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United Arab Emirates University

College of Education

Department of Foundation of Education

THE RELATIONSHIP BETWEEN SUPERVISOR INTERPERSONAL APPROACHES AND GRADUATE STUDENT SATISFACTION AT ONE UNIVERSITY IN THE UNITED ARAB EMIRATES

Dalal Mohammed Mesfer Aldosari

This thesis is submitted in partial fulfillment of the requirements for the degree of Master of Education (Educational Leadership)

Under the Supervision of Dr. Ali Ibrahim

June 2017



SPECIAL COLLECTIONS

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Declaration of Original Work

I, Dalal Mohammed Mesfer Al Dosari, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this thesis entitled "The Relationship between Supervisor Interpersonal Approaches and Graduate Student Satisfaction at One University in the United Arab Emirates", hereby, solemnly declare that this thesis is my own original research work that has been done and prepared by me under the supervision of Dr. Ali Ibrahim, in the College of Education at UAEU. This work has not previously been presented or published, or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my thesis have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this thesis.

Student's Signature: Date: 4/7/2017

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Copy 9 of 1

Abstract

This thesis is concerned with graduate students' thesis/dissertation supervisors' interpersonal approaches. As its framework, the study adopted Glickman, Gordon and Ross-Gordon (2013) four approaches to supervision: directive control, directive informational, collaborative, and non-directive. The purpose of this explanatory mixed method study is to describe students' perceptions of the approaches used, their satisfaction with these approaches, and whether satisfaction differed based on students' gender, degree sought, or concentration. The study was conducted by distributing a questionnaire to all graduate students at one of the United Arab Emirates universities who have written a thesis/dissertation during 2015-2017 (N=213), and then, interviewing a group of them (N=16). The study revealed that the most used supervisory approach by the supervisors was the collaborative interpersonal approach and the least used one was the directive informational approach. The level of graduate students' satisfaction with their supervisors' approaches was satisfied to highly satisfied. There was no significant difference according to the degree sought and concentration, but for gender, female students believed that the supervisors used the collaborative approach more than the male students. There was a relationship between the supervisor interpersonal approach and student satisfaction. The more collaborative the supervisor was, the more satisfied the student became. In contrast, the more the supervisor uses the non-directive interpersonal approach, the less satisfied students became.

Keywords: Supervision, graduate students, interpersonal approaches, thesis, dissertation, student satisfaction.

Title and Abstract (in Arabic)

العلاقة بين الأساليب الإشرافية للأستاذة المشرفين ورضا طلبة الدراسات العليا في إحدى جامعات دولة الإمارات العربية المتحدة

الملخص

تركز هذه الدراسة على الأساليب الإشرافية للأساتذة المشرفين على أطروحات الماجستير والدكتوراه لطلبة الدراسات العليا. يتبنى الإطار النظري لهذه الدراسة الأساليب الإشرافية الأربعة لغليكمان وغوردن وروس غوردون (2013) وهي: الأسلوب التوجيهي، أسلوب التوجيه لعدد من البدائل، الأسلوب التشاركي، والأسلوب غير التوجيهي.

الهدف من هذه الدراسة التي تتبع المنهج التفسيري المختلط هو وصف آراء الطلبة للأساليب الإشرافية المستخدمة من قبل أعضاء هيئة التدريس، ومدى رضاهم عنها، وإذا ما كان هناك فروق ذات دلالة إحصائية تعزى إلى متغيرات الجنس، الدرجة العلمية، أو التخصص. أجريت الدراسة عن طريق توزيع استبانة على جميع طلبة الدراسات العليا (عددهم = 213) في إحدى جامعات دولة الإمارات العربية المتحدة، والذين كتبوا أطروحاتهم خلال العامين الدراسيين بين عن أن أكثر الأساليب الإشرافية استخدامًا من قبل الأساتذة المشرفين وهو الأسلوب التشاركي، عن أن أكثر الأساليب الإشرافية استخدامًا من قبل الأساتذة المشرفين وهو الأسلوب التشاركي، وكان الأسلوب الأقل استخدامًا هو أسلوب التوجيه لعدد من البدائل. وكشفت الدراسة أيضا بأن مستوى رضا طلبة الدراسات العليا عن الأساليب الإشرافية المستخدمة كان بين راض وراض ولكن بالنسبة لمتغير الجنس، اعتقدت الطالبات أن المشرفين استخدموا الأسلوب التشاركي أكثر من الطلبة الذكور. كما وجدت الدراسة علاقة ذات دلالة إحصائية بين الأسلوب الإشرافي مستوى رضا الطلبة. وبالمقابل كلما استخدم الأستاذ المشرف يستخدم الأسلوب غير التوجيهي، كلما قل مستوى رضا الطلبة. وبالمقابل كلما استخدم الأستاذ المشرف الأسلوب غير التوجيهي، كلما قل مستوى رضا الطلبة.

مفاهيم البحث الرئيسية: الإشراف، طلبة الدراسات العليا، الأساليب الإشرافية ، أطروحات الماجستير والدكتوراه، رضا الطلبة.

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Dedication

I dedicate this study to my:

Dear parents for their prayers.

Dear brothers, Salem (may Allah have mercy on him), Abdullah, Abdulrahman, and beloved sisters for their encouragement and support.

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SPSS Statistical Package for the Social Sciences

UAE United Arab Emirates

Chapter 1: Introduction

1.1 Overview

Thesis writing is viewed as the last stage in accomplishing the graduate degree, and has been recognized the pinnacle of college studies, as the process of thesis writing develops vital research skills (Ho, Wong, & Wong, 2010; Ylijoki, 2001). Thesis completion as part of graduate students' curriculum can boost and refine students' research oriented skills. It can also enhance their critical and reasoning capabilities, so the absence of a thesis in a professional curriculum, could weaken the success of students research abilities at graduate level (Drennan & Clarke, 2009). However, , the challenging process of completing the thesis has also contributed to student anxiety, an increase in the duration of study, and even students' withdrawal from graduate studies (Ylijoki, 2001).

An important factor that determines how successfully a student navigates the challenges inherent in the thesis writing process, is their relationship with their supervisor. Students are well-aware of the crucial role the supervisor plays in achieving the desired academic degree (Erichsen, Bolliger, & Halupa, 2014; McAlpine & McKinnon, 2013). In one study, students identified the relationship with thesis's supervisor as the key feature of the research supervision process (de Kleijn et al., 2014).

Even though some supervisors may prefer to maintain a formal relationship with their students, many often become personally involved in their students' master's thesis projects. They tend to play an active role in maintaining student satisfaction (de Kleijn, Mainhard, Meijer, Pilot, & Brekelmans, 2012). In fact,

supervisors' communication and support is positively correlated with students' academic performance (Ismail, Jui, Sham, Faqih, & Abdullah, 2015). Conversely, when supervisors do not spend enough time with their students, and if the relationship lacks continuous communication and feedback, the result is student dissatisfaction (Abo-Daf, 2002; Alawi, Jabr, & AboSamra, 2008; Shatnawi, 2006). So maintaining a productive, positive relationship has been identified as important for preventing graduate student dissatisfaction and also reduces dropout rates from the program (Parker-Jenkins, 2016).

Many efforts have been made to classify the type of supervisor-learner relationship into different approaches, and models of supervision, which affect graduate supervision, have been developed (McCallin & Nayar, 2012). In this study I have adopted Glickman, Gordon, and Ross-Gordon's (2013) three main interpersonal approaches: directive, collaborative and nondirective, which were extracted from three main philosophies: essentialism, experimentalism, and existentialism. These approaches were adopted to investigate the relationship between graduate student satisfaction and supervisor interpersonal approach in a governmental university in the United Arab Emirates (UAE).

1.2 Statement of the Problem

The graduate thesis is viewed as the most suitable form of assessment leading to positive student outcomes in research ability (Drennan & Clarke, 2009). However, a large proportion of students exit their graduate program without having completed their thesis (Gosling & Noordam, 2011). A focus on improving the supervision process can improve student satisfaction, and thereby increase student retention rates.

Many studies have broadly emphasized the importance of the supervisor-student relationship and its impact on students' educational outcomes and satisfaction (e.g., Aguinis, Nesler, Quigley, Suk-Jae-Lee, & Tedeschi, 1996; de Kleijn, Meijer, Pilot, & Brekelmans, 2014; Erichsen, Bolliger, & Halupa, 2014; Ismail, Jui, Sham, Faqih, & Abdullah, 2015). More specifically, "research confirms that graduate students' satisfaction with doctoral training - particularly the dissertation experience - hinges on satisfaction with the primary advisor" (Johnson, 2016, p. 147). In particular, the supervisor feedback is one of the essential elements of the supervision process and also plays a critical role in students' satisfaction (de Kleijn et al., 2014).

The key role of the supervision in postgraduate study makes it a pertinent subject for research. Despite its importance however, little research has been conducted to examine supervision in the context of the UAE. Hence, I carried out a preliminary study to explore the situation in one of the universities in the UAE universities. The study drew on responses from interviews with six graduate students: four master graduates (two in Curriculum & Instruction, one in Environmental Sciences, one in Civil Engineering) and two PhD graduates (one in Translation and the other in Business Administration). In this university, the master's thesis is an optional requirement in some colleges, but is obligatory for all the PhD programs (except Pharmacy).

An early small-scale study conducted on the supervision process as experienced by graduate students provided some interesting preliminary insights. A major finding that arose from this earlier study was that some supervisors were controlling and did not give students the freedom to make important decisions related

to their studies, such as topic selection, and methodology. To illustrate, one master's student made the following comment:

He said you have to do your research about this topic, I said I do not want, he said no, no, no this is easier, and insisted, and you have to ... He choose the methodology, I told him that I asked other professors and they suggest to add another instrument ... but he said no no no it is not necessary, you do not have to listen to anyone, follow what I am saying.

Of more concern from this preliminary study were some of the reports of negative interactions with supervisors. Some supervisors' were reportedly using coercive power, at times shouting at students. One PhD student described her interaction with her supervisor as follows: "His attitude was shouting... the attitude was very bad, not only with me." Students' concerns about not getting sufficient or timely feedback were also raised repeatedly in preliminary study. One PhD student reported that "He was delaying the revision of my writing ... what happened, I submit the chapter, and he does not check it." while another student complained, "There was no proper guidance regarding the methodology." Lack of timely feedback in turn delayed students' completion of their theses. One student reported, "I was able to finish my thesis very earlier if he gave me the right feedback." Similarly, another student stated, "Writing my thesis took very long time, it took more than it supposed to take ... if he gave me feedback about every chapter from the beginning, I would finish my thesis earlier."

In addition to late feedback, supervisors' feedback was reported to be sometimes vague. One master's student reported, "My supervisor problem is that his

feedback was not very detailed, it was very, very shallow ... when I submit a part of my work, he usually says elaborate, elaborate in what exactly!,". Another master's student also highlighted a similar concern:

For example, he said there is a problem with the problem statement, or chapter one, okay, where is the problem? ... You said there is something wrong, where is it? He does not clarify for me, this made me feel uncomfortable that I do not know where, where is the problem.

Such serious concerns contributed to dissatisfaction with the quality of their supervision. This also forced them to change supervisors sometimes more than once, though in this university, doctoral students may not change advisors after beginning their dissertation research. Changing supervisors was also a disruptive, and delaying process. One student reported the negative effect of changing supervisors on the length of candidature: "changing the supervisor affected me in terms of the time and how I feel, I was supposed to graduate three years ago."

To sum up, the findings from the preliminary study highlighted, from students' perspectives, some of the issues that arise in the supervision process. These findings however also further highlighted the need to examine in more depth, the approaches of thesis/dissertation's supervisors. By researching these approaches, we can gain a deeper understanding of how these approaches may affect students' satisfaction, particularly in the UAE context.

1.3 Purpose of the Study

The study aims to understand the relationship between the supervisor's interpersonal approach and the level of graduate student satisfaction from students' perspective. The study will thus describe students' experiences with their supervisors in order to find out the most used interpersonal approach by the supervisors and students' satisfaction with these approaches. This was achieved by distributing a questionnaire to all graduate students (Masters and PhD) who had written a thesis/dissertation during 2015-2017 in one of the universities in the UAE. Questionnaire completion was followed by a semi-structured interview with a representative group of students.

1.4 Research Questions

The study was guided by the following research questions:

- 1. What are the supervisory approaches used by faculty members and how satisfied are graduate students with these approaches?
- 2. Is there a significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the gender, level of education (Masters or PhD), and concentration (Sciences or Arts) of students?
- 3. How do students perceive the relationship between the supervisors' interpersonal approaches and their satisfaction with using these approaches?

1.5 Significance of the Study

Few studies have been conducted in the UAE regarding graduate students' satisfaction with their thesis/dissertation supervision experience. Thus, this study

adds to the literature about supervision and supervisor-student relationship in higher education in general and in the UAE particularly. Findings from this study are also important as they can give this higher education institution more insight about approaches used by their supervisors, which of these are most likely to lead to increased graduate satisfaction with their supervision experience. This insight would assist this university in better planning and offering suitable training for supervisors. Subsequently, this institution would be able to achieve a higher rate of thesis/dissertation completion, which means an increase in the graduation rates.

Currently, this university has a teacher evaluation system in place, which allows graduate students to anonymously evaluate their teachers' course delivery, teaching styles, personalities and their general satisfaction with the course. This happens via an automatic email at the end of every semester, which includes links of all courses in which the student has enrolled for that semester. However, courses with fewer than four students, which include thesis/dissertations courses, are not allocated evaluation surveys, since the professor can guess the students' identities. Hence, there is no official measurement of students' satisfaction with their thesis/dissertation supervision experience in this university. Therefore, this study will also emphasize to university administration, the need for a thesis/dissertation course and professor evaluation, or some type of student satisfaction measurement to improve this course.

