixed method studies in order to explore relationships on a large sample of mentors and mentees (Alpern, 2017; Benett, 2017). That is why, the combination of both qualitative and quantitative methods is convenient to answer the purpose of this current study in exploring the impact of peer mentoring for undergraduate female students in the UAE. Adopting mixed-methods approach will also enrich the literature with various perspectives of mentors, mentees, and faculty about the effect of peer mentoring on the improvement of mentors' leadership practices within this particular context (Cornelius, Wood, & Lai, 2016; Gunn, Lee, & Steed, 2017; Topping, 2005).

Scholars like Clark and Creswell (2009) and Fraenkel and Wallen (2009) argued that the combination of quantitative and qualitative methods in which they complement each other assists researchers in capitalizing on the strengths of each method. Additionally, using different data collection methods will increase the reliability of the data (Cohen et al., 2007). Cohen et al. (2007) claimed that planning, designing, and conducting a research study depend on the objectives of the research. Therefore, the researcher implemented a mixed-methods approach and followed a sequential exploratory design to explore participants' perceptions about the peer mentoring impact on undergraduate females' personal development and leadership practices.



Figure (5) below is adopted from Creswell (2009) to clarify the process of designing an exploratory sequential methodology.

*Figure 5. Pragmatism, mixed-methods, exploratory sequential design adopted from Creswell (2009)*



Creswell (2014) asserted that collecting quantitative data after collecting the qualitative data assists in the interpretation of the qualitative findings and corroborate the results. This design does not explain and interpret relationships as much as it explores a phenomenon. Therefore, the researcher collected qualitative data through individual interviews and analyzed them to obtain a deeper understanding of the overall impact of peer mentoring on mentors. Then, a survey design was used to collect quantitative data. Following the sequential exploratory data collection strategy, the researcher analyzed the datasets separately to determine if the data supported or refuted the other in order to better explain the phenomenon (Clark & Creswell, 2010).

Creswell (2014) described that exploratory design is appropriate to use whenever the researcher aims to: 1) test the element of an emergent theory resulting from the qualitative phase, 2) generalize the findings to different samples, 3) determine the distribution of a phenomenon within a chosen population and 4) develop an instrument. In this research study, the reason for choosing this particular design is to explore a phenomenon (impact of peer mentoring on

mentor's personal development) and to expand on the qualitative findings while focusing on one particular theme (leadership skills and practices) for the subsequent quantitative phase.

The qualitative and quantitative data collection increased knowledge about the topic and deepened the understanding that could have been missed if using only one method (Creswell, 2014). Based on this understanding, choosing mixed-methods as a strategy of inquiry offered an in-depth understanding of the research problem and overcame the flaws that could have caused by solely relying on information gathered from either source (Creswell, 2014). Both strategies contributed differently to this study. The qualitative method based on participants' responses that were collected through in-depth individual interviews yielded subjective findings. The quantitative data collected through surveys yielded objective interpretations of the qualitative findings.

Therefore, the nature of the questions addressed have directed the selection of the design of this study. By adopting mixed-methods design, the researcher was able to explore the topic in-depth, increase the reliability of the data, and answer all the research questions as explained in the table (2) below.

*Table 2. A summary of the methodology approach in relation to each research question.*

Research question	Participants		Sampling technique	Instrument	Approach
How do student mentors perceive the impact that peer mentoring has on their personal development and competence?	Mentors	n=25	Purposeful convenience sampling of mentors who were in the mentoring role for more than 3 semesters	Interviews	Qualitative
Are there significant differences among the SLPI subscale scores for undergraduate female mentors and mentees?	Mentors	N=111	Purposeful sampling of mentors and	S-LPI self & observer versions	Quantitative
	Mentees	N=180	mentees who were enrolled in the peer mentoring program		
Are there significant differences among the newly joined mentors and the ones with long experience based on the Student Leadership Practices Inventory subscale?	Mentors	N= 111	Purposeful sampling of mentors and	S-LPI self & observer versions	Quantitative
	Mentees	N= 180	mentees		
Are there significant differences in participant perceptions about the impact that the mentoring role has on the development of mentors' leadership practices?	Mentors	N=111	Purposeful sampling of mentors, mentees, and faculty who were involved in the peer mentoring program	S-LPI self & observer versions	Quantitative
	Mentees	N=180			
	Faculty	N=25			

What SLPI subscales are associated with each other and with participants' overall perceptions?	Mentors	N=111	Purposeful sampling who were involved in the peer mentoring program	S-LPI self & observer versions	Quantitative
	Mentees	N=180			
	Faculty	N=25			

Table 2 above presents each of the research sub-questions with the sampling technique, number of participants, instruments for data collection, and nature of the approach followed. Since that this study adopted the sequential exploratory design, the qualitative phase will first take place in order to gain insights about the impact of the peer mentoring on mentors' personal development and leadership skills. After collecting and analyzing the qualitative data, the quantitative data collection will commence to identify the exemplary leadership practices developed by mentors and examine the association of the mentoring role with the development of these practices.

## Context of the Study

The UAE is located on the shoreline of the Arabian Sea and Indian Ocean. It became a federation in 1971. It has seven emirates and its capital is Abu Dhabi (Morris, 2005). The UAE's economy was primitive and under-developed, mainly relying on fishing, nomadic animal farming, and a once-lucrative pearl trade. When the federation was formed, oil production and export was ramped up and provided the financial resources to grow the economy into its current state (De, Ahmad, & Somashekar, 2004). Given the country's relatively recent formation and economic growth, its educational system is understandably young with the first public school being founded in 1953 (Abu-Samaha & Shishakly, 2008; Gaad, Arif, & Scott, 2006). UAE's public schools are fully subsidized by the government. They enroll national students exclusively and follow a single gender model (Gaad et al., 2006). The private sector, however, provides expat students their educational needs. In recent years, there has been a growing trend for national students attending these private schools. That is why, hiring a greater variety of expat teachers to cater to this growing demand has increased.

The educational system in the UAE and in particular in the public sector, is based on a teacher-centered approach and on traditional curriculum design and application (Farhat, 2008; Tubaishat, Bhatti, & El-Qawasmeh, 2006). As a response, the Ministry of Education is interested in the implementation of modern teaching methods, with numerous initiatives aimed

at enhancing the teaching and learning strategies and improving overall school performance. Therefore, in its national agenda for 2017-2021, the UAE has declared that innovation and leadership are the main focus of educational reform to prepare today's school children for the nearly sixty-five percent of jobs that have yet to be created (Ministry of Education, 2016). Research showed that nurturing leadership skills in university students regardless of their field could lead to better performance and a higher level of creativity in the workplace (Day & Harrison, 2007).

As such, the ruler of Dubai His Highness Sheikh Mohammed Bin Rashid Al Maktoum indicated that Emiratis were not permitted to undertake jobs without the qualifications and skills to participate in both the public and the private sector. He also added that the Ministry of Education ought to do more to educate youth in critical thinking rather than memorization (Harris, 2007). According to Muijsen and Nour (2006), the citizens of the UAE must be more involved in the education process as it is believed the economy is being held back by a deficient educational system. Educational reform was influenced mainly by technological innovations, enhancement of the curriculum, and employing various strategies to offer learners with a better learning environment (Ministry of Education, 2016). Ultimately, the 2020 Vision plan by the Ministry of Education and Youth in the UAE was focused on fundamentally updating and revolutionizing schools to reflect a progressive and useful change in teaching, appropriate policies and thorough assessment processes (Abu-Samaha & Shishakly, 2008). To target the country's mission of developing a successful education sector, student-centered tactics of teaching and learning were presented. This assisted students in becoming more independent (Abu-Samaha & Shishakly, 2008). However, teachers and administrators need to engage students in activities that will enhance their self-confidence and self-efficacy. Teachers were trained and encouraged to enhance the experience of students by making learning fun and engaging. For instance, a gardening project was initiated as an alternative learning space and environment when teaching Early Years students about plants. A more effective use of technology is promoted and integrated in lessons (Abu-Samaha & Shishakly, 2008).

Additionally, teaching strategies such as inquiry-based learning is encouraged and accounted for at K-12 due to the role it has in developing students' problem solving and critical thinking and problem-solving skills, and nurturing students' autonomy and independent learning (Ministry of Education, 2016). At the higher education level, academic leaders are collaborating to achieve the country's vision in providing first rate education and advancing the nation's socio-economic development. Hence, several leadership opportunities are offered

to prepare university students to be the leaders of tomorrow and achieve the country's economic and social progress (Ministry of Education, 2016). As such, leadership development programs were implemented in some of the university courses. Others have integrated opportunities for leadership development into existing courses offered. While these two approaches are beneficial, it's a challenge for universities to integrate them across all their courses, i.e, Health Sciences field (Vanniasinkam, 2015). Therefore, other approaches like taking on mentoring roles became common in larger universities around the globe (Cohen et al., 2011). This approach enhanced student engagement, boosted their confidence levels, and provided leadership development opportunities for students (Colvin & Ashman, 2010; Crisp & Cruz, 2009; Joseph & Winston, 2005). These programs were initially designed to support newly joined students and help them discuss their challenges and difficulties. However, the practice of mentoring had greater benefits for both mentors and mentees. It advocated students' professional and personal growth, developed their sense of responsibility, commitment, and independence. It increased students' self-confidence and self-esteem (Colvin & Ashman, 2010; Crisp & Cruz, 2009; Joseph & Winston, 2005). As a result, students were more capable of solving their problems and managing their learning.

## **Site Selection**

This study was conducted in one university in the UAE. This medium-sized institution has two modern campuses in Dubai and Abu Dhabi that welcomes both national and international students. English is the language of instruction in most of its colleges. As in many tertiary institutions, a peer mentoring program was created in 2011 to help students achieve and realize academic success. However, at the time of conducting this study, the peer mentoring program included female mentors and mentees only. In this peer-mentoring program, more experienced students, often from the same major or some other area of interest, mentor their struggling peers to help them achieve their academic goals and transition to university. This program provides mentoring services through multiple sessions on a daily basis. The duration of mentoring sessions differs based on the needs of the students and are voluntarily organized after regular class time with an average ratio of 55 sessions per day. Mentoring sessions are based on a daily one-to-one or through weekly group sessions presented by one mentor for an average of eight student mentees.

## **Population and Samples**

To select the subject of any research study, the researcher must follow a sampling technique. Sampling is the way to select a specific group to represent the whole population. There are usually two sampling techniques: random (probability) sampling and non-random (non-probability) sampling. In the random sampling, every individual has an equal opportunity to be a part of the sample, unlike the non-random sampling where there individual in the sample are selected based on specific criteria. In the random sampling, characteristics are equally distributed in the population, which means that any sample selected would represent the whole population to produce more accurate results (Cohen et al., 2007).

The population of this study was a group of undergraduate Emirati female peer mentors who are enrolled in the peer mentoring program, their mentees, and their faculty members. Considering that both the site and population of this study are small in size, the researcher adopted a purposeful convenient sample for the qualitative and quantitative phases. A purposeful sampling technique is a non-random or non-probability sampling in which participants selected are based on the researcher's judgment about how useful or representative individuals are to the study (Cohen et al., 2007). Hence, the sample size and sampling approach used was determined by a number of factors, such as the small number of population studied, time available to collect the data, and the convenience of the study context (Cohen, et al., 2007. p. 93; Schneider, 2003).

Considering that the focus of this study is to investigate peer mentoring impact on undergraduate female students who are enacting the mentoring role, the sampling method chosen was purposeful sampling. Having a purposeful sample from which the most can be learned, helped the researcher discover, understand, and gain insights about the topic (Merriam, 2009). Gay, Mills and Airasian (2009, p.181) explained that "in some cases where the population is small, the entire group may make up the sample". To this end, the researcher used the purposeful sampling technique to collect data for the survey design (N=111) from one particular group of mentors from both campuses. The small number of participants selected limit the generalizability of the results that is why collecting feedback from mentees (N=180) and faculty (N=25) gave significance and trustworthiness to the data collected.

The selection of this particular method of sampling was due to the size of the studied program and the selection of participants who can provide valuable information about the topic (Gall, Gall, & Borg, 2007). The power of this sampling method lies in collecting rich and in-depth information from individuals from whom we can learn a great deal (Patton, 2002). Hence, for

the qualitative part, a purposeful convenient sample of mentors who were exercising the mentoring role for more than three semesters, at the time of conducting the study, were selected to collect qualitative data through individual interviews.

At the time of the study, there were one hundred and eleven mentors enrolled in the peer mentoring program at the two campuses (Dubai and Abu Dhabi). The researcher contacted the two directors (one director for Dubai and one director for Abu Dhabi) of the peer mentoring program directors and asked them for the list and email addresses of the mentors working on these campuses. From the list of mentors, the researcher selected seventy-three mentors who have more than three semesters experience in the mentoring role. The researcher asked from the directors of the program to select 25 mentors out of the 73 that were mostly involved in the peer mentoring program to be participants of the qualitative part. The researcher was introduced to the mentors and invited them individually and via email to participate in the interviews. Out of the 25 participants, 22 agreed to be interviewed. Mentors were invited to participate in the interviews at their convenience. During these interviews, the researcher explained that she would be sending them and their colleagues (N=111) a survey to collect their self-assessment on their leadership practices. The researcher gained access to the email addresses list of mentees and faculty from the directors of the peer mentoring program. A total of 111 self-version of the surveys was sent out to mentors. One hundred eighty copies of the observer version were emailed to mentees who were attending the mentoring session. Twenty-five copies of the observer version were sent to the faculty members who were teaching the participant mentors at the time of the study. Out of the 111 mentors who were invited to participate in the survey, 94 were only completed and returned back. This amounts to a high response rate of 85%. Of the 180 mentees who were invited to participate in the survey, 142 responded positively. This amounts also to a high response rate of 79%. As for the 25 faculty members who were invited to participate in the survey, only seven returned back. This amounts to a weak response rate of 28% with respect to selectivity. Due to this low response rate, faculty participants were excluded later on from the quantitative analysis.

## **Data Collection Instruments**

Following the sequential exploratory design used in this study, the biggest weight of the data collected was on the qualitative part. Qualitative data helps researchers learn about something new rather than testing something that is known (Richards, 2014). Considering the aim of this



research, it was important to learn the overall impact of peer mentoring on mentors and to collect in-depth information related to their personal and leadership skills development. The qualitative part helped the researcher to understand, interpret, and describe the experience shared by the participants (Merriam, 2009). Semi-structured interviews with open-ended questions were used to extract the hermeneutic meaning of participants' experiences about the phenomenon studied. In a phenomenological hermeneutic approach, the participants are the ones who have experienced the phenomenon. To this end, Creswell (2013) explained that a maximum number of 25 participants who have experienced the phenomenon would be very informative to the study. In this particular approach, Creswell (2013) added that the participants should be asked two broad and general questions about their overall experience in terms of the phenomenon and the situations that have mostly influenced their experiences. These two broad questions will provide an understanding of the participants' experiences in regard to the impact of the peer mentoring role 1) on their personal development and 2) on their leadership skills and practices. Open-ended questions were also developed to gather in-depth data through changing the sequence of questions as to what seen fit during the interview (Kvale & Brinkman 2009; Merriam 2009; Riessman 2009). Participants were advised to check the transcription of these interviews to ensure their validity (Kvale & Brinkman 2009; Merriam 2009; Riessman 2009).

Following a constructivism stance provided the study with data relating to attitudes of participants lived experiences but also a whole lot richer information about how participants' attitudes inter-relate or differ. This approach generated with both descriptive and analytical descriptions of attitudes and perceptions. Thus, many themes were produced from the qualitative data collected from the selected mentors. After exploring these themes, mentees, faculty, and mentors will be invited to participate in the quantitative data collection part. One hundred eleven mentors, 180 mentees, and 25 faculty members were asked to fill out the 360 S-LPI surveys to examine their perceptions and feedback about mentors' leadership skills and practices development. The quantitative data collection took part during two weeks' time of the end of fall semester of the academic year 2018-2019. The researcher sent the surveys by email to participants and followed up with them twice by emails to ensure having high response rate. As mentioned in the section above 94 copies were returned back from mentors, 142 from mentees, and 7 from faculty.

## **Interviews**

The rational of choosing interviews as a first instrument of data collection procedures is linked to the sequential exploratory approach adopted by the researcher to achieve the purpose of this study. Collecting first qualitative data helped the researcher explore the phenomenon studied and gather different views around the benefits of peer mentoring on mentors' personal development and leadership practices. Moreover, the novelty of the topic within the studied context, the various implications of its effectiveness in higher education, and the lack of a reliable methodology in understanding how peer mentoring forms operate within higher education (Budge, 2006) intrigued the researcher to construct reality by exploring participants' subjective views through interviewing them. Thus, a qualitative approach through the use of interviews was used to collect individuals' perceptions and attitudes regarding the impact of peer mentoring on mentors' personal development and leadership practices. Then, the researcher collected quantitative data through surveys in order to explain the initial results and findings of the qualitative data (Creswell, 2012, 2015). This part of the study was important to corroborate the results that are related to the leadership component and identify the exemplary leadership practices that are mostly enacted by mentors.

Seidman (2013) discussed that interviews are a powerful tool within educational settings that can help the researcher gain insights and an understanding of the experiences of the participants. To this end, the researcher developed open-ended questions for the face-to-face semi-structured interviews. These semi-structured interviews aimed to give participants the opportunity to describe and elaborate the challenges and benefits of this program to their personal and leadership skills. Seidman (2013) discussed that individual interviews provide the freedom for participants to express their perspectives and experiences. In addition, due to the novelty of peer mentoring programs in the Arab world, specifically in the UAE, it was essential to gain a deeper understanding of participants in their natural setting before going to a quantitative method. Therefore, this qualitative approach provided quality data about the participants' experiences, before, during, and after their involvement in the peer mentoring program. It has also discovered important themes related to the challenges of such programs and how they overcame them. These interviews have also allowed for new information to emerge (Merriam, 2009). As a result, a comprehensive exploration of the main variables related to the benefits of this program towards students' personal development and leadership skills was promising.

One-on-one interviews were conducted with 22 mentors to get deeper insights and explore participants' perceptions regarding the personal development and competence including their

leadership behaviors and practices. The researcher developed twelve open-ended questions (Appendix A). The types of questions ranged from demographic questions to questions regarding participants' experiences, behaviors, opinions, values, feelings, and knowledge as recommended by Patton (2002) and Merriam (2009). These questions were adopted from a recent qualitative study conducted by Haber-Curran, Everman, and Martinez (2017). They were also and were based on the peer mentoring framework identified by Crisp and Cruz (2009) and also based on a second framework related to mentors' characteristics and skills revealed through the literature review done by Terrion and Leonard (2007). Questions were divided into four categories aimed at uncovering the purpose of why mentors join the program; prospective mentors' characteristics and skills in participants' point of view; program impact on mentors academic, personal, and career-related impact; and challenges of the mentoring role. Example of these questions are: Why did you join peer mentoring program? What is your goal or purpose? In your opinion, what qualities and skills do you think a prospective peer mentor needs? To what extent do you feel you are part of the decision-making team, explain how? How do you impact the program as a whole? How did your involvement with the program influence your leadership practices? Being a mentor, what are the challenges that you faced and how you overcome them?

### **The Student Leadership Practices Inventory Survey**

The quantitative study was conducted after the qualitative data collection and analysis to expand on the qualitative findings, make convergence of results, and discover relationships among the variables related to peer mentoring benefits towards students' leadership skills and practices development (Creswell, 2014; Fraenkel & Wallen, 2009). To measure the relationship between the mentoring role and the development of leadership practices, the researcher adopted the existing Student Leadership Practices Inventory (S-LPI) questionnaire developed by Kouzes & Posner (2003), reviewed by Posner (2004), and then modified by Posner (2010). The S-LPI is a property tool of the Wiley Company and the researcher had to obtain their permission in utilizing it for her study.

This instrument was derived from case studies of students' own beliefs of their personal-best leadership experience and the behaviors they believed were most critical to the success of this endeavor (Posner, 2012). This questionnaire is the best available instrument that measured both

the servant and transformational leadership practices of a mentor. It is based on the Leadership Practices Inventory (LPI) developed by Kouzes and Posner (1990, 1997a, 2003). A copy of the instrument appears in Appendix B (self-version) and Appendix C (Observer version). This questionnaire was validated on a population of 78,000 students, across a variety of individual differences. Internal reliability analysis showed a consistent set of Cronbach alpha coefficients generally at about the .70 level and above.

*While the LPI was utilized by more than three million people and helped them gain clarity on their leadership style, the S-LPI was modified and adapted for students' participants. The Student LPI has two forms: Self and Observer. Each form consists of 30 statements—six statements to measure each of the five leadership practices. The forms differ only in terms of the individuals who complete them. The Self-form is completed by the student leader himself or herself, and the Observer form is completed by a person who has directly observed the leadership behaviors of that student leader. The overall Cronbach alpha coefficients on the self and observer versions run from .78 to .86. Internal reliability coefficients were acceptable and individual respondent characteristics (e.g. GPA, year in school, and academic major) did not account for differences in leadership practices (Posner 2012, 2014).*

The S-LPI is a property of the Wiley Company. The researcher filled out and sent a request form to the company to gain their approval for the usage of the instrument. After obtaining their permission to use it in this study (Appendix D), the researcher sent the surveys by email to the mentors. Another document (Appendix E) was also attached in the same email to the participants identifying to them the purpose of this survey and that by filling out the survey their consent is automatically presumed. Participants were also informed that their leadership scores could be provided to them only upon their request. The survey required 20 minutes to be completed.

The aim of this survey was to measure student mentors' leadership practices and assist the researcher in identifying specific behaviors and actions that they report doing when they are at their "personal best as leaders." These behaviors are categorized into "five fundamental practices of exemplary leadership" as identified by (Kouzes & Posner, 1995, p. 8): 1. Model the Way 2. Inspire a Shared Vision 3. Challenge the Process 4. Enable Others to Act 5. Encourage the Heart (such as: celebrating the values and victories by creating a spirit of community). Kouzes & Posner (1997b, p. 9) described these five practices as:

1) Inspiring a Shared Vision: Exemplary leaders are expected to make a significant positive change and difference by forming a vision for the future of their organization. It is also key to get everyone on board and work collectively towards accomplishing this vision. The items related to this exemplary behavior provide a description of participants' perceptions of their ability to obtain others support in working toward common goal (Kouzes & Posner, 2002a). In this subscale, student mentors were asked how often they discuss future trends and describe an exciting future, how commonly do they encourage others to work common future goals, and how they demonstrate a positive image of these goals and discuss with others the university's values (Kouzes & Posner, 2013).

2) Modeling the Way: Student leaders whose vision is to make a difference in the educational institution and in the life of others, they set certain goals and principles and share them with others. Therefore, these student leaders must set an example and model the way for others to follow. They must be the pioneers and inspire and raise the team's interest in these goals. To raise team's interest and ownership, an effective leader allocates responsibilities as per followers' weaknesses and strengths, which in turn will enhance their performance. Six items evaluate student mentor's leadership strength in this area. Questions for this subscale measure how often student mentors set a personal example of values and beliefs, how they ensure that common values are clearly and equally understood by everyone and make certain that others stick to them. This subscale also assesses how often student leaders adhere to their commitments and request feedback on their actions.

3) Challenging the Process: One of the most challenging features of leadership is challenging the existing process inside the organization and making a change. While leaders search for innovative opportunities to create a change that will benefit the people and the organization, this can be overwhelming for some. People fear change because they fear failure and mistakes. Therefore, leaders begin by putting smaller objectives for the team to achieve as they work towards the bigger goal. They also admit in front of their followers their mistakes and failures because they are learning opportunities. Therefore, student mentors will be asked here to describe the extent to which they take risks, seek out challenges, and develop innovative practices (Kouzes & Posner, 2002a). This subscale will measure the extent to which students challenge

the process by seeking learning opportunities and establishing realistic goals for their work (Kouzes & Posner, 2013).

4) Encouraging the Heart: Motivating by rewarding is the key to keeping people determined and committed to accomplish their goals. Appreciating others' hard work and efforts and recognizing their contributions will give hope and strength to people. In this subscale, student mentors were asked to rate how often they recognize and reward others for good work and how regularly do they get out of their way to celebrate other accomplishments (Kouzes & Posner, 2013).

5) Enabling Others to Act: Effective leaders understand that their success is a result from their teams' success. That is why effective leaders always look for ways to engage the team with the process. As such, they create an atmosphere of trust and respect among team members to strengthen their involvement and collaboration. Student mentors here were asked to evaluate how often they develop collaborative partnerships and provide these people with decision-making autonomy. They were also asked to evaluate the extent to which they are open to different viewpoints and to which extent they respect others and encourage them to make decisions. Lastly, they are required to answer how consistently they encourage the professional development of their team members (Kouzes & Posner, 2013).

Additionally, The S-LPI 360 surveys were distributed also to mentees and faculty to collect their perceptions on the impact of peer mentoring on mentors' leadership skills. These questionnaires created a genuine 360° measurement to collect valuable feedback from mentors through the self-version, and from mentees and faculty through the observer version. Mentees and faculty who had direct experience in observing the individual student leader in a leadership role or any leadership capacity were selected to participate in the study. 360-degree surveys instruments are useful multi-source feedback tools that capture various leadership behaviors. They were developed mainly for increasing leaders' awareness of their impact on others. Having this knowledge will successfully build one's intrapersonal competence and confidence that is necessary for enhancing individuals' leadership practices (Day, 2001).

The S-LPI included 30 items, 6 items are under each subscale of the five leadership practices. Instructions in the beginning of these surveys encouraged participants to answer with honesty

and be realistic when they rate themselves. For instance, respondents were instructed to consider their typical behavior rather than concentrating on a specific situation or occasion when responding to the survey questions. Respondents were asked to consider how frequently they engage in each of the behaviors using five-point Likert-scales, with (1) indicating rarely or seldom and (5) indicating very frequently or almost always. Example of the questions are as follows:

1. Model the way (e.g., I set a personal example of what I expect from others);
2. Inspire a shared vision (e.g., I describe a compelling image of what our future could be like);
3. Challenge the process (e.g., I seek out challenging opportunities that test my skills and abilities);
4. Enable others to act (e.g., I develop cooperative relationships with the people I work with);
5. Encourage the heart (e.g., I praise people for a job well done).

A last item was added by the researcher to examine the relationship of mentoring role with the development of these leadership practices. As such, question 31 stated:

For self-version “I believe that the mentoring role developed my overall leadership practices.”