1.6 Limitations

As a study that has been conducted in one case study institution, there are a number of inherent limitations that need to be considered. Firstly, conducting the study in one higher educational institution is one main limitation of this study, as the

results cannot be easily generalized to other institutions. This study also is limited to the graduate students who have written their thesis/dissertation from 2015 to 2017. This period of time was chosen to ensure that students were still able to clearly recollect the supervision experience in detail. Hence, the results represent the experiences of this particular group of students, which might be different if the study had involved data from a larger number of students over a more extended period of time. Furthermore, the study is limited by the nature of self-reported questionnaire in that some students may prefer to provide answers they perceive may be more acceptable, especially when referring to their professors. To address these potential limitations that arose, I used qualitative data helped provide triangulation of data and minimize overly negatively or positively biased responses.

1.7 Definition of Terms

This section provides in-depth definitions of the most commonly used terms in this thesis namely: student supervision, interpersonal approach, student satisfaction, feedback, master thesis, and doctoral dissertation.

Student supervision:

a professional relationship, or personal/professional/political relationship, than that of tutor, friend or colleague, and it relies on more than goodwill and spare time. It needs to be, and in many cases is, the focus for development and 'training'... students at all levels need guidance, modelling and managing so that they can start to develop as independent researchers. (Wisker, 2012, pp. 40-41)

Interpersonal Approach: "it is a range of interpersonal behaviors that are available to a supervisor who is working with individuals and groups" (Glickman, Gordon, & Ross-Gordon, 2013, p. 90). It is the supervisor's behaviors with the graduate student during writing his/her thesis/dissertation.

Student satisfaction: the favorable experiences of a student within an educational context (Letcher & Neves, 2010, as cited in Green, 2016).

Feedback: "when someone provides their thoughts to another person on their behavior. The thoughts given may be positive or they may point out something that needs to be improved" (Sillett, 2016, p. 5).

Master's thesis: A research study based on data that is produced by experiment or observation that is an original piece of work by a graduate student, representing the student's culminating research and writing abilities (Bui, 2014).

Doctoral dissertation: A formal document, quite substantial in length, that has a comprehensive body of original data which supports a particular thesis or supposition with appropriate evidence (Gosling & Noordam, 2011).

Chapter 2: The Literature Review

The purpose of this chapter is to review literature related to thesis/dissertation supervision, the approaches supervisors use with graduate students during this stage, and graduate students satisfaction about it. Thus, the chapter covers three main parts. The first part is the conceptual framework, where an explanation of the essentialism, experimentalism, and existentialism philosophies along with Glickman et al. (2013) three main approaches is provided. The second part is previous studies that had investigated the graduate students' supervision from different facets. It also draws on the different supervision approaches that have been researched by different researchers. It includes the relationship between the supervisor's approach and graduate student satisfaction and discusses the supervisor's feedback influence on student's satisfaction. The last part focuses on graduate student supervision in the United Arab Emirates (UAE) context.

2.1 Conceptual framework

Supervision is a personal and professional relationship whereby a more experienced faculty member acts as a guide, facilitator, role model and informer of a student. A supervisor provides the supervisee with knowledge, advice, counseling, challenge, and support in the supervisee's development of becoming a full member of a particular profession (Johnson, 2016). According to Wisker (2012), graduate students supervision is "a professional relationship ... that focuses on development and training... Students at all levels need guidance, modeling and managing so that they can start to develop as independent researchers" (pp. 40-41). As in any other relationship, the supervisor and supervisee might have communication obstacles

because people are different. However, being aware of these barriers is the beginning of overcoming them, so the supervisor can act professionally, being a better listener, playing a role model by actions, and provide and ask for feedback to ensure successful communication with the student (Sullivan & Glanz, 2005). Every supervisor has his/her own interpersonal approach in dealing with his/her student. The interpersonal approach "is a range of interpersonal behaviors available to a supervisor who is working with individuals and groups" (Glickman et al., 2013, p. 90). The supervisors who are aware of the strengths and weaknesses of supervision approaches are more likely to enjoy and benefit from the supervision experience (Lee , 2008).

For this study, I am using three main supervisory approaches that emerged from three educational philosophies. These three key philosophies are essentialism, experimentalism, and existentialism. The main difference among these philosophies is related to the nature of knowledge, truth, and reality (Glickman et al., 2013).

Essentialism tells that knowledge, truth, and reality exist outside of humans. Knowledge does not change, it is complete and absolute. The purpose of education is to train the mind to think logically (Glickman et al., 2013), because there is a logic behind everything that happens in the universe (Apps, 1973). This philosophy is founded by Bagley in 1938 (Glickman et al., 2013). It is sometimes called the traditional philosophy as in Apps (1973) study.

Essentialism advocates that there are essential subjects or knowledge that students should learn, and the educator is the main source of this knowledge (Kessinger, 2011). Thus, from the essentialist perspective, the supervisor is the expert who transfers the knowledge mechanistically to a student or trainee. As

students follow the supervisor directions, they become closer to be good learners (Glickman et al., 2013).

This philosophy leads to the first main interpersonal supervisory approach; the directive approach. The directive approach is divided into two types; directive control and directive informational. Directive control means that supervisor directs the student to what to be done, with standardizing specific time and criteria that ensure the expected results. The supervisor also reinforces the student by telling the positive or negative consequences of his/her actions. On the other hand, the directive informational means that the supervisor directs the student to the available alternatives where he/she need to select from them. Then, the supervisor standardizes the time and criteria of expected results after the student made his/her selection from the options. In the directive approaches (control or informational), the supervisor is the source of knowledge and has the power, s/he is the one who takes the decisions and responsibility, but the degree of freedom in the first approach is far less than in the second one (Glickman et al., 2013).

Experimentalism (or its variant progressivism) emphasizes that reality, knowledge, and truth are not absolute and continuously changing depending on what works after testing (Glickman et al., 2013). This philosophy confirms that people are born with limitless possibilities for development, growth and they can have more satisfying life, through scientific method and experimental thinking in the right environmental situations. The scientific method in progressivism can also be named the problem-solving method, which was described by Dewey (1916) and others as the explanation of a problem to be solved, the development of ideas or hypotheses about this problem, and the testing of these hypotheses by an examination of

experimental evidence (Elias & Merriam, 1995). Briefly, learning about reality happens by experiments and interacting with the environment (Glickman et al., 2013).

Experimentalism emphasizes that education is "the reconstruction of experiences through interactive processes with one's environment" (p. 61). Therefore, experimentalists believe that the traditional educator-learner relationship where the educator is the only source of knowledge is not sufficient (Elias & Merriam, 1995). Supervision in experimentalism happens when the supervisor works democratically with student to test old hypotheses and try new ones (Glickman et al., 2013). This represents the collaborative interpersonal approach.

Collaborative interpersonal approach means that the supervisor and student have the same level of power, and they make joint decisions and bear equal responsibility. The supervisor listens, clarifies what the student says, and encourages the student to speak his/her mind (Glickman et al., 2013). According to Dewey (1916), the educator's role is to organize, motivate, encourage, and evaluate the highly complex process of education, where learning is something students do for themselves. The educator and the learner should plan and learn from each other so the relationship between them becomes mutual (as cited in Elias & Merriam, 1995). In addition, the supervisor presents his/her own ideas by participating in the discussion, solving problems by asking the student to suggest possible actions, and negotiate them to find a shared option that satisfies the supervisor and the student (Glickman et al., 2013).

Existentialism is built on the belief that humans are the source of reality, truth, and knowledge. It emphasizes that there is no absolute knowledge or logic

because this will prevents humans from discovering existence and then it will keep them ignorant (Glickman et al., 2013). According to Feibleman (1973), Soren Aabye Kierkegaard (1813-1855), the father of existentialism, believed that the individuals should have the complete freedom to select and become what they would like to become (as cited in Koirala, 2011). Existentialism encourages individuals to create their own meaning about the world around them and engage in self-discovery (Glickman et al., 2013). Existentialism advocates that an individual cannot follow readymade ideas about existence; instead, he/she must form his/her own ideas. Therefore, education should make learners more aware and conscious of themselves and the responsibilities they ought to take in life (Koirala, 2011).

Existentialists consider that every student is unique, and education should count for the individual differences (Koirala, 2011). Thus, supervision in existentialism means that the supervisor helps the student to explore his or her own capabilities to make decisions freely. The supervisors are facilitators and help when it is needed merely (Glickman et al., 2013). The non-directive interpersonal approach to supervision is extracted from this philosophy.

The non-directive interpersonal approach means that the student is the one who lead the supervision process and has the power to take responsibility and decision. The supervisor's role is to facilitate the student autonomous learning (Glickman et al., 2013). Hence, the student should be asked questions by the supervisor to clarify his/her ideas and refine his/her answer; then asking him/her again, and the learning process is pushed to come up with acceptable results (Koirala, 2011). So, the supervisor role is to sit and listen to the student, elucidate what the student says, and encourages him/her to explain his/her interests (Glickman et al.,

2013). Figure 1 illustrates the different philosophies and Glickman et al. (2013) approaches to supervisions that guide this study.

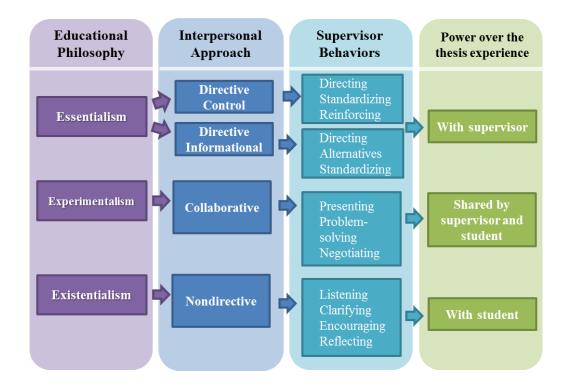


Figure 1: Theoretical Framework

Glickman et al. (2013) approaches were originally used to explain the supervisors' approaches with teachers. However, I believe that the same approaches can be used to explain how the thesis/dissertation supervisor could work with the graduate student. So this study had adopted mainly Glickman et al. (2013) interpersonal approaches; directive control, directive informational, collaborative and non-directive to investigate the relationship between graduate student satisfaction and supervisor interpersonal approach.

2.2 Previous Studies

As this might be the first study that utilizes Glickman et al. (2013) approaches to explain supervisor-graduate student relationship, there are no previous studies found related to Glickman et al. (2013) approaches with graduate students because as mentioned, their approaches were mostly used to describe supervisor-teacher relationship. However, there are many research studies on the supervisor-graduate student relationship.

In literature, graduate students supervision approaches have been investigated and framed in three main ways: 1) reviewing literature, 2) investigating students and/or supervisors experiences and opinions, and 3) adopting existing theories and approaches from a different field and applying them on supervision (as is the case in this study). Moreover, the supervisor feedback, as part of supervision process, is playing a critical role in student's satisfaction with supervision as well, so literature also discussed this side of supervision in details. Presentation of previous studies will follow the same order.

2.2.1 Studies on approaches derived from literature

Lee (2007) used the literature (other researchers written work such as Brew conceptions of research (2001)) to list five supervisory models based on a belief that the concepts that supervisor holds will affect the way they supervise and the kind of researcher will emerges at the end of the supervision process. These five supervisor models were: functional, enculturation, critical thinking, emancipation, and developing a quality relationship. The functional model means the supervisor helps the doctoral student to have a reasonable progress throughout the research phases.

The supervisor also agreed on the importance of student's obedience. In the enculturation model the supervisor encourages the student to be self-aware as well as a contributing member to the research community. The role of the supervisor is to coach the student to help him/her overcome his/her deficiencies. The critical thinking model is where the student is encouraged to think outside the box and to question his/her work. Emancipation model is when the student is encouraged to be independent and improve him/herself. In this model, it is important to recognize the dependency stage at the beginning and build on it by inspiring the student with a sense of self-experience and self-discovery. The absence of demand for control is what distinguishes it from enculturation. Developing a quality relationship model is involved in developing a constructive and healthy student-supervisor relationship. In this last model, the supervisor's emotional intelligence and flexibility play a large part in the successful completion of postdoctoral student's research.

Lee (2007) concludes with recommending that supervisors should be aware of the concept that they are adopting, and try to improve it or even adopt some approaches from the other concepts to enhance their supervision skills. A continuous professional development might be the tool to update the supervisors with the recent and various ways of supervision.

Lee (2008) conducted a subsequent study by implementing the five supervisory models. The study purpose was to examine the influences that affect the supervisor's approach in dealing with doctoral students by following the five concepts that explain the supervisor's approach in supervision (i.e., functional, enculturation, critical thinking, emancipation, and developing a quality relationship). The study proposed that two main factors influenced supervision. The first influence

was the supervisors' concept of research supervision, and the second one was the supervisors' previous personal "experience as a doctoral student" (p. 267). Semi-structured interviews were conducted with 12 supervisors who have been chosen purposefully from different disciplines in a UK university. For clarity and to check the validity, the data collected from supervisors' interviews were "compared to interviews with two PhD students and a discussion group of PhD students" (p. 269). A main finding of this study was the significant impact of the supervisors' own experience as doctoral students on their approaches of supervision. The study also showed that supervisors tend to use the functional approach and one other approach, and current students reported that they have been supervised by one or two approaches. The study also extracted the strengths and weaknesses of each approach and concludes that the supervisors who were aware of these strengths and weaknesses were more likely to enjoy and benefit from the supervision experience.

Acker, Hill, and Black (1994) outlined two supervision models based on the available literature. The authors used several related qualitative researches that studied the student research experience. The two models were the technical rationality model and negotiated order model. The technical rationality model was where supervision priority was given to procedure or technique issues whereas the negotiated order model assumed that supervision was "a process open to negotiation and change" (p. 483). The technical rationality model must be carried out in a succession of predictable steps that would structure the students' growth in the research field, leaving them passive participant. In the negotiated order model, the students and supervisors shared their responsibilities and based it on their respective past and present experiences, and the interactions of one another. The model prepares

the students to be active participants in negotiating and understanding the research meanings.