For the observer version: “I believe that the mentoring role developed the mentor’s overall leadership practices”. This item was necessary to add in order to answer the research questions and measure overall participants’ perceptions about the impact of the mentoring role on the mentor’s leadership practices development. This item will help the researcher to analyze 1) which of the SLPI subscale categories predict mentors and mentees perceptions about the impact that the mentoring role has on their overall leadership skills and 2) compute the correlation between the SLPI subscales and participants overall perceptions and 3) compare differences between mentors and mentees overall perceptions about the impact of the mentoring role on developing mentors’ leadership practices. A sample of a filled self-version survey is attached as Appendix (J).

## **Reliability and Validity of the Data**

The quality of findings of every research project is mostly affected by the different aspects of the data collected and the reliability and validity of the instruments used. As such, it becomes the researcher’s responsibility to indicate whether the instrument used is a modified instrument

or an intact instrument developed by other scholars. Wherever the instrument used is an existing one as in the case of this study, validity and reliability of scores obtained from the past use of the instrument should be described by the researcher (Creswell, 2009).

### **Trustworthiness of the Qualitative Instrument**

Interview questions should be checked by other people who are experts in the field and/or piloted on a very few number of cases (Richards, 2014). Since the researcher becomes part of the qualitative instrument, it is very likely that their prior knowledge and preconceptions, their experience in the field, their values and strong commitment to their topic could cause bias to the data. Hence, it is recommended for researchers to document their preconceptions, their experiences with the participants, and their expectations while *making* data (Richards, 2014).

Three professors with extensive experience and background in mentoring and training in Education reviewed the interview protocols and the open-ended questions developed by the researcher to ensure clarity and validity. Baker (1994) recommended that a sample size between 10% to 20% of the actual study should be selected for pre-testing of the research instruments. A pilot study was carried out on three mentor participants to test the appropriateness of the tool and process. Piloting the research protocol and assessing the feasibility of the interviews were fundamental steps to train the researcher and identify any logistical problems. Additionally, it was necessary for the researcher to evaluate if each question was consistently understood by all mentors especially that they were all Arabic native speakers and the interviews were administered in English. Overall, piloting the interview questions has promoted the overall quality of the results.

Feedback from piloting the interview questions were as follows:

- 1- Interview with each participant took approximately an hour. To this end, questions were reduced from 20 to 12 questions. Questions with yes or no answers such as “Did you find satisfaction in helping others?” were omitted.
- 2- The instructors who checked the questions advised the researcher to use simpler words in the questions asked.
- 3- Due to language differences, the researcher found herself sometimes explaining the question in both English and Arabic to ensure that participants understood the meaning.



Furthermore, the researcher increased the degree of confidence for the data by controlling her self-perceptions or biases using the following techniques described by Fraenkel, Wallen and Hyun (2015, pp.456-457):

1. The researcher checked one participant's descriptions of something against another participant's description of the same thing. Hence, the researcher interviewed three participant mentors to verify that the data collected is valid by checking their perceptions on the third question "Why did you join the peer mentoring program? What is your goal or purpose?"
2. Recording personal thoughts considered as researcher's reflexivity while conducting interviews. This technique aided the researcher in recording unusual or incorrect responses which she checked later against other comments or data. An example of that is when one of the participants mentioned during the interview the differences in student mentees between Dubai and Abu Dhabi. In her point of view, student mentees in Abu Dhabi are more focused and effective than the ones in Dubai. The researcher noted this comment but did not find it in other participants' responses. Thus, the researcher decided to disregard it because it is very subjective and irrelevant to the study aim.
3. The researcher used an audio recording device to record the interviews and ensure that she did not miss any spoken information.
4. The researcher asked the participants to check the transcription of their own responses from the interviews. Of the 22 participants, 17 responded back to the researcher with their agreement on their transcribed interviews. Two asked the researcher to mention the name of the director in Dubai in the transcriptions as being a key success to the program. However, the researcher replied back mentioning that all names are confidential. Three participants did not respond back at all.

### **Reliability and Validity of Quantitative Instrument**

Various scales and measurements were developed to measure leadership in business and corporate communities such as the Multifactor Leadership Questionnaire developed by Bass & Avolio (1990) (MLQ—also known as MLQ 5X short or the standard MLQ) that measures leaders' leadership style and performance. However, very few can assess or measure youth leadership skills (MacGregor, 2010). For instance, Tyree (1998) created the Socially

Responsible Leadership Scale (2nd revision) instrument based on the principles of the social change model of college student's leadership development. This instrument proved its effectiveness in measuring the relationship between students' leadership experiences and their development of socially responsible leadership attributes (Alpern, 2017). This instrument looked at the attributes of the transformational leadership that aim solely to examine students' leadership development towards the social change and development of values for the common good. Despite that this examination is interrelated with the transformational leadership model, it does not serve the purpose of this current study. This study aims to look at all the attributes of transformational leadership in relation to the five exemplary practices of students' leadership development.

Johnson (2016) in her study used the Everyday Leadership Skills & Attitudes Inventory (ELSA) developed by MacGregor (2010) for tweens (ages 9-12) and teens (ages 13-18) to explore students' attitudes about their leadership and their skills as a leader. ELSA proved to be an effective tool in enhancing and assessing students' self-perceptions of their leadership attitudes and skills. However, it was mainly applied in elementary, middle, and high school settings. Additionally, ELSA is an instrument limited to measuring self-perceptions from one group of participants (the studied sample).

Consequently, it was necessary for the researcher to look for another reliable instrument that could:

1. Collect participants self-perceptions on their leadership practices development through the lens of both transformational and servant leadership.
2. Measure leadership skills and practices of a sample of university students whose leadership development is different from the school level students.
3. Collect the feedback from other sources (followers and observers) as a way to corroborate the scores.

Therefore, the researcher adopted the 360 Students Leadership Practices Inventory SLPI developed by Kouzes and Posner (2003). The SLPI is based on the Leadership Practices Inventory (LPI) tool developed by Kouzes and Posner (2002) to advise people about their leadership styles and abilities. It was initially formed to evaluate the five functional attributes of servant leadership.

**Reliability of LPI:** Since the 1980's Kouzes and Posner began their research on developing an instrument that could measure exemplary practices of leaders. Through case studies and interviews with leaders, they were able to determine their greatest leadership moments and achievements (Posner, 2015). These extensive qualitative studies assisted the authors in developing a survey called "The personal- Best Leadership Experience" questionnaire. Results of this survey identified the five leadership exemplary practices namely, *Inspire a Shared Vision, Model the Way, Challenge the Process, Enable Others to Act, and Encourage the Heart* (Kouzes & Posner, 2000). Hence, the LPI was triangulated over many years by utilizing both qualitative and quantitative methodologies.

It was administered on 1,100 case studies and accumulated database of over 12,000 leaders. The LPI was found to be a reliable instrument -meaning that it provided consistent results- with a strong internal reliability measured by the Cronbach's alpha coefficient above .80 for all five of the LPI scales among leaders from many disciplines (Kouzes & Posner, 2002). The internal reliability for each of the subscale was also found to be reliable with a strong reliability coefficient ranging from 0.75 to 0.93 (Kouzes & Posner, 2000). Internal reliability of LPI was also tested in several fields such as in medical education where Bennett (2017) reported the LPI reliability coefficient ranging from 0.55 to 0.76. Additionally, it was tested among chief nursing officers and found to be also reliable (internal reliability coefficient scores ranged from 0.66 to 0.87 (Clavelle et al., 2012). Finally, in a summary of more than 50 studies, Posner (2016) reported the scores of the internal reliability coefficient for the LPI as ranging from 0.61 to 0.97.

**Validity of LPI:** Kouzes and Posner (2003) developed the SLPI to evaluate student's leadership practices based on the five exemplary practices in relation to both servant and transformational leadership attributes. The SLPI was validated on a worldwide population of 78,000 students, across a variety of individual demographics. Other studies demonstrated strong evidence of internal, external, face, and construct validity (Kouzes & Posner, 1995; Kouzes & Posner, 2000; Lewis, 1995; Posner & Kouzes, 1993). Construct validity is the consistency of the instrument and that it measures correctly what it claims to measure. Face validity evaluates whether the questions on the subscales assess the corresponding leadership practices (Lunenburg & Irby, 2008).

Face validity was consistently checked through both quantitative and qualitative methodologies (Kouzes & Posner, 2000). Furthermore, factor analysis and multiple regression

analysis indicated strong construct validity of the instrument (Kouzes & Posner, 2000). Kouzes and Posner (2000) and Posner (2005) supported the face and construct validity of LPI by aligning its results with other measures of leadership. Furthermore, the test proved to be very easy to understand, complete, and evaluate by participants. The SLPI was used by several studies examining leadership practices and behaviors at the university level (i.e., Benett, 2017; Foli, Braswell, Kirkpatrick, & Lim, 2014). It was also used to measure female leadership and predicted the major practices that developed their skills in this area, namely *Model the Way*, and *Enable Others to Act* (Galante & Ward, 2017).

In summary, the psychometric standards of reliability and validity of the SLPI were met (Posner, 2016). Internal analyses showed a consistent set of Cronbach alpha coefficients about the .70 level and above. Face and construct validity were supported by quantitative and qualitative means (Kouzes & Posner, 2000).

## **Data Analysis Plan**

This study adopted a sequential exploratory approach to explore undergraduate female students' perceptions about the impact that the mentoring role has on their personal development and leadership practices. The qualitative phase was initiated by conducting semi-structured interviews with 22 mentors who have more than 3 semesters of experience. Interviews were recorded, and analyzed by the researcher to identify common, recurring themes and patterns. After that, the quantitative surveys were distributed to mentors, mentees, and faculty. These participants were purposefully selected because of their involvement in the peer mentoring program. The Student Leadership Practices Inventory (SLPI) surveys self and observer versions were adopted from Kouzes and Posner (2002). These surveys comprised 30 items divided on five categories. One item was added at the end by the researcher for the purpose of computing the correlation of the mentoring role with the development of mentors' leadership practices. The quantitative data were analyzed using SPSS by the researcher to produce T-test, one-way ANOVA (Analysis of Variance) among variables, descriptive statistics, and regression analysis. The quantitative data helped corroborating the qualitative results concerned with identifying the enacted leadership practices and skills by these students.

## **Qualitative Analysis**

In this sequential exploratory mixed method study, the analysis of the qualitative data first took place through an ongoing process of preparing, organizing and interacting with data through the open-ended in-depth interviews (Creswell & Plano, 2007). Content analysis was chosen for this study to use the data as source for open coding, categorization, and thematic analysis (Denzin & Lincoln, 2008). Moreover, the content analysis helped with generating results that will explain the occurring patterns in participants' experiences (Morgan, 1993). The content analysis technique used for the coding process informed the researcher about the categories and their meaning to the topic investigated (Richards, 2014).

The qualitative data obtained from the interviews was manually transcribed (Sample of an interview transcription is attached in Appendix I) but analyzed using Hyper Research software. Following Creswell (2008) coding process, the researcher began by reading through the text data. After that, the researcher divided each text into segments of information, then labeled the segments of information into codes. Next, the codes were reduced by merging the ones that overlaps. Finally, the codes were collapsed or reduced to a maximum number 7 themes. Quotes from participants were represented as evidences for each code.

This coding process assisted the researcher in organizing the data collected into categories in relation with the research questions and then to combine categories to find patterns in participants' perceptions and attitudes about the topic (Richards, 2014). After identifying categories, a comparative method was employed to compare data with data and to identify concepts that could be grouped together. As such, concepts were compared by asking, 'what are the similarities and differences in the benefits that students gained from enacting the mentoring role?' 'What are the challenges faced?' 'How mentors do overcame these challenges?' This analysis enabled the researcher to identify similarities, differences, and general patterns to develop an understanding about how the functions of the female mentor role are shaped and how they are impacting their personal development and leadership skills.

To ensure similar and valid perspectives in identifying unique codes and themes, two coders were assigned to code the transcripts (Johnson & Christensen, 2008). Coders met for an entire session and agreed on a coding scheme to extract common codes, combine them, and formulate the data. They also agreed to avoid transcribing any unnecessary discussions such as personal

stories that are not related to the topic and baseless accusations that could affect the study. Afterwards, each coder was assigned to different units.

## **Quantitative Analysis**

The purpose of descriptive studies is not to investigate a cause or effect of a phenomenon but rather explain it in its current environment or situation (Lunenburg & Irby, 2008). In this descriptive study, descriptive statistics were used to analyze numerical data and describe the characteristics of the population studied. In general, there are four common types of descriptive statistics in educational research (Lunenburg & Irby, 2008):

- 1- Mean, median and mode are the measures of central tendency to describe the average scores or characteristics of a sample or population.
- 2- Standard deviation and range are variability statistics used to highlight the breadth and range of the scores (how far the scores fall from the mean).
- 3- Percentile ranks and standardized scores are statistics of relative position to describe how individual scores relate to all other scores in the population or sample. For example, the z scores describe the distance of a data point from the mean of the group.
- 4- Relationships or correlations measure the association between two variables.

In this study, statistics of central tendency, measures of variability, and relationships were utilized to describe the characteristics and illustrate features of the studied participants, to examine differences in responses, and extract correlations. IBM Statistical Package for the Social Science Statistics (SPSS) version 24 was used to analyze the statistical means of the quantitative data based on 5 Likert scale survey. Data was manually entered in the SPSS, examined, and reviewed for accuracy and checked for any missing values. Descriptive statistics such as percentages, group means, modes, and frequencies were computed. Parametric statistics were also completed to measure relationships and examine the strength of association between variables. Measures of relationship were calculated utilizing linear regression analysis.

First, variables were computed by adding participants' responses for the items related to each of the S-LPI subscales. Second, composite scores were created by dividing the scores by 5. Third, data was screened for data entry and missing data. Corrections were made in case of any mistakes found in the data entered. Only one case was found to be entered incorrectly and subsequently adjusted by the researcher. No missing values were found. This is because the survey clearly states for participants to write number 1 (rarely or seldom) for the statements that are not applicable.

After that, inferential statistics were applied to compare groups. These tests such as T-test is a statistical test of significance aimed at determining differences among groups (Lunenburg & Irby, 2008). The Independent T-test analysis involved comparing two groups based on their means on one variable. Group 1: mentors with less than 3 semesters of experience and group 2: mentors who have more than 3 semesters of experience. For participant mentees, group 1: mentees who were mentored for less than 3 semesters and group 2: mentees who were mentored for more than 3 semesters. Analysis of Variance ANOVA was also computed to examine the statistical significance of the regression model and see if it can predict the dependent variable (overall perceptions about the impact that the mentoring role has on mentors' leadership practices development). Correlation between composite scores was done to understand the strength of association between the SLPI subscales and the dependent variable (the overall perceptions on the impact that the mentoring role has on mentors' leadership practices development). Table 3 below gives an overview of the data collection and analysis procedures in relation to each question:

*Table 3. Data collection and analysis procedures in relation to each research question*

Research question	Research instrument	Analysis
How do student mentors perceive the impact that peer mentoring has on their personal development and competence?	Semi-structured interviews	Interpretative thematic analysis to generate codes, categories, and themes.
Are there significant differences among the SLPI subscale scores for	S-LPI self & observer	Measures of central tendency: mean scores and standard deviations.

undergraduate female mentors and mentees?		Independent sample T-test to compare the perceptions of mentors and mentees on the SLPI subscales
Are there significant differences among the newly joined mentors and the ones with long experience based on the Student Leadership Practices Inventory subscale?	S-LPI self & observer	Measures of central tendency: mean scores and standard deviations. Independent sample T-test to compare the perceptions of mentors and mentees on the SLPI subscales
Are there significant differences in participants' perceptions about the impact that the mentoring role has on the development of mentors' leadership practices?	S-LPI self & Observer	Statistical descriptive analysis and Independent Sample T-Test to compare the differences in participants' overall perceptions about the peer mentoring impact on mentors' leadership skills development. Linear regression analysis to see which of the SLPI subscale categories predict mentors and mentees perceptions about the impact that the mentoring role has on their overall leadership skills. ANOVA to examine the statistical significance of the regression model.
What SLPI subscales are associated with each other and with participants' overall perceptions?	SLPI Self & observer	Pearson correlation to examine the association of the SLPI subscales with each other and with the dependent variable (mentoring role impact on mentors' leadership practices development).

## Ethical Considerations

This study was conducted during the fall semester of the academic year 2018-2019. Creswell (2008) emphasized on the importance of considering ethical issues in collecting, analyzing, and reporting the research findings. Obtaining the permission from the research site



stakeholders and informed consent of individual participants are of critical significance to conduct any research study. The researcher obtained the institution review board committee approval in which she agreed to abide by the rules, policies, and procedures and confirmed that this study has no affiliations in any forms and no conflict on interests in any form (Appendices G and H). After getting the ethical permission, the researcher approached three professors with extensive experience and background in mentoring and training in education and asked them to review the interview protocols and the semi-structured questions to ensure clarity and validity. The researcher piloted the interview questions during the beginning of the term. After revising some of these questions, participants were invited personally and by emails for a face-to-face interview. Some of the revisions made were to exclude a few questions and reduce the time of the interview. Questions with yes or no answers such as “Did you find satisfaction in helping others?” were omitted.

Individual semi-structured interviews with open-ended questions were conducted with 22 participant mentors who were in the mentoring role for more than 3 semesters to get a deeper understanding of the research problem. Interviews were conducted in the peer mentoring program center rooms in both Dubai and Abu Dhabi campuses. Interviews were done in the fall semester and each interview was on average thirty to forty-five minutes in length. Maintaining confidentiality was extremely necessary to show during the interviews because it helped put participants at ease, made them more open to the discussions, and gained their honest responses. Therefore, a consent was created (Appendix F) to ensure confidentiality and deal with participants’ privacy issues while at the same time preventing any harm to them. This consent form covered many aspects that the participant must be aware of, such as: background of the study, description of the study procedures, possible risks or discomforts, predictable benefits, the level of confidentiality and how to maintain it, clarification of the voluntary participation and the right to withdraw at any time during the interview without any consequences. Participants were made aware that they have the right to ask questions and report concerns at any time, whether before, during, or after the study. To this end, the researcher provided her supervisor’s contact details to the participants in addition to her own contact information.

It was fundamental for the participant to read and sign the consent before the beginning of each interview in order to give permission to the researcher to record the interviews and use the information obtained in her research. Any information that may identify the participants was excluded to ensure confidentiality and anonymity. All interviews were audio recorded and

handwritten notes were taken at the same time. The handwritten notes recorded will be safely locked in the researcher's office while the audio-taped voice recordings will be secured in a password-locked file.

Surveys were administered via email at the last two weeks of the fall semester to all participants to measure mentors' leadership practices developed by enacting the peer mentoring role. An explanation was added to the survey allowing participants to decide if they wish to participate or to decline and clarified that the results will be shared with interested participants. To ensure a high return rate of surveys, the researcher added a text to explain how important is for participants to fill out these surveys and sent them two reminders during the two weeks of the data collection duration. By filling the surveys, participants gave consent to the researcher to use the data collected. Any information provided during this study that could identify a participant or other personal information was kept confidential. Each participant was referred to by a number instead of using her original identity to guarantee confidentiality and anonymity of all subjects in both qualitative and quantitative data collection (Fraenkel & Wallen, 2009). Any personal data distinct to the research was deleted in order to preserve participants' anonymity. Participants of this study were guaranteed the voluntary nature of at their participation, and were assured their freedom to withdraw at any point. Participants were assured that their individual leadership scores will not be shared with the program directors rather it can be sent to them upon their request.

The information generated from the surveys and audio recordings were only used for this study and were kept confidential in a password protected file. The data collected will be kept for the period of two years and will be destroyed after that. There was a minimal risk of potential harm or distress to participants during this study. To this end, the researcher assured the participants that this research is only aiming for information about their leadership practices and no judgment will be made on their competencies. The researcher clarified to the mentees and faculty to consider each statement of the survey in the context of the peer mentoring program and imagine a situation or a session in which they have had the greatest opportunity to observe or be involved with the mentors. The researcher mentioned that their ratings on the SLPI subscales should be realistic and honest. Giving all 5 or all 3 on all responses is most likely not an accurate description. That is why it is important to be realistic about the extent to which the mentors actually engage in the mentioned behavior on most days with most people. To ensure an accurate analysis of responses, all participants were recommended to write number 1 (rarely

or seldom), which is the lowest on the Likert scale, whenever they feel that a statement does not apply (Kouzes & Posner, 2002).

## **The Role of the Researcher**

It is argued that the researcher role in qualitative studies is by itself considered as a data collection instrument (Denzin & Lincoln, 2003). It also means that the data could be mediated through this *human instrument* during the collection process more than the use of questionnaires (Denzin & Lincoln, 2003). That is why it is fundamental for qualitative researchers to acknowledge their biases, assumptions, experiences, and expectations to increase the validity and trustworthiness of data collected (Greenbank, 2003). It is as equally important for these researchers to explain if their role is more emic (insider as a full participant) or etic (Outsider with objective views) to the study or maybe both (starts as an outsider then becomes an insider or the opposite) (Greenbank, 2003). That is why, qualitative researchers are recommended to keep a research journal to explain their personal reflections and insights. Denzin and Lincoln (2003) discussed that during the data collection process, effective qualitative researchers are expected to ask probing questions, listen to participants answers, think about them, and then ask further probing questions to get deeper understandings.

In addition to the above, Patton (2002) claimed that it is important for the researchers to have qualifications and experiences relevant to the field studied to obtain more valid data. In this current study, the researcher's educational background and experience within the leadership area equipped her with the necessary skills to ensure validity in qualitative methods. Having competence, experience, and skills in the area studied as well as working as a research assistant for the past three years has worked well and increased the credibility of the research findings. Additionally, the researcher role was considered as etic or outsider to the participants who are involved in the peer mentoring program. However, the researcher's familiarity with the context of the study allowed her to get a deeper understanding of the investigated issue by focusing solely on learning about the meaning that the participants hold about the topic and not be distracted by other irrelevant details (Creswell, 2014).

Furthermore, to avoid researcher's biases, the researcher kept with her a journal at all time during the qualitative data process. In this journal, the researcher mentioned her thoughts and expectations before and during the interviews. For instance, the researcher took short notes about comments made by interviewees especially whenever they disclosed sensitive

information. Doing so helped the researcher control her emotional turmoil towards any distressed information unveiled by participants in order to process it (Creswell, 2008).

Finally, during the interviews the researcher asked probing questions to participants in order to collect deeper understandings. Questions like “tell me more”, “could you explain your answer more?” “Would you give more details?” were always addressed to encourage participants to clarify what they are saying and to urge them to elaborate on their ideas. The researcher also tried to avoid leading questions during the interviews and asked instead open-ended questions to ensure honest responses.

## **Summary**

In this chapter, the researcher identified the philosophical stance that guided the research design and the methodology applied. Due to the novelty of peer-mentoring in higher education across the globe and in the UAE, and the variety of factors related to students’ personal and leadership development, the researcher followed the pragmatism philosophical stance. This stance provided the audience with humanistic and post-positivism assumptions of both realistic and socially useful findings. As such, the pragmatism worldview enriched the study with a comprehensive analysis of the results and an interpretation of both qualitative and quantitative findings. Following one method alone could not have achieved the aim of the study or addressed the research questions that required both qualitative and quantitative answers. By adopting a sequential exploratory methodology where more weight was placed on the qualitative part, participants were able to express their views and share their experiences regarding the peer mentoring in general as well as the challenges and benefits it had on their personal development and leadership skills.

During the fall semester of the 2018-2019 academic year, the researcher conducted interviews and administered the 360 Student Leadership Practices Inventory (S-LPI) self and observer surveys. Interview questions were adopted from a recent qualitative study done by Haber-Curran, Everman, and Martinez (2017) and based on the framework of peer mentoring programs discovered by Crisp and Cruz (2009). They were also based on the framework of mentors’ characteristics and competencies revealed through the literature review completed by Terrion and Leonard (2007). Questions were divided into nine categories aimed to uncover the impact of the mentoring role on mentors’ personal development and leadership skills and practices.

The 360 S-LPI surveys were developed by Kouzes and Posner (2003) to collect and analyze mentors' perceptions of their leadership skills and practices. Utilizing this particular tool generated with specific behaviors and actions that students enact when they are at their "personal best as leaders." These behaviors are categorized into five leadership practices: 1. Model the Way 2. Inspire a Shared Vision 3. Challenge the Process 4. Enable Others to Act 5. Encourage the Heart (such as: celebrating the values and victories by creating a spirit of community). It also helped with getting observers' (mentees and faculty) feedback on mentors' exemplary leadership practices. In-depth interviews generated various themes and differences in categories analyzed. The survey design allowed the researcher to expand on the qualitative findings by focusing on one particular theme (leadership skills and practices) and combine the results (Creswell, 2014; Fraenkel & Wallen, 2009).

An interpretive content analysis of themes was followed for the qualitative analysis. As for the quantitative data, descriptive and correlation analysis were computed using the SPSS statistical software. T-test analysis were conducted to see if there are any differences in mean between two groups of mentors (G1: mentors with less than three semesters of experience in mentoring role, G2: mentors with more than three semesters of experience). After analyzing each phase (qualitative and quantitative) separately, the researcher combined both qualitative and quantitative results to answer all research questions, provide a holistic picture of the phenomenon, and draw conclusions. Discussion of the implications of these results for future research on the topic will be also presented.

## **CHAPTER 4: RESULTS, ANALYSIS, and DISCUSSION**

### **Overview of the Chapter**

This study adopted a sequential exploratory approach to investigate the impact of peer-to-peer mentoring on female mentors' psychosocial and leadership skills and practices in one university in the UAE. This chapter will provide the results attained from the data collected. The qualitative data obtained from the individual interviews will be analyzed to explore the common and recurrent themes that emerged from participants' responses. Thematic analysis helped the researcher make meaning of the lived experiences of the participants. Then, the researcher will provide an analysis and explanation of the quantitative results from the closed ended questions using a 5 Likert-scale. A combination of both qualitative and quantitative data will be presented in the last section of this chapter to present an overall understanding of the research topic and identify the exemplary leadership practices enacted by student mentors.