Acker et al. (1994) tested the two models through conducting semi-structured interviews that lasted around forty-five minutes to two hours with participants from education and psychology department in three UK universities. The participants consisted of 67 students, 56 supervisors and 14 key individuals (such as administrators or heads of departments ...etc.). The technical model was the one expected to be in research setting and the negotiated model provided a better description of what happened in practice. An interesting finding was that students had the tendency to cope with any offered situation even if they were not satisfied with the supervision. Only very few student interviewees seek to change their supervisor and usually after multiple attempts to improve the relationship. This helped some of them to be independent, or to decide that academic life is not suitable for them. The negotiated order model provided an accurate description of what really succeeds in the social science supervisory process than the technical rationality. However, some degree of control and direction were needed to have a successful outcome in the research experienced by both the students and supervisors. In addition, it should be noted that supervisors cannot be trained by single supervisory strategy since different student capabilities require different supervisory strategies.

There are also other studies that used literature as an attempt to categorize graduate students supervision approaches such as Yob and Crawford (2012), who framed the conceptual framework of graduate students' mentoring by reviewing the literature from 2005 to 2012. The researchers have listed 55 mentor behaviors and characteristics of successful mentors that support students' success based on the

previous studies results. Then, they classified them into two main domains: academic and psychosocial. The academic domain has four clusters: competence, availability, induction, and challenge. The psychosocial domain has three clusters namely: personal qualities, communication, and emotional support. However, testing this conceptual framework in various contexts and different participants is needed in order to validate this conceptual framework.

Another example is McCallin and Nayar (2012) who reviewed and analyzed the literature from 2000 to 2010 to discuss what influence postgraduate supervision in the New Zealand. The scholars discussed four main influences; research context, faculty issues, supervision pedagogy and models of supervision. They suggested that supervisors should have enough training to follow up with research supervision changes and practices to improve research excellence and increase doctoral degree completion rates. They suggested also that not only supervisors need training, but also students. They prefer that students training should follow the mixed model of supervision where students could be supervised in different ways: student-supervisor, student-student, and mixed of both depending on the number and level of students. The authors emphasized the importance of that universities should pay attention to the approach that used to manage doctoral research students.

2.2.2 Studies on approaches derived from existing approaches

Aguinis, Nesler, Quigley, Suk-Jae-Lee, and Tedeschi (1996), have implemented French and Raven (1959) power taxonomy to examine the relationship between the supervisor power and students' educational outcomes such as students' perceptions, intentions, and behaviors. The taxonomy has five bases of power: 1) referent, based on graduate student desire to be associated with the supervisor, 2)

coercive, based on graduate student belief that the supervisor has the ability to punish him/her, 3) expert, based on graduate student belief that the supervisor can provide him/her with special knowledge, 4) legitimate, based on graduate student perception that the supervisor has legitimate right to influence the student and that he/she is obligated to obey, and 5) reward, based on the graduate student belief that the supervisor has the ability to provide him/her with desired benefits.

The researchers mailed surveys to all the 967 graduate students with assistantship duties in a large university. The studied sample was composed of students with assistantship duties because they have more frequent interaction with their supervisors. The total number of completed surveys was 346 (35.8%). The authors have stressed on the important role of the power relationship in student-faculty relationship and interactions. The study concluded that the expert power was positively associated with students' educational outcomes, and the coercive power was associated negatively with students' educational outcomes. These power bases are "critical to graduate students' experiences, satisfaction, and success" (p. 292).

Raven (2008) added one more power base to the French and Raven (1959) power taxonomy, the informational power. It means that supervisor explains how things should be done in different ways with logical reasons and the supervisee understands and accepts the supervisor alternative changes and its reasons. For the old five bases of power, the author added that in the reward power, the supervisor motivates the supervisee by telling him or her the positive consequences of obedience without undesirable outcomes in case of noncompliance. On the other hand, the coercive power is the opposite, where the supervisor threatening the supervisee with the negative costs of his or her disobedience. The author addressed

that there is no base of power that is more effective than the others, as it depends on the nature of the supervisor, supervisee and the context. He also mentioned that there was one organization study found that the reward power is leading to higher supervisee satisfaction. He commented that as there are interactions among humans, they should use numerous power strategies. He emphasized that supervisors who are more aware of these power strategies and its influences become more effective and successful in the supervision process.

Armstrong (2004), have used known theories and approaches to conduct his research. He has investigated the influence of supervisors' cognitive styles on the research supervision quality in one university business school in the UK. The main cognitive styles in this study were two; analytic and intuitive. The analytic means that supervisor use the logic, structured and step by step method with student. On the other hand, the intuitive means that the supervisor tends to use his/her feelings to act regardless to the conscious reasoning. The Cognitive Style Index was the instrument that used in this study to determine the cognitive styles of the supervisors, and "the Thurstone attitude scale was used to measure students' perceptions of the quality of supervision" (p. 599). The participants were 118 supervisor-student dyads. The findings showed that the more the supervisor is analytic the more the students perceive the quality of the supervision and "achieved significantly higher grades for their dissertation" (p. 599). The author has recommended that as the cognitive styles of supervisors impact the supervisor-student relationship and student performance, it is important to select the research supervisors carefully and select the analytic supervisors particularly. It would be helpful also if the supervisors with intuitive cognitive style got some training to help them to be aware of different strategies that could improve their relationship with students and their students' performance. It is also important that the concerned personnel in the university needs to avoid pairing intuitive cognitive style student with intuitive cognitive style supervisor. Instead, pairing him/her with a supervisor who has analytic cognitive style would be good strategy.

Fernando and Hulse-Killacky (2005) investigated the supervisory styles that impact counseling students at master's-level in terms of self-efficacy and satisfaction with supervision. There were three main specified supervisory styles; Attractive, Interpersonally Sensitive and Task-Oriented. The 33-item Supervisory Styles Inventory (SSI) measurement, created by Friedlander and Ward (1984), was used to determine the supervisory styles. It has three main subscales representing the different supervisory styles that have mentioned earlier. The Attractive supervisory style means that supervisor is friendly, trusting, and supportive. The Interpersonally Sensitive style means the supervisor is more intuitive, invested, and reflective. The Task-Oriented style means the supervisor is more structured, goal oriented, and evaluative. Another instrument was the Supervisory Satisfaction Questionnaire (SSQ) to measure the students' satisfaction about the supervision experience that was modified by Ladany, Hill and Nguyen (1996). The third instrument was the Counseling Self-Estimate Inventory (COSE) for measuring the self-efficacy of the students, that was created by Larson (1990) and Larson et al. (1992). The participants were 82 counseling students from different six programs from different universities around the US, who were enrolled in a weekly internship class.

Fernando and Hulse-Killacky (2005) study results were tested by comparing the scores of the SSI with SSQ, SSI with COSE, and SSQ with COSE. The

interpersonally sensitive style was the main style found statistically significant in predicting satisfaction with supervision. The study also mentioned that the attractive style had impact on supervisees' satisfaction too. On the other hand, the task-oriented style was the only style that was statistically significant in predicting the students' self-efficacy. There was no relation between the students' satisfaction and their self-efficacy. The study recommended that even though supervisors may prefer particular style, it would be beneficial to adopt more than one style for better supervision experience. Supervisors also need to be aware that the supervisory styles that they using can impact supervisees' satisfaction and perceived self-efficacy. The study results also can help supervisors and researchers deliver effective supervision and develop the supervision training.

2.2.3 Studies investigating students and/or supervisors' perceptions

Abdallah, Hillerinch, Romero, Topp, and Wnuk (2010) interviewed an experienced professor who supervised 100 students within the past 20 years in LUND University in Sweden. The aim of this study was to discuss the supervision of undergraduate students who are conducting a master's project. This study focused on the roles and relationship of the supervisor and student. The model of Bartlett and Mercer (2000) used in this study had three approaches. The first one was "creating in the kitchen" where the supervisor is the leader of this relationship, and have a close relationship. The second approach was the "digging in the garden", where the relationship between the supervisor and student is loose and they do not work together, and the supervisor just give advice to the student. The third approach was the "bush walking", where the supervisor and student have equal power and have very close relationship. The results were that supervisors can impact the supervision

process by organizing the communication process with students. Controlling the communication style by being formal is necessary but not being too formal. Supervisors should not give the student ready answers, instead, they should show them the ways to overcome any project related problems. The study assumed that the "creating in the kitchen" model was the most suitable approach to deal with the students. However, there is no ultimate, standardized model that can be perfect for supervision. Being aware of the difficulties that could arise during the supervision process from the beginning and learning about them is the key to solve them and improve the supervision experience. It is also important to have a "learning contract" between the supervisor and student that states a clear scope and clear goal to show both parties engagement with the project, to reach the successful master's project supervision experience. The main last result was that supervisors should support students during their writing master's project journey with allowing them to be independent but not leaving them standing alone.

Another example of approaches extracted by studying students' experiences and opinions was Ylijoki (2001), who has identified the issues surrounding thesis writing, from the point of view of students. In this study, 72 students from different fields of study, from a Finnish university, were interviewed. Based on the experiences of those students, four core cultural narratives were developed: the heroic, tragic, businesslike and penal stories. Each story presents a different way of viewing the importance of thesis writing, the relationship between the supervisor and student, and study problems. It was seen that every student subconsciously lived a story, with a certain idea about his or her thesis.

The first narrative is the heroic narrative includes the student viewing the thesis writing stage as mythical, as the highpoint of their story, something that determines their worth as student, and measures their ability to hold their own in the real world; the student feels the need to work alone, and views the supervisor as a colleague or a friend to have discussions with, rather than someone to get guidance from. Their story has the typical happy ending, where their hard work pays off in the end with a more or less excellent thesis. It changes them, and they become much more confident in their abilities.

The second one is the tragic narrative, although had the student see thesis writing as mythical, they feared it. The student never feels capable enough to rise to the challenge. Like the hero, this student has high hopes and ambitions, and has been a top student and highly self-dependent. This makes it difficult for them to ask for guidance if they are stuck at some point in the process. Also, if the supervisor does not understand their difficulty, it makes them feel lonely, depressed, and makes them avoid further interaction with the supervisor. The resulting delay in graduation highly affects their self-esteem, and the story has an unhappy ending. They usually drop out due to other commitments. They are left with trying to console themselves.

The third narrative is the businesslike which is different from the above two in that thesis writing, for the student, is not mythical. It's just another course requirement, and not the top of their college studies. According to the student, it doesn't require superhuman intelligence or inspiration to get the thesis done; all it requires is persistence and hard work. The student has a set routine for the writing and systematically finishes a part of the work daily. They regularly visit their supervisors, and try to get as much feedback from them as possible. Upon the

completion of the thesis, they feel reasonably pleased with themselves, and feel competent enough to take on the real world.

The last narrative is the penal which is similar to the businesslike in that the student considers thesis writing as not mythical. However, while the businesslike student views thesis writing as something that can help them improve their skills and is required like other courses, the student with the penal narrative views it as a punishment. They think that it is irrelevant to the job they will do in the industry. Thesis writing, according to them, lacks practical application, and is only meant for those aiming for a future in academia. For others like themselves, it is suffering. The supervisor for them is a prison guard who wants to make things difficult for them. Finally, they end up putting minimal effort for the thesis, and do a poor job only to finish it and be free again.

Ylijoki (2001) study concludes that it can be noted that students' experiences can be improved by recognizing their core narratives and correcting or encouraging them during the supervising process. Moreover, for enhancing the relationship between the students and the supervisors, it is essential for them to belong to the same narrative.

Another study was Franke and Arvidsson (2011) that aimed to analyze the different ways that supervisors use to supervise doctoral students. Semi-structured interviews were conducted with 30 supervisors from different faculties in a Sweden university, who were selected randomly. The study revealed two main supervision structures; research practice-oriented supervision (lower percent of the sample used it, 33.3%) and research relation-oriented supervision (higher percent of the sample used it, 43.3%). Research practice-oriented supervision means where supervisor and student

share mutual research practice, so the supervisor and doctoral student share the topic area and/or methodology. On the other hand, the research relation-oriented supervision means the supervisor and student lack clear connection between their research practices, problems and approach. In addition, the results also showed that around 23.3 percent of supervisors use both structures.

2.2.4 Studies on supervisor feedback

Another concern regarding thesis/dissertation supervision also is the influence of the supervisors' feedback on students' satisfaction. Some researchers conducted studies that focused on the supervisor's feedback during the thesis/dissertation supervision. For example, de Kleijn, Mainhard, and Meijer (2013) investigated student perceptions of supervisor one-on-one and face-to-face feedback regarding thesis projects. Their aim was to find out what kind of feedback students perceive they received from their master's thesis supervisor, and the factors behind these perceptions, and how these factors related to students satisfaction with supervision (SSS) and perceived supervisor contribution to learning (PSCL). The authors focused only on the master's thesis project because it differs from the coursework in general with the duration that the project takes, the one to one interaction nature of the supervision, and the multi goals of the thesis. The study also discussed what students consider as feedback and how they act upon it. The authors mentioned that to support students learning, the feedback content should focus on the task rather than on the learners, the content of feedback should be goal-related, and elaborated. The sample was 1016 students from three cohorts who were working on their thesis or finished it recently. The instrument that used in this study was an online questionnaire of 23 items covering the feedback focus, goal-relatedness, and

elaboration, two items to measure the SSS, and five items to measure the PSCL. The main findings were that students perceive more focus on task, more negative feedback, and less focus on self-regulation and little feed up (feed up means the expectations, what they are going to do). It also showed that there is no contribution of the negative elaboration and focus on self-regulation to the SSS and PSCL. Further, it showed that the feed-forward, feed up (was minimally provided) and positive elaborated feedback were positively related to SSS and PSCL, and suggested that supervisors should invest in providing more of these three. Finally, it showed receiving positive and goal-related feedback from the supervisor during working on the master's thesis project is essential for students.

Another study was conducted by de Kleijn, Meijer, Pilot, and Brekelmans (2014). The aim of the study was to investigate students' perceptions of their relationship with supervisors and supervisors' feedback in master's thesis projects. Master's students studying in three different departments of a Dutch university were asked to fill an online questionnaire. With a response rate of 30%, 1016 of them completed the questionnaire. The instrumentation for feedback perceptions and perceptions of student-supervisor relationship were modified questionnaires, and for the quality of the supervision process, a seven-point scale was used to measure the Student Satisfaction (SS).

de Kleijn et al. (2014) found that students viewed the relationship as the most key feature of the process. Students needed to feel that their supervisor supports them, especially through assigning personal time for resolving their issues. Thus, giving special attention to the student's progress to support their research goals contributed positively in meeting the required outcome measures like the students

satisfaction. Secondly, it was found that there is high correlation between feedback and student perception of feedback, and perceived supervisor contribution to learning. Therefore, the more beneficial the feedback is, the more the students feel that the supervisor supports their learning and growth. Furthermore, statistical analyses point out certain interactions between relationship and interpersonal control. Thus, not only should students feel comfortable with their supervisor, but also supervisor feedback must give their work a clear direction. The research has shown that student perceptions change over the duration of the project. Hence, future research must examine how the change occurs. Thirdly, as mentioned above, student satisfaction and perceived supervisor contribution to learning are used as outcome measures. Even though students are highly capable of appreciating the contribution of supervisor feedback towards improving their work, they might not be able to understand fully certain teaching techniques that used by supervisors to achieve consistent results in the long-term. Finally, this study should be generalized with caution, since different university departments have different characteristics that cannot always be generalized. The context also must be kept in mind, especially when compared to doctoral studies.

Obviously, there is no one standardized set of approaches for graduate students' thesis/dissertation supervision. Nevertheless, we can notice some general similarities between them and Glickman et al. (2013) approaches. For example, the "functional model" (Lee, 2007), "informational power" (Raven, 2008), "expert power" (Aguinis et al., 1996), "technical rationality model" (Acker et al., 1994) and "creating in the kitchen" (Abdallah et al., 2010) styles are almost similar to the directive approaches. Where having equal power between the supervisor and student

such as "negotiated order model" (Acker et al., 1994) and "bush walking" (Abdallah et al., 2010) are representing the collaborative approach. Leaving the leadership of the project to the student as the "digging in the garden" (Abdallah et al., 2010) and "emancipation model" (Lee A. M., 2007) are more closely to the non-directive approach.

Based on different studies' findings, it is difficult to determine the best practices that supervisors should approach. There is no doubt that there are good supervisory models that were very useful, but it is context-specific, so it cannot be useful for everybody. In other words, there is no 'best practice model' that can be used in all institutions (Parker-Jenkins, 2016). Using control power by supervisor and positive relationship will make students satisfied, learn better and have higher grades. The control power is more positively related to the students' grades and learning, where the positive relationship leads more to students' satisfaction (de Kleijn, Mainhard, Meijer, Pilot, & Brekelmans, 2012). This means the academic support of the supervisor will improve the student productivity, and the psychosocial support will increase student's satisfaction with the supervisor mainly and the program in general (Forehand, 2008, as cited in Yob & Crawford, 2012). The literature also confirms the important impact of supervisor feedback on students' satisfaction. Expectations, roles and boundaries of the supervisory relationship must be made expressive at the beginning of a program to avoid any misunderstanding among all parties which will lead to higher rates of successful completion (Parker-Jenkins, 2016).

2.3 The United Arab Emirates Context

The field of higher education is a focus of interest to many countries around the world, including ambitious country as the United Arab Emirates (UAE). Higher education in the UAE is managed by two authorities; Ministry of Higher Education and Scientific Research (MoHESR) since 1993 and the Abu Dhabi Education Council (ADEC) that was established in 2005. However, recently, the MoHESR became part of the Ministry of Education. There are two levels of authorities, the local (at the Emirate level) and the federal which include all Emirates. ADEC is in charge of Abu Dhabi Emirate, which includes three main regions: Abu Dhabi, Al Ain and Al Dhafra. The Ministry of Education operates at the federal level which includes all of the Emirates (Higher Education, 2017).

This study is conducted in one federal institution that is funded by the federal government. This institution is one of the first universities that give graduate studies very high attention in the country. It has 37 master programs and 9 PhD programs (Retrieved from the university under investigation website, 2017). It is also one "of the largest Higher Education Institutions in Abu Dhabi in terms of students' enrolment" (Higher Education, 2017).

The admissions of the graduate programs are published in details, but individual colleges can also add some conditions. However, for the thesis/dissertation's supervisor role, there is no official announced list of thesis/dissertation supervisor duties. The only published information is that every graduate student will have an academic advisor who will help student on all academic matters concerning the student's program of study (Retrieved from the university under investigation website, 2017). Not all the master programs require a

thesis, but it is an obligatory for the PhD degree to write a dissertation except the Pharmacy program.

Chapter 3: Methodology

This study aims to describe the relationship between graduate student satisfaction and supervisor interpersonal approach at one university in the United Arab Emirates (UAE). This chapter includes a description and justification of the study methodology. It covers the following main parts: study design, instruments, population and sample, procedures, data analysis, and ethical considerations.

3.1 Study Design

This study does not only aim to explore the relationship between graduate student satisfaction and supervisor interpersonal approach, but it also to aims to examine students' perceptions of supervision behaviors during the process of writing their thesis or dissertation. The mixed method utilized in this study allows for drawing on the strengths of both quantitative and qualitative research methods to better understand, and to gain a more complete insight into a phenomenon (Gay, Mills, & Airasian, 2011). This study used an explanatory mixed method, where I started to collect the quantitative data first, and then the qualitative data to better understand the quantitative results. Using a mixed method for this study enabled a more detailed understanding of the topic at varying levels of depth. On the one hand, the quantitative data provided information from a large sample of graduate students concerning their perceptions of approaches of supervision adopted by the advisors and their satisfaction. On the other hand, the qualitative data provided more in-depth data and more detail of their experience.

3.2 Instruments

This is a mixed research design and therefore the instruments used were a closed questionnaire and semi-structured interview. Questionnaire (see Appendix A), which addressed the themes of the first and second research questions guiding my study. These questions were: What are the supervisory approaches used by faculty members and how satisfied are graduate students with these approaches? And, is there a significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the gender, level of education (Masters or PhD), and concentration (Sciences or Arts) of students?

The questionnaire had two main sections: demographic data and supervisory practices and graduate student satisfaction on every practice. The demographic data covered gender (male or female), level of education (Master or PhD), number of supervisors (worked with one supervisor or more than one), college (nine colleges grouped later into sciences and arts), and status (already graduated or about to graduate). The supervisory practices questions covered six main phases of writing thesis/dissertation, which were selecting the research topic, formulating the research problem, framing the literature review, deciding on the research methodology, providing feedback, and writing the discussion chapter. Then, a final question was asked about the overall approach that the supervisor used and the overall satisfaction level of student.

For questions about the approaches used, students selected from four choices: directive control, directive informational, collaborative, and non-directive. For the sub-questions of satisfaction, a six level satisfaction scale was used ranging from not

satisfied at all = 1 to totally satisfied = 6. One open question gave participants the chance to clarify any point in the questionnaire.

In the second phase of the study, semi-structured interviews were conducted to again a deeper and more detailed understanding of the supervisor-students relationship in the research supervision process. The interview questions (see Appendix B) addressed the third research question: How do students perceive the relationship between the supervisors' interpersonal approaches and their satisfaction with using these approaches?

The semi-structured interview gave me, as the interviewer the chance to ask questions that had been prepared in advance to collect the targeted information from the interviewees, and at the same time, it gave me the chance to improvise as needed (Wengraf, 2001).

The semi-structured interview had two main sections: demographic data and supervisory practices. The demographic data collected were similar to those in the questionnaire. The questions about the practices covered the six main phases of writing thesis/dissertation (selecting the research topic, formulating the research problem, framing the literature review, deciding on the research methodology, providing feedback, and writing the discussion chapter), and the overall approach that their supervisor used during the thesis/dissertation writing. All the main questions had four sub-questions to confirm which approach the supervisor used. A question about the participant's level of satisfaction was placed below every question.

3.2.1 Validity and reliability

To check the validity of the instruments, the questionnaire and interview questions were reviewed by six academics with experience in the field of education and research. For the questionnaire, the feedback was positive, with most commenting that it was well written. There were recommendations for minor adjustments to the questionnaire and interview questions, especially with regard to clarifying the language, and these were addressed. For instance, one academic recommended that I better clarify the differences between the four approaches to supervision. After meeting with her, I ensured that the differences between the approaches were more explicitly stated.

To measure the reliability of the instrument I used test-retest method by distributing the questionnaire to a group of 15 graduate students who were not included in the research sample. I subsequently redistributed it after 10 to 14 days to the same group. I asked the pilot group not to disregard their answers from the first administration, and to but to answer the questionnaire as they felt at that present moment. Then, I used Pearson's correlation coefficient to measure the correlation between their responses in the pre-and post-test for the supervisory practices. Following this, I used Cronbach's Alpha to test the reliability of the satisfaction scale. Table 1 and table 2 below show the results of the tests.

Table 1: Supervisory Practices (Pearson Correlation Coefficients)

	Pearson Correlation Coefficients	
Question 1	0.960	
Question 2	0.882	

Question 3	0.831
Question 4	0.928
Question 5	0.844
Question 6	0.867

Table 2: Satisfaction (Cronbach's Alpha)

Questions 1 to 6	Cronbach's Alpha
Pretest	0.951
Posttest	0.958

As shown in table 1, Pearson Correlation Coefficients scores were very high (0.831 to 0.960) which means that there is a high correlation between the first and second administration; indicating a high reliability of this part of the questionnaire. In table 2, Cronbach's Alpha scores for satisfaction were very high (0.951 and 0.958). These results indicated that the instruments were reliable.

3.3 Population and Sample

The target population for the study comprised of both master's and PhD graduates, who had written or were about to finish writing their thesis/dissertation between 2015 and 2017 at one university in the UAE (N= 213). The master's graduates were 175 students and the PhD graduates were 38 students. I intentionally targeted this group of students as they were more likely to remember their thesis/dissertation supervision experience than those students who had graduated earlier, or those who had not yet reached the final stages of their thesis/dissertation. The sample included both male and female students.

The questionnaire was sent to all graduated and enrolled graduate students. The number of participants who completed the questionnaire was 124 respondents with a 58.2% response rate. Table 3 below summarizes the demographic profiles of the respondents. Overall, the sample consisted of 45 males (36.3%) and 79 females (63.7%), with the majority enrolled in the science colleges (91students), compared to a smaller number in the arts colleges (33 students). Of the 124 respondents, 105 were master's students who had written or were in the process of writing a thesis, while the remaining 19 were PhD students. The number of participants who had been supervised by only one main supervisor was 83, while the number who reported changing their supervisors once or more was 41. The majority of participants (61.3%) had already graduated, whereas 38.7% were about to graduate.

Table 3: Demographic Data of the Sample

		N F		Frequency	Percent	Valid
		Valid	Missing			Percent
	Male	45	0	45	36.3	36.3
Gender	Female	79	0	79	63.7	63.7
	Total	124	0	124	100.0	100.0
	Master	105	0	105	84.7	84.7
Degree	PhD	19	0	19	15.3	15.3
	Total	124	0	124	100.0	100.0
Number of	One supervisor	83	0	83	66.9	66.9
supervisors	More than one	41	0	41	33.1	33.1
	Total	124	0	124	100.0	100.0
Collogo	Arts	33	0	33	26.6	26.6
College	Sciences	91	0	91	73.4	73.4

	Total	124	0	124	100.0	100.0
	Already graduated	76	0	76	61.3	61.3
Status	About to graduate	48	0	48	38.7	38.7
	Total	124	0	124	100.0	100.0

For participants in the semi-structured interviews, they were selected from the quantitative sample based on their willingness to sit for the interview. Everyone was asked to provide contact information in the questionnaires and 25 participants did so. Of these, 16 were purposively selected based on how cooperative they were during the quantitative data collection. Table 4 shows the demographic data of the interviewees.

Table 4: Demographic Data of Interviewees

	Gender	Degree	College	
Participant 1	Female	Master	Arts	
Participant 2	Female	PhD	Arts	
Participant 3	Female	Master	Sciences	
Participant 4	Male	PhD	Arts	
Participant 5	Female	Master	Arts	
Participant 6	Female	Master	Sciences	
Participant 7	Female	PhD	Sciences	
Participant 8	Female	Master	Sciences	
Participant 9	Female	Master	Sciences	
Participant 10	Female	Master	Arts	
Participant 11	Male	Master	Arts	
Participant 12	Female	Master	Sciences	

Participant 13	Female	PhD	Arts
Participant 14	Female	Master	Sciences
Participant 15	Female	Master	Arts
Participant 16	Female	PhD	Sciences

3.4 Procedures

Important procedures were undertaken to ensure proper ethical, institutional approval was sought and gained. I submitted all the requested papers to the Research Ethics Committee in the university to get approval to start distributing the questionnaire. I got the approval within two weeks (see approval letter in Appendix C). Then, the English version of the questionnaire was translated into Arabic. I established two electronic versions of the questionnaire (using Google Forms), one in English and another in Arabic. I contacted the Registration Department at the university under investigation to get the contact information of students who had graduated, and those who were in their last semester. The students' information was very essential, especially the students who already graduated. The Registration Department provided me with this information after I gained the approval from the department's head and director.

After these important procedures were implemented, I sent the links for the questionnaires as text messages to all 213 students to invite them to participate in this study. The electronic questionnaire required the informed consent of the participants, which was confirmed by clicking a button to indicate agreement to participate in the study before beginning the questionnaire. This was one advantage of using an electronic questionnaire. Another advantage was the possibility of making all the questions obligatory, so I did not have any missing data. The only

non-obligatory question was the open question at the end of the questionnaire. After sending them the link, I sent another text message as a reminder, to get a higher response rate.

Willing participants from the quantitative sample (who provided me with contact information) were subsequently contacted to sit for a semi-structured interview (N=25). I sent a text message to all 25 participants and 16 of them agreed to conduct the interview. The average duration of each interview was from 12 to 35 minutes. Most of the interviews were face-to-face and recorded, while a few were phone interviews, because these students were from distant cities, where notes were taken during the interview. For the face-to-face interviews, I asked participants to sign the informed consent form and gave them a copy of it. For the phone interviews, the informed consent form was sent to participants prior to the interview. All interviews were then transcribed.