### **Qualitative Data**

The section presents qualitative findings from the interviews conducted with mentors' participants. Even though the study adopted a mixed-methods approach, greater weight was placed on the qualitative method. The aim was to do an initial exploration of the impact of peer mentoring on mentors in an undergraduate female setting in the UAE. The purpose of the conduction of interviews is twofold. First, interviews are the best data collection instrument to understand participants' views and perceptions. Second, they uncover new concepts or theories for potential quantitative studies. Hence, the in-depth interviews in this study helped the researcher collect rich data from participants and build theories. The results of the qualitative approach are descriptive, not predictive to understand participants' views of the impact of peer mentoring on their personal development, competence, and leadership skills and practices. A purposeful sample of twenty-two mentors who were in the mentorship role for three academic semesters or more participated in this qualitative approach. Creswell and Clark (2011) stated that this type of sampling method allows researchers to select individuals who are well-informed and have knowledge about the phenomenon explored. To this end, selecting these twenty-two mentors allowed the researcher to learn about important issues with regards to the topic of the study. These participants were asked why they joined the mentoring program and whether it had an impact on their personal development and competence.

An exploratory qualitative approach was adopted to answer the first research question:

**How do student mentors perceive the impact that peer mentoring has on their personal development?**

A total of twenty-two semi-structured interviews were conducted with mentors in this role for more than three semesters. During these interviews, the researcher established rapport with all of the participants. Glesne (2011) argued that establishing rapport with interviewees will engage them and motivate them to provide honest information and reflect on the meaning of their lived experiences. In this study, the relationship established between the researcher and the mentors interviewed served in obtaining in-depth and truthful information during the peer mentoring activity. These semi-structured interviews aimed to give participants the opportunity to describe and elaborate on the benefits and challenges of this program.

The interviews were conducted in English and recorded. They were transcribed later. Once the interviews were transcribed, the researcher shared these with the participants in order to do member checking. This process is important in a qualitative approach to ensure the validity of the information collected and to secure interviewee confirmation regarding what they talked about (Glense 2011; Kvale & Brinkmann 2009). In two cases, the participants asked the researcher to add more information related to the success of the program. They requested the researcher to mention the name of the director of the peer mentoring program in Dubai campus, as a main factor that made the program successful. While this request was noted, participants were informed that no names would be identified during analysis or reporting of the data to maintain confidentiality and anonymity.

Following a content analysis approach, the qualitative data collected was coded by two researchers to identify and organize themes and meanings. Creswell (2007) explained that having more than one coder is required to ensure credible and reliable analysis. Hence, the coders met to compare and discuss the codes and agreed on the main themes. The content analysis approach assisted with the exploration of meaning and interpretations of the participants' experiences (Patton, 1990). This process assisted the researcher in discovering emergent themes such as the challenges within the peer mentoring program and how participants overcame these challenges.

Among the twenty-two student mentors interviewed, nine participants joined in the mentoring

role for three semesters, four for four semesters, seven for five semesters, and two for six semesters. These participants were studying in different colleges: Five students in each of the College of education, Business Administration, and Finance, four in Communication and media, two in International affairs, and one student in Human management.

The interview questions were adopted from a recent qualitative study conducted by Haber-Curran, Everman, and Martinez (2017). These questions were grounded on the framework of peer mentoring program discovered by Crisp and Cruz (2009) and on the framework related to mentors' characteristics and competencies identified through the literature review done by Terrion and Leonard (2007). A total of twelve questions were divided into four main categories aimed to uncover: 1- the purpose of why mentors join the program; 2- prospective mentors' characteristics and skills in participants' point of view; 3- program impact on mentors' academic, personal, and career-related impact; and 4- challenges of the mentoring role. Therefore, a comprehensive exploration of the main themes is presented below following these categories.

#### *Category 1: Why do students apply for the mentorship role?*

Thematic analysis generated six main themes related to this first category. These were: 1- Gain teaching skills, 2- Doing something valuable, 3- Helping students at-risk, 4- Building friendships, 5- Increase individual's self-confidence, 6- Improve their English language skills. Table 4 below represent these themes and the related sub-themes.

*Table 4. Category 1: Reasons for students to apply for mentorship role*

Themes	Sub-Themes
Gain teaching skills	Become better teachers- Gain experience in teaching Application of learning Put instructional theories in action - Employ teaching strategies Learn how to deal with different types of learners Distinguish the fast-learning students and slow-learning students
Doing something valuable	Make good to people Support students academically Serve others is a rewarded act Feel special and unique Increase student's happiness- Improve students well-being



Helping students at risk	<p>Sense of obligation towards helping students at risk</p> <p>Support students academically</p> <p>Students struggle from the load of information given by the teacher</p> <p>The class period is too short to comprehend all the material given</p> <p>Students are unable to comprehend the materials explained in English</p> <p>Improve students' autonomy</p> <p>Develop students' confidence in their subjects</p>
Building friendships	<p>Become a member of a group</p> <p>Make more friends- Get to know different people from different majors</p> <p>Friendly, comfortable, and welcoming environment</p> <p>Build strong relationships inside the mentoring program- Mentors are very helpful and cooperative with each other</p> <p>Deal with different types of people</p>
Increase their self-confidence	<p>Have the opportunity to participate in events, gatherings, and regular meetings</p> <p>Overcome my fear of doing presentations in front of an audience</p> <p>Improve my self-esteem and confidence in teaching skills</p> <p>By teaching others, they develop their own confidence</p>
Improve their English language skills	<p>Improve my English language skills</p> <p>We always speak among each other in Arabic</p> <p>Students essays are written in English</p> <p>I learn new English words</p>

The interviewed participants believed that by joining the mentoring program they will acquire skills that will help them become better teachers in the future. As such, the main reason why they joined the program is to get experience in teaching. Even participants who study in colleges other than the College of Education felt the same way. A mentor leader (MT2) who was in the Human Resources and Management program explained that:

*I wanted to practice being a teacher and to develop professionally ... I chose the subjects that I want to mentor but now I do more than teaching. I am involved in the leadership activities of the program. I even encourage other students to join the program and I explain to them that it is a very beneficial experience especially those who want to major in Education.*

Participants in the College of Education stated that they joined the mentoring program to apply what they learned. They wanted to see instructional theories in action and practice them. The mentoring program is a perfect place where participants gain teaching experience and employ teaching strategies that they learned. In addition, the mentoring role trained them on how to

deal with different types of learners. For example, it taught them to distinguish the fast-learning students and slow-learning students. MT5 claimed that:

*I am studying special education and I wanted to test my teaching skills... I wanted to see the theories that I learned in practice and discover my strengths and weaknesses in teaching.*

The second reason is that these students joined the program to help others. Helping others has the power to increase individuals' self-satisfaction and purpose. The term *doing good* to people was mentioned by many participants. Serving others is a rewarded act, especially in Islamic culture, where this study was conducted. Participants realized that by *doing good* for others they are serving God's wishes and creating a good image for themselves. Participants know that the opportunities provided to them by the mentoring role *will make them special and good students*. MT7 stated that:

*I feel like I am doing something good when I mentor students and help them do their projects ... It also makes me feel special and unique.*

Additionally, interviewed participants were positive about their ability to support vulnerable students and personalize the lessons to suit each student's needs. In their responses, mentors revealed that students understand the material from them better than their professor. This is mainly because they feel more comfortable being taught by a fellow student who can speak their language. To this end, mentors conveyed that students who came regularly to the mentoring sessions understood the material and did better on the exams.

Mentors expressed that they feel a sense of obligation towards helping students who are at risk. They conveyed that these students *mainly struggle from the load of information given by the teacher*. They also indicated that *the class period is too short to comprehend all the material given*. These students *are unable to comprehend the materials explained in English as a foreign language*. That is why, student mentors re-explain the same material given by the faculty using simpler terms or sometimes in Arabic. In their opinion, this method is helping students understand the material and have positive attitudes towards the subjects. MT2 mentioned:

*Many students who don't understand what their instructor explained in class, they seek help outside the university and pay up to four hundred dirhams per class. Here in the*

*university the mentoring program is free and students can come anytime they want...For example, I trained five girls on their midterm exam by giving them a sample of the questions. During this one hour and a half session, I explained to them all the main concepts. They later came back and told me that they got full marks on their exams.*

Mentors understand that by joining the program they will support students academically and elevate their level of independence and autonomy. They are aware that this program is an avenue to support students' learning rather than doing students work. Student mentors can do that by tackling students' weaknesses and assisting them to improve the quality of their work. By improving students' performance, student mentors developed their emotional well-being and increased their level of happiness at the university. MT6 informed that:

*One time, I was mentoring a very shy and quiet girl. She lacked confidence in her English language skills. That is why I kept encouraging her to write her essays independently while I proofread them for her. I kept praising her despite her language mistakes. I constantly said, "It is okay to do mistakes because this is how we learn". Slowly she became more comfortable in attending the sessions. She became more confident and I could see her many times in the atrium working independently on her projects. I could also see how the program impacted her emotionally. She is smiling more now, and she looked happier than before. She has more friends inside the university.*

Furthermore, mentors expressed that they joined the program to make friends and become more familiar with the university environment. They described the peer mentoring program as a friendly, comfortable, and welcoming environment where they get to know different people from different majors. Mentors believed that by joining the program they became a member of a group. They gained more friends and created strong relationships inside the mentoring program. Through the mentoring role and having the opportunity to participate in events, gatherings, and regular meetings, mentors were capable to deal with different types of people. MT11 identified that:

*It is known that mentors are very helpful and cooperative with each other even if they don't know each other very well...they are very nice people!*

Interestingly, a number of participants mentioned that they joined the program to increase their self-confidence. Many expressed their fear of doing presentations in front of an audience. They believed that joining the peer mentoring program would be a solution to their struggle and help

them overcome this fear. Participants reported that they joined the program to improve their self-esteem and confidence in their teaching skills. They also expressed that joining this program will help them improve their English language skills. Participants understand that by teaching others they develop students' confidence in their subjects and their own confidence as well. MT11 explained:

*I joined the mentoring program because I wanted to teach and to improve my English language skills. We always speak among each other in Arabic but when I read students essays written in English, I learn new English words, and I also learn about their subjects and materials.*

Female student mentors revealed that they joined the mentoring program for six main reasons. These reasons ranged from personal and moral motives to academic, and career-related ones. Students applied for the mentoring role to *do something good to others* and help students who are at-risk. They felt that they are obliged to support them and improve their learning and academic performance. Mentors joined the mentoring role to develop their self-confidence, make more friends and become *a member of a group*. They also joined the mentoring program to improve their English language skills. Finally, they wanted to become better teachers and saw the mentoring activity as a platform where they can apply the instructional theories that they learned.

#### Category 2: Prospective mentors' characteristics and skills

When asked about the qualities and skills that a prospective mentor needs, participants' responses varied. To some, the most effective mentor has certain soft skills such as time management, leadership, and communication skills. The majority of participants agreed that a prospective mentor should have great communication skills with his peers as well as with the mentees. . Table 5 below represent the themes and the sub-themes related to this category.

Table 5. Category 2: Prospective mentor characteristics

Themes	Sub-Themes
Soft skills	Time management skills- punctuality- planning and organizing skills- set up weekly goals and timelines - Being more professional and efficient- Communication skills- strengthen relationships- gain friends -deal with all types of people
Leadership skills	Be self-confident- lead others- Flexible and open to people- cooperating with others Team player- extrovert- Deal with different type of people Solve problems Able to make effective decisions to make the mentoring session more productive
Role modelling	Demonstrate good behavior– be honest and sincere when mentoring others- Be patient while mentoring students Interact with others in a professional and confident manner.
Have previous knowledge in the subject taught	Be knowledgeable in the subject taught- being exposed to the subject taught previously- know what to teach to teach it better to others Committed to making the learning experience productive- know the materials in advance- support mentees' academic needs Quick revision of material
High academic record	Outstanding academic record- support mentees' academic needs- understand the subject taught and the materials Make the learning session more productive to learners- capable to address students' difficulties

Having good communication skills helps mentors clarify their goal and communicate ideas clearly to others, which will strengthen relationships. To this end, one of the participants (MT11) asserted that:

*Having good communication skills helped me reach my goal to serve students... It also helped me gain friends and deal with all types of people.*

Having time management skills is necessary so that mentors arrive on time and are able to manage their studies and mentoring activity. As such, peer mentors explained that they planned their schedule one week ahead of time. They set up weekly goals and timelines. This planning lessened the pressure and improved their professionalism and efficiency. MT21 explained that:

*It is fundamental to be able to manage my time between my studies, personal life, and the mentoring program. I usually put like general goals for the week and organize my*

*time to meet these goals. Time management skills is a prerequisite for us (mentors) to have because we have to be on time to the mentoring session. Being on time will make us more professional and efficient.*

Participants admitted that prospective mentors must be honest and sincere when mentoring others. They should be role models for students. As such, they should demonstrate good behavior and honesty. They should interact with others in a professional and confident manner. As such, mentors should be patient while mentoring students as MT2 highlighted:

*A prospective mentor should be patient because she will face different personalities. Students learn differently so mentors should not act in an aggressive way but keep repeating the instruction in different ways to ensure that students have understood.*

As for leadership skills, participants expressed that having self-confidence and being open to people are among the prerequisites for prospective mentors to have. Having leadership skills will promote mentors to become team players and increase the cooperation channels with others. MT2 expressed her view by saying:

*A prospective mentor needs to be confident and have leadership skills. These are the skills that will make us succeed as mentors. Even if you were an introvert like me, you have to get over that and try to be an extrovert in order to lead others.*

Teaching skills was mentioned several times among participants' responses. However, mentors believed that it is not a prerequisite to have in the beginning, but it could be gained through experience. MT20 described:

*When I first joined the program, I was surprised to see that having teaching experience is not a requirement for me to join the program. However, after some time I was able to identify the type of learners and differentiate the instruction.*

Mentors understand that they don't need to be qualified in teaching and that it is not required of them to teach the whole textbook but rather to explain unclear ideas or concepts to students. Students who sought mentors' help were *either absent at a specific lesson or had lack of concentration during the lesson*. Mentors understand that their role is to assist teachers in

making sure that students know the material taught. They also realized the importance of their role in lessening the pressure on teachers.

Mentors believed that a prospective mentor should be knowledgeable and committed to making the learning experience productive. They all believed that a prospective mentor should have an outstanding academic record to support mentees' academic needs. Mentors highlighted the fact that taking the subject taught previously and being exposed to the materials is a requirement to help them teach it better to others. This prerequisite is crucial to the success of the mentoring experience because as MT15 highlighted:

*I struggle when I have to attend the mentoring session and I have exams and projects submission on the same day. But the fact that I have previously took the subject taught makes it easier for me. I use the break time to revise before I explain it to the student.*

In this category, undergraduate female mentors highlighted the characteristics and skills that prospective mentors should have to succeed in their job. Communication and time management were the prominent skills mentioned in participants' responses. Having leadership skills and self-confidence are essential prerequisites for mentors to have for a productive mentoring session. These skills will promote mentors to take the right decisions and solve upcoming problems. Participants described that a successful mentor is the one who demonstrates good behavior and interacts with others in a professional manner. Having previous knowledge in the subject taught and high academic performance are vital conditions to enhance the quality of the mentoring session.

### Category 3: Program impact on mentors' academic, personal, and career-related skills

This section investigated the impact of peer mentoring role on mentors' academic, personal, and career-related skills. Table 6 below represents the three main themes and their sub-themes related to the third category.

*Table 6. Category 3: Program impact on mentors' academic, personal, and career-related skills*

Themes	Sub-Themes
Academic achievement	Teaching others is an opportunity to review the material- repeating the same material over and over- information on the subject taught was retained- pass on the knowledge- reflect on their own learning. Academic performance increased- high grades on exams- GPA increased- knowledge of the subject expanded -learn new concepts when revising students' essays who are in different majors -English language improved- writing skills improved.
Self-confidence and decision making	Able to make decisions- take initiatives- volunteer in many activities- seek the help of others to ensure taking the right decisions- become more mature- make public speech- be the first one to sign up for the activities- volunteer in internal and external events- represent the peer mentoring program at the university- do presentations in front of a male audience- conquer the fear of public speaking.
Leadership skills	Take decisions and initiatives- lead people- manage programs and tasks- initiate various programs- volunteer in many activities- ensure taking the right decisions- become more mature- make public speech- be the first one to sign up for the activities- the first to register and participate in the exhibitions- learning to become a leader- represent the program abroad- organize events and conferences- interview new joiners- train mentors- do presentations for new students- introduce students to the university services- local and international conferences presentations and participations- volunteer in community services- follow the leadership style of the program director- good leader always listen to others- satisfy students' academic needs- teamwork- encourage and motivate students- positive influence to others- become a role model to mentees- take others suggestions and opinions- challenge others- be committed to the goal.



Time management skills	Capable of organizing time between studies, the mentoring session, and personal life- limiting the social life outside the university- time management skills improved- prioritize tasks- arrange schedule- rejecting continuous requests.
Communication skills	Build strong relationships - more cooperative and open to people- understand others- more sociable, helpful, and friendly- interact and communicate with different types of personalities- communicate their ideas freely- better in doing presentations- direct a discussion panel.
Sense of belonging and value	Belong to the program- value in teaching others- feel relaxed and comfortable- feel as if the mentoring program is home- a sense of relief -belong to a community- have your own group of friends- become part of the program- doing good and serving others- feel respected by their peers, the faculty, the staff- Be close to teachers- become family.
Teaching skills	Apply the theories of teaching- test teaching strategies- know the different learner styles- employed several teaching strategies- satisfy students' academic needs- discover teaching style- practical learning activities rather than lecture- active learning has a better impact on students- more engaged in the learning process- understand their peers- detect students' weaknesses- choose a simple and clear strategy to teach the same content- explain difficult concepts in Arabic.
Patience	Become more patient- more mature- have tolerance when teaching students- repeat the instruction many times- explain the concepts more than once
Career related skills	Feel like being at work- peer mentoring program is similar to a job- mentoring role is serious job- we should be committed and responsible- be on time- avoid being late or absent- multitasking- assist teachers in class- take managerial roles- in charge of administrative tasks- recruit new mentors- do paperwork- arrange for meetings- organize and manage events- peer mentoring enriches teaching experience- know how to deal with others- build relationships- understand others' abilities- become more

cooperative- understand the importance of teamwork- be flexible with others- open to change- aware of career choice- pursue a career in higher education.

### *Academic skills*

Teaching others is by itself an opportunity for mentors to review the material, pass on the knowledge, and reflect on their own learning. Mentors agreed that their knowledge of the subject improved and their academic performance increased when mentoring others. Mentors stated that their academic grades increased since they joined the peer mentoring program. They also added that learned new concepts and their English language improved. MT18 claimed that:

*My writing skills developed whenever I revise students' essay- Reviewing students' projects improved my English language skills- I learned new concepts by reviewing students' essays who are enrolled in different majors than mine.*

As such, having the knowledge about the subject taught is required to make the mentoring session smooth and successful. By teaching others, mentors' knowledge grew. By repeating the same material, the information was retained in mentors' long-term memory. As MT18 continued:

*We are given an opportunity, where we can teach the same courses we take. This helped me succeed in my course and get high grades on the exams.*

### *Personal development*

Mentors reported that these programs have widely developed their personality. They became more committed, responsible, confident, and patient. Peer mentoring activity strengthened their leadership and decision-making skills. Interviewed participants stated that they became more courageous, mature, and honest in giving their opinions or suggestions to the management team. They asserted that this program changed their personality.

### *Self-confidence and decision- making*

Participants asserted that their self-confidence has improved since they joined the program. They were able to make decisions and take initiatives. Many stated they were very shy and quiet when they first joined the program. For instance, one mentor leader explained that she was given several tasks to manage and make decisions. She was responsible for deciding who among the mentors should be promoted. She also initiated various programs and volunteered in many activities. She expressed her satisfaction when she said that “*they (the management) accepted anything I do or the decisions that I make.*” MT2 continued:

*The program gave me the opportunity to lead and manage 50 people! Yes! Where I am today is because of the peer mentoring program. It is very rare for an undergraduate student to get this opportunity to manage an entire department.*

However, not all mentors were prepared to make good decisions. Making decisions is a skill that is usually gained through experience. Considering that these mentors come from a young educational system where schools are mostly teacher-centered, they are provided with very few opportunities to make decisions or take on leadership roles. This is why many feel they are hesitant to make the right decisions because they lack maturity and courage. Some participants explained that they seek the help of their peer mentors to guide them to the right decision. MT5 stated that:

*Each one of us has her own decision to make, so how can we be sure that we took the right decision?*

MT7 added:

*The limited environment of thinking and of understanding makes me less able to make my own decision.*

MT10 explained:

*I am not able to make good decisions because I am an emotional person. I am shy and I feel embarrassed to express my opinion.*

These student mentors reported that they have grown and became more mature since they joined the program. This maturity is the product of the development of their self-confidence and self-esteem. As a result, student mentees were more reliant on their fellow mentors and constantly sought their advice and help. A very clear statement made by MT13 in this regard:

*I was not the type that stands in front of public and talk, but when I went to the first event, they made me talk to the president of the university and I never knew I was capable to do such thing! I became the first one to sign up for the activities. For example, when school students would come to the university, I would be the first one to volunteer to do the campus tour. I also was the first to register and participate in the exhibitions. The peer mentoring helped me discover these skills in me and I learned to be confident, to have better self-esteem, and to be a leader.*

Patience is another sign of maturity. Many participants reported that they became more patient and tolerant when teaching students: “some students have low concentration during the lesson, so we have to repeat the instruction many times and explain the concepts to them more than once” as described by MT16.

Having high levels of self-confidence encouraged mentors to participate in other programs and volunteer in internal and external events. Mentors were provided with many leadership roles. They represented the peer mentoring program at the university and were invited to travel abroad and present the peer mentoring program in international universities. Many participants added that they volunteered in charity events. Others were responsible for organizing events and conferences at the University campus. However, some interviewees reported that their parents wouldn't allow them to travel abroad or attend events outside the university. The society of the UAE is still male dominant. As such, females are not permitted to travel alone without their family or a close male relative (father or brother). Despite this, mentors described how the continuous support from other females gave them hope and motivated them. In particular, mentors' mothers were the ones who supported them. As MT14 explained:

*I volunteered with a charity event to donate money for poor countries. I am also in charge of organizing many events, like the NACADA conference for more than 500 guests...I had many opportunities to travel abroad and introduce the program to other universities, but my family was against it and restricted me to travel. However, my mother supported me and allowed me to travel on a condition to take my brother with*

*me. I was lucky that my brother agreed but the problem is when your brother or your father doesn't have time to go with you which makes you lose these opportunities.*

Additionally, many participants interviewed described that being a peer mentor gave them to opportunity to do presentations in front of a male audience for the first time. The peer mentoring role boosted their confidence and motivated them to conquer their fears. MT14 continued:

*Participating in the NACADA conference was the most difficult and challenging thing I did so far because it was the first time that I have to present in front of men and people from different part of the world. I was super nervous and scared at the beginning which was evident in my speech. I was not totally satisfied with my performance, but it was a great learning experience for me.*

#### *Time management skills*

Many participants reported the importance of having good time management skills and how it could affect their overall performance. Mentors described that they are more capable of organizing their time between their studies, the mentoring session, and their personal life. Some explained that they had to give up on their social life outside the university. To them, their social life is now limited to the people inside the mentoring program. MT12 clarified:

*I have mentoring sessions up to three hours a week. I found it difficult at the beginning to balance between my personal life, my social life, and my academic life. The mentoring role experience made me grow and improved my time management skills. I became better at managing my time between my classes and the mentoring sessions. I also limited my friendship channels with my fellow mentors in the program.*

Almost all mentors were capable of managing their time by prioritizing their tasks. They explained that they prioritize their tasks and arrange their schedule accordingly. Finally, mentors managed their time by saying “No” to the continuous requests from the mentees. Some of them complained that mentees would come without an appointment and request help with writing their essays. MT12 described:

*I used to be the kind of person that always says yes to anything. The mentoring role made me courageous and taught me that there are times where I should say No to others. Student mentees come to the mentoring session expecting a lot from us. They even come without appointments. This was a challenge at first until I learned how to be stronger and say No to their countless demands.*

### *Leadership skills*

Participants agreed that being a peer mentor offered them many leadership opportunities. When asked about these opportunities, mentors explained that those with more than three semesters of experience were invited to interview new joiners. They were required to train their peers. Student mentors were also asked to do presentations for all new students and introduce them to the university services and to the mentoring program. They were responsible for arranging university conferences and participating in many events locally and internationally. They were also requested to volunteer in community services. Being involved in these activities increased mentors' self-confidence and developed their leadership skills and practices. They became more skilled in leading others. For instance, MT10 described this as:

*I regularly get involved in leadership activities. For example, I was responsible to manage the Open Day event. It was the first time for me to deal with schoolgirls. I confronted many difficulties, but I overcame them. This activity was a great experience for me to learn how to manage projects and lead people.*

Being rewarded is a great motivation for peer mentors. It made them feel appreciated and that their efforts are valued. That is why mentors reported that their role model leadership style is the one followed by the manager of the program. The mentors interviewed described their satisfaction, pride, and contentment to be led by someone who always listens to them and satisfies their needs. They believed that being led by a strategic and transparent leader is a key factor in the success of the program. MT2 explained the following:

*Our leader is the key success of this program. He has a positive attitude towards us and the mentees which made us all attracted to the program and made us love the place. The leader of the program is very respectful and values our opinion.*

Another participant described her personal experience when the director invited her to join their meeting and help them prepare a presentation for an event in an Australian university.

She mentioned that she did not hesitate to point out the mistakes and her suggestions were all included in the presentation.

The mentoring role made these students become a role model to others and set a good example for them. A mentor explained that her teacher always tries to encourage other students to follow her steps. Peer mentors became a positive influence for others. This is evident when one mentor described how one of her mentees was very keen to improve her academic grades to be eligible to apply for the mentoring role. It is worth noting here that having a high GPA is one of the essential conditions for students to be recruited as mentors.