3.5 Data Analysis

For the quantitative study, I used frequencies (mainly percentages) to identify the most common approaches for supervision. Students' levels of satisfaction were assessed using a six-point Likert-type scale, ranging from not satisfied at all =1 and totally satisfied = 6, and the means, medians, modes and standard deviations were then calculated to ascertain the overall satisfaction level. The Statistical Package for the Social Sciences (SPSS) software was used to extract these frequencies and analysis of the data.

To find out the relationship between the supervision approach used and students' satisfaction level, One-Way ANOVA and Tukey tests for Post Hoc were

used for the analysis of each question. Here, the supervisor approach counted as the independent variable and the student satisfaction as the dependent variable. I used Mann Whitney test to find out the differences in the relationship between graduate students satisfaction and supervisor interpersonal approach according to the level of education, gender, and concentrations.

For the qualitative data, verbatim transcriptions of the interviews were completed as Word documents and printed out. A thematic analysis was then conducted to examine students' perceptions of their experience of working with the faculty supervisor during the thesis/dissertation writing process.

3.6 Ethical Considerations

The Research Ethics Committee approval was obtained as mentioned above, before distributing the questionnaire. The university Registration Department head and director gave me the necessary approval to contact the students. All participants were informed that their participation was voluntary and all the information provided will remain confidential and anonymous. There was no anticipated physical or psychological risk to the participants. They were informed that they have the right to withdraw from the study at any time.

Chapter 4: Results

This study aims to describe the relationship between graduate student satisfaction and supervisor interpersonal approach at one governmental university in the United Arab Emirates (UAE). The fourth chapter presents the results that were based on the quantitative and qualitative data analysis. For the quantitative data analysis, the Statistical Package for the Social Sciences (SPSS) software was the tool to conduct the needed calculations. For the qualitative data, a thematic analysis was used to describe students' perceptions of their experience working with the faculty supervisor during the process of writing their thesis/dissertation. These data analyses answer the following research questions.

- 1. What are the supervisory approaches used by faculty members and how satisfied are graduate students with these approaches?
- 2. Is there a significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the gender, level of education (Masters or PhD), and concentration (Sciences or Arts) of students?
- 3. How do students perceive the relationship between the supervisors' interpersonal approaches and their satisfaction with using these approaches?

4.1 Results of Question One

What are the supervisory approaches used by faculty members and how satisfied are graduate students with these approaches?

Supervisory approaches: Table 5 displays the approaches that supervisors used with graduate students in percent (%). For selecting the research topic phase,

the collaborative approach was the most used approach with 32.3%, then with also high percentage, the non-directive approach 29%, and the least used approach was the directive informational with 16.9%. For formulating the research problem phase, the most used approach was also the collaborative 51.6%, and the least used approach was the directive informational approach that was used with 11.3% of participants. As for the framing literature review phase, the most used approaches were the collaborative approach and the non-directive approach with equal percentage (37.9%), and the least used approach was the directive informational approach that was used with 10.5% of participants. While deciding on the research methodology phase, supervisors used collaborative approach 46%, then the directive control approach 21%, and the least used approach was the directive informational 14.5%. Regarding providing feedback, 52.4% of the supervisors used the collaborative approach, and 21.8 % of the supervisors used the directive informational approach, and the least used approach was the directive control 11.3%. As far as the sixth phase is concerned, which is writing the discussion chapter, the most used approach by the supervisors was the collaborative approach 54.8%, and the least used approach was the directive control approach 9.7%.

Table 5: The approaches that supervisors used with graduate students in percent (%)

	Directive control Approach	Directive Informational Approach	Collaborative Approach	Non-directive Approach
1. Selecting the research topic.	21.8	16.9	32.3	29.0
2. Formulating the research problem.	20.2	11.3	51.6	16.9
3. Framing the	13.7	10.5	37.9	37.9

literature review.				
4. Deciding on the research methodology.	21.0	14.5	46.0	18.5
5. Providing feedback.	11.3	21.8	52.4	14.5
6. Writing the discussion chapter.	9.7	12.9	54.8	22.6
7. Overall approach.	13.7	11.3	57.3	17.7

After identifying the most and least used approach in every phase in writing the thesis/dissertation, I compared the results for question seven, overall approach, and the average of the approaches used during the six phases (answers of question one to question six). To calculate the average of the used approach for the six phases, I divided the total percent of all the phases for each approach on six, as shown in table 6. For the overall used approach, the collaborative approach was the highest used approach 57.3%, followed by the non-directive approach 17.7%, and the least used approach was the directive informational 11.3%.

All phases average percentages were fairly consistent with the percentage of the overall approach, i.e., they have the same order, but with different percentages. The collaborative approach ranked the highest used approach 45.8%, followed by the non-directive approach 23.2%, and the least used approach was the directive informational 14.7%.

Table C. The		1 4			~4d~4~ i		/ \
Table 6: The	approaches u	nat subervisoi	s usea with	graduate	students in	percent (%	ດ)
	upproduction of		5 655 65 111611	5-44-44	5000001105 111	p (/ ·	٠,

	Directive control Approach	Directive Information Approach	Collaborative Approach	Non-directive Approach
All phases average	16.3	14.7	45.8	23.2
Overall approach	13.7	11.3	57.3	17.7

In general, the most dominant approach used by the supervisors from the participants' perspective was the collaborative approach. On the other hand, the directive informational approach was the least popular approach used by the supervisor.

Students satisfaction: Results of participants' satisfaction level with their supervisor interpersonal approach at every phase of the thesis/dissertation are reported in table 7. Six level satisfaction scale was used where the means from 1 - 1.83 means not satisfied at all, 1.84 - 2.66 unsatisfied, 2.67 - 3.49 somewhat unsatisfied, 3.5 - 4.32 somewhat satisfied, 4.33 - 5.15 satisfied, and 5.16 - 6 is totally satisfied.

Table 7: Students satisfaction level with each thesis/dissertation phase and the overall satisfaction level

	N		Mean	Median	Mode	Std.
	Valid	Missing				Deviation
1. Satisfaction with selecting the research topic.	124	0	5.31	6	6.00	.95
2. Satisfaction with formulating the research problem.	124	0	5.11	5	5.00	1.07
3. Satisfaction with	124	0	5.11	5	6.00	1.05

framing the literature.						
4. Satisfaction with deciding on the research methodology.	124	0	5.18	5	6.00	1.03
5. Satisfaction with providing feedback.	124	0	5.01	5	6.00	1.25
6. Satisfaction with writing the discussion chapter.	124	0	5.12	5	6.00	1.16
7. General satisfaction with supervisor approach.	124	0	5.13	5	6.00	1.19

In general, students were satisfied with their supervisors' approaches. The means were from 5.01 to 5.31. These mean scores indicate that the students reported a level of satisfaction between satisfied and totally satisfied with the supervisor interpersonal approach. They were totally satisfied with selecting the research topic (M=5.31) and deciding on the research methodology (M=5.18), and they were satisfied with the rest (formulating the research problem, framing the literature, providing feedback, and writing the discussion chapter). They had highest satisfaction level was with selecting the research topic while the lowest satisfaction level was with providing feedback (M=5.01).

To check the stability of the overall satisfaction of participants with the supervisor approach, I compared the general satisfaction level results in question seven and the average of the satisfaction level for the six phases (from question one to question number six). To calculate the cumulative satisfaction level mean of the

six phases, I divided the total means of all phases satisfaction level on six, as shown in table 8.

Table 8: Students satisfaction level with each thesis/dissertation phase and the overall satisfaction level statistics

	Mean	Std. Deviation
General Satisfaction with supervisor approach.	5.13	1.19
All phases satisfaction level	5.14	1.08

The general satisfaction level of participants with their supervisor interpersonal approach is 5.13, and the overall satisfaction level of all phases is 5.14. There is no big difference between the two means, indicating that students were satisfied in general.

4.2 Results of Question Two

Is there a significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the gender, level of education (Masters or PhD), and concentration (Sciences or Arts) of students?

To answer this question Mann-Whitney U test was performed to find significant differences based on gender, level of education, and concentration. The results of the test indicated that there was a significant difference based on gender (p=.019). For the interpersonal approach of the supervisor, female students (M=67.61) believed that the faculty supervisor used the collaborative approach more than male students (M=53.52) (See tables 9 and 10). For the level of satisfaction both

male and female students were satisfied, therefore, there was no significant difference.

Table 9: Mean difference between male and female for the used interpersonal approach

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
Overall, during the writing	Male	45	53.52	2408.50
of my thesis/dissertation, I	Female	79	67.61	5341.50
believe:	Total	124		

Table 10: Test Statistics a

	Satisfaction of students based on gender
Mann-Whitney U	1373.500
Wilcoxon W	2408.500
Z	-2.343
Asymp. Sig. (2-tailed)	.019

a. Grouping Variable: Gender

The test results also indicated that there was no significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the level of education and concentration. To conclude, table 11 provides a summary of the question two results.

Table 11: Significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach

	Supervisor interpersonal approach	Student satisfaction
Gender	Yes	No
Level of Education	No	No
Concentration	No	No

4.3 Results of Question Three

How do students perceive the relationship between the supervisors' interpersonal approaches and their satisfaction with using these approaches?

Quantitative and qualitative data were collected and analyzed to answer this question. Quantitative data results were presented first, and then the qualitative data results were presented.

4.3.1 Quantitative data results

One-Way ANOVA and Tukey tests for Post Hoc analysis were performed to test if there is a relationship between supervisors' interpersonal approach and students' satisfaction level. The supervisor approach is the independent variable and the student satisfaction is the dependent variable.

First, I conducted a One-Way ANOVA test to check if there is a relationship between supervisor interpersonal approach and graduate student satisfaction level. Then I followed it with a Tukey post hoc test to check which approach particularly is related to more students' satisfaction level. I did the One-Way ANOVA and Tukey post hoc tests for every question of the six main phases of writing thesis/dissertation namely: selecting the research topic, formulating the research problem, framing the literature review, deciding on the research methodology, providing feedback, and writing the discussion chapter, and I did the test also for the overall approach and satisfaction.

The tests results indicated that there was no statistically significant relationship between the supervisor interpersonal approach used and graduate student satisfaction level regarding the selection the research topic (p=.427) which means

that students satisfaction was not affected by any approach the supervisor used in helping the student select the research topic.

The analysis of variance showed that there was a statistically significant relationship between the use of the supervisor approach and student satisfaction level regarding formulating the research problem, F (3. 120) = 5.563, p=.001 (table 12). Multiple comparisons showed that the collaborative approach is related positively to students' satisfaction, while the directive control approach is related negatively with student satisfaction in formulating the research problem (table 13).

Table 12: ANOVA table of graduate students satisfaction level with the supervisor's approach in "formulating the research problem"

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.293	3	5.764	5.563	.001
Within Groups	124.344	120	1.036		
Total	141.637	123			

Table 13: Post Hoc Tests 1

Multiple Comparisons

Dependent Variable: How satisfied are you with the supervisor's behavior in "formulating the research problem"?

Tukey HSD					
(I) Formulating research problem:	(J) Formulating research problem:	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Upper Bound Bound

Directive Control	Directive Informational	76571	.33980	.115	- 1.6510	.1196
	Collaborative	88625*	.24008	.002	- 1.5118	2607
	Non-Directive	24190	.30132	.853	- 1.0270	.5431
Directive	Directive Control	.76571	.33980	.115	1196	1.6510
Informational	Collaborative	12054	.30034	.978	9030	.6620
	Non-Directive	.52381	.35122	.446	3913	1.4389
Collaborative	Directive Control	.88625*	.24008	.002	.2607	1.5118
	Directive Informational	.12054	.30034	.978	6620	.9030
	Non-Directive	.64435	.25600	.062	0226	1.3113
Non-Directive	Directive Control	.24190	.30132	.853	5431	1.0270
	Directive Informational	52381	.35122	.446	- 1.4389	.3913
	Collaborative	64435	.25600	.062	- 1.3113	.0226

^{*.} The mean difference is significant at the 0.05 level.

The analysis of variance exhibited that there was a statistically significant relationship between the use of the supervisor approach and student satisfaction level regarding framing the literature, F(3.120) = 3.004, p=.033 (table 14). Multiple comparisons showed that the collaborative approach is related positively to students' satisfaction, in contradiction to the non-directive approach which is related negatively to student satisfaction in framing the literature (table 15).

Table 14: ANOVA table of graduate students satisfaction level with the supervisor's approach in "framing the literature"

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.531	3	3.177	3.004	.033
Within Groups	126.889	120	1.057		
Total	136.419	123			

Table 15: Post Hoc Tests 2

Multiple Comparisons

Dependent Variable: How satisfied are you with the supervisor's behavior in "framing the literature"?

Tukey HSD						
(I) 3: Framing the literature review:	=		fference Error		95% Confide Interval	
					Lower Bound	Upper Bound
Directive Control	Directive Informational	21267	.37887	.943	- 1.1998	.7744
	Collaborative	50563	.29103	.309	- 1.2639	.2526
	Non-Directive	.11139	.29103	.981	6469	.8696
Directive	Directive Control	.21267	.37887	.943	7744	1.1998
Informational	Collaborative	29296	.32224	.800	- 1.1325	.5466
	Non-Directive	.32406	.32224	.746	5155	1.1636
Collaborative	Directive Control	.50563	.29103	.309	2526	1.2639
	Directive Informational	.29296	.32224	.800	5466	1.1325

	Non-Directive	.61702*	.21212	.022	.0644	1.1697
Non-Directive	Directive Control	11139	.29103	.981	8696	.6469
	Directive Informational	32406	.32224	.746	- 1.1636	.5155
	Collaborative	61702*	.21212	.022	- 1.1697	0644

^{*.} The mean difference is significant at the 0.05 level.

Moreover, the analysis of variance showed that there was a statistically significant relationship between the use of the supervisor approach and student satisfaction level regarding deciding on the research methodology, F (3. 120) = 8.167, p=.000 (table 16). Multiple comparisons showed that the collaborative approach is related positively to students' satisfaction, while the non-directive approach is related negatively to student satisfaction in deciding on the research methodology (table 17).