Furthermore, these mentors modeled leadership qualities for others. They behaved like true effective leaders who appreciate teamwork and realize that things cannot be done without having people on board. MT10 explained:

*Joining the mentoring program taught me that a good leader is the one who listens to others. For instance, when I was in charge of organizing the ceremony, I listened to my colleagues' opinions and took their suggestions into consideration. Even though I had the power and authority at that time to choose whatever decision I want, I displayed effective leadership qualities and took the majority's opinion.*

Another leadership skill that participants gained through mentoring was to challenge the process. These mentors gained confidence and challenged people who stand in their way to achieve their goal. Now that they were able to make the right decisions, student mentors became more committed to their goal. MT15 claimed that:

*I learned to challenge everything that stands in my way. For example, I don't let people affect me if I am on the right path to achieve my goal.*

### *Communication skills*

Participants reported that being a mentor boosted their communication skills. These programs helped them build strong relationships with others and became more cooperative and open to people. They are better at understanding people, which made them more sociable, helpful, and friendly. Seeing new faces every day trained them to better interact and communicate with different types of personalities. Most participants reported the development of their

presentation skills and how they became better in communicating their ideas freely. MT15 explained that:

*I gained many skills and my confidence grew by being a mentor. I became better in doing presentations. For example, whenever I have to present my research project or case studies, I feel that I can communicate my ideas smoothly to others. I must say that I wouldn't be able to stand up in a crowd and present if it wasn't for the mentoring program, because it boosted my confidence a lot!*

Being a peer mentor inspired them to participate in many events and conferences. As a result, their confidence grew, and their communication skills improved as highlighted by MT14:

*During the NACADA event I was chosen to direct a discussion panel and I was nervous at first but because of my long experience of being a mentor, I was able to do the discussion easily. I knew I did well because of the excellent feedback I got from my fellow peers and from the advisors who attended the discussion panel that day. The advisors complimented me and told me that my discussion came out so naturally! I was very happy from their feedback. I was also content about myself to overcome my fear from stage presentations. Seeing how I am now compared to how I was before joining the mentoring program is a huge difference for me.*

#### *Sense of belonging and value*

It is important to mention that being a peer mentor gave these students a sense of belonging and value in what they do. To them, university life is stressful and complicated, but when they are in the mentoring program, they feel relaxed, comfortable, and feel as if they are in their homes. Additionally, being part of the peer mentoring program gave them a sense of relief and belonging to a community as explained by MT3:

*University life is very stressful and when we are out in the atrium it's either you have your own group, or you are left out. When the girls come to the mentoring program whether they've come for the first time or for two semesters in a row they feel like they belong here, and I can see how relaxed they become. I also feel that I am part of the program and that it became a part of me... It makes me so happy whenever I have to*



*describe what my role to others. This is mainly because I am developing myself and because I am doing good and serving others.*

Doing something valuable is believed to increase individuals' self-satisfaction and intrinsic motivation. It makes them feel valued and respected. In this case, participants conveyed that wearing the badge that identifies them as peer mentors made them feel respected by their peers, the faculty, the staff, and even the security guards. MT6 stated:

*I feel like teachers treat me as if I am closer to them. One of the teachers keeps telling her students to become like me and even she asked me to teach them to become like me! Even the other instructor told me how proud he is of me!*

Additionally, participants expressed their happiness when they described how the program director asks for their opinions and takes them into consideration. This made them feel that they are members of a community or a family. Mentors also expressed that they are aware of the seriousness of the mentoring role that requires their full commitment and dedication. MT3 claimed that:

*Not every student understands what it means to be a mentor until they actually become one. It is true that we are like a family here, but we are very committed to what we do. I have realized throughout my experience that we need to put our heart and soul into this program because it demands a lot of work and dedication.*

### *Teaching skills*

By teaching others, mentors gained valuable teaching experience. They were able to apply the theories of teaching and test their application on students' learning. By having different learner styles, mentors employed several teaching strategies to satisfy students' academic needs. They became savvy in identifying various learning approaches. In their opinions, they understood their peer academic needs even more than the faculty. The mentoring activity helped them discover their teaching style and see the impact of teaching strategies on students' learning and understanding. MT13 stated that:

*Being able to teach students has helped me a lot because I have discovered my own style of teaching. I have discovered that I prefer practical learning activities rather*

*than lectures. I think that active learning has a better impact on students because they become more engaged in the learning process.*

The mentoring experience increased mentors' understanding of their peers. They could detect students' struggles and weaknesses even from the first session. This is mainly because mentors are already familiar with the subject, the content, and the instructor. They can relate when their peers open up and talk about their weaknesses. This is why mentors choose a simple and clear strategy to teach the same content. Noting that they sometimes explain it in Arabic to their peers to ensure that they fully comprehend. MT13 continued explaining that:

*I observed that the students come here and are frustrated from some subjects and feel they are difficult, especially if their instructors are explaining things in detail. They feel that the curriculum is very heavy and difficult. But when we explain to them in a simple way, it becomes easier for them and eventually they get higher grades.*

#### *Career –related skills*

As for the career-related skills, participants revealed that the mentoring experience offered them the opportunity to feel like being at work. The expression “*I feel like it is similar to a job*” was recurrent in many interviewees' responses. This could be related to many factors: First, participants revealed that their leader taught them to take the mentoring role seriously and to be committed and responsible. They all thought of the mentoring role as a job where they have to be on time and must avoid being late or absent. MT1 indicated:

*Being a peer mentor is unlike any other activity in the university, it is very serious.*

They also described multitasking. Many mentors were responsible for organizing events, conducting class visits to introduce the program, and assisting teachers in class. Participants with experience in the mentoring program were offered managerial roles. In addition to their mentoring sessions, these mentors were in charge of other tasks such as drafting professional emails, organizing events, recruiting new mentors, and choosing who to promote. MT1 described that:

*I practice different things at the same time. For example, I mentor students and I am at the same time an assistant at the office. I work with people, but I also learned*

*paperwork and administration work. I arranged for the meeting with the vice president of the university.*

Being a mentor offered these participants many leadership opportunities. Participants volunteered in events inside and outside the university. Participants felt they could be exposed to real work opportunities. Many joined the job market as trainees to build their career:

*I was a volunteer in many events, and I am also working as a trainee in one national Bank, as stated by MT1.*

MT5 added:

*It is very beneficial to be a mentor because it is enriching my teaching experience for the future. Dealing with students will prepare me to deal with the employees at work.*

Participants believed that the mentoring experience taught them how to build relationships and understand others' abilities. These skills are crucial to their effectiveness in the workplace. It is clear that the mentoring role made mentors more cooperative and understanding of the importance of teamwork. MT12 described that:

*You need to know how to deal with different types of people, so this (peer mentoring activity) will help me in my future career. We also learned group work and how to be flexible with other people. We were very cooperative and divided the work equally and that helped us to deal with other people that we don't know.*

Mentors learned to be open to change. Organizations' success depends on the effectiveness of its employees and their ability to adapt. The latter is a difficult skill to learn but the mentoring experience is making it possible for mentors. As expressed by MT17:

*I did not know that there was another peer mentor who joined the introductory meeting that we had last time. There was no time to redistribute the parts of the presentation among us. However, we tried to be flexible and we helped each other, and it was a very successful presentation.*

Being involved in the mentoring role made mentors aware of their future career choice. Regardless of their specialization, the mentoring role inspired the majority of participants to pursue a career in higher education. MT17 described that:

*I am studying business but being a mentor made me realize exactly what I want to do.  
I want to pursue my higher education, get a PhD, and be a professor.*

MT5 added:

*Being a peer mentor actually helped me realize what I want to do in the future as a job.  
I want to be a professor and not a school teacher.*

In this category, undergraduate female mentors highlighted the impact that the mentoring role had on their academic achievement, personal development, and career-related skills. Repeating the material to mentees helped these mentors retain the information and do better in their exams. As for their personal development, student mentors explained that the opportunities that the peer mentoring offer to them (i.e., participating in events and conferences) strengthened their self-confidence and leadership skills. They became more confident in leading others. They were at front in many situations and took initiatives in many managerial activities. It is noteworthy to mention that communication, time management, and teaching skills were increased by enacting the mentoring role as expected by mentors. It is notable as well to indicate that mentors felt a great sense of belonging to the program. They also felt valued and appreciated by their peers, teachers, and staff inside the university. As for the career-related skills, being a peer mentor made them aware of their future career choice. This role gave student mentors aspirations to pursue a career in Higher Education and become professors.

#### Category 4: Challenges of peer mentoring role

Six main themes were recurrent under this category. Undergraduate female student mentors complained that student mentees were coming late to the sessions and sometimes they did not show up at all. This caused emotional stress and pressure on mentors. In addition, mentees co-dependence on mentors, lack of faculty support, and constant evaluations and appraisals were other themes that caused challenges and pressure on mentors. Table 7 below represents the themes and sub-themes.

Table 7. Category 4: Challenges of peer mentoring role

Themes	Sub-Themes
Students coming late to the session	Students being late to the session- students missing the session- students did not show up to the session- students schedule appointment with us and they don't show up.
Lack of faculty support	Faculty always change the materials- not updated on the changes made- lack of collaboration with the faculty
Faculty's misconceptions about the mentoring role	faculty think that we are doing students homework – some are not aware of what we do – giving wrong information to students
Mentees co-dependence	Students count on us to explain the materials- prepare them for tests- write their assignments on their behalf
Pressure and stress concerns	Stress and pressure- Some students wanted the same mentors to teach them every time- Emotional stress- unavailability – other deadlines- exams- minimum number of mentoring sessions-
Constant evaluations and appraisals	Continuously observed- expected to excel- one on one meeting with the director- self-reflections- improvement plan- pressure and stress from appraisal meetings.

One recurrent challenge from mentors' point of view is related to students being late to the session or missing the session. MT7 described that:

*One day I did not have any mentoring sessions, but when a student asked for my help, I went to the center immediately and waited for her, but she did not show up. I felt like she wasted my time, and this irritated me. Similar incidents happen a lot during my shifts when students schedule appointment with us and they don't show up.*

Lack of support from the faculty was an additional challenge for mentors. Mentors complained that the faculty always change the materials taught to students without updating the mentors on that. That is why mentors suggested creating a system of communication between both parties and collaborating to improve the quality and efficacy of the mentoring sessions.

Some participants were concerned that a few professors saw the peer mentoring program as a threat. When students go to mentors for help, it makes professors feel like their teaching abilities are called into question. The manager of the program ensures that mentors conduct regular class visits to introduce themselves and the program and explain the vision and mission of the program. They also approach the faculty and inform them that their role is limited to supporting students' learning.

Several mentors expressed concerns about mentees' co-dependence. Student mentees count on their peer mentors to explain the material and prepare them for tests. Additionally, they want mentors to write their assignments on their behalf. This is why mentors believe that proper training on how to guide and teach students will enhance their mentoring skills. A strong relationship between mentor and mentee will not lead to one taking advantage of the other. Therefore, it is recommended that the mentor-mentee relationship be built on certain terms where each person's role is acknowledged. This relationship is characterized by mentors as one of respect and professional communication where confidentiality is valued, and knowledge is shared in a friendly environment.

All participants viewed the program as a support for students with learning needs. Some relayed their concerns about the stress put on them. Mentors also conveyed that their parents were proud, happy, supportive, and encouraged them to join the mentoring program. However, they claimed their parents worried that mentoring might negatively impact their grades if they did not manage their time well. Some students wanted to have the same mentor in every session, which put pressure on that specific mentor. For instance, MT18 explained that student mentees want the same mentors to teach them every time.

*This causes us emotional stress because we might not be available all the time for the same student. Personally, I feel also pressured because from one hand I am responsible to help the student and on another I need to meet my other deadlines.*

Mentors agreed that providing workshops and support to revise the material will lessen the workload and stress. It will also ensure they are not giving wrong information to students. Having regular meetings with faculty is another solution to keep them updated on any changes in the curriculum.

Having a patient and helpful leader who worries about their well-being and supports them also helps mentors overcome challenges as described by MT20:

*Our director is very patient and helpful. He always worries and asks about us.*

Participants relayed that constant evaluation and appraisals added to their stress. To ensure that mentoring sessions are targeting students' academic needs, mentors are constantly observed and evaluated. While this accountability is key to the success of the program, it puts pressure on mentors. Despite the stress, mentors understand these appraisals are important for their own development. They realize these appraisals give them the opportunity to self-evaluate and reflect on their performance. MT21 explained that:

*I would say the main challenge is knowing that you are constantly expected to excel. It adds a lot of stress and pressure because you are constantly evaluated and you are constantly observed because we have the appraisal, we have COPE 1, COPE 2. These are really important evaluations for us because it helps us to constantly reflect and when we do that it develops our self-awareness.*

*Our director used to sit with us and criticize us deep on where we stand and, on our strengths, and weaknesses and how to improve ourselves.*

Hence, many participants expressed that increasing the learning opportunities both locally and abroad will expand their knowledge and mentoring skills. Doing so, it will increase the success of peer tutoring as a formal teaching-learning experience. To this end MT8 stated:

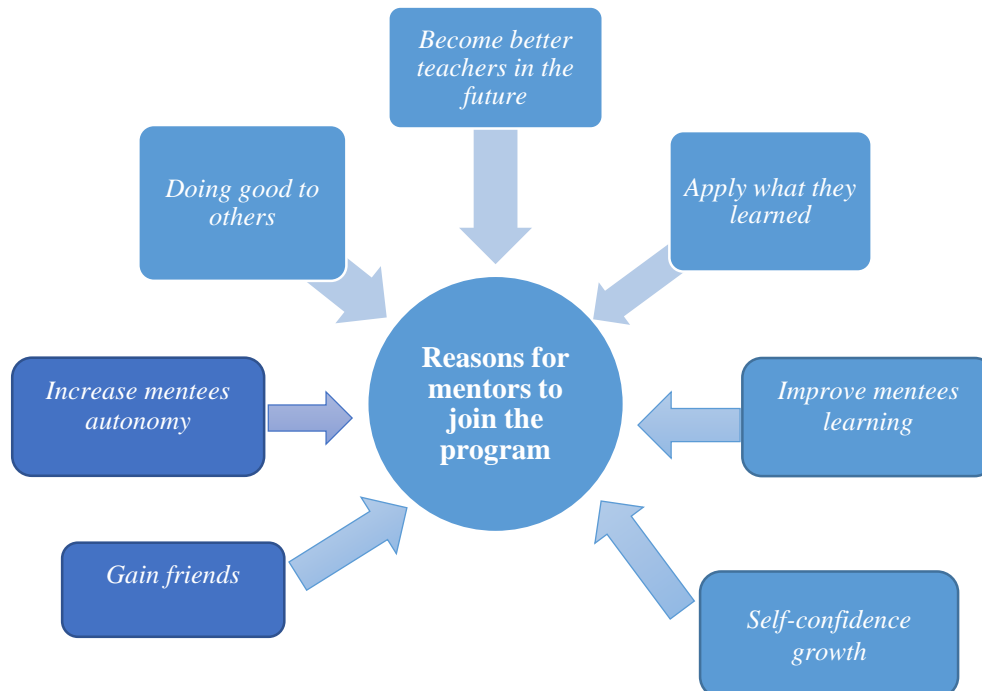
*By participating in external activities, you will learn and grow intellectually.*

Undergraduate female student mentors interviewed raised six main concerns related to their mentoring role. However, their self-confidence, problem solving skills, and maturity levels nurtured throughout this program made them suggest solutions towards these concerns. Participating in workshops to gain more guidance about the mentoring process; collaborating more with the faculty; and having time to revise the material will lessen the workload and stress and improve the quality of the mentoring session.

## Discussion of Qualitative Analysis

The general results of the qualitative data analysis of this study show positive perceptions about the peer mentoring role. Twenty-two participants with three semesters or more of mentoring experience agreed to be interviewed. Participants were asked a total of twelve open-ended questions divided into four main categories. These categories aimed to uncover the reasons why mentors join the program; to collect participants' opinions on prospective mentors' characteristics and skills; to analyze the program's impact on mentors' academic, personal, and career-related skills; and to explain the challenges in mentoring and how they overcame them. These in-depth interviews also uncovered the key successes of the peer mentoring program. Generally, all participants interviewed believed that the main reason for joining the program is to help others. They value education and want to help others succeed. They believe that by *doing good* for others they will be serving their Islamic beliefs. They will be also appreciated and respected by peers and faculty. The majority of participants whose major was Education described that they mainly joined the program to apply the teaching theories and see them in action. Figure 6 below represents a summary of the themes related to this category.

*Figure 6. Reasons for mentors to join the program*

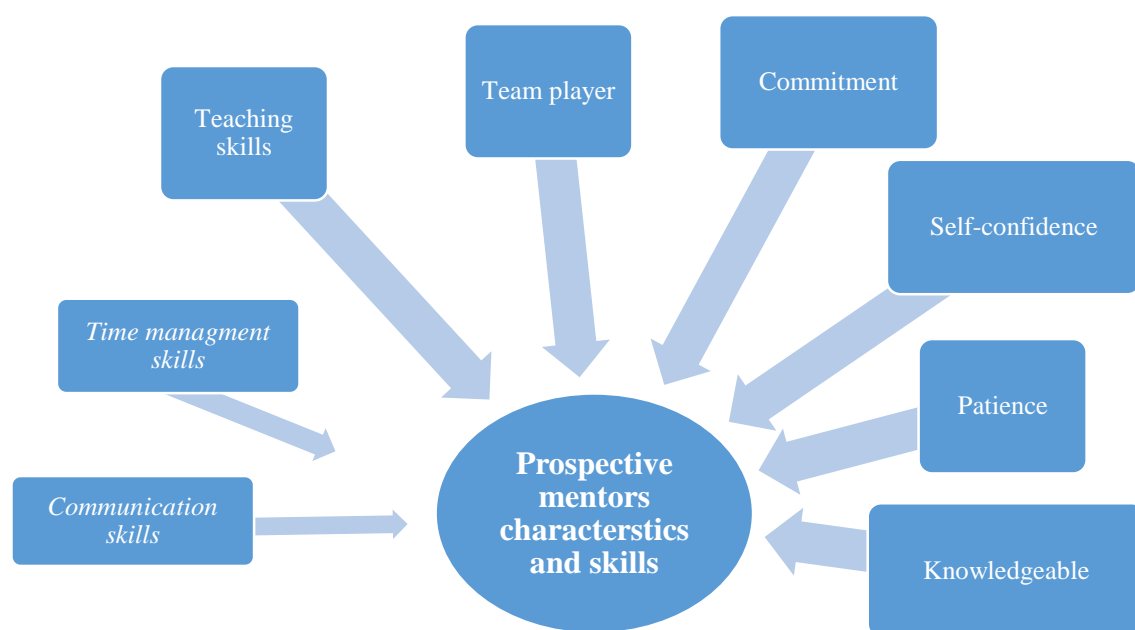


Many themes were recurrent when participants were asked to identify the main characteristics and skills that a prospective mentor should have. Almost all mentors agreed that for a peer



mentor to succeed in her role, she should be knowledgeable of the subject taught and have minimal teaching experience. They are expected to be committed and have the patience to satisfy various students' academic needs. Prospective mentors should also demonstrate certain leadership skills and self-confidence. A high level of self-confidence promotes individuals to take initiative and motivate others to work towards a common goal. Prospective mentors should also demonstrate certain skills such as time-management and communication skills. Having good communication skills helps mentors clarify their goal and communicate ideas clearly to others. Through these relationships, mentors interact with others and make lots of friends. Figure 7 below represents a summary of the themes related to this category.

*Figure 7. Prospective mentors' characteristics and skills*



When asked about the impact of the peer mentoring activity on their academic and personal development and career-related skills, many themes emerged from participants' responses. Participants realized that as much as the mentoring activity is benefiting students at-risk it has greater gains for them as well. Their academics, personal development, and career-related skills have improved since they joined the program. Mentors understand that mentoring others is an experience with mutual benefits for them and the mentees. They discussed how they learned new concepts and how their knowledge expanded every time they developed the understanding

of others. Repeating the same material to students supported the information to be retained in their long-term memory. As a result, mentors' academic grades increased since they joined the program.

As for their personal development, participants reported that the mentoring role changed their personality. They became more patient and open to others. They learned how to deal with people and the way to communicate clearly with them. Their presentation skills and time management skills improved. The program elevated their confidence level. As a result, mentors volunteered in many activities and were in charge of leadership tasks. Participants made regular class visits to present themselves and the program to other students and faculty. They participated in internal and external events and conferences where they were part of a panel discussions.

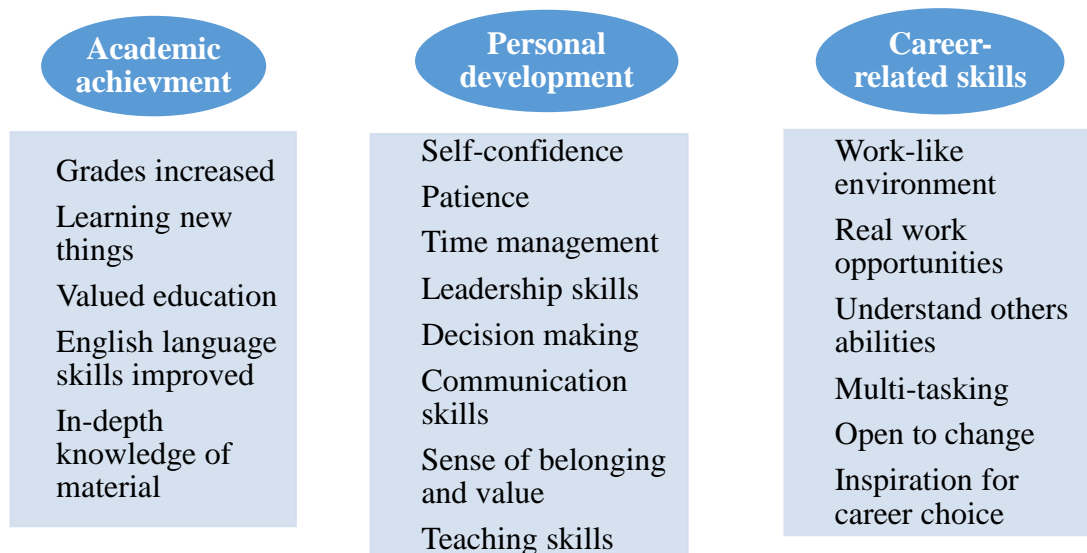
Being peer mentor made participants feel valued by others. They were always praised for their performance and presented a good image. Participants' emotional well-being improved in the mentoring role. Coming from an Islamic culture, mentors' value what they are doing and are happy to help others. Mentoring others makes them feel productive and valued. Mentors discussed how students feel more comfortable with them rather than with their professor. This gave them a sense of confidence and pride. However, they were aware of the nature of their role. They understand that they support students' learning because they speak the same language and explain the information in a way that is easy to understand.

Almost all participants expressed that they enjoyed being a peer mentor. It widened their circle of friends and taught them how to interact with different personalities. They appreciated being in an environment where they are motivated to learn and develop professionally. By reflecting on their performance, participants have self-awareness of their weaknesses and how to improve them. Additionally, mentors reported that their time management skills developed. They were able to manage their academic life, their personal life, and the mentoring program. They all agreed that by teaching the same subjects every semester they needed little time to revise the material before going to the mentoring sessions.

As for career-related skills, participants described how the mentoring role gave them the feeling of being at work. They described being in a *business-like environment*. They sensed the seriousness, responsibility, and professionalism of the activity. They were accountable for their performance and were regularly evaluated and observed by the program management. Being a

peer mentor gave them an idea of what career to choose upon completion of their studies. Many were interested in the teaching job while others wanted to enter the business market. Figure 8 below represents a summary of the themes related to their academic achievement, personal development, and career-related skills.

*Figure 8. Mentoring role impact on mentors' academic achievement, personal development, and career-related skills*

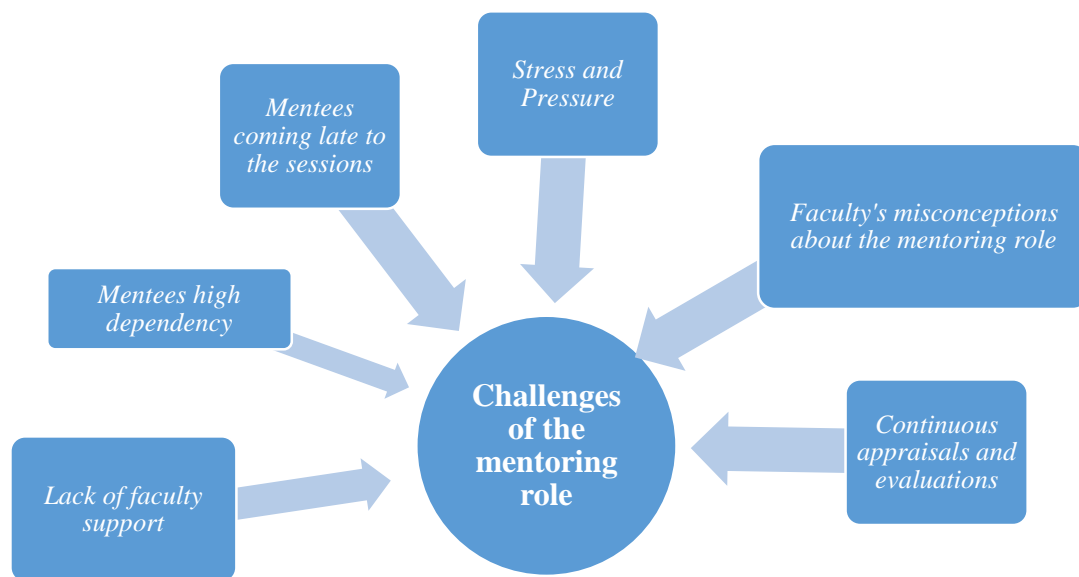


Many challenges were associated with this activity. While the major concerns were about students not coming to the sessions on time, the real concern was linked to the lack of support from the faculty. Many reported a lack of communication between the mentoring program and the faculty. Mentors struggled when the faculty constantly changed the materials taught without updating them. They also conveyed a feeling of being seen as a threat to the faculty. Therefore, they suggested building a system of communication between them and the faculty. Implementing a collaborative system between the two will improve the quality and efficacy of the mentoring sessions by ensuring that the knowledge transferred is correct and up-to-date.

Another challenge was the dependence students have on their mentors. Students still have misunderstandings about the mentors' role. Many students think that mentors are responsible for writing essays on their behalf. This is why mentors believe that training them on how to guide and teach students will enhance their mentorship skills. Pressure and stress were repetitive themes in participants' responses. Mentors expressed being under pressure and feeling stress over managing their time between their studies, personal life, and mentoring

sessions. Others complained that the regular appraisals and evaluations pressured them. Participants suggested that if they were better trained in the mentoring activities it would lessen the workload and stress. Having regular meetings with the faculty is another solution to help keep track of the changes happening in the curriculum. Figure 9 below shows the main challenges of the mentoring role as reported by participants. The sources of these challenges varied between faculty, mentees, and the program itself.

*Figure 9. Themes related to the challenges of the mentoring role*



Despite the challenges of peer mentoring, almost all participants described the mentoring role as a work experience in which they matured and became more professional. Through the mentoring role, participants were able to take on leadership roles and participate in a variety of events. These experiences gave them the feeling of being at *work*. It also gave them a clear picture of what type of job they want to seek. These participants identified that connecting with and building relationships among themselves and with the mentees is the key success of this program. It is also about the leadership opportunities that the program offers. Another key success identified to be related to the leadership style of the program director. Student mentors expressed that he is role model and an effective leader. He is a strategic and servant leader who listens to them, supports their needs, and gives them the freedom to express their opinions. Having a patient and helpful leader who worries about their others' well-being and supports them helped them overcome their challenges and perform better.

The qualitative part of the study served in answering the first research question regarding the impact of the peer mentoring role on mentors' personal development and competence. All participants viewed the mentoring role as the driving force behind their improved academic, personal development, and career-related skills. Mentors were able to identify the various challenges that the leadership role brings. They also explained how they overcame these challenges and suggested areas of improvement. While the qualitative part assisted the purpose of this study and showed that the mentoring role had several benefits towards mentors' leadership skills, it did not clarify the leadership behaviors of the studied participants. To answer the second research question, a quantitative approach was followed to investigate the exemplary leadership practices used by these mentors and examine its correlation with the mentoring role.

### **Quantitative Analysis**

A total of 245 surveys were completed. Of these 245 completed surveys, two cases were disregarded due to incomplete responses; the respondents completed only the first page which contains the demographics and five dimensions of the Student leadership practices Inventory questions. As a result, data from 243 surveys were analyzed: 94 surveys were completed by mentors, 142 surveys were completed by mentees, and 7 were completed by faculty. Due to the low response rate of the faculty their surveys were not included in the analysis.

Participants answered a set of 30 questions that are divided into five categories (6 questions under each category) to determine the most exemplary leadership practice enacted by mentors. These categories are: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. One item was added at the end of the survey by the researcher to measure the relationship of peer mentoring with the development of mentors' leadership practices. As such, question 31 stated: "I believe that the mentoring role developed my overall leadership practices."

All mentor and mentee participants were Emirati female students attending the peer mentoring program located in university campuses of Dubai and Abu Dhabi. The mean age for the mentors was 20, ranging from 17 to 27. Among the 94 mentors, 78% reported having joined the mentoring role for less than three semesters (n=73) while 22% joined the mentoring role for more than 3 semesters (n=21). When asked about their colleges, 30% of mentors were enrolled in the college of the Natural and Health sciences (n= 29), 20% were enrolled in the

college of business (n=19), 16% in the college of Humanities and Social sciences (n=15), 13 % in the college of Technological Innovation (n= 12), 11% in the college of Communication and Media sciences (n=10), and 10% of mentors were enrolled in the college of Arts and Creative Enterprises (n=9).

Central tendency measures were computed through the mean scores and standard deviations to examine the differences among the Student Leadership Practices Inventory subscale scores for undergraduate female mentors and mentees. Table 8 below shows a summary of the 5 composite scores of the Student Leadership Practices Inventory (SLPI) survey subscales as per decreasing order for mentors and mentees.

*Table 8. Composite scores of the 5 SLPI subscales as per decreasing order for mentors and mentees*

<b>Mentors N=94</b>	Mean	SD	Std. Error Mean	<b>Mentees N=142</b>	Mean	SD	Std. Error Mean
Enable Others to act	4.33	.503	.052	Enable other to act	4.32	.598	.050
Encourage the heart	3.99	.665	.069	Model the way	4.31	.560	.047
Model the way	3.96	.613	.063	Encourage the heart	4.30	.562	.047
Inspire a shared vision	3.74	.700	.072	Inspire a shared vision	4.28	.547	.046
Challenge the process	3.72	.699	.072	Challenge the process	4.25	.615	.052

Enable others to act has the highest mean scores as reported by both groups of participants, followed by Encourage the heart in mentors' perceptions in comparison with Model the way for mentees. While the difference in mean scores were very low, this could indicate that mentees viewed mentors as role model leaders. The Fourth (Inspired a shared vision) and fifth (Challenge the process) subscales were similarly ranked by both mentors and mentees. This shows a great evidence of the transparency and honesty of mentors' self-evaluations of their leadership skills.

Independent sample T-testing was also conducted to compare the perceptions of mentors and mentees on the SLPI subscales. The results showed high average of scores on all of the five subscales. Significant differences were found in participants' scores for the first four subscales of the SLPI but not for the last one Enable others to act. Model the way varied between mentors'

perceptions ( $M = 3.96$ ,  $SD = 0.61$ ) and mentees ( $M=4.31$ ,  $SD= 0.56$ ;  $t(186.482) = -4.385$ ,  $p = 0$ , two-tailed). Similarly, a significant difference was also found for Inspire a shared vision between mentors ( $M = 3.74$ ,  $SD = 0.70$ ) and mentees ( $M = 4.28$ ,  $SD=0.54$ ;  $t(165.892) = -6.351$ ,  $p = 0$ , two-tailed), for Encourage the heart between mentors ( $M=3.99$ ,  $SD= 0.69$ ) and mentees ( $M = 4.30$ ,  $SD=0.56$ ;  $t(175.893) = -3.696$ ,  $p=0$ , two-tailed), and Challenge the process between mentors ( $M = 3.72$ ,  $SD=0.69$ ) and mentees ( $M = 4.25$ ,  $SD = 0.61$ ;  $t(181.446) = -5.993$ ,  $p = 0$ , two-tailed). However, no significant difference was found between the two groups of participants on their rating scores for Enable others to act between mentors ( $M= 4.33$ ,  $SD= 0.50$ ) and mentees ( $M=4.32$ ,  $SD= 0.59$ ;  $t(234) = 0.180$ ,  $p= 0.857$ , two-tailed). Enable others to act did not vary among the mentors and mentees perceptions. The magnitude of the differences in the mean (mean difference= 0.13, 95%  $CI$ : -0.134 to 0.161) was very small (eta squared= 0.004).

*Table 9. Independent samples T-test comparing the differences in SLPI subscale scores for mentors and mentees*

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2- tailed)	Mean difference	Std. Error Difference	Lower	Upper
Model the way	Equal variances assumed	.047	.828	-4.46	234	.000	-.345	.077	-.498	-.193
	Not assumed			-4.385	186.482	.000	-.345	.079	-.501	-.190
Inspire a shared vision	Equal variances assumed	4.679	.032	-6.667	233	.000	-.544	.082	-.705	-.383
	Not assumed			-6.351	165.892	.000	-.544	.086	-.714	-.375
Encourage the heart	Equal variances assumed	.610	.436	-3.823	234	.000	-.308	.080	-.466	-.149
	Not assumed			-3.696	175.893	.000	-.308	.083	-.472	-.143
Challenge the process	Equal variances assumed	1.863	.174	-6.150	234	.000	-.531	.086	-.702	-.361
	Not assumed			-5.991	181.446	.000	-.531	.089	-.706	-.356
Enable Others to act	Equal variances assumed	2.812	.095	.180	234	.857	.013	.075	-.134	.161
	Not assumed			.187	220.919	.852	.013	.072	-.129	.156

Independent sample T-test was also conducted to compare the SLPI scores for mentors who had less than 3 semesters of experience in the mentoring role and the ones with more than 3 semesters of experience. Mentoring experience had no significant difference on mentors' evaluations of their leadership skills on the SLPI subscales. Moreover, no significant differences were found when comparing mentors rating scores based on the type of college, they are enrolled in. These two findings are due to the high selection criteria followed when recruiting mentors. Mentors who are recruited to the mentoring role should meet certain criteria (i.e., high GPA, demonstrate high levels of self-confidence) and they should receive same trainings when they join the program. That is why, their leadership practices development did not depend on the type of college that they are enrolled in or on the experience they have in the mentoring role.

*Table 10. Simple regression model for SLPI subscales for mentors and mentees*

Participant	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Mentor	1	.470 <sup>a</sup>	.221	.177	.805
Mentee	1	.611 <sup>b</sup>	.373	.349	.613

a. Predictors: (Constant), Enable Others to act, Challenge the process, Model the way, Inspire a shared vision, Encourage the heart

b. Predictors: (Constant), Enable Others to act, Challenge the process, Model the way, Encourage the heart, Inspire a shared vision

Linear regression analysis was utilized to see which of the SLPI subscale categories predict mentors and mentees perceptions about the impact that the mentoring role has on their overall leadership skills (Table 10). ANOVA table (11) below indicates the statistical significance of the regression model that was run.  $P < 0.0005$ , which indicates that, overall, the regression model statistically significantly predicts the dependent variable, the overall perceptions on the impact that the mentoring role has on mentors' leadership practices development. The model explains 22.1% of the variance for mentors and 37.3% for mentees of the variance in their perceptions about the impact that the mentoring role has on their leadership practices.



*Table 11. ANOVA table to measure the significant contribution of SLPI subscales to mentors' leadership practices development*

		Sum of Squares				
Participant	Model		Df	Mean Square	F	Sig.
Mentor	Regression	16.210	5	3.242	5.003	.000 <sup>b</sup>
	Residual	57.024	88	.648		
	Total	73.234	93			
Mentee	Regression	30.124	5	6.025	16.043	.000 <sup>c</sup>
	Residual	50.699	135	.376		
	Total	80.823	140			

a. Dependent Variable: Mentoring role impact on mentors' leadership practices development.

b. Predictors: (Constant), Enable Others to act, Challenge the process, Model the way, Inspire a shared vision, Encourage the heart

c. Predictors: (Constant), Enable Others to act, Challenge the process, Model the way, Encourage the heart, Inspire a shared vision

Simple linear regression presented in table (12) below showed a significant relationship between Encourage the heart and overall perceptions on the impact that mentoring experience has on their leadership skills ( $p < 0.005$ ). For mentors, Encourage the heart has the largest beta coefficient  $B = 0.531$ . This means that this variable makes the strongest unique significant contribution to explain mentors' ratings on the impact that the mentoring role has on their overall leadership skills. Other SLPI subscales were found not significant for mentors. Significant relationships were found for mentees on the following subscales: Inspire a shared vision ( $B = -0.422$ ), Encourage the heart ( $B = 0.345$ ), Challenge the process ( $B = 0.331$ ), and Enable others to act ( $B = 0.355$ ) the significance value is less than 0.005. This standardized **beta coefficient** compares the strength of the effect of each individual independent variable (the SLPI subscale) to the dependent variable (participants overall perceptions on the impact that the mentoring role has on their leadership skills). Model the way was not correlated with mentees overall perceptions about the impact that the mentoring role has on leadership practices development. Bivariate Pearson correlation were computed to see the significance of mentors' age on their all composite scores of the SLPI subscale and on their perceptions about the impact that the mentoring role has on their leadership practices development, no significance differences were found.

*Table 12. Regression analysis of SLPI subscales on participants' overall perceptions about the mentoring role impact on mentors' leadership practices development*

Participant	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
Mentor	(Constant)	2.119	.745		2.846	.006
	Model the way	.030	.225	.021	.132	.895
	Inspire a shared vision	-.191	.204	-.150	-.933	.354
	Encourage the heart	.709	.218	.531	3.246	.002
	Challenge the process	.077	.171	.061	.450	.654
	Enable Others to act	-.044	.244	-.025	-.181	.857
Mentee	(Constant)	1.899	.469		4.049	.000
	Model the way	-.104	.140	-.077	-.746	.457
	Inspire a shared vision	-.586	.145	-.422	-4.048	.000
	Encourage the heart	.467	.140	.345	3.336	.001
	Challenge the process	.410	.120	.331	3.427	.001
	Enable Others to act	.451	.129	.355	3.494	.001

a. Dependent Variable: Mentoring role impact on mentors' leadership practices development.

The third question was addressed to examine the differences in participants' perceptions about the impact that the mentoring role has on the development of mentors' leadership practices. Descriptive statistics in tables (13) and (14) below showed that mentors and mentees reported high scores on their overall perceptions about the impact that the peer mentoring role has on mentors' leadership practices development. However, the mean of mentees responses ( $M=4.63$ ,  $SD= 0.758$ ) were slightly higher than mentors ( $M= 4.45$ ,  $SD= 0.887$ ).

*Table 13. Descriptive statistics for participants' perceptions about the mentoring role impact on mentors' leadership practices development*

Participant			N	Min	Max	Mean	Std. Deviation
Mentor	Impact on leadership practices		94	1	5	4.45	.887
Mentee	Impact on leadership practices		142	1	5	4.63	.758

The impact of mentoring role on mentors' leadership practices development was examined based on the experience duration for mentors and mentees. Mentors who were in the mentoring role for more than 3 semesters had higher mean scores ( $M = 4.67$ ,  $SD= .48$ ) on their perceptions about the impact of the mentoring role on the development on their leadership skills in comparison with mentors who have less than 3 semesters of experience

( $M=4.38$ ,  $SD=.96$ ). Similarly, mentees who were mentored for more than 3 semesters ( $M=4.81$ ,  $SD= 3.94$ ) were able to report higher scores on their perceptions about the impact that the mentoring role have on mentors' leadership practices development than their peers with less than 3 semesters of experience ( $M=4.54$ ,  $SD= .879$ ).

*Table 14. The impact of mentoring role on leadership practices development based on the mentoring experience*

Participant			Mentoring experience	N	Mean	SD	Std. Error Mean
Mentor	Impact on leadership practices		less than 3 semesters	73	4.38	.967	.113
			More than 3 semesters	21	4.67	.483	.105
Mentee	Impact on leadership practices		less than 3 semesters	93	4.54	.879	.091
			More than 3 semesters	49	4.81	.394	.057

Furthermore, Independent sample T-test computed showed significant differences only in mentees participants' scores for their overall perceptions ( $t(139) = -2.059$ ,  $p = 0.041$ , two-tailed) (Table 15 below). This means that mentees could differentiate the stronger leader among the mentors, but mentors showed no significance difference on how they see themselves as leaders.

*Table 15. Independent sample T-test comparing the differences in participants' overall perceptions about the peer mentoring impact on mentors' leadership practices development*

			Levene's Test for Equality of Variances		t-test for Equality of Means					
Participant			F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
Mentor	Impact on leadership practices	Equal variances assumed	4.068	.047	-1.293	92	.199	-.283	.219	-.718 .152
		Not assumed			-1.831	67.666	.072	-.283	.155	-.592 .025
Mentee	Impact on leadership practices	Equal variances assumed	11.075	.001	-2.059	139	.041	-.275	.134	-.539 -.011
		Not assumed			-2.557	136.97	.012	-.275	.107	-.487 -.062

To explore the last question, we looked at how the different subscales of the instrument corrolate with each other and with overall perceptions of participants. Pearson correlation

coefficient results presented in Table (16) below showed that the strongest correlations in mentors responses on the SLPI was Encourage the heart and Model the way ( $r=.728, p=0$ ). The most moderate correlation was Enable others to act and Challenge the process ( $r=.465, p=0$ ). No weak correlations were found. As for the mentees, the strongest correlation was Enable others to act and Encourage the heart ( $r= 0.690, p=0$ ) and the most moderate association was similar to the one of mentors, Enable others to act and challenge the process ( $r=.559, p= 0$ ). No weak correlations were also found.

*Table 16. Correlation of mentors' perceptions on the SLPI subscales with the development of their leadership practices*

<b>Participant</b>		<b>Mentor</b>					
		Impact on leadership practices	Model the way	Inspire shared vision	Encourage the heart	Challenge the process	Enable Others to act
Impact on leadership practices	Pearson Correlation	1					
Model the way	Pearson Correlation	.316**	1				
Inspire a shared vision	Pearson Correlation	.258*	.697**	1			
Encourage the heart	Pearson Correlation	.461**	.728**	.691**	1		
Challenge the process	Pearson Correlation	.273**	.500**	.693**	.600**	1	
Enable Others to act	Pearson Correlation	.299**	.660**	.579**	.696**	.465**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

When examining the association of the SLPI subscales with participants overall perceptions on the impact that the mentoring role has on their leadership practices development, moderate positive correlation was found for mentors perceptions with Encourage the heart ( $r= .461, p= 0$ ). While it showed a weak positive correlation with Model the way ( $r= .316, p= 0.002$ ) as well as Enable others to act ( $r= .299, p= 0.003$ ), Challenge the process (  $r= .273, p= 0.008$ ), and Inspire a shared vision ( $r= .258, p= 0.012$ ). Furthermore, the composite scores of all SLPI subscales were correlated with mentees overall perceptions about the peer mentoring impact on mentors leadership skills development (table 17). The following four suscales Enable others to act ( $r=.478, P=0$ ), Encourage the heart ( $r=.468, p= 0$ ), Challenge the process ( $r=.404, p=0$ ),

and Model the way ( $r = .278, p = 0.001$ ) had weak correlations. Inspire a shared vision was not correlated with mentees perceptions on the impact that the mentoring role has on mentors leadership skills development ( $p > 0.05$ ). This result provided a general sense that the mentoring role was significantly related with an increase of the all subscale scores from mentors point of view and with four out of five from mentees perceptions.

*Table 17. Correlation of mentees' perceptions on the SLPI subscales with the development of mentors' leadership practices*

<b>Participant</b>		Impact on leadership practices	Model the way	Inspire shared vision	Encourage the heart	Challenge the process	Enable Others to act
<b>Mentee</b>							
Impact on leadership practices	Pearson Correlation	1					
Model the way	Pearson Correlation	.278**	1				
Inspire a shared vision	Pearson Correlation	0.164	.667**	1			
Encourage the heart	Pearson Correlation	.468**	.622**	.617**	1		
Challenge the process	Pearson Correlation	.404**	.623**	.643**	.566**	1	
Enable Others to act	Pearson Correlation	.478**	.612**	.597**	.690**	.559**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## Discussion of Quantitative Analysis

Results for the quantitative analyses showed several significant outcomes. Mentors and mentees reported high scores on all five subscale scores. Enable others to act had the highest mean score for both mentors and mentees ratings on the SLPI subscales. Significant difference was found among mentors and mentees evaluation of the SLPI subscales except for Enable others to act. This result did not vary among mentors and mentees self-evaluations. This outcome is expected since that there is almost no difference in means for both groups. Mentors demographics such as mentoring experience and type of college in which they are enrolled in, did not have any significant differences on their self-evaluations of their leadership practices on the SLPI subscales. This is due to the high selection criteria followed when recruiting mentors and the type of trainings they participate in when they enter the program.

Linear regression analysis showed a significant relationship between Encourage the heart and mentors' overall perceptions on the impact that the mentoring role has on their leadership

practices development. This finding is in line with the qualitative responses extracted from the interviews which showed that the main reason for mentors of joining the program is to *do good to others* by praising their efforts and celebrating their accomplishments. From a cultural perspective, participants are always encouraged to serve others and support their development. Therefore, recognizing others' contributions is the strongest component in the way that these mentors see themselves as leaders. Mentors' ages did not have any significant difference on the composite scores of SLPI subscales and on the overall mentors' perceptions on the impact that the mentoring role has on their leadership practices development. This finding is also consistent with the one above related to the mentoring experience and type of college in which they are enrolled. Mentors' demographic characteristics did not appear to be related with the way they see themselves as exemplary leaders.

Mentors and mentees reported high scores on their overall perceptions about the impact that the peer mentoring role has on mentors' leadership practices development. However, mentees' responses were slightly higher than mentors which means that mentors five leadership practices are demonstrated during the mentoring activity and are observed by mentees. Furthermore, significant differences were only found in mentees' scores for their overall perceptions. This means that mentees could differentiate the stronger leader among mentors, but mentors showed no significant difference on how they see themselves as leaders. Mentors who were in the mentoring role for more than 3 semesters had higher perceptions on the impact of the mentoring role on the development of their leadership skills in comparison with mentors who have less than 3 semesters of experience. Similarly, mentees who were mentored for more than 3 semesters reported higher scores on their perceptions about the impact that the mentoring role have on mentors' leadership practices development than their peers with less than 3 semesters of experience. This finding gives a clear image of the impact of that the mentoring activity has on the development of mentors' leadership practices. Being in the mentoring role for longer time nurtured and increased the development of leadership practices and skills of mentors.

Correlations between the SLPI subscales for both mentors and mentees were examined. Strong to moderate correlations were found among all subscales. The strongest correlations in mentors' responses on the SLPI was Encourage the heart and Model the way while Enable others to act and Encourage the heart was found to be the strongest for mentees. The most moderate correlation for mentors and mentees was the same, Enable others to act and Challenge the process.

All of the five SLPI subscales were correlated with all participants' perceptions about the impact of the mentoring role on mentors' leadership practices development. Inspire a shared vision was found not correlated with mentees perceptions on the impact that the mentoring role has on mentors leadership skills development. Enable others to act, Encourage the heart, Challenge the process, and Model the way were positively correlated. Enable others to act had the strongest correlation with mentees overall perceptions on the way they see the mentoring role impact on mentors' leadership practices.

## **Overall Summary of the Results**

In general, both quantitative and qualitative data supported the positive impact that the peer mentoring role has on mentors' personal development and leadership practices. Qualitative data collected from participants showed the impact it had on their academics, personal development and career-related skills since they joined the program. Mentors understand that mentoring others improved their academic achievement and expanded their knowledge. Mentors personality developed. They gained time management and communication skills, and became more patient and mature. More importantly, mentors described the development of their leadership skills and confidence level. As for their career-related skills, peer mentoring role provided work-like environment for mentors. As such, mentors' professionalism and sense of responsibility grew and gained experiences and skills that will help them in their future career. Overall, the peer mentoring experience offered a great personal and psychosocial support to female mentors. Being involved in peer mentoring helped undergraduate female students form close relationships with others. As a result, mentors' well-being grew and became more attached to their learning environment and they became more engaged in their learning.

Quantitative data analysed from both mentors and mentees responses on the SLPI provided evidence that the mentoring role was significantly related with an increase of the all subscale scores from mentors point of view and with four out of five from the mentees perceptions. In other words, as per mentors perceptions, enacting the mentoring role developed the five exemplary leadership practices identified by Kouzes and Posner (2002) as: Model the way, Inspire a shared vision, Encourage the heart, Challenge the process, Enable others to act. However, mentees' responses showed that Inspire a shared vision is not associated with their overall perceptions about the impact that the mentoring role has on mentors' leadership practices development. Mentors and mentees reported high mean scores on the SLPI subscales

however, mentees had higher means in their perceptions about the exhibition of these five exemplary leadership practices by mentors during the mentoring activity. This means that mentees could differentiate the stronger leader among mentors, but mentors showed no significant difference on how they see themselves as leaders. The following chapter five will sum up and conclude the study.



## **CHAPTER 5: CONCLUSION**

### **Overview of the Chapter**

This chapter covers five major sections. The first section presents a brief summary of the study. It will briefly discuss the needs and the purpose of the study, the theoretical framework, the methodology used, and the research questions. The second section discusses the findings in comparison to previous research. The third section presents the implications for practice. Section four includes the limitations and recommendations for further research. The last section offers conclusions drawn from the study.

### **Summary of the Study**

Gender barriers are, to this day, obstacles in most developed and developing countries (Diaz, 2016). The lack of women leaders in Arab and Western societies was raised as a concern in many studies (Akar & Mouchantaf, 2014; Archard, 2012; Diaz, 2016; Mynard & Almarzouqi, 2006). Female manager participants in different contexts were less confident about their leadership practices compared to their male counterparts (McCormick, Tanguma, & López-Forment, 2002). Gender barriers affect specifically Arabic societies where there are discrimination practices in the workplace and females feel that they are excluded from networks as their relationships with men are limited (Akar & Mouchantaf, 2014; Mynard & Almarzouqi, 2006).

The mentoring role was recommended as an avenue to promote female leadership and assist in the development of future female leaders (Archard, 2012). Implementing peer mentoring programs in schools or universities improved female students' academic achievement, built their confidence, and increased their interest in their respective courses (Archard, 2012). Mentoring programs promoted student learning, retained first-year female students, and opened the door for female students to discuss their difficulties with their peers (Mynard & Almarzouqi, 2006). Consequently, modern leadership models encourage the importance of the mentoring role in nurturing individual skills and personal development.

To this end, investigating ways to improve students' leadership skills and practices has drawn researchers' interest for the past decade. In particular, enacting the peer mentoring role was

found to be an avenue to develop students' leadership across different age groups and disciplines. Despite this interest, few studies have examined the impact on gender, specifically on female students (Crisp & Cruz, 2009; Joseph & Winston, 2005). Dennehy and Dasgupta (2017) argued that female students are still underrepresented in mentorship roles compared to their male peers. Sadly, they are missing out on the benefits that peer mentoring could have on their self-efficacy, motivation, retention, and post-college aspirations (Dennehy & Dasgupta, 2017). Previous research noted that in female colleges, these programs represented a platform where students felt free to discuss their learning needs which they were hesitant to discuss with male instructors (Mynard & Almarzouqi, 2006). Conversely, a number of studies indicated the shortage of peer-mentoring programs in the Arab and Gulf region (Alrajhi & Adhafri, 2015; Mynard & Almarzouqi, 2006). It has been suggested that wherever these peer-mentoring programs existed, they focused solely on strengthening students' English writing skills (Alrajhi & Adhafri, 2015). The lack of peer mentoring in the Arab world is mainly due to doubts that both students and faculty have in passing the knowledge from student-to-student instead of teacher-to-student (Mynard & Almarzouqi, 2006). It could also be related to teachers' confusion between peer-mentoring and collaborative learning approaches inside the classroom (Alrajhi & Adhafri, 2015). Additionally, there seems to be little attention paid to student-to-student mentoring in the literature overall (Boyle, Kwon, Ross, & Simpson, 2010) with only a few studies in the UAE (Aderibidge, Antiado, & Anna, 2015; Mynard & Almarzouqi, 2006).

All of the above shaped the need for this study and guided its aim and objectives. The purpose of this study was to explore the impact of peer mentoring role on female mentors' personal development and leadership practices in one university in the UAE. The investigation of peer mentoring programs in the Arab world is not drawing researchers' interest due to the lack of these programs and the confusion that educators have between peer collaboration and peer mentoring. Aderibigbe et al. (2015) were among the few studies that looked into the issues and challenges related to peer mentoring among undergraduate students in the United Arab Emirates. These authors used a mixed-method approach to collect participants' views. Their small-scale study was limited to collecting mentors' views only. Thus, this current study presented a more robust snapshot of peer mentoring by looking into mentors' and mentees' views in the same context. This mixed-method study explored the perceptions of student mentors on their personal development and leadership skills and examined mentees' views regarding the development of mentors' leadership skills and practices. A particular focus was given on identifying exemplary leadership practices that mentors enact during the mentoring role. This is because they play a role in improving students' well-being and self-awareness

(Alpern, 2017; Huebner, 1991b; Huebner, Drane, & Valois, 2000; Karcher, 2008). In turn, student leaders will effectively contribute to the improvement of student mentees and the educational institution as well. Measuring leadership practices through the functions of modeling, inspiring, challenging, motivating, and appreciating followers is the most accurate way to determine the level of student leadership development (Kouzes & Posner, 2002). Both quantitative and qualitative data were collected to investigate participants' perceptions.