Table 16: ANOVA table of graduate students satisfaction level with the supervisor's approach in "deciding on the research methodology"

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.058	3	7.353	8.167	.000
Within Groups	108.039	120	.900		
Total	130.097	123			

Table 17: Post Hoc Tests 3

Multiple Comparisons

Dependent Variable: How satisfied are you with the supervisor's behavior in

"deciding on the research methodology"?

Tukey HSD						
(I) 4: Deciding on the research methodology:	(J) 4: Deciding on the research methodology:	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Directive Control	Directive Informational	39316	.29094	.532	- 1.1512	.3649
	Collaborative	67679*	.22455	.016	- 1.2618	0917
	Non-Directive	.40635	.27161	.443	3013	1.1140
Directive Informational	Directive Control	.39316	.29094	.532	3649	1.1512
	Collaborative	28363	.25654	.687	9520	.3848
	Non-Directive	.79952*	.29860	.042	.0215	1.5775
Collaborative	Directive Control	.67679*	.22455	.016	.0917	1.2618
	Directive Informational	.28363	.25654	.687	3848	.9520
	Non-Directive	1.08314*	.23439	.000	.4725	1.6938
Non-Directive	Directive Control	40635	.27161	.443	- 1.1140	.3013
	Directive Informational	79952*	.29860	.042	- 1.5775	0215
	Collaborative	-1.08314*	.23439	.000	- 1.6938	4725

^{*.} The mean difference is significant at the 0.05 level.

The analysis of variance displayed that there was a statistically significant relationship between the use of the supervisor approach and student satisfaction level regarding providing feedback, F(3.120) = 22.514, p=.000 (Table 18). Multiple comparisons showed that the collaborative approach is related positively to students'

satisfaction; however, the non-directive approach is related negatively to student satisfaction in providing feedback (Table 19).

Table 18: ANOVA table of graduate students satisfaction level with the supervisor's approach in "providing feedback"

	Sum of Squares	f df	Mean Square	F	Sig.
Between Groups	68.784	3	22.928	22.514	.000
Within Groups	122.207	120	1.018		
Total	190.992	123			

Table 19: Post Hoc Tests 4

Multiple Comparisons

Dependent Variable: How satisfied are you with the supervisor's behavior in "providing feedback"?

Tukey HSD						
(I) 5: Providing feedback:	(J) 5: Providing feedback:	Mean Difference	Std. Error	Sig.	95% Co	onfidence
reedback.	reedback.	(I-J)			Lower Bound	Upper Bound
Directive Control	Directive Informational	25397	.33236	.870	-1.1199	.6120
	Collaborative	61978	.29734	.164	-1.3945	.1549
	Non-Directive	1.57937*	.35961	.000	.6424	2.5163
Directive Informational	Directive Control	.25397	.33236	.870	6120	1.1199
	Collaborative	36581	.23105	.392	9678	.2362
	Non-Directive	1.83333*	.30708	.000	1.0333	2.6334
Collaborative	Directive	.61978	.29734	.164	1549	1.3945

	Control					
	Directive Informational	.36581	.23105	.392	2362	.9678
	Non-Directive	2.19915*	.26878	.000	1.4989	2.8994
Non-Directive	Directive Control	-1.57937*	.35961	.000	-2.5163	6424
	Directive Informational	-1.83333*	.30708	.000	-2.6334	-1.0333
	Collaborative	-2.19915*	.26878	.000	-2.8994	-1.4989

^{*.} The mean difference is significant at the 0.05 level.

The analysis of variance showed that there was a statistically significant relationship between the use of the supervisor approach and student satisfaction level regarding writing the discussion chapter, F (3. 120) = 9.752, p=.000 (table 20). Multiple comparisons showed that the collaborative approach is related positively to students' satisfaction, while the non-directive approach is related negatively to student satisfaction in writing the discussion chapter (table 21).

Table 20: ANOVA table of graduate students satisfaction level with the supervisor's approach in "writing the discussion chapter"

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.378	3	10.793	9.752	.000
Within Groups	132.807	120	1.107		
Total	165.185	123			

Table 21: Post Hoc Tests 5

Multiple Comparisons

Dependent Variable: How satisfied are you with the supervisor's behavior in "writing the discussion chapter"?

Tukey HSD						
(I) 6: Writing the discussion chapter:	(J) 6: Writing the discussion chapter:	Mean Difference (I-J)	Std. Error	Sig.	95% Confide Interval	
					Lower Bound	Upper Bound
Directive Control	Directive Informational	68750	.40174	.322	1.7342	.3592
	Collaborative	-1.02941*	.32940	.012	- 1.8876	1712
	Non-Directive	.14286	.36298	.979	8028	1.0886
Directive	Directive Control	.68750	.40174	.322	3592	1.7342
Informational	Collaborative	34191	.29231	.647	- 1.1035	.4197
	Non-Directive	.83036	.32969	.062	0286	1.6893
Collaborative	Directive Control	1.02941*	.32940	.012	.1712	1.8876
	Directive Informational	.34191	.29231	.647	4197	1.1035
	Non-Directive	1.17227*	.23622	.000	.5568	1.7877
Non-Directive	Directive Control	14286	.36298	.979	- 1.0886	.8028
	Directive Informational	83036	.32969	.062	- 1.6893	.0286
	Collaborative	-1.17227*	.23622	.000	- 1.7877	5568

^{*.} The mean difference is significant at the 0.05 level.

The analysis of variance showed that there was a statistically significant relationship between the use of the supervisor approach and student satisfaction level in general, F(3.120) = 17.770, p=.000 (table 22). Multiple comparisons showed that the collaborative approach is the most approach that was related positively to the students satisfaction, while the non-directive approach was related negatively to student satisfaction (table 23).

Table 22: ANOVA table of overall satisfaction level of graduate students with their supervisor's approach

	Sum o Squares	f df	Mean Square	F	Sig.
Between Groups	53.503	3	17.834	17.770	.000
Within Groups	120.432	120	1.004		
Total	173.935	123			

Table 23: Post Hoc Tests 6

Multiple Comparisons

Dependent Variable: In general, how satisfied are you with your supervisor's approach?

Tukey HSD						
(I) 7: Overall, during the writing of my	(J) 7: Overall, during the writing of my	Mean Differenc e (I-J)	Std. Error	Sig.	95% Confide Interval	
thesis/dissertation , I believe:	thesis/dissertation , I believe:				Lower Bound	Upper Bound
Directive Control	Directive Informational	47059	.3615 5	.56 4	- 1.412 6	.4714
	Collaborative	-1.11848*	.2705	.00	- 1.823	4137

			0	0	2	
	Non-Directive	.52941	.3235 0	.36 2	3134	1.372 3
Directive Informational	Directive Control	.47059	.3615 5	.56 4	4714	1.412 6
	Collaborative	64789	.2929 5	.12 6	- 1.411 1	.1154
	Non-Directive	1.00000*	.3425 0	.02 1	.1077	1.892 3
Collaborative	Directive Control	1.11848*	.2705 0	.00 0	.4137	1.823 2
	Directive Informational	.64789	.2929 5	.12 6	1154	1.411 1
	Non-Directive	1.64789*	.2444 5	.00 0	1.011 0	2.284 8
Non-Directive	Directive Control	52941	.3235 0	.36 2	1.372 3	.3134
	Directive Informational	-1.00000*	.3425 0	.02 1	1.892 3	1077
	Collaborative	-1.64789*	.2444 5	.00	- 2.284 8	1.011 0

^{*.} The mean difference is significant at the 0.05 level.

4.3.2 Qualitative data results

Thematic analysis was conducted to present the qualitative results. Seven main themes were created namely: selecting the research topic, formulating the research problem, framing the literature review, deciding on the research methodology, providing feedback, writing the discussion chapter, and overall supervisor approach.

Theme one: Selecting the research topic

When selecting the research topic, students provided different opinions. But overall, students were satisfied with the way their supervisors worked with them to select the topic of their research. Some of them (N=4) agreed that their supervisors gave them the chance to select the topic as they wanted and they were satisfied with their supervisors' approach. One of them said, "He was very cooperative, he gave me chance to select and decide what I want to study based on my interests and needs as a novice researcher... So, the degree of satisfaction with my supervisor is very high" (Participant 5). Another participant explained, "It was on my own choice... The supervisor was 100% supportive in that stage... and I am totally happy with that" (Participant 7).

Half of the interviewed participants (N=8) were satisfied because their supervisors selected the research topic for them or at least interfered in the selection process. One of them mentioned, "He had given me so many choices... He sat with me and said this is a big topic you can select it and then you dig deeper... the general topic was his concept. And I am fully satisfied" (Participant 3). Another said, "After several meetings, we agreed on the topic... I was really satisfied" (Participant 12).

However, two students were not satisfied because their supervisors selected the topic for them, the first one said,

My supervisor selected my topic. I had another topic for my thesis, but he said no, it will take time... I am not satisfied because I continued with this topic and I hated it... I have discussed this issue with him more than once, but he refused to change it (Participant 1).

The other student illustrated that, "He said, as you did not select a topic yet, I prefer you select this topic, and I agreed. At that time, I needed a topic so I can graduate, I was not satisfied that much" (Participant 10). Another two students were on the opposite side; they were not satisfied because their supervisors did not help them to select the topic. One of them said,

I had the complete freedom from my advisor to choose the topic and he was supportive to put my thoughts about the topic in the correct lane. I wasn't satisfied completely with the way of my supervisor, because I suffered too much to choose my topic (Participant 15).

Theme Two: Formulating the research problem

For formulating the problem, half of the students (N=8) mentioned that their supervisors used the directive approach (control or informational) and they were all satisfied. Participant 8 said, "He is a specialist, so he knew where the problem is, then he explained the idea to me and then I added to it... and I was satisfied with this." Another said, "I was totally satisfied especially that he taught me how to write it and then gave me a chance to write alone" (Participant 12).

The other half of participants (N=8) believed that their supervisors used the non-directive interpersonal approach. However, not all of them were satisfied with this approach. Participant 2 mentioned, "The supervisor did not have a role in formulating my research argument. But I am satisfied that she gave me the freedom to write it as I want." Another participant explained that, "In the beginning, he did not ask me for a research problem so I wrote it alone... I was not satisfied at all

because the problem statement was a critical part of the research, he should check it before the defense" (Participant 11).

In general, the majority of students (N=14) were satisfied with their supervisors interpersonal approach during formulating the research problem phase.

Theme Three: Framing the literature review

For framing the literature review, half of students (N=8) believed the directive approach (control or informational) were the most used approach, as their supervisors provided them with resources and gave them clear guidelines to frame the literature review chapter. All of them were satisfied except Participant 1 who explained, "He told me how to do it, and I just did it... I felt that he is controlling me and what should I write... Honestly, I was not satisfied." But this is seen differently by Participant 9, "He gave me steps to follow and I wrote few pages then I showed him. Then, if I was wrong he would correct me, and I did the same with every portion of the chapter... I was happy with this way."

Some of the participants (N=5) thought that their supervisors used the non-directive approach. Three of them were not highly satisfied with such an approach but moderately satisfied. Participant 8 mentioned, "I am the one who wrote the literature review... he just approved it when I finished it... I wished that he could have guided me, but I was satisfied as he provided me with some resources." Another participant said, "He wasn't actually much involved in this chapter, he gave me the freedom to write. And that was fine" (Participant 3).

While the rest of the participants (N=3) believed that their supervisors used the collaborative approach and they were all highly satisfied. Participant13, for

example, mentioned, "I discussed with my supervisor my ideas of how to frame my research and then he provided me with additional insight on how to write better the framework." But in general, the majority of students (N=12) were satisfied with the supervisors' interpersonal approaches during framing the literature review phase.

Theme Four: Deciding on the research methodology

For deciding on the research methodology, half of students (N=8) believed that their supervisors used the directive approach (control or informational). Most of them were satisfied but some of them were not highly satisfied with this approach. Participant 12 illustrated, "My supervisor suggested the research methodology for my research and he told me that it will be great if I had any suggestion and contribution to it... I really appreciate his way." Participant 13 added:

My supervisor agreed that I use qualitative methods but at the same time he urged me to use mixed methods and include quantitative methods even when I wasn't fully convinced... I'm quite satisfied with how my supervisor agreed on my usage of the qualitative methods, but I am not satisfied with how I was urged to use quantitative methods when I personally thought it wasn't much needed in my study.

Another group of students (N=5) thought that their supervisors used the non-directive approach. Only one of them was not highly satisfied and the rest were highly satisfied. Participant 5 mentioned, "He let me design each instrument myself without his intervention... he was a facilitator and a guider...I am really satisfied."

Participant16 said, "The literature had a great existing knowledge on my topic, which made it easier for me to choose research methodology."

Two of the participants said that their supervisors used the collaborative interpersonal approach, and they were also satisfied. Participant 3 said, "That was also both sides' decision... I did the experiment fully, he suggested some things and I suggested other things to come up with this method... It was perfect." Therefore, overall, the majority of the students (N=12) were satisfied with the supervisors' interpersonal approach in deciding on the research methodology phase.

Theme Five: Providing feedback

For providing feedback, half of students (N=8) believed that their supervisors used the directive approach (control or informational). Most of them were satisfied but two of them were not satisfied with this approach. Participant 15 mentioned, "My supervisor gave me feedback on each single word I wrote. I am totally satisfied with his invaluable feedback and notes." Another illustrated,

This is how it went. I would usually write up a section of the study. Take it to the supervisor—we would read it together and while reading it my supervisor would give me feedback. And then I had to go make necessary changes and modifications based on his feedback... My supervisor gave me a lot of feedback, but I only chose to work on areas in which I thought were crucial... I'd have to say I wasn't very satisfied with the feedback. I rather felt that my supervisor gave me broad and vague feedback, rather than specific ones (Participant 13).

Six of the students believed that their supervisors used the collaborative approach in providing them with feedback, and all of them were satisfied. Participant 4 explained, "Actually he gave me precise and accurate feedback and asked me either to reflect on it, either to do them or say why you cannot do them... I am very satisfied."

Only two students mentioned that their supervisors used the non-directive approach, and they both were not satisfied. Participant 14 said, "The supervisor's feedback was too slow and delayed, I did most of the thesis without his feedback... I am not satisfied." But overall, the majority of the students (N=12) were satisfied with the supervisors' interpersonal approach in providing feedback.

Theme Six: Writing the discussion chapter

For writing the discussion chapter, a number of students (N=7) believed that their supervisors used the directive approach (control or informational). Most of them were satisfied, only one of them was not highly satisfied with this approach. Participant 15 mentioned,

The supervisor advised me to have each research question and use my data to answer it and relate what I got to the theories I discussed in my study. Then, he gave me his feedback and I made the modification he recommended. I was totally satisfied with the way he dealt with this chapter... he made it very easy to me.

Participant 6 said, "I wrote the discussion chapter then I sat with my supervisor and she told me what to modify... She asked me to delete a part from it but I liked that

part and tried to convince her to keep it but she refused... so I was kind of not satisfied."

Four students believed that their supervisors used the collaborative approach and all of them were satisfied. According to Participant 3, "It was a brainstorming and we actually sat together and we discussed like after this you can write this, experimentation, implementation, discussion... and this is the best possible way I suppose."

Five students of thought that their supervisors used the non-directive approach, two of them were satisfied and the rest were not satisfied. Participant 5 mentioned, "This is the only chapter that I wrote without my advisor's feedback or any instructions... Of course I was satisfied, because he provided me with self-confidence, how to be a good researcher how to think like a researcher, how to connect ideas how to provide or justify your results."

But Participant 14 viewed it differently, "The discussion chapter was written by me without any guidance from the supervisor, I was led by previous studies to write it... I was not satisfied."

In general, the majority of the students (N=12) were satisfied with the supervisors' interpersonal approaches in the phase of writing the discussion chapter.

Theme Seven: Overall supervisor approach

For the overall supervisor approach, students had different opinions. Most of them (N=10) believed that their supervisor had mixed between more than one approach, and they were all satisfied. Participant 15 illustrated:

My supervisor didn't accept everything I wrote. Sometimes he gave notes and we discussed them but other times he rejected some points and justified his rejection. Therefore, as a novice researcher I can't insist on things I didn't know if they were right at the first place. I think that my supervisor was directive and rarely collaborative and that was because my shallow experience in the research field. I was satisfied with his way of supervising and that was proved by the few points highlighted by the discussion committee.

Participant 13 mentioned, "Honestly, I feel it was combination of all, but mostly it was a non-directive approach. And with the methodology part it was a directive approach." Participant 16 added, "It was a combination of all approaches with more of independent work from my side, and more of positive and supportive guidance from my supervisor's side, and the result was a great deal of learning outcome."

Three students out of the 10 mentioned that their supervisors started with the directive approach (two said control and one informational) especially in selecting the topic, then they moved to the non-directive approach. All of them were not highly satisfied. Participant 14 said, "He used the non-directive approach, I tried to contact him so many times to follow up with me without any response... He started the supervision very well then he started to ignore my calls and emails." Participant 11 mentioned also that, "He selected the topic, then he gave me the complete freedom to do all the research sections alone... I am not satisfied at all, because this way made me spend very long time writing my thesis."

Another three students out of the 10 students said that their supervisor moved from the directive approach (one said control and two informational) to the

collaborative approach, they all were satisfied. Participant 5 explained, "He provided me support at the beginning and tried slightly to remove this support until I became an independent learner... I was satisfied for sure."

Participant 6 also said, "She was directive in the beginning, and then she moved to the discussion approach. I am very satisfied with her behaviors."

The rest of the students (N=6) believed that their supervisors used the collaborative approach during the whole process, all of them were satisfied. Participant 2 elaborated:

Generally, for each chapter, I drew the outline and then discussed it with my supervisor to get her feedback on it. After writing, I gave her a part or a whole chapter to comment on. Whenever I have a problem regarding my research, I asked her for a meeting to discuss and make things clear... So it is mostly discussion... I am very satisfied. She is very helpful.

Also Participant 12 commented,

It was collaborative approach in which he allowed me to write with my own effort and then discussed all what I wrote. I think this helped me a lot to enhance my writing techniques in this scientific way... Also, his suggestions made my thesis strong.

In general, students were satisfied. However, most of them felt more satisfied when they have directions or discussions with their supervisors during every phase of their thesis/dissertation writing process. On the other hand, they were less satisfied

when their supervisors gave them the complete freedom to do what they wanted without any interference.

4.4 Summary

This chapter presented the results of the quantitative data collected from 124 graduate students and qualitative data collected from 16 students who had written or about to finish writing a thesis/dissertation during 2015-2017 at one university in the UAE. The results showed that students perceived that the collaborative approach was the mostly used approach by their faculty supervisors. In addition, graduate students in the sample reported that they were satisfied with their supervisors' approaches. In some cases, they are highly satisfied such as in selecting the research topic and deciding on the research methodology. The results indicated also that there was a relationship between the level of their satisfaction and the approach used by the supervisors. In general, the more collaborative faculty supervisors were, the more satisfied students became. In addition, using the non-directive supervision approach could lead to less satisfaction.

Chapter 5: Discussion

The purposes of this study were twofold. Firstly, the study explored the different supervision approaches used by faculty members with graduate students during the process of writing the thesis or dissertation. Secondly, it investigated the relationship between the supervisor's interpersonal approach and graduate student satisfaction from students' perspectives at one university in the United Arab Emirates (UAE). This study adopted as its theoretical framework, Glickman, Gordon and Ross-Gordon's (2013) interpersonal approaches identified as directive control, directive informational, collaborative and non-directive. It also utilized a mixed method approach where quantitative and qualitative data were collected and analyzed to study the topic in detail. This chapter presents a discussion of the study results, makes recommendations for stakeholders, and identifies areas for future research.

5.1 Results discussion

5.1.1 Question one: What are the supervisory approaches used by faculty members and how satisfied are graduate students with these approaches?

The main results of question one indicate that overall, the majority of students indicated the collaborative interpersonal approach was adopted by their supervisors, while the least commonly identified used approach was the directive informational approach. As for student satisfaction levels with supervisors' approaches, these were mostly rates as satisfied to highly satisfied.

Based on the interview results, the majority of the students (13 out of 16 interviewees) believed that their supervisors used a collaborative interpersonal approach during their thesis/dissertation writing process. Six of them stated that their supervisors used a collaborative interpersonal approach all the time, while three of

them reported that they used it during the later phases of the thesis/dissertation writing process, as they moved from directive interpersonal approach to the collaborative interpersonal approach. On the other hand, four of them stated that the supervisors used it alongside the other three interpersonal approaches.

It may be the case that, students might be reporting on the latest approach most used by their supervisors, in their responses, to the overall used approach question in the questionnaire. Hence, the collaborative interpersonal approach was mentioned as the most commonly used approach but it was probably not the only approach used. This means that when supervisors give students equal power in the thesis/dissertation writing process, and adopt discussion as a way of reaching agreements on decisions, it tends to increase students' satisfaction. This confirms what was found previously in the "negotiated order model" (Acker, Hill, and Black, 1994) and the "attractive supervisory style" (Fernando & Hulse-Killacky, 2005), where the supervision process was identified as one that is based on negotiation, change, and support by supervisor. In addition, when comparing the percentages of the overall used approaches across the different phases of the thesis/dissertation writing process, to average percentages of used approaches, a decrease is found in the use of collaborative approach. Furthermore, an increase is evident in the other three approaches (directive control, directive informational and non-directive). This confirms that supervisors tended to use more than one approach during the thesis/dissertation writing process in general, but used the collaborative approach more often.

5.1.2 Question two: Is there a significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the gender, level of education (Masters or PhD), and concentration (Sciences or Arts) of students?

Results of question two indicate that there was no significant difference in the relationship between graduate student satisfaction and supervisor interpersonal approach according to the level of education (Master's or PhD), and concentration of study (Arts or Sciences). These results agree with previous studies, which also found no significant difference based on the level of education and concentration of study (Shatnawi, 2006).

According to Glickman's developmental supervision, it was expected that Master's students would be more satisfied with directive approaches than PhD students. As for the Master's students, it was most likely their first experience of writing a thesis, so it was expected that they prefer to have more directions. It is expected that supervisors should be adopting the directive approach at the beginning, especially for first time graduate students till students gradually adapt to research procedures and build their research skills. Then, the supervisors might switch to the collaborative approach. According to Glickman et al. (2013), the best time to use the directive approach is when the learner does not have the knowledge about an issue and the supervisor possesses this knowledge. In this study, many students especially at the master's level can be considered first-time graduate students, who do not have the knowledge of thesis/dissertation writing process, while the supervisor has this knowledge; therefore, it is perhaps better to use the directive approach at this stage, then to gradually move towards the collaborative approach.

On the other hand, a significant finding in the data was related gender differences. Although both male and female students were equally satisfied with their

supervision, more female students believed that the supervisors used the collaborative approach compared to the male students. This finding may be attributed to a number of different factors, one of which may be that female students tended to be more committed to attend supervision meetings, which might mean that they had more discussions with the supervisor than their male counterparts. This in turn would affect their perceptions of the interpersonal approach used. It is important to note that previous studies have not identified a correlation between the students' evaluation of supervisors' performance and gender (e.g., Abo-Daf 2002; Alawi, Jabr & AboSamra 2008; Shatnawi, 2006). Therefore, further research would be valuable to further investigate this.

5.1.3 Question three: How do students perceive the relationship between the supervisors' interpersonal approaches and their satisfaction with using these approaches?

For question three the study found that there is a relationship between the supervisor's interpersonal approach and student satisfaction. Findings indicated that more collaborative the supervisor was, the more satisfied the student became. Conversely, the more the supervisor used the non-directive interpersonal approach, the less satisfied the student became. In collaborative supervision, there is more discussion as students are permitted to express their opinions and get feedback, unlike the other two approaches where they are either given directions or left to fend for themselves. Therefore, the study indicated that when there was a two-way channel of communication, students tended to be more satisfied with their supervisors.

Many studies encourage supervisors to be trained and to use different approaches depending on individual student capabilities, as different student

capabilities would require different supervisory strategies for a better supervision experience (e.g., Abdallah et al., 2010; Acker et al. 1994; Armstrong 2004; Fernando and Hulse-Killacky 2005; Lee 2008; McCallin and Nayar 2012; Raven 2008).

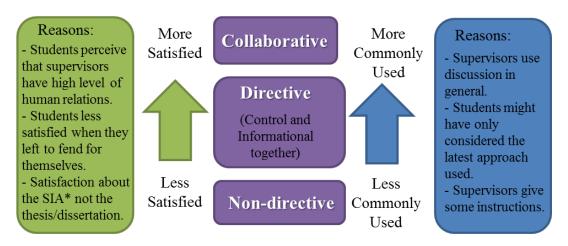
Some studies conducted regionally in different universities showed that students evaluated the human relation side of the supervisor at a very high level (e.g., Abo-Daf 2002; Alawi et al. 2008; Al-Sakraan 2016). Taking this into consideration, supervisors' high level of human relations might also have contributed to students' evaluation of the approach used and their level of satisfaction, leading students to perceive that their supervisors had used a collaborative interpersonal approach.

Likewise, when the supervisor listens, and clarifies what the student says, and encourages the student to speak his/her mind, they are able to mutually negotiate and find a shared option that satisfies both parties (Glickman et al., 2013). This can make students have high level of satisfaction. On the other hand, as the study found, students become less satisfied when they were not given any directions from their supervisors. This result is supported by Abdallah, Hillerinch, Romero, Topp, and Wnuk's (2010) study which argued that supervisors should support student independence, but should also provide enough guidance and support for a successful supervision experience.

This study focused on students' satisfaction with their supervisors' interpersonal approaches, which means their satisfaction with the supervisors' interactions and behavior with them. However, it is important to point out that some students might be satisfied with the supervisors' interpersonal approach used but not with the thesis/dissertation itself. According to Fernando and Hulse-Killacky (2005), no relationship was found between students' satisfaction and their self-efficacy. Although the current study did not incorporate a focus on self-efficacy, it disagrees

with the findings of other studies which, highlight the positive relationship between students' general outcomes such as satisfaction and grades, and the role of supervisors as the source of knowledge and from whom students follow instructions, For example, Aguinis et al. (1996) used the concept of "expert power" to described how students see their supervisors as the source of information, while, Abdallah et al. (2010) adopted the metaphor of "creating in the kitchen" style to express the continuous advice and monitoring of a supervisor to a student. In a similar vein, Fernando and Hulse-Killacky's (2005) study found that a task-oriented style, which is similar to the directive approach, was the only one that was statistically significant in predicting the students' self-efficacy. Hence, if the concern is student satisfaction, collaboration could lead to more satisfaction; however, when the focus is on finishing in a timely manner, and promoting self-efficacy, a directive approach is more suitable. However, it is important to give students' satisfaction full attention even if they are not satisfied with the thesis/dissertation itself. This is because students' satisfaction will "create long-term institutional advocates" (Johnson, 2016, p. 11) which means that students will advocate for these institutions/programs among their relatives, friends, and colleagues.

To conclude, figure 2 provides a summary of discussion points of this study and shows the positive relationship between using a collaborative interpersonal approach and students' satisfaction. It also summarizes the possible reasons for this relationship.



^{*}Supervisor Interpersonal Approach

Figure 2: Summary of Discussion

5.2 Recommendations

This study has shown that various types of supervision must be adopted to deliver the best supervision practice to students. As the collaborative approach was the most satisfying approach, supervisors are recommended to start with the collaborative approach with PhD students or students who have previous experience with research until they are able to find out what type of approach suits student best. Supervisors might start with the directive approach and move to the collaborative approach gradually with novice researchers. Students also should be clear with their supervisors from the beginning by stating their needs, interests, preferences, and abilities, so supervisors could be guided on which approach to use from the beginning. Higher educational institutions in the UAE are encouraged to offer different types of supervision training so supervisors can gain different strategies of supervision.