Mentoring is often viewed as a primary component of leadership. Mentors are committed individuals whose goal is to serve others' needs and nurture their professional and personal growth. A pool of studies investigating students' leadership approaches and behaviors recognized the connection between the functions of servant and transformational leadership with the mentoring role (Diaz, 2016; Kouzes & Posner, 2002; Shek & Lin, 2015). As such, the mentor is expected to model, explain, coach and scaffold the mentee in order to meet their needs during learning activities (Shek & Lin, 2015; Roberts, 2000). These functions created an environment of trusting, positive, and pleasant mentor-mentee relationships leading to academic and personal growth (Hussain, Anwar, & Majoka, 2011; Topping, Campbell, Douglas, & Smith, 2003; Yurt & Aktas, 2016). Thus, student mentors are regarded as servant leaders because the characteristics of servant leadership is connected to their role in identifying others' needs, as well as providing them with developmental opportunities, and facilitating their growth (Greenleaf, 2002). Moreover, both transformational and servant leaders share common characteristics in leading their followers. These characteristics are related in the way these leaders listen to others, mentor them, appreciate their efforts, and empower them.

Bass and Riggio (2006) argued that transformational leaders lead others by influencing them and being their role models. They listen and respond to followers' concerns and needs in order to perform what Bass (1985) acknowledged as "individualized consideration". Additionally, these leaders constantly inspire others and motivate them through a set of shared values and beliefs. They are distinguished from other types of leaders because they stimulate others' intellect and encourage their problem solving, creativity, and innovation. Transformational leaders treat others as unique individuals and encourage their independent decision making skill (Bass & Riggio, 2006).

Servant and transformational leadership theories were the cornerstone of the theoretical framework. However, other theories shaped the framework of this study. The first is related to the principles of social learning theories. This theory assisted the aim of this study in understanding the importance of interactions and communications to the development of

individuals' learning. According to the Vygotskian approach, learning takes place when students interact with their teachers and peers. He argued that learning happens when weak students are scaffolded or guided by more competent learners through the zone of proximal development (which is the difference between a learner's performance that is unaided, and a performance supported by a more competent individual). As such, when students work together collaboratively, they create reciprocal relationships and establish mutual trust and confidence (Vygotsky, 1978). These relationships bring about a shared understanding of the purposes and goals that support students' learning. This is indeed the learning case of mentors and mentees within the mentoring experience where students work together and collaborate in order to scaffold and develop the learning. The collaborative process of peer mentoring facilitates peer interaction which promotes learning and knowledge transfer (Topping, 2005). Consequently, the student mentee will gain knowledge on a particular topic and the mentor will gain skills and competencies through "learning by teaching" (i.e. communication, assessment, and modelling) (Douglass et al., 2013). It is also believed that students are deeply engaged when working together and reflect more on tasks than they would in the presence of a teacher or a staff member (Boud et al., 2014). As a result, students' cognitive abilities are developed, and their social and communication skills improve. This gain will make both mentors and mentees confident in what they have achieved. Therefore, students become intrinsically motivated to assist each other in achieving their goals and attaining success (Topping, 2008). Hence, the social learning theory developed by Vygotsky (1978) assisted in understanding the impact that the peer-mentoring model could have on students' cognitive and psychosocial development.

As a result, individuals' cognitive abilities, beliefs, and attitudes are nurtured through their social interactions with the surroundings. Bandura (1977; 1993) claimed that four sources could influence individual's reasoning: mastery learning, vicarious learning, verbal persuasion, and emotional arousal. These four sources of reasoning guide individuals' behaviors, beliefs, and choices that determine their own performance (Bandura, 1977; 1993). One particular belief was highlighted throughout Bandura's work, self-efficacy beliefs. Self-efficacy is a characteristic that can influence leaders' behaviours and goals, because it is interrelated to the decisions they make (McCormick, Tanguma, & López-Forment, 2002; Schunk & Meece, 2006). Leaders who have level of self-efficacy have a higher leadership quality because they improve others' achievement through modelling an effective performance in managing challenging tasks and exhibiting problem solving skills (McCormick et al., 2002).

Modeling/vicarious experiences and verbal persuasion are the two areas of the social cognitive theory that are interconnected with the functions of the mentoring role (Shaw et al., 2018). First, when mentors perform a behavior it is expected from the mentees who are observing them to engage in this behavior and replicate it. Mentors are acting as role models to others and providing as such an idealized influence for mentees to observe, repeat, and learn. Second, mentors are expected to promote mentees' achievement. One way to do that is through verbal encouragement or persuasion. As a result, mentees self-efficacy levels increase (Shaw et al., 2018).

Self-determination Theory of (Deci & Ryan, 1985) presents a framework of motivation that can be used to observe individual's development. This theory is concerned with the degree to which individuals' self- motivation and self-determination guide their behaviors and the choices they make. Deci and Ryan (2000) identified three main intrinsic psychological needs involved in self-determination: competence, autonomy, and relatedness. Autonomy and competence are essential for intrinsic motivation of individuals to freely engage in activities they find interesting and challenging (Deci & Ryan, 2000, p. 234). As a result, they are necessary to retain individual's motivation for learning (Neimiec & Ryan, 2009). Autonomous motivation is the most need that teachers or mentors would stimulate to engage students in interesting and valuable activities (Ryan & Deci, 2000). When students are intrinsically motivated, they became eager and passionate to perform the task, and gain a sense of fulfillment and satisfaction when it is accomplished.

This theory suggests that individuals who succeed in developing others' personal growth and well-being satisfy their three psychological needs (competence, autonomy, and relatedness). The mentor role is to develop this confidence in mentees and increase their autonomy to eventually accomplish the task without their help. This notion is interrelated as well with the self-efficacious beliefs of individuals who can successfully accomplish tasks (Bandura, 1977; 2012).

The student development theory developed by Chickering (1969) and the contemporary model of student leadership development of Priest and Clegorne (2015) were also included in the framework of this study. These theories shaped the lens that helped the researcher understand how students' engagement in the peer mentoring activity improved their personal and leadership skills. Participating in mentoring activities promoted several development changes in students including the leadership element. Chickering (1969) identified these changes as the

seven vectors of student development. For example, student development is seen when their interpersonal competencies are improved and when they became better at managing emotions. Students' capacity to understand the self and others increased. They were skilled to build healthy, honest, and long-term relationships. Their autonomy developed and they were capable of shaping a meaningful purpose and define their goals accordingly. Lastly, students' development is viewed when they displayed high self-confidence levels in making decisions (Chickering, 1969). These seven vectors assisted in understanding student mentors' development stages when working in peer mentoring programs. These seven vectors of students' development are the basis of the contemporary model of students' leadership development of Priest and Clegorne (2015). These authors claimed that for students to be able to engage in high leadership practices they should be personally developed. As such, students who applied for the mentoring role should in advance demonstrate certain skills and characteristics. Having good communication and time management skills are believed to be a prerequisite for student mentors (Terrion & Leonard, 2007). Having a clear purpose is another requirement. To this end, Priest and Clegorne (2015) argued that the contemporary model of student leadership development is based on the clarity of student goals and the way to achieve them. This notion will strengthen students' commitment and motivation to achieve their goals. As a result, a set of leadership practices will be fostered in order to guide and inspire others to work towards these goals. Sets of both transformational and servant leadership components are believed to be interconnected with the mentoring role (Shaw et al., 2018). They are also linked with the paradigm of the five practices of exemplary leadership developed by Kouzes and Posner (2002).

Kouzes and Posner (2002) developed a set of leadership practices in their S-LPI (Student Leadership Practices Inventory) model based on what they have observed in student leadership actions and behaviors. They found that student leaders who use specific leadership practices are more effective than those who do not. These practices are considered exemplary for leaders to exhibit: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. For exemplary leaders to effectively guide their followers, they must model the behavior they expect of others. While serving as role models, student leaders encourage and engage others to work towards a shared and united vision to improve performance. These student leaders take risks and challenge the process in order to reach to their goal. Those leaders step into the unknown to look for opportunities to innovate, grow, and improve. Hence, they experiment, take risks, and learn from their mistakes and failures. To do so, these leaders foster collaboration and build relationships to engage people and gain their

commitment. As a result, they constantly motivate others by encouraging them and recognizing their efforts. Recognizing people's contributions and celebrating their victories will motivate the team to carry on and perform at their best (Kouzes & Posner, 2007). Posner (2012) and (2014) claimed that student leaders who reported using the five leadership practices described above developed their leadership skills to a greater extent than those who did not use these practices. Student leaders in college are empowered to create a positive social change inside the institution by modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. As a result, they create a community of shared responsibility where everyone is respected and their well-being matters (Astin & Astin, 2000). Ultimately, students' leadership practices and behaviors become the cornerstone of understanding the promotion of their personal development and competencies in the university.

Expanding the investigation of leadership development in various contexts is a concern addressed by many scholars in this field such as Posner (2012; 2014). Measuring the impact of leadership development programs (i.e., peer to peer mentoring) on one's leadership development is recommended to conduct a longitudinal study or pre- and post-test conditions (Posner, 2014). However, due to a lack of related literature in the context of this study and the insufficient research and validation of peer mentoring programs (Alhamodi, 2010; Mynard & Almarzouqi, 2006), this study followed an exploratory sequential mixed-method approach to collect both qualitative and quantitative data. Adopting this approach enriched the literature on the impact of peer-to-peer mentoring on undergraduate female mentors' personal development and leadership practices in the UAE. Implementing this approach generated reliable and valid results by having a strong study design that overcame the limitations posed if one single method was employed (Cohen et al., 2007; Creswell, 2014).

One-on-one interviews were conducted with a purposeful sample of twenty-two mentors who were in the mentoring role for three semesters and more. A set of twelve open-ended questions were developed by the researcher and piloted on a random sample of three mentors. Transcriptions from these interviews were analyzed to explore the common themes that emerged and to gain meaning about the lived experiences of the participants. After that, the researcher used the SLPI surveys to identify the most exemplary practices exhibited by mentors during the mentoring activity. A total of 243 Surveys were collected from 94 mentors, 142 mentees, and 7 faculty. Due to the low response rate of the faculty, their surveys were not included in the analysis. All mentor and mentee participants were Emirati female students attending the peer mentoring program located in university campuses of Dubai and Abu Dhabi.

Mentors were enrolled in the following colleges: Natural and Health Sciences, Business, Humanities and Social Sciences, Technological Innovation, Communication and Media Sciences, and College of Arts and Creative Enterprises.

Collecting self and observer versions of the surveys provided a more transparent and reliable picture of mentors' leadership practices that are nurtured by this role. An analysis and explanation of the quantitative results from the closed-ended questions using a 5-point Likert-scale was provided. Participants answered a set of 30 questions that are divided into five categories (6 questions under each category) to determine the most exemplary leadership practice enacted by mentors. These categories are: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. One item was added at the end of the survey by the researcher to measure the relationship of peer mentoring with the development of mentors' leadership practices. As such, question 31 stated: I believe that the mentoring role developed my overall leadership practices."

The central objective of this study was to investigate the relationship of peer mentoring role with their leadership practices in an undergraduate program. To address this objective, the main question is: **To which extent peer mentoring program developed undergraduate female mentors' personal development and leadership practices?**

### **Key Findings of the Study**

In general, both quantitative and qualitative data supported the positive impact that the peer mentoring role has on mentors' leadership practices development. Collecting 360 feedback through self and observer versions of the SLPI surveys generated valid and reliable results. Mentors and mentees reported high mean scores on the SLPI subscales however, mentees had higher means in their perceptions about the exhibition of these five exemplary leadership practices by mentors during the mentoring activity. This means that mentees could differentiate the stronger leader among mentors, but mentors showed no significant difference on how they see themselves as leaders. This finding supports Posner's (2012; 2014) claims that student leadership skills develop whenever student leaders use the five leadership practices. It also showed that these five exemplary practices were common across Emirati female undergraduate students.



It was evident from the data collected that for students to be engaged in high leadership practices such as the mentoring role, they should be personally developed (Priest & Clegorne, 2015). As such, student mentors reported that there are certain skills and characteristics that should exist in prospective mentors who want to join the program. In line with the findings of Day (2000), Douglass et al. (2013), Heirdsfield et al. (2008), Jacobi (1991) and Terrion and Leonard (2007), qualitative data collected from participants showed that both academic and social competence should exist in prospective peer mentors. Participants interviewed revealed that peer mentors should have knowledge in the subject taught and should be committed and patient. Participants also revealed that students who want to apply for the mentoring job should have strong communication skills, they should be flexible with others, listen to them and open to their suggestions. Day (2000) argued that whenever mentors displayed these behaviors and characteristics, a more beneficial and close mentoring relationship is expected to happen.

Furthermore, participants emphasized that prospective peer mentors should also demonstrate certain leadership skills and self-confidence. However, current literature showed evidence that having leadership skills is a result of being involved in the mentoring experience rather than being a prerequisite (Douglass et al., 2013; Heirdsfield et al., 2008; Jacobi, 1991; Terrion & Leonard, 2007). Emirati female mentors reported numerous challenges including lack of parental support, a demanding mentoring role, and time management. As such, they believe having self-confidence and good leadership skills are prerequisites for successful mentors. Having high self-confidence as a prerequisite will increase the self-efficacy levels within individuals who persevere and perform necessary tasks to exercise an effective leadership (Mesterova et al., 2015).

Having minimal teaching experience is another prerequisite for the student mentor as described by participants. Previous mentoring or teaching experience is needed to assist mentors build knowledge in others (Berghmans et al., 2013). While this prerequisite is highlighted in the literature, it remains an argument particularly in the context of this study. Since 2011, the educational reform in the UAE aimed to improve teaching standards and students' performance (Ministry of Education, 2011). However, teachers in the UAE often stick to the old teaching mode that limits students' critical thinking and intellectual autonomy (Farah & Ridge, 2009). As such, these student mentors coming from traditional teacher-centered secondary schools have very little autonomy, creativity, and were rarely involved in leadership roles (Mynard & Almarzouqi, 2006). To this end, some participants who mentioned that having prior teaching

or mentoring experience is a prerequisite for student mentors were not exposed to this kind of experience before they joined the mentoring program.

The findings of this study are in agreement with Foster, Ooms and Marks-Maran (2015) which showed that the peer mentoring experience offered a great personal and psychosocial support to female mentors. In particular, qualitative data generated through the one-on-one interviews corroborated this notion. It helped collecting mentors' perceptions toward the improvement of their well-being when they formed close relationships between them and the mentees. As a result, mentors' capacity and interest in understanding others improved. Mentors reported that they became more open and flexible with others. They described how their personality grew and became more mature. Hence, their interpersonal and intrapersonal relationships were built to shape an overall student development (Chickering, 1969; Priest & Clegorne, 2015).

As for the other benefits gained, student mentors reported several advantages in line with their academic achievement and career-related skills. Assisting others had a great impact on one's career goals (Terrion & Leonard, 2007). Participants described how the mentoring role offered them real work opportunities. They were trained in understanding others' abilities and multi-tasking. Consequently, the majority of mentors who joined the mentoring program gained experiences and skills that will help them in their future career. Furthermore, mentors became more flexible and open to change. Adapting to the change and accepting the other is described by Fullan (2014) to be the core capacity of transformational leadership.

Additionally, mentors claimed that by joining the program their grades increased, they learned new things, gained in-depth knowledge of material, and their English language skills improved. During the mentoring session, student mentors are expected to recall information, foster learning of complex concepts, and assist in reconstruction of knowledge (Karpicke & Blunt, 2011). As a consequence, mentors' retention and mastery of content increased (Hattie, 2009). Student mentors who became teachers of their learning tend to engage in self-evaluation, self-monitoring, and self-learning. This leads to an increase in their self-confidence and self-esteem (Hattie, 2009; Karcher, 2008).

Furthermore, these student leaders have a common goal to improve mentees' academic achievement. They are committed to the growth of mentees. They listen to their needs, empathized with them and served them. Their leadership success was measured based on the degree of relationships and trust they created between them and the mentees. As a result, they

succeeded in building a community inside the university where student mentors and mentees grew with one another and shared responsibilities. These results match those observed in earlier studies which also suggested the formation of robust interactions and communication channels within this environment (Comfort & McMahon, 2014; Haber-Curran et al., 2017). Consequently, these relationships strengthened mentors and mentees attachment to this learning environment which in turn supported their engagement in their learning (Grolnick & Ryan, 1987).

Considering the context of the UAE where public schools and universities are segregated, undergraduate Emirati female mentors involved in the peer mentoring program had the chance to interact with males from different background. They became self-confident and reported high scores on their leadership practices in contradiction with what was found in previous studies (McCormick, Tanguma, & López-Forment, 2002). However, practices of leadership are mainly exercised in the peer mentoring program. Outside this environment, Emirati female students feel intimidated in the presence of another male and discouraged to build networks with males or take on leadership roles. Evidence of this is when participants reported that they are not allowed to travel outside the UAE to participate in conferences without being accompanied by a male relative.

The quantitative results gathered through the SLPI surveys corroborated the qualitative results related to the development of mentors' leadership skills and practices. Quantitative data also examined whether mentors enact the five exemplary leadership practices of Kouzes and Posner (2002). First, mentor demographics such as mentoring experience, mentors' age, and type of college in which they are enrolled in did not have any significant differences on their self-evaluations of their leadership practices on the SLPI subscales. This is due to the high selection criteria followed when recruiting mentors and the type of trainings they participate in when they enter the program. Whether student mentors were first generation students or not, they all perceived themselves as exemplary leaders by modeling the way for others and serving their needs (Colvin, 2007; Connolly, 2017). Similar to Connolly (2017) we assume that by being in contact with peer and faculty, mentors who have less experience felt an improvement of their interpersonal skills and leadership skills. Results of this study suggested the development of mentor's self-confidence and leadership skills. A detailed description of their leadership skills development is presented below following the five exemplary leadership practices identified by Kouzes and Posner (2002).

**Model the way:** Priest and Donley (2014) argued that students' decision-making skills developed after they joined the mentoring program. Similarly, participants of this study explained how the mentoring role nurtured their abilities in making decisions, taking initiatives, and solving problems. Through role modeling, mentors showed others how to make decisions and take action toward their goals. Being a role model is described by Bass (1985) to be a main component of transformational leadership and identified by Chickering (1969) as one of the seven vectors related to students' development. It is also one of the five exemplary practices of student leadership observed by Kouzes and Posner (2002). It is displayed whenever mentors set clear goals for the team, guide the team, and demonstrate knowledge and expertise.

Quantitative analysis showed that *Model the way* had the strongest correlation in mentors' responses on the SLPI. It was positively correlated with their overall perceptions about the impact that the mentoring role has on their leadership practices. In addition, it had the second highest mean of the SLPI scores reported by mentees when rating mentors' leadership practices. Indeed, mentor participants displayed good behavior and interacted with others in a professional way. By modeling the way, students grew with one another allowing for a transformative process of knowledge and behaviours between mentors and mentees (Astin & Astin, 2000). Bandura (1978) argued that through modeling vicarious experiences, individuals self-efficacy beliefs grow. Additionally, they became more eager to learn and motivated to try new behaviors. Participants mentioned that during peer mentoring activities, they supported and encouraged each other to be more engaged in their learning. They appreciated each other's knowledge and promoted mentees' independent learning. They also promoted active learning, built teamwork, and increased network opportunities for mentees. Hence, this increased students' autonomy and competence that in turn elevated their intrinsic motivation and self-efficacy beliefs (Deci & Ryan, 2000).

**Inspire a shared vision:** Participants of this study claimed that they joined the mentoring role to support others' academic achievement and competencies, in particular the first-year students. Mentors acknowledged that their purpose and goal is to develop others' learning by scaffolding them. The effect of scaffolding on students' cognitive abilities and on their social skills is supported by the social learning theory of Vygotsky (1978). This gain will make both mentors and mentees confident in what they have achieved (Crain, 2015; Douglass et al., 2013). As such, these students always encouraged and motivated mentees to improve their academic grades. For example, they encouraged mentees to do their work independently in spite of their mistakes. They communicated that "you learn by making mistakes". Creating autonomy in

others is essential to maintain their motivation for learning (Niemic & Ryan, 2009). It is also believed to be a key role in improving one's psychological well-being and improved performance (Niemic & Ryan, 2009).

Furthermore, building an environment of trust and confidence offered a platform for mentors to express and communicate clearly their vision to others. This trusting environment allowed the existence of free discussions between mentors and mentees in a more friendly and relaxed way (Hussain, et al., 2011; Topping et al., 2003; Yurt & Aktas, 2016). This in turn strengthened mentees' commitment to achieve their goals and improve their academic achievement (Terrion & Leonard, 2007). Despite having high mean scores, this variable was not found to be significant in mentors' ratings of the impact that the mentoring role has on their overall leadership skills. In addition, *Inspire a shared vision* was not correlated with mentees' perceptions about the impact that the mentoring role has on mentor's leadership skills development. Acting as a role model and being open and honest is the one of the core components of transformational leaderships that was mostly used by mentors (Shaw et al., 2018). However, the use of this particular behavior is dependent on the needs of the follower (Bass & Riggio, 2006).

**Challenge the process:** Bass (1985) and Kouzes and Posner (2002) claimed that transformational leaders are visionary and forward-thinking leaders. They inspire and challenge the followers into their vision's pursuit. In doing so, they create positive emotions and move people upward and forward. Interviews with mentors revealed that their main goal is to support students' academically and elevate their independence and autonomy. Mentors provided mentees with various learning sources (i.e. videos, practical activities) to improve the quality of their work. They regularly offered constructive feedback to mentees and encouraged them to ask questions. This behavior is believed to foster mentees' independent thinking and sense of autonomy (Deci & Ryan, 2000). Consequently, their perceived competence and performance will increase (Deci & Ryan, 2000). By satisfying mentees psychological needs (i.e., autonomy and competence), mentors emotional well-being and happiness level at the university increased (Crisp & Cruz, 2009; Deci & Ryan, 2002).

Promoting others achievement could result in stirring mentors' self-efficacy levels (Shaw et al., 2018). Mentors' beliefs in their abilities to perform tasks successfully and overcome the challenges developed (Bandura & Locke, 2003). As evidence, participant mentors accepted the challenges of the mentoring role and expressed that they were not afraid to take risks. Despite

the reported high means, *Challenge the process* had the lowest scores among the five subscales. It had a moderate correlation with the SLPI subscales and weak correlations with participants' overall perceptions about the impact the mentoring role has on their leadership practices development. This is mainly because these mentors come from a young educational system where schools are mostly teacher- centered. They are provided with very little opportunities to take control of their own learning and be independent. They have limited opportunities to take on leadership roles and take risks (Mynard & Almarzouqi, 2006). However, during the mentoring role, mentors' sense of responsibility towards assisting others increased (Ragins & Kram, 2009). As such, mentors showed that the mentoring role nurtured their capabilities to challenge people who stand in their way to achieve their goal. Student mentors became more committed to their goal by not letting people affect their decisions and divert them from their path. They looked for opportunities and innovative ways to support and improve mentees' achievement.

**Encouraging the Heart:** Leading with a moral purpose is what transformational leaders are distinguished to exhibit in order to improve the organization's performance (Fullan, 2014; Kouzes & Posner, 1995). Fullan (2014) defined the moral purpose in education to *make a difference in the lives of students*. Participant mentors acknowledged that they wanted to do something good and valuable for other people. Doing good to others is not only encouraged by their religion, it also made them feel valued and appreciated. The sense of doing something that has value made Emirati female students feel appreciated in their community (Mynard & Almarzouqi, 2006).

Doing good to others and supporting them is a main component of what servant leadership is about (Cutler, 2014; Greenleaf, 2002). It is also identified as being an exemplary leadership practice under the *Encourage the heart* subscale. As such, it is reported to be mostly correlated to mentors' overall perceptions about the impact that the mentoring role has on the development of their leadership practices. It was positively correlated with mentees' overall perceptions. In addition, *Encourage the heart* was highly correlated with the various SLPI subscales. From an Emirati cultural perspective, participants are always encouraged to serve others and support their development (Mynard & AlMarzouqui, 2006). Therefore, recognizing others' contributions was the strongest component among mentors' perceptions about the way they view themselves as leaders. In a recent study Shaw et al. (2018) found that promoting others' achievement appeared to be a unique leadership behavior connected with mentoring

activity. Mentors considered verbal encouragement to be a great motive for mentees. Through verbal persuasion (i.e., words of encouragement and feedback) from mentors, mentees' beliefs and achievement grew. Bandura (1977; 1993) asserted that individuals who are encouraged and persuaded are most likely to put in the effort and overcome the challenges in order to master certain tasks. As a result, mentees self-efficacy beliefs grew as well.