5.3 Future research

For future research, the following aspects could be investigated:

- Future studies should examine the relationship between students' satisfaction with the quality of thesis/dissertation and the supervisor's interpersonal approach. This is important in order to evaluate whether there is a difference between students' satisfaction with their thesis/dissertation and satisfaction with supervisors' interpersonal approach.
- A research focus should be extended to cover other UAE governmental and private universities to better understand the relationship between supervisors' interpersonal approach and student satisfaction in other educational contexts.
- It is important for future studies to consider the perspectives of supervisors concerning the relationship between their interpersonal approach and student satisfaction.
- Even though gender, level of education, and concentration (field of study) of students were not found to affect the students' satisfaction, researchers should continue to inspect these variables in a more in-depth manner.

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Appendix A

Dear Participant:

I aim to investigate the relationship between Master's and PhD graduates' level of satisfaction with supervision. You only need **10 to 15 minutes** to complete the questionnaire. All the information provided will remain confidential and anonymous, please do not include your name. Completion and return of the questionnaire will indicate your willingness to participate in this study.

Please do not hesitate to contact me if you need clarifications or have questions.

Thank you for your contribution.

Dalal Al Dosari, Master's Candidate Mobile: 0502004227.

E-mail: 200719912@uaeu.ac.ae

Graduate students' satisfaction with their supervisors' approaches: A study on one university in the UAE

Directions:	Directions: Please check one choice for each of the following:						
Section 1: I	Demographic	data					
Gender: Male Female	Level of edd Master DBA PhD	tl	tatus: Graduated (find the sis/dissertation) About to finish the sis/dissertation	n) h the	Worked with: One supervisor More than one		
☐ Enginee	d Agriculture ring e and Health	Huma Sciences	ess and Econom nities and Socia nation Technolo	al	☐ Law ☐ Science ☐ Education		
Directions: your thesis/o consider you 1: Selecting	dissertation sur ar latest superv the research	s of four sen pervisor. If y visor only. Y topic:	ou worked with	n more than only one of	nent best describes one supervisor, The four options.		
 My supervisor gave me some ideas for topics and asked me to select one to study. My supervisor and I discussed different topics and we made a decision together to study one. My supervisor gave me complete freedom to select the topic. 							
How satisfic topic"?	ed are you wi	th the super	visor's behavi	or in "selec	ting the research		
Totally satisfied		Somewhat satisfied 4	Somewhat unsatisfied 3	Not satisfied 2	Not satisfied at all		

☐ My his/ My sele ☐ My prol ☐ My	supervisor un her understan supervisor sh cted one. supervisor an olem. supervisor ga	ding. owed me diffe d I reached an ve me comple	erent ways to fra a agreement on lete freedom to fra	ame the problemow to formulation	em and I late the lem.
How satisf research p Totally satisfied 6	•	Somewhat satisfied 4	Somewhat unsatisfied 3	Not satisfied	Not satisfied at all
☐ My ☐ My my ☐ My mac	supervisor su selection. supervisor and le a decision t	d a viewpoint ggested differ d I discussed ogether to add	-	ne the literatu	re and I made terature and we
How satisf literature" Totally satisfied 6	•	somewhat satisfied	Somewhat unsatisfied 3	Not satisfied	Not satisfied at all
☐ My ☐ My me ☐ My ☐ My ☐ My	supervisor pr supervisor to to select one to supervisor and supervisor ga	ld me about the course. d I reached and the course.	nin methodology ne different reservation agreement on the	arch methodo he research m	logies and asked nethodology.
	ied are you v nethodology" Satisfied	?	visor's behavious Somewhat unsatisfied	or in "decidir Not satisfied	Not satisfied at all

<u> </u>	□ 5	<u> </u>	□ 3	2	<u> </u>	
 5: Providing feedback: My supervisor gave me direct feedback and I had to do as he/she directed. My supervisor gave me a lot of feedback and I was allowed to select the ones I see suitable. My supervisor gave me enough freedom to discuss his/her feedback and we agreed on the things I should change. My supervisor did not give me direct feedback. I felt that I was the one who led the feedback process and s/he was supportive of this attitude. 						
How satisfication Totally satisfied	ied are you we Satisfied	vith the super Somewhat satisfied 4	visor's behavior Somewhat unsatisfied 3	r in "providin Not satisfied 2	ng feedback"? Not satisfied at all 1	
☐ My way ☐ My and ☐ My disc ☐ My	and I had no supervisor ga I selected one supervisor an ussion chapte	rected me to prochoice but to a ve me some all to follow. d I reached an r and s/he according to proche to follow.	roduce the discu agree on his/her ternatives for w agreement on the epted some of m te freedom to wa	requirements. riting the disconne way of writh ay ideas.	ussion chapter	
How satisfichapter"? Totally satisfied 6	Satisfied 5	Somewhat satisfied 4	Somewhat unsatisfied 3	Not satisfied	Not satisfied at all	
 7: Overall, during the writing of my thesis/dissertation, I believe: My supervisor used the directive approach: giving me specific ideas and steps to follow. My supervisor used the alternatives approach: giving me options and asking me to select from them. My supervisor used the collaborative approach: giving me complete chance to share my ideas and we agree together on what to be done. My supervisor used the non-directive approach: giving me complete 						

freedom to write the thesis/dissertation as I like.

In general,	how satisfied	d are you with	ı your supervis	or's approacl	h?
Totally	Satisfied	Somewhat	Somewhat	Not	Not satisfied
satisfied		satisfied	unsatisfied	satisfied	at all
\square 6	□ 5	$\prod 4$	□ 3	$\square 2$	\square 1
		_		_	_
supervisor w	orked with y	ou.	e or add any coi		
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •				
Email addre	ss (optional):				

طلبة الدراسات العليا الأعزاء،

تهدف هذه الاستبانة إلى استقصاء مستوى رضى طلبة الدراسات العليا عن الإشراف على كتابة أطروحة البحث. تحتاج من 10 إلى 15 دقيقة لإنهاء هذه الاستبانة. جميع المعلومات ستكون خاضعة للسرية التامة ولن تستخدم إلا في مجال البحث، برجاء عدم كتابة اسمك أو اسم مشرفك الأكاديمي. يعد إكمال هذه الاستبانة وإعادتها إشارة إلى رغبتكم بالمشاركة.

يرجى عدم التردد في التواصل معنا إذا كان لديكم أي استفسارات.

نشكر مشاركتكم وتعاونكم. دلال الدوسري طالبة ماجستير

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رضا طلبة الدرسات العليا عن أساليب المشرفين على أطروحة البحث

تعليمات: برجاء أختيار خيار واحد من الخيارات التالية: القسم الأول: البيانات الأساسية عملت مع: الجنس: التخرج: المستوى التعليمي: تخرجت مشرف واحد __ ماجستبر 🗌 ذکر □ دكتوراه في إدارة الأعمال(DBA)
□ أكثر من مشرف
□ على وشك التخرج ☐ أنثى 🔲 دكتوراه الكلية: العلوم الإنسانية والاجتماعية 🗌 الهندسة القانون التربية تقنية المعلومات □ الأغذبة والزراعة 🔲 الطب والعلوم الصحية 🔲 الإدارة والأقتصاد العلوم القسم الثاني: الأساليب الإشرافية تعليمات: في الأسفل مجموعات من أربع جمل، اختر الجملة التي ترى أنها تصف بشكلِ أفضل مشرفك على الرسالة. اذا كنت قد عملت مع أكثر من مشرف اختر الجملة التي تنطبق على المشرف الأخير. برجاء اختيار واحدة من الخيارات الموجودة 1: أختيار موضوع البحث: 🗌 وجهني مشرفي إلى دراسة موضوع معين. 🔲 أعطاني مشرفي أفكاراً عن بعض المواضيع ، وطلب مني اختيار أحدها لدراسته. 🗌 أنا ومشرفي تناقشنا في مواضيع مختلفة واتخذنا القرار معًا عن موضوع الدراسة. أعطاني مشرفي الحرية الكاملة لاختيار موضوع الدراسة. إلى أي حد أنت راضٍ عن سلوك المشرف تجاه "أختيار موضوع البحث "؟ راضٍ إلى حدٍ غير راضٍ إلى غير راضٍ راضِ تماماً راضِ غير راضِ حدِ ما **□**1 \square 2 □ 3 **4** □ 5 □ 6 2: صياغة مشكلة البحث: فهم مشرفي مشكلة البحث بطريقة معينة وتوجب على اتباع فهمه. اقترح مشرفي طرقاً مختلفة لصياغة المشكلة، وقمت باختيار إحداها.

إلى أى حد أنت راضٍ عن سلوك المشرف تجاه "صياغة مشكلة البحث"؟

توصلنا أنا ومشرفي إلى اتفاق على كيفية صياغة المشكلة.

أعطاني مشرفي الحرية الكاملة لصياغة المشكلة.

غير راضٍ	غير راضٍ	غير راضٍ إلى	راضٍ إلى حدٍ	راضٍ	راضٍ تماماً
تماما		حدٍ ما	ما		
□1		□3	\Box 4	\square 5	□ 6

			ت السابقة:	النظري والدراسا	3: كتابه الإطار
يّ تبنيّها.	بقة، وتوجب علم	ري والدراسات السا	عينة عن الإطار النظ	رفي وجهة نظر م	كان لدى مشر
داها.	قمت باختيار إحد	والدراسات السابقة و	تابة الإطار النظري	ي طرقاً مختلفة لكا	🗌 اقترح مشرفہ
القرار معًا.	قة وقمنا باتخاذ ا	ري والدراسات الساب	له لكتابة الإطار النظر	شرفي طرقاً مختلف	🗌 ناقشنا أنا وما
	<u>.</u> ä	ي والدر اسات السابق	ة لكتابة الإطار النظر	في الحرية الكاملة	🗌 أعطاني مشر
٢٣٦	الدراسات السابق	لة الإطار النظري وا	المشرف تجاه "كتاب	راضٍ عن سلوك	إلى أي حد أنت
غير راضٍ تولوا	غير راضٍ	غير راضٍ إلى دروا	راضٍ إلى حدٍ . ا	راضٍ	راضٍ تماماً
	□2		ما 4	□ 5	□ 6
				ية البحث:	4:أختيار منهج
		ها	توجب عليّ استخدام	ر منهجية معينة و	 فضیّل مشر فے
	يداها		ر تلفة لمنهجية البحث و		•
	•	_	على اختيار منهجية		
			عسى احديار منهجية البد المختيار منهجية البد	-	
		_		-	
			المشرف تجاه "اختب		
غير راضٍ تماما	غير راضٍ	غير راضٍ إلى درما	راضٍ إلى حدٍ ما	راضٍ	راضٍ تماما
تماما 1	□2		ما 4	□ 5	□ 6
				بعة:	5:التغذية الراج
		یّ تنفیذ تو جیهاته.	مباشرة ، وتوجب علـ	في تغذية راجعة	ا عطانی مشر
المناسية منها	أن أختار النقاط		حظات كتغذية راجع		
			ناقشة التغذية الراج		
			ً . مباشرة. شعرت بأنا		
ی و ی	<i>J</i> ,	ي ٥٠.٠٥		ر ي ب الداعم لي فحسد	-
		د التغذية الراحعة"؟	^{ب.} المشرف تجاه "تقدي		• .
غير راضٍ		,	، حدرت بياد راضٍ إلى حدٍ	ŕ	
تماما □1		حدِ ما	ما 4		

6: كتابة فصل المناقشة:

متطلباته.	ى أن أوافق على	ولم يكن أمامي سو	ناقشة بطريقة معينة،	في لكتابة فصل الم	🗌 وجهني مشر
	حدها.	ىة، وقمت باختيار أ .	ت لكتابة فصل المناقث	في بعض الخياراد	🗌 أعطاني مشر
	ض اقتر احاتي.	المناقشة، وتقبل بعد	عن كيفية كتابة فصل	مشرفي إلى اتفاق	🗌 توصلنا أنا و
		، بطريقتي.	لكتابة فصل المناقشة	في الحرية الكاملة	🗌 أعطاني مشر
		فصل المناقشة"؟	المشرف تجاه "كتابة	راضٍ عن سلوك	إلى أي حد أنت
غير راضٍ	غير راضٍ	غير راضٍ إلى	راضٍ إلى حدٍ	راضٍ	راضٍ تماماً
تماما □1	\Box_2	حدٍ ما □ ۲	راضٍ إلى حدٍ ما 4 🏻	□ 5	□6
	□∠	□3	□ 7	□ 3	□ 0
		توراه، أعتقد أن :	وحة الماجستير/ الدكا	خلال كتابتي لأطر	7: بشكل عام،
	ان عليّ اتباعها.	أ محددة وخطوات ك	جيهي: أعطاني أفكار أ	خدم الأسلوب التو.	🗌 مشرفي است
الختيار من بينها.	ائل وطلب مني ا	دم لي خيارات أو بد	به لعدد من البدائل: ق	خدم أسلوب التوجب	🔲 مشرفي است
			اركي: أعطاني فرصا		
			التوجيهي: أعطاني ا		
ئ ىر . اىن			، عن أسلوب مشرفك 		
غير راضٍ تماما	غير راضٍ	عير راضٍ إلى حدٍ ما	راضٍ إلى حدٍ ما	راصِ	راضٍ نماما
تماما 1	\Box 2	□3	ما 4	\square 5	□ 6
	رف معك ؟	في طريق تعامل المشر	، أو إضافة تعليق عز	أي نقطة مما سبق	برجاء توضيح
				ي (أختياري)	البريد الإلكترون

Appendix B

Graduate students' satisfaction with their supervisors' approaches: A study on one university in the UAE (Semi-structured Interview)

Demographic data:				
Gender: Male Female	Level of educe Master DBA PhD	cation:	Status: Graduated (finished the thesis/dissertation) About to finish the thesis/dissertation	Worked with: One supervisor More than one
☐ Engineer	d Agriculture ing and Health	Hu Science	asiness and Economics amanities and Social ses Formation