**Enable Others to Act:** Appreciating others or Encouraging the Heart and Enabling Others to Act are two fundamental components of exemplary leadership behavior (Kouzes & Posner, 2002). Enable Others to Act had the highest mean score for both mentors' and mentees' ratings on the SLPI subscales. This theme is also about developing trust and respect between students. It is also related to the extent mentors share power and delegate tasks (Kouzes & Posner, 2002). Aspects of this theme were particularly evident when mentors expressed that they regularly motivated mentees and promoted collaboration and teamwork. Additionally, the peer mentoring experience offered a feeling of trust and comfort to students where mentors work together as a team to improve mentees' performance (List & Sorcinelli, 2018). Moreover, Enable Others to Act did not vary among mentors' and mentees' self-evaluations. This means that both groups saw this leadership behavior mostly practiced by mentors during the mentoring activity. It is demonstrated when mentors describe how they would always praise mentees' efforts despite making mistakes. One participant stated:

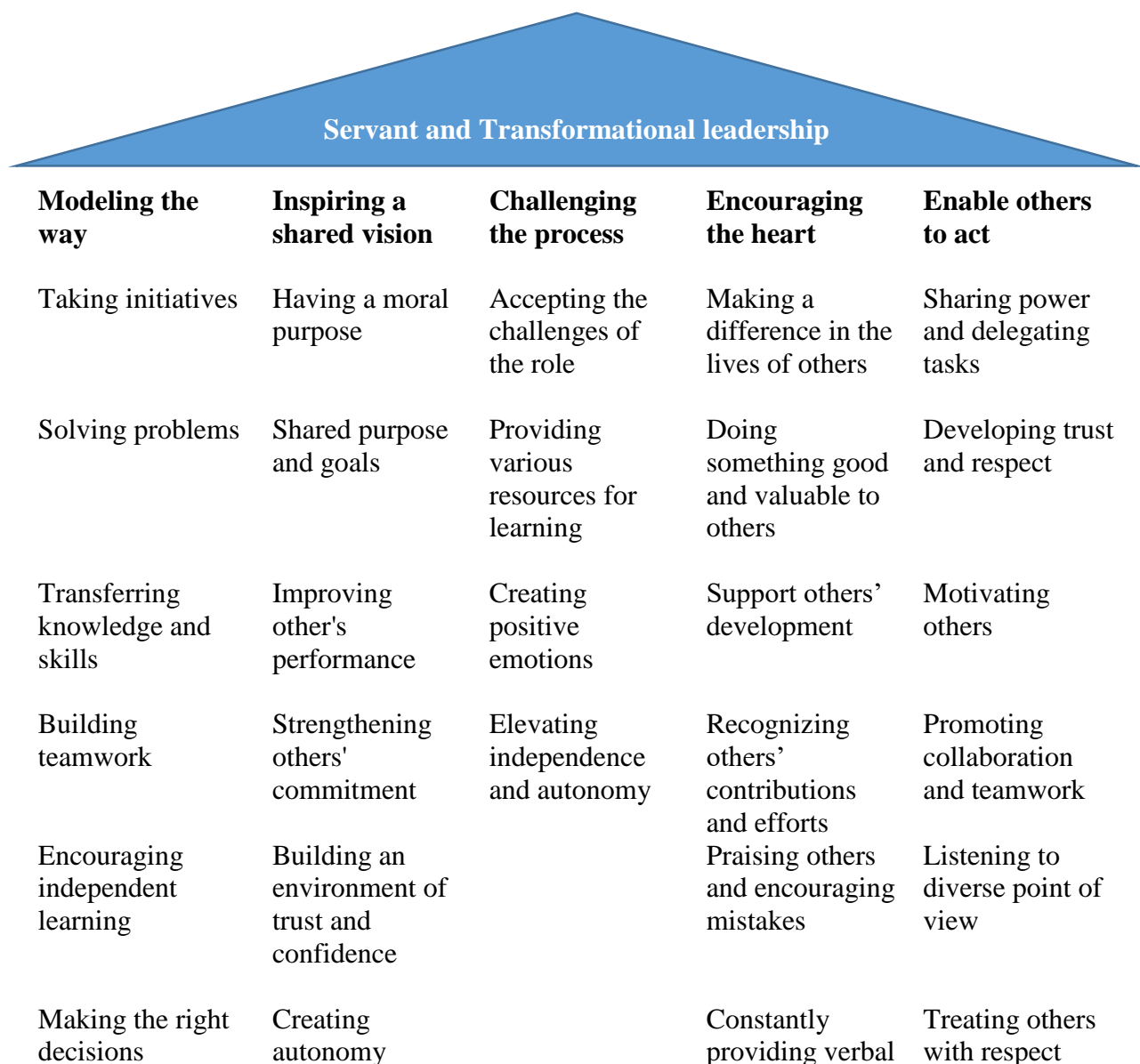
*I used to tell her (the mentee) that her writing is, actually, really good and I always encouraged her to keep coming here to help her improve the quality of her work. I remember telling her "You are so brave for that you came here and asked for our help. It is okay to do mistakes. Actually, this is how we learn". Slowly, she became more comfortable in attending the sessions. She became more confident and I could see her many times in the atrium working independently on her projects.*

Consistent with the findings from other studies such as Bennett (2017), *Enable Others to Act* made the strongest contribution in mentors' perceptions about the association of the mentoring role with their leadership skills development. This subscale is focused on developing cooperative relationships, treating others with respect, listening to diverse points of view, and supporting individual decisions and autonomy (Kouzes & Posner, 2002). This quantitative finding is in line with the qualitative results. Mentor participants agreed that things cannot be done without having people on board. According to Burns (1978), Bass (1985), and Kouzes and Posner (2002), student leaders promote collaboration, create effective teamwork, and build

a culture of trust and respect. As such, their main responsibility became to develop a friendly environment based on trusting relationships. Indeed, participants of this study constantly mentioned how they were able to understand their mentees' capabilities and determine their needs once they became friends. They also reported the friendly environment inside the program became the center of social life and they did not seek friends outside of the program.

To sum up, undergraduate Emirati female mentors studying and working in a female only setting represent both servant and transformational dimensions of leadership as displayed in the model below:

*Figure 10: An Arab perspective of servant and transformational leadership of undergraduate female mentors*





	encouragement to others	
Motivating others		Developing cooperative relationships
Treating others with respect		Supporting individual decisions and autonomy
Recognizing others' contributions and efforts		Understanding others' capabilities and needs

While the quantitative results identified the most exemplary leadership practices enacted by female mentors, the qualitative data elaborated with examples on each practice and uncovered the challenges that these student leaders face. These challenges were similar to the ones reported in worldwide studies. First, faculty misconceptions about the role of peer mentors and their lack of support were reported as concerns and negative attitudes towards such programs. Similar to the study of Cui et al. (2015) that was conducted in Australia, mentors in the UAE claimed that the faculty was concerned that the peer mentoring program would replace a deep learning of the material. As a result, there is lack of cooperation from the faculty's side which could negatively affect the peer mentoring process in the UAE (Mynard & AlMarzouqi, 2006).

The second challenge was related to the stress and pressure that mentors' feel. Having to balance their time between their studies, mentoring sessions, and other activities was taxing on mentors. Additionally, mentees did not always show up to mentoring sessions. As such, having a proper structural design of the mentoring program with clear goals, roles, and relationships will lead to a better learning experience and lessen these challenges (DeFoe, 2013). In addition, building stronger communication channels with faculty will gain their confidence and create more opportunities for collaboration (Sim, 2003; Skaniakos et al., 2014).

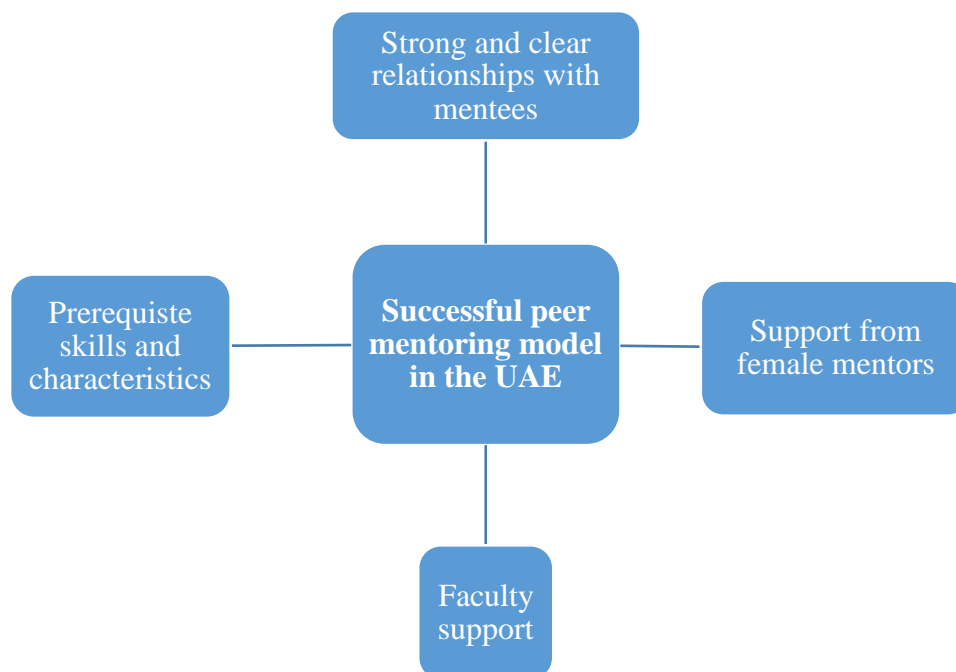
The last challenge faced by mentors was related to the co-dependent behavior exhibited by mentees. This finding is not new in the context of this study. Previous research done by Mynard and Almarzouqi (2006) in the UAE claimed that mentees were highly dependent on mentors and expected them to do their homework on their behalf. However, in contrast to the reported

complaints of mentors in Mynard and Almarzouqui's (2006) study, participants of this study did not succumb to mentees' wishes. Instead, they encouraged their intellectual autonomy. They provided them with many practical activities and learning sources to develop their knowledge about the subject. Active engagement in collaborative learning communities is believed to expand students' knowledge (Vygotsky, 1978) and increase their positive attitudes toward subjects (Comfort & McMahon, 2014). Consequently, student mentees' independent thinking will progress, and they will become autonomous learners (Deci & Ryan, 2000).

### Implications of the Current Study

This study looked at the peer mentoring model from the Arab lens and refined dominant western models. For a peer mentoring program to be successful in the context of the UAE, it should consider four main areas as in the figure below.

*Figure 11: A Contextualized Successful Peer Mentoring Model in the UAE*



<b>Prerequisite Characteristics and Skills</b>	Being committed- Being patient- Being flexible with others- Listen to other- Being self-confident - High sense of responsibility- Empathize with others  Having knowledge on the subject taught- Strong communication skills- Leadership skills-Time management- Previous mentoring/teaching experience- Being able to adapt to change
<b>Strong and clear relationships with mentees</b>	Increased network opportunities- Sharing power and delegating tasks- Promoting collaboration- Building a friendly environment- Understanding mentees capabilities- Determining others needs
<b>Faculty support</b>	Establishing clear roles for faculty- Building communication channels between mentors and faculty- Clarifying mentor's role to the faculty- Providing mentors with specialized trainings from the faculty to develop their knowledge and skills
<b>Support from female mentors</b>	Knowledge and experience exchange- building friendship and trustful relationships- Emotional support- Help in solving personal and academic problems- Lessen the pressure of the job-

The findings of this study recommend that universities in the UAE establish and implement peer to peer mentoring programs based on clear roles and job descriptions. Such programs will offer students a variety of training opportunities to develop the leadership skills needed for future employment. Transformational leadership skills were acquired and developed through training and practice (Bass & Riggio, 2006). Therefore, encouraging students to be involved in the peer mentoring program will nurture exemplary leadership behaviors.

The data generated from this study provided evidence for curriculum developers in undergraduate programs to create curricula containing an array of peer teaching/mentoring experiences. Since that novice and experienced mentors scores on the SLPI varied, it becomes essential for universities to offer a variety of peer mentoring experiences to provide students with skills connected to the five exemplary leadership skills identified by Kouzes and Posner (2002). For example, by observing sessions where experienced mentors display these leadership behaviors (i.e., encouraging mentees' independent thinking) new mentors will be able to recognize and identify the practices of effective mentor leaders.

The information gathered about the outcomes of the peer mentoring towards students' academic, personal, and career-related skills are hoped to motivate directors of these programs

to design learning opportunities targeting students' interpersonal and intrapersonal skills. For example, faculty could be more involved in the peer mentoring program by providing mentors with various specialized trainings. Building communication channels and cooperating with the faculty benefits mentors on many levels and enhances the mentoring experience (Skaniakos et al., 2014). Hence, faculty's role should be integrated and defined when designing the structure and roles of the peer mentoring program.

## **Limitations of the Study**

When conducting a research study, limitations affect the reliability of the research and the generalization of the results (Creswell, 2013). The following are some of the limitations that may have affected the findings of this study:

First, the study is limited to a convenient sample of female participants in one peer mentoring program in the UAE. Additionally, the sample was homogenous (Female Emirati undergraduates in one university in the UAE) and it was purposeful and convenient for both qualitative and quantitative data collection. This type of sampling generated more in-depth and rich information, but it limited the chance for participants to equally participate in the study. Sample limitations affected the generalizability of the study. However, the statistical significance generated from the self and observer surveys and the rich description that was provided from participants' experiences provided a systematic methodology for a comprehensive investigation of this phenomenon.

Second, the self-reporting scores on the Students Leadership Practices Inventory scores might have been influenced by individual bias. To avoid this limitation, mentees and faculty responses to the S-LPI 360 (observer-version) gave feedback on the observed student leaders' behaviors and corroborated the results.

Third, there are many potential confounding variables outside the control of the researcher that could have affected the research outcomes. For instance, participants' experiences in mentoring or leadership may affect their scores on the Students Leadership Practices Inventory. These variables were controlled and reduced by the researcher to eliminate the bias that might affect the outcomes.

Fourth, the lack of research on this particular topic in the context of study (UAE) steered the literature review to include mostly studies from the Western world about the peer mentoring benefits and challenges within undergraduate students. However, the literature that reflects a long history of research on peer mentoring provided this study with a focused and in-depth overview of the topic.

Fifth, the researcher selected only two models of leadership to explore: transformational leadership model and servant leadership model. Knowing that leadership approaches are many, choosing the transformational and servant leadership models will best fit the purpose of the research study as the combination of both is reflected through the development seen in the leaders themselves and in their team.

Finally, despite the various benefits that peer mentoring could have had on students' social and cognitive skills, the proposed conceptual framework focused only on their personal development and leadership practices. This focus fed into the purpose of the study and reduced the time and resources that sequential exploratory mixed methods design usually demand.

## **Recommendations for Further Research**

Numerous recommendations for further research can be made based on this study findings:

1. Conduct a study to examine if there are any significant differences in leadership practices between male and female mentors in the UAE. Additional research in this area would provide the Arab world with more information about the leadership views and approach of both genders.
2. Explore differences in male and female mentor views and see whether the mentoring role empowers both male and females equally in their academic, interpersonal, and career-related skills.
3. Examine the benefits of peer mentoring sessions on first-year students' attainment and retention. While this impact has been explored in the West (e.g. Comfort & McMahon 2014; Quinn, Muldoon, & Hollingworth, 2002) it is absent in the Gulf region.
4. Investigate the differences in the academic scores of students who were at risk of failing before and after they attended the mentoring sessions.
5. Explore reasons why Inspire a Shared Vision was not correlated with mentors' and mentees' perceptions about the impact the mentoring role has on the development of exemplary leadership practices.

6. Since mentors and mentees in this study were from the same background, it would be insightful for other studies to look into programs with students from different backgrounds and see if this variable influences students' perceptions about their overall experience.
7. This study findings provided evidence of the development and growth of mentors' well-being through satisfaction of their autonomy, competence, and relatedness. As such, further research is recommended to explore the impact of the peer mentoring role on mentors' behaviors and intrinsic motivation using the self-determination theory.

## Concluding Note

Nurturing students' leadership is a crucial element in the 21st century due to effects on their personal growth, well-being, and self-awareness (Alpern, 2017; Huebner, 1991b; Huebner, Drane, & Valois, 2000; Karcher, 2008). Students with low self-confidence or self-esteem fail to face their problems and manage their learning. **To this end, this study sought to explore the impact of peer mentoring role on female mentors' personal development and leadership practices in one university in the UAE.** It aimed to inspire female students to be future leaders who can positively contribute to their communities. It also bridged the gap in the literature and strengthened arguments for implementing peer mentoring programs in universities.

This study used a mixed-method approach to collect participants' observations and examine differences in their scores. The qualitative phase followed the framework of Jacobi (1991) and Terrion & Leonard (2007) and examined the desired characteristics and skills of a prospective mentor. It also investigated the impact of the mentoring role on developing mentors' academic, personal and career-related skills. The goals and challenges faced by mentors during the mentoring activity were also explored. While most of the findings were found to be aligned with the literature, this study revealed different themes that are specific to the context and culture of the participants. For instance, "doing good to others" or, as it is known in Islamic culture, عمل الخير, was the most prominent theme in female mentor participants' responses regarding their reasons for joining the program. The SLPI self and observer surveys developed by Kouzes and Posner (2002) was utilized to collect the scores of mentors, mentees, and faculty regarding the five exemplary leadership practices exhibited by student mentors. Results from the quantitative analysis demonstrated significant correlations among all SLPI subscales.

Quantitative results provided evidence for the association of the peer mentoring role with the development of one's exemplary leadership practices.

This study highlighted the importance of implementing peer to peer mentoring in UAE universities due to the benefits they have on female mentors' and mentees' academic development and social well-being. Findings of this study revealed that mentors displayed several behaviors that fulfilled their autonomy, competence, and relatedness needs. Participants described that being a peer mentor gave them a sense of belonging and connection to the university. They became part of the peer mentoring program. Hence, we assume that the peer mentoring program is an avenue for Emirati female students to be connected to the university environment. It is also regarded as a platform where their self-efficacious beliefs increased. These programs are also in line with UAE government initiatives and legislation against gender discrimination in secondary and tertiary education and professions. Further research is necessary to investigate the relationship between peer mentoring and leadership skill development. Additionally, it would be beneficial to compare male and female mentors and students from different backgrounds.

In conclusion, the findings of this current study support the notion that peer mentoring has a significant positive impact on mentors' personal development and leadership practices. Providing assistance and scaffolding to students through the peer-to-peer mentoring is a platform where students' cognitive abilities and social and communication skills improved (Vygotsky, 1978). Interestingly, mentors described several behaviors linked to three basic psychological needs of the self-determination theory (autonomy, competence and relatedness) of Deci and Ryan (1985). Mentors also described behaviors supported by the social cognitive theory of Bandura (1978) particularly when mentors idealized influence and promoted mentees' achievement through verbal persuasion and encouraging words. The findings of this study provide insight into how the five exemplary practices of Kouzes and Posner (2002) are displayed by undergraduate female mentors and connect them with the transformational and servant leadership theories of Bass (1985) and Greenleaf (2002).

Findings of this study are of great evidence for policy makers and curriculum designers in the UAE and the Arab World proving that female students are capable in successfully handling leadership positions and transferring leadership qualities to others. Trusting female's abilities and giving those equal opportunities of their male counterparts will benefit these societies and advance their economy and institutions. Especially at the time being where these societies are

in much need of both servant and transformational leaders who demonstrate exemplary behaviors for others to follow. That is why showing emotions, empathizing and feeling with others, are characteristics that are found mostly in women more than men. Having them in leaders will change the course of where the Arab World is being dragged into.

As a final thought, looking at the association of peer mentoring and leadership practices development in an Arabic context showed that Emirati female undergraduate students displayed the five exemplary leadership behaviors (model the way, inspire a shared vision, challenge the process, encourage the heart, enable others to act) as sculpted by the rulers of this country. However, to make benefits of educational programs such as the peer mentoring, a clear vision should be shared by all parties before implementing them. This could be the reason of the nonexistent association between the impact of the peer mentoring program on the *Inspire a shared vision* subscale. Hence, molding the vision of newly implemented programs with the country socio cultural needs rather than copying it from the west is a prerequisite of its success.



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## **Appendices**

### **Appendix A: Interview Guide and Questions**

Good morning/afternoon/evening. The aim of the current research study is to understand the role and perceived effects of peer to peer mentoring on mentors academic, psychosocial, and leadership skills. The information generated by the study will be used in a research project that is designed to benefit both students and faculty with respect to the peer mentoring role activity. With your permission, I would like to record this interview.

Before we begin, I would like to notify you of the following:

- 1- This interview will last approximately 30-45 minutes.
- 2- Your participation is entirely voluntary. You may halt the interview at any time.
- 3- Your responses will remain anonymous. Complete confidentiality will be maintained. At no time will your identity be revealed either by the procedures of the study or during reporting of the results.
- 4- No negative consequence will result for choosing not to participate.

Please feel free to tell us what you really think and feel; this will be the most helpful in trying to find out how to improve things for students and faculty members in the future.

Thank you for your participation in this research.

Interview questions:

#### **Personal introduction**

- 1- Can you kindly offer a brief introduction about yourself
- 2- Please describe your involvement with the peer mentoring program and for how long?

#### **The reasons for mentors to join the program?**

- 3- Why did you join peer mentoring program? What is your goal or purpose?

#### **Mentors characteristics**

- 4- In your opinion, what qualities and skills do you think a prospective peer mentor need?

#### **Peer mentoring impact**

##### *Academic impact*

- 5- Did you feel that you could understand or achieve more while learning since you joined the peer mentoring program?

##### *Personal impact*

- 6- On a personal level, how did your involvement with the program influence you?  
Lessons learned- Skills acquired
- 7- What is the key thing that you feel this program has changed in you (if any)?
- 8- To what extent do you feel you are part of the decision-making team?

9- How did your involvement with the program influence your leadership practices?

*Career-related impact*

10- What are your career aspirations?

11- Has your experience as a peer mentor influenced your career aspirations in any way?

**Challenges of the mentoring role**

12- Being a mentor, what are the challenges that you faced and how you overcome them?

Thank you for your willingness to participate. The information you have shared is highly appreciated.



## Appendix B: Student Leadership Practices Inventory – SELF

By James M. Kouzes and Barry Z. Posner

Dear Participant,

On the next two pages there are thirty statements describing various leadership behaviors. Please read each statement carefully then rate yourself on how frequently you engage in the behavior described. This is not a test (there are no right or wrong answers).

Be realistic about the extent to which you actually engage in the behavior. Be as honest and accurate as you can be. Giving yourself all 5 or all 3 on all responses is most likely not an accurate description of your behavior. Most people will do some things more or less often than they do other things.

Do answer in terms of how you typically engage on most days with most people. If you feel that there is a statement where you don't frequently engage in the behavior, in that case please write number 1.

**Please note that by filling the survey you give consent to your participation.**

Once done, please send it back to [Sandra.kanaan@live.com](mailto:Sandra.kanaan@live.com)

Thank you for your participation

How many semesters have you been in the mentoring role?.....

Are you a regular mentor or a mentor leader?.....

In which college are you at ?.....

How frequently do you typically engage in the following behaviors or actions?

Please write the number using the scale below

1	2	3	4	5
Rarely or Seldom	Once in a while	Sometimes	Often	Very Frequently

I set a personal example of what I expect from other people: \_\_\_\_

I look ahead and communicate about what I believe will affect us in the future: \_\_\_\_

I look for ways to develop and challenge my skills and abilities: \_\_\_\_

I foster cooperative rather than competitive relationships among people I work with: \_\_\_\_

I praise people for a job well done: \_\_\_\_

I spend time making sure that people behave consistently with the principles and standards we have agreed upon: \_\_\_\_

I describe to others in our organization what we should be capable of accomplishing: \_\_\_\_

I search for innovative ways to improve what we are doing: \_\_\_\_

I make sure that big projects we undertake are broken down into smaller and doable parts: \_\_\_\_

I follow through on the promises and commitments I make: \_\_\_\_

I encourage others as they work on activities and programs in our university: \_\_\_\_

I actively listen to diverse points of view: \_\_\_\_

I give others a great deal of freedom and choice in deciding how to do their work: \_\_\_\_

I talk with others about a vision of how we could be even better in the future: \_\_\_\_

I look for ways that others can try out new ideas and methods: \_\_\_\_  
When things do not go as we expected, I ask, "What can we learn from this experience?" : \_\_\_\_  
I express appreciation for the contributions that people make: \_\_\_\_  
I support the decisions that other people make on their own: \_\_\_\_  
I seek to understand how my actions affect other people's performance: \_\_\_\_  
I talk with others about how their own interests can be met by working toward a common goal: \_\_\_\_  
I make it a point to publicly recognize people who showed commitment to shared value: \_\_\_\_  
I treat others with dignity and respect: \_\_\_\_  
I take initiative in experimenting with the way things can be done: \_\_\_\_  
I make sure that people support the values we have agreed upon: \_\_\_\_  
I am upbeat and positive when talking about what we can accomplish: \_\_\_\_  
I talk about my values and the principles that guide my actions: \_\_\_\_  
I speak with passion about the higher purpose and meaning of what we are doing: \_\_\_\_  
I find ways for us to celebrate accomplishment: \_\_\_\_  
I make sure that people are creatively recognized for their contributions: \_\_\_\_  
I provide opportunities for others to take on leadership responsibilities: \_\_\_\_  
I believe that the mentoring role developed my overall leadership practices: \_\_\_\_

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## Appendix C: Student Leadership Practices Inventory – OBSERVER

By James M. Kouzes and Barry Z. Posner

Dear Participant,

On the next two pages there are thirty statements describing various leadership behaviors. Please read each statement carefully then rate the peer mentor on how frequently she engages in the behavior described. This is not a test (there are no right or wrong answers).

Consider each statement in the context of the peer mentoring program with which the peer mentor you are describing you have had the greatest opportunity to observe or be involved with. Be realistic about the extent to which this person actually engages in the behavior. Be as honest and accurate as you can be. Do answer in terms of how this person typically engages on most days with most people.

Be thoughtful about your responses; giving all 5 or all 3 on all responses is most likely not an accurate description. Most people will do some things more or less often than they do other things.

If you feel a statement does not apply, it's probably because you did not observe the peer mentor engaging in the behavior and in that case please write number 1.

**Please note that by filling the survey you give consent to your participation.**

Once done, please send it back to [Sandra.kanaan@live.com](mailto:Sandra.kanaan@live.com)

Thank you for your participation.

How long have you been involved with or observing the mentor that you are thinking about in responding to these statements.....

How frequently does the mentor typically engage in the following behaviors and actions?  
Please write the number using the scale below

1	2	3	4	5
Rarely or Seldom	Once in a while	Sometimes	Often	Very Frequently

Sets a personal example of what she expects from other people: \_\_\_\_

Looks ahead and communicate about what she believes will affect us in the future: \_\_\_\_

Looks for ways to develop and challenge people's skills and abilities: \_\_\_\_

Fosters cooperative rather than competitive relationships among people she works with: \_\_\_\_

Praises people for a job well done: \_\_\_\_

Spends time making sure that people behave consistently with the principles and standards that have been agreed upon: \_\_\_\_

Describes to others in our organization what we should be capable of accomplishing: \_\_\_\_

Searches for innovative ways to improve what is being done: \_\_\_\_

Makes sure that big projects undertaken are broken down into smaller and doable parts: \_\_\_\_

Follows through on the promises and commitments she makes: \_\_\_\_

Encourage others as they work on activities and programs in our university: \_\_\_\_

Actively listens to diverse points of view: \_\_\_\_

Gives others a great deal of freedom and choice in deciding how to do their work: \_\_\_\_

Talks with others about a vision of how things could be even better in the future: \_\_\_\_

Look for ways that others can try out new ideas and methods: \_\_\_\_  
When things do not go as she expected, asks, "What can we learn from this experience?" : \_\_\_\_  
Expresses appreciation for the contributions that people make: \_\_\_\_  
Supports the decisions that other people make on their own: \_\_\_\_  
Seeks to understand how her actions affect other people's performance: \_\_\_\_  
Talks with others about how their own interests can be met by working toward a common goal: \_\_\_\_  
Makes it a point to publicly recognize people who show commitment to shared values: \_\_\_\_  
Treats others with dignity and respect: \_\_\_\_  
Takes initiative in experimenting with the way things can be done: \_\_\_\_  
Makes sure that people support the values that have been agreed upon: \_\_\_\_  
She is upbeat and positive when talking about could be accomplished: \_\_\_\_  
Talks about her values and the principles that guide her actions: \_\_\_\_  
Speaks with passion about the higher purpose and meaning of what is being done: \_\_\_\_  
Finds ways for people to celebrate accomplishments: \_\_\_\_  
Makes sure that people are creatively recognized for their contributions: \_\_\_\_  
Provides opportunities for others to take on leadership responsibilities: \_\_\_\_  
I believe that the mentoring role developed the mentor overall leadership practices: \_\_\_\_

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## Appendix D: WILEY permission to use the SLPI

# WILEY

January 4, 2019

Sasndra Baroudi  
Reem 1  
Dubai, United Arab Emirates

Dear Ms. Baroudi:

Thank you for your request to use the LPI®: Leadership Practices Inventory® in your research. This letter grants you permission to use either the print or electronic LPI [Self/Observer/Self and Observer] instrument[s] in your research. You may **reproduce** the instrument in printed form at no charge beyond the discounted one-time cost of purchasing a single copy; however, you may not distribute any photocopies except for specific research purposes. If you prefer to use the electronic distribution of the LPI you will need to separately contact Joshua Carter ([jocarter@wiley.com](mailto:jocarter@wiley.com)) directly for further details regarding product access and payment. Please be sure to review the product information resources before reaching out with pricing questions.

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- (3) One (1) **electronic** copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data must be sent **promptly** to my attention at the address below; and,
- (4) We have the right to include the results of your research in publication, promotion, distribution and sale of the LPI and all related products.

Permission is limited to the rights granted in this letter and does not include the right to grant others permission to reproduce the instrument(s) except for versions made by nonprofit organizations for visually or physically handicapped persons. No additions or changes may be made without our prior written consent. You understand that your use of the LPI shall in no way place the LPI in the public domain or in any way compromise our copyright in the LPI. This license is nontransferable. We reserve the right to revoke this permission at any time, effective upon written notice to you, in the event we conclude, in our reasonable judgment, that your use of the LPI is compromising our proprietary rights in the LPI.

Best wishes for every success with your research project.

Cordially,



Ellen Peterson  
Permissions Editor  
[Epeter4@gmail.com](mailto:Epeter4@gmail.com)

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## Appendix E: Invitation to Survey Participants

Dear participant,

Immense benefits were identified to influence individuals involved in peer mentoring programs. These benefits assisted students on a multiple level of their academic, personal, and well-being status. That is why; many universities seek to improve the peer mentoring experience in order to develop mentors' self-confidence and self-esteem as well as strengthening their leadership skills and behaviors.

Feedback from students and their faculty about their experience in the peer mentoring program and how it is influencing their leadership practices is pertinent to such improvement. To this end, I would really appreciate it if you would take about 15-20 minutes to complete the leadership practices inventory survey. You have the freedom to withdraw from the study at any time.

Your insights as a mentor/mentee/faculty are especially useful, as there is much to learn from the people actively involved or observing a peer mentor in his mentoring experience. It is hoped that what is learned from this research study would provide valuable insights to universities who are considering adopting peer mentoring programs. The data analyzed at the end will create awareness on both students and institution level about the importance of participating and continually improving these programs to the benefits they yield towards students' leadership development.

Any information provided during this study that could identify you or other personal information will be kept confidential. You will be referred to by a number instead of using the original identity to guarantee confidentiality and anonymity. Your individual leadership scores will not be shared with the program directors. In case you were interested to see the results of your leadership practices scores or the overall study findings, kindly write to the main researcher and she will provide them to you.

This study is being conducted by Sandra Baroudi as part of a doctoral dissertation study in fulfillment of the requirements for her degree from The British University in Dubai- Faculty of Education. The study is being conducted under the guidance and supervision of Dr Solomon Arulraj David. If you have any questions about this study, please feel free to contact Sandra at [sandra.kanaan@live.com](mailto:sandra.kanaan@live.com) or at 050-2836642.

**Please note that by filling the online survey you give consent to your participation.**

Thank you in advance for your participation in this research study. Your time and co-operation are greatly appreciated.

Project approved by the Research Ethics Committee of BUID on 10 Sept 2018

Project approved by the Research Ethics Committee of Zayed University on 10 Feb 2019

Sandra Baroudi  
Ph.D. Candidate in Management and Leadership in Education  
Faculty of Education  
British University in Dubai

## **Appendix F: Informed Consent Letter**

**Title of Study:** Impact of peer mentoring role on mentors' leadership practices: a mixed study among undergraduate Emirati female students at a higher education institution in Dubai.

**Principal Investigator:** Sandra Baroudi,  
Ph.D. candidate at BUID University  
Phone: +971 50 283 6642  
E-mail: sandra.kanaan@live.com

### **Background:**

This consent form, a copy of which has been given to you, is only part of the process of informed consent required by both BUID and Zayed University Ethics Committees. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more details about something mentioned here, or information not included here, please ask. Please take the time to read this form carefully and to understand any accompanying information.

### **Purpose:**

The purpose of this research is to have a deeper understanding of your perceptions about the impact that the mentoring role has on your leadership skills and practices.

### **Study Procedure:**

For this research, you are kindly invited to share your reflections and insights during an interview that will take 20 to 30 minutes of your time. This interview will be audio recorded subject to your approval. If you don't agree to be audio recorded, I will be taking hand written notes of our discussion. In addition, you will be invited to participate in an online survey to help identify the most practiced exemplary leadership skills when enacting the mentoring role. You do not have to decide on participating in the surveys right now. You will be invited for that later and you will have the freedom to participate or not.

### **Risks:**

The risks of this study are minimal. Participating in the interview might cause you stress or discomfort by making you doubt your own leadership skills. However, the evaluated leadership practices are exemplary dependent on your level of involvement of the program and experience. Please note that there will be no judgment on your competencies or skills. The researcher intent is to look at the most effective leadership practice experienced by yourself in a certain situation.

You may decline to answer any or all questions and terminate your involvement at any time if you choose. The interviewing will be conducted without the presence of the PALs Coordinators. The names of the participants will be renamed and replaced by pseudonyms.

### **Benefits:**

Your feedback is very important in providing a deeper understanding of how peer mentoring programs could benefit students by developing their leadership practices and improving their academic and personal growth.

### **Confidentiality:**

Your participation will be kept confidential. False-names will be used in all future reference to the feedback you provide, and no identifying information will be used. Any identifying

participant information will be kept in a locked file cabinet in the personal possession of the researcher. When no longer necessary for research, all materials will be destroyed.

**Person to Contact:**

Should you have any questions about the research or any related matters, please contact the researcher Sandra Baroudi on Sandra.kanaan@live.com or on 050-2836642.

**Voluntary Participation:**

Your participation in this study is voluntary and will not affect the relationship you have with the researcher or University. If you do decide to take part in this study, please sign this form. If you decide to take part in this study, you are still free to withdraw at any time and without giving a reason. You are free to not answer any question or questions if you choose.

**Unforeseeable Risks:**

There may be risks that are not anticipated. However, every effort will be made to minimize any risks.

**Costs to Subject:**

There are no costs to you for your participation in this study.

**Compensation:**

There is no monetary compensation to you for your participation in this study.

**Conditions of Participation**

- I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.
- I understand that my participation in this study is CONFIDENTIAL
- I understand that the data from this study may be published.

Please check the appropriate box:

- ☐ I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY and have my **INTERVIEW AUDIOTAPED**
- ☐ I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY **WITHOUT** having my **INTERVIEW AUDIOTAPED**
- ☐ I HAVE CAREFULLY STUDIED THE ABOVE AND DO NOT AGREE TO PARTICIPATE IN THIS STUDY.

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

If you have any questions concerning your participation in this project you may also contact Dr. Mercedes Sheen, Chair of the ZU Research Ethics Committee Zayed University, [Mercedes.Sheen@zu.ac.ae](mailto:Mercedes.Sheen@zu.ac.ae), (+971 4 402 1824).

A copy of this consent form has been given to you for your records and reference.

**Appendix G: Research ethics form approval from BUID**



### Research Research Ethics Form (Low Risk Research)

To be completed by the researcher and submitted to the Dean's nominated faculty representative  
on the Research Ethics Committee

**i. Applicants/Researcher's information:**

Name of Researcher /student	Sandra Baroudi
Contact telephone No.	971502836642
Email address	<a href="mailto:Sandra.kanaan@live.com">Sandra.kanaan@live.com</a>
Date	19 August 2018

**ii. Summary of Proposed Research:**

BRIEF OUTLINE OF PROJECT (100-250 words; this may be attached separately. You may prefer to use the abstract from the original bid):	Implementing peer mentoring programs in schools or universities improved students' academic achievement, increased their confidence and developed their attitudes and interests in their respective courses. Despite their importance, peer-mentoring programs in the Arab and Gulf regions are minimal and focusing solely on strengthening students' writing skills (Alrajhi & Adhafri, 2015; Mynard& Almarzouqi, 2006). The emphasis of this current study is to look at the impact of the mentoring role on female mentors' leadership practices in one federal university in the UAE. This study will hold various significances to the literature and to the practice. Nurturing students' leadership is a crucial element in the 21st century due to the consequences on their personal growth (Alpern, 2017). Students with low self-confidence or self-esteem failed in facing their problems and managing their learning. Developing students' leadership skills is an important
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	<p>element in improving students' well-being and self-awareness. This development will promote students to be future leaders who can positively contribute to their communities. Additionally, information gathered on the leadership practices could motivate program directors to give a greater role to peer mentoring by allocating necessary resources to foster mentors' overall university experience.</p>
<p>MAIN ETHICAL CONSIDERATION(S) OF THE PROJECT (c.g. working with vulnerable adults; children with disabilities; photographs of participants; material that could give offence etc...):</p>	<p>Considering that both the site and population of this study are small in size, the researcher will select a purposive and convenience sampling. An approximate number of 60 mentors, 120 mentees and 20 faculty members from both campuses will be selected to collect data for the quantitative survey design. After obtaining the permission from the institution review board committee, the researcher will contact the program manager and get the emails list of the mentors and mentees who joined the program for a minimum of two academic semesters. By filling the online questionnaire, participants will give consent to the researcher to use the information in the study. As for the faculty, the researcher will select a purposive 20 faculty members who taught courses to the mentors. A purposeful sample of extreme/deviant cases will be selected from the participants who reported high or low scores on the questionnaires to collect further qualitative data through individual interviews. Numbers for each category of participant are estimated to be mentors (n=18), mentees (n=36), faculty (n= 6). Each interview will be on average thirty minutes in length. Another consent will be also obtained to allow the researcher audiotape the</p>

	<p>interviews (Appendix B). The interviews will be conducted in the peer mentoring program center rooms.</p> <p>There will be a minimal risk of potential harm or distress to participants during this study. The participants might feel distressed while being asked about their leadership behaviors. They might feel that a judgment will be made on their practices as mentors. They might fear that the program manager might see the information declared during the interview. Hence, the researcher will assure the participants that this research is only aiming for information about their leadership practices and no judging will be made on their competencies as a leader nor as a mentor. The researcher will clearly explain that all information collected will be confidential and anonymous and that the program manager will not have any access to the data.</p> <p>Pseudonyms will be used for participants' names to guarantee confidentiality and anonymity of all participated subjects. Personal data unrelated to the research will be modified or deleted in order to prevent identification. All participants will be granted the freedom to withdraw from the study at any time. Data will be safely secured in a password locked file. Only the researcher will have the access to it. Data will be destroyed after 4 years.</p>
DURATION OF PROPOSED PROJECT (please provide dates as month/year):	September 2018-September 2019
Date you wish to start Data Collection:	Dec 2018 – Jan 2019 – Feb 2019

Date for issue of consent forms:	Oct 2018
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iii. **Declaration by the Researcher:**

I have read the University's policies for Research and the information contained herein, to the best of my knowledge and belief, accurate.

I am satisfied that I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations as researcher and the rights of participants. I am satisfied that members of staff (including myself) working on the project have the appropriate qualifications, experience and facilities to conduct the research set out in the attached document and that I, as researcher take full responsibility for the ethical conduct of the research in accordance with subject-specific and University Research Policy (9.3 Policies and Procedures Manual), as well as any other condition laid down by the BUIID Ethics Committee. I am fully aware of the timelines and content for participant's information and consent.

Print name: Sandra Baroudi

Signature:  Date: 19.08.2018

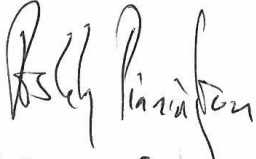
*If the research is confirmed as not medium or high risk, it is endorsed HERE by the Faculty's Research Ethics Committee member (following discussion and clarification of any issues or concerns)\*...John Mc Kenny...and forwarded to the Research Office to be recorded.*

I confirm that this project fits within the University's Research Policy (9.3 Policies and Procedures Manual) and I approve the proposal on behalf of BUIID's Research Ethics Committee.

Name and signature of nominated Faculty Representative: JOHN MC KENNY

Signature:  Date: 3 September 2018

- iv. If the Faculty's Research Ethics Committee member or the Vice Chancellor considers the research of medium or high risk, it is forwarded to the Research Ethics Officer to follow the higher-level procedures.

Approved   
Prof. Ashley H. Pinnington  
10 Sept 18

*\* If the Faculty representative is the DoS, the form needs the approval of the Chair of the Research Ethics Committee.*

## Appendix H: Research Ethical Clearance from Zayed University



### Research Ethics Committee (REC) Proof of Ethical Clearance

Dr. Teresa Arora  
Chair of the Research Ethics Committee

Sandra Baroudi  
PHD candidate  
College of Education  
The British University in Dubai

Date	10 <sup>th</sup> February 2019
Ethics Application Number	ZU19_013_F
Research Title	Impact of peer mentoring role on mentors' leadership practices: a mixed study among undergraduate Emirati female students at a higher education institution in Dubai.
Submitted Form	<input checked="" type="checkbox"/> Full Application for Ethical Clearance <input type="checkbox"/> Exemption from Full Application
Valid until	9 <sup>th</sup> February 2021

Dear Sandra,

Thank you for submitting the above-mentioned research proposal to the Research Ethics Committee at Zayed University. The following submitted documents were reviewed:

- Full Application for Ethical Clearance Form
- Data collection tool(s)
- Informed Consent form(s)
- Approval from BUID
- Completion report of CITI online based training course for the PI

The project was discussed in the Research Ethics Committee's meeting held on Monday, 28<sup>th</sup> January 2019, and I am pleased to advise you that that the Committee has granted

☒ Full Ethical Clearance

☐ Exemption from Full Ethical Clearance

The following Committee members and Office of Research representatives were present at the meeting

**Dr Teresa Arora**, Assistant Professor, College of Natural and Health Sciences  
**Ms. Shurooq AL Hashimi**, Research Development Coordinator, office of Research  
**Dr Kennon Rider**, Associate Professor, College of Education  
**Dr Anoud Bani-Hani**, Assistant Professor, College of Technological Innovation  
**Dr Abdelrahman Baqrain**, Assistant Dean for Research and Graduate Studies, College of Business  
**Dr JR Ratliff**, Assistant Professor, University College

Notes from the Committee	
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Approval is given on the understanding that the Principal Investigator reports the following to the Office of Research at Zayed University:

- § Any amendments or significant change that occur in connection to the study which may alter the ethical consideration, such as
  - \* any serious or unexpected adverse events, and
  - \* any unforeseen events that might affect the continued ethical acceptability of the project
- § Any proposed changes to the research protocol or the conduct of the research
- § Premature suspension or termination of the study
- § Arrangements for publication or dissemination the research including any feedback to participants
- § Progress Report on annual basis
- § Final Report within 3 months after termination or completion of the study

On behalf of the Committee, I am wishing you a productive and successful accomplishment of this research study.

Sincerely,



**Teresa Arora, Ph.D.**  
Chair, Research Ethics Committee  
Zayed University

## **Appendix I: Sample of a Transcribed Interview**

Researcher (R): Thank you for agreeing to participate in this interview. Can you kindly offer a brief introduction about yourself?

Participant (P): I have majored in international affairs. I will graduate this semester and I have been working in the peer mentoring center for one and half years and this is the 3rd semester.

R: In the Abu Dhabi campus, right?

P: yes, that's right.

R: Please describe your involvement with the Peer mentoring program?

P: I am a mentor- I mostly teach global and English.

R: Why did you join the peer mentoring program? What was your goal or purpose?

P: In the beginning I wanted to experience something new and add something to my resume but now I'm really passionate about it.

R: Why is that?

P: Well, because it gave me a new level of knowledge, because it helped me develop social skills and memory. I didn't think it would help my personality, but it did.

R: How?

P: Because we always have to take part in activities and events.

R: (overlapping) so did you achieve your goals by joining the program?

I: Yes

R: Can you give me some examples of your goals and how did you grow in the pal program?

I: In which area?

R: any.



I: So I started with only teaching limited amount of subjects like global 1. Even from the first semester in the program, I taught about 44 students and I was able to develop teaching techniques and be much better for the second semester.

R: How did you see the influence of these teaching techniques on the students?

I: Positively because they have someone who is a peer to them, so they are not intimidated of asking and talking and chatting. So, we do a lot of chatting... I explain the material in Arabic and in English to make sure that they understand each and every line because the teachers are English speakers and cannot explain this to the students who are native Arabic speakers.

R: Can you remember any example of a student who you have impacted?

I: Yes, they say to me “yes! Finally, we understand”. They basically get surprised because it (the instruction) is not as hard as they thought it was and they say that they did not understand in the class because of the language. The language (English) is not particularly new to them but it is different from the school level and it is a great shift, so they need someone to assist them again step by step.

R: In your opinion, what qualities and skills do you think a prospective peer mentor need?

P: (...) well many qualities... like being able to give, loving to teach, being sociable and wanting to teach. Also wanting to learn new things. Having time management skills and respecting the time factor like if you are late then you have to immediately inform the management and the student. You have to be respectful of another people time.

R: Did you feel that you could understand or achieve more while learning since you joined the program?

P: Yes of course! It made me gain so much knowledge! but some knowledge I already knew but like global 1 and 2 they (the faculty) modified them, so I had to restudy it and learn extra things to teach the students. Plus, I learn new stuff.

R: What stuff?

P: Sometimes the students want me to check their essays like the psychology or business students so when I read their essays, I learn new stuff about new subjects.

R: How is the experience of the peer mentoring different from other activities?

P: In this one you can help the student develop mentally, others might not have this.

R: On a personal level, how did your involvement with the program influence you? What are the lessons learned or skills acquired?

P: First of all, I learned teaching techniques. I used them for myself for summarizing in a specific way using highlight in bright colors. I also learned a lot by preparing for the session and doing so much reading. But most important I was capable to see what information is mostly important to focus on. For example, from 70 pages I can take 10 important points.

R: What is the key thing in the program has changed in you?

P: Well, I'm much more confident, I was basically an introvert so I discovered that I am sociable and so I can be a leader as well. I can do speeches in public without having the fear and basically confidence and discovering the leader in you.

R: How did your involvement with the program influence your leadership practices?

P: Well, I said before that I became more confident...so I tried to do as many activities as possible. I did some volunteering and introduced high school students to our university. I participated in many events like expeditions and anything that is related to the peer mentoring program or to the university. I also participated in lots of activities such organizing the CEPA exam on campus.

R: Great, and do the faculty ask for your help? Or do they promote you for others for help?

P: (overlapping) no not really on the professor's level they don't know much about the program, but the students know the program pretty well. I'm not sure why. But one faculty asked me last time to assist two other students in research, but they don't know I'm a peer mentor. I think maybe because I have high GPA.

R: Being a mentor, what are the challenges that you faced and how you overcome them?

P: Any kind? So basically, my difficulty was that students are taking a lot from our time and information, but they don't show their willingness and enthusiasm. Some students try their best

to learn and be cooperative but to be honest, sometimes I do have cases where they sit at the back with their phones.

R: So, they are not serious about learning?

I: No, they are serious but there are few cases where students are not very interested and give me a hard time. But very rare.

R: What are other challenges?

P: If sometimes I have an urgent thing to do outside the peer mentoring center ...because I am graduating, and I am a senior, so I have many responsibilities and deadlines to meet... If this was the case, I have then to apologize from not attending the mentoring session.

R: any other challenges?

P: Well, my parents yeah, they don't know much about the peer mentoring but my mother is very proud of it, but she is worried that it is taking my time and cannot focus on other activities so sometimes she does not understand that it is not counterproductive, it is productive.

R: So how did you balance your personal commitments and studies and the peer mentoring program at the same time?

P: Time management through a to do list so I list my priorities so I cannot miss another appointment in the peer mentoring.

R: What would be the most memorable experience in the peer mentoring program?

I: Really when the students come and tell that they passed the exam and that brings happiness to my heart.

R: What are your career aspirations?

P: I love teaching very much (laughing) and I used to do group studies before joining the peer mentoring program and it was a hobby and developed into a job.

R: Has your experience as a peer mentor influenced your career aspirations in any way?

P: yes of course, when a professor came to us from USA to talk about the assistant leader in the USA it seemed more powerful and more like a real job like not particularly 2 to 4 hours but more than that it was actually like a job they had to do a minimum hours a week. So organizing trips abroad, they went other countries and that is basically-we are starting to do that or we will because they are planning to go to the USA for the conference to talk about our experience and we have done some of these conferences but they are few so we have to develop but it will take time, so trip abroad and expanding the program and make it more memorable.

R: Ok, so do you feel that it is a job?

P: It is like a job, but it is not a job. I mean you learn so much like punctuality and time management, evaluations and all these. It is like internship or job training. It is very different from all the other activities we do at the university and it is very amazing... it is empowering.

R: To what extent do you feel you are part of the decision-making team?

P: All mentor leaders are involved in the decision-making process. For example, the manager always asks us do a meeting and ask us about our opinions.

R: In what?

P: like our weaknesses and strengths in the program, or what we will change and why. And you know ... we do this is every semester and throughout the semester we are asked our opinions about: what do you think about that? Or should we do this? You know we are included.

R: So, what do you think is best for the success of this program?

P: The spirit of the pals because they are professional and at the same time, they are very passionate and they are themselves to be honest, they be themselves around the students so they are not like a professor who could intimidate the students, they are just girls who are happy to influence other people.

R: Anything else?

P: I have to say the devotion and commitment of the mentors themselves to give without thinking about their reward. Also, about the willingness of the students who are taught. They

should have the ability to want to learn and the ability to want to get help to improve their learning.

R: So, can we say that it is about the appreciation of giving and taking responsibility?

P: exactly if one of them are missing then there's no success.

R: That was my last question, so you have anything to add?

P: Not really

R: Thank you for your time and valuable information.

P: Thank you.

## Appendix J: Sample of a Filled Survey

### **Student Leadership Practices Inventory – SELF**

**By James M. Kouzes and Barry Z. Posner**

Dear Participant,

On the next two pages there are thirty statements describing various leadership behaviors. Please read each statement carefully then rate yourself on how frequently you engage in the behavior described. This is not a test (there are no right or wrong answers).

Be realistic about the extent to which you actually engage in the behavior. Be as honest and accurate as you can be. Giving yourself all 5 or all 3 on all responses is most likely not an accurate description of your behavior. Most people will do some things more or less often than they do other things.

Do answer in terms of how you typically engage on most days with most people. If you feel that there is a statement where you don't frequently engage in the behavior, in that case please write number 1.

**Please note that by filling the online survey you give consent to your participation.**

**Once done, please send it back to [Sandra.kanaan@live.com](mailto:Sandra.kanaan@live.com)**

Thank you for your participation.

How many semesters have you been in the mentoring role? This...is...my...first

Are you a regular PAL mentor or a mentor leader? a regular PAL

In which college are you at? Business

How old are you? 18

How frequently do you typically engage in the following behaviors or actions? Please write the number using the scale below

1	2	3	4	5
Rarely or Seldom (N/A)	Once in a while	Sometimes	Often	Very Frequently

I set a personal example of what I expect from other people: 5

I look ahead and communicate about what I believe will affect us in the future: 4

I look for ways to develop and challenge my skills and abilities: 5

I foster cooperative rather than competitive relationships among people I work with: 5

I praise people for a job well done: 5

I spend time making sure that people behave consistently with the principles and standards we have agreed upon: 4

I describe to others in our organization what we should be capable of accomplishing: 4

I search for innovative ways to improve what we are doing: 3

I make sure that big projects we undertake are broken down into smaller and doable parts: 4

I follow through on the promises and commitments I make: 5

I encourage others as they work on activities and programs in our university: 4

I actively listen to diverse points of view: 5

I give others a great deal of freedom and choice in deciding how to do their work: 5

I talk with others about a vision of how we could be even better in the future: 5

I look for ways that others can try out new ideas and methods: 4

When things do not go as we expected, I ask, "What can we learn from this experience?": 4

I express appreciation for the contributions that people make: 5

I support the decisions that other people make on their own: 5

I seek to understand how my actions affect other people's performance: 4

I talk with others about how their own interests can be met by working toward a common goal: 4

I make it a point to publically recognize people who showed commitment to shared value: 5

I treat others with dignity and respect: 4

I take initiative in experimenting with the way things can be done: 5

I make sure that people support the values we have agreed upon: 5

I am upbeat and positive when talking about what we can accomplish: 4

I talk about my values and the principles that guide my actions: 5

I speak with passion about the higher purpose and meaning of what we are doing: 4

I find ways for us to celebrate accomplishment: 3

I make sure that people are creatively recognized for their contributions: 4

I provide opportunities for others to take on leadership responsibilities: 5

I believe that the mentoring role developed my overall leadership practices: 5

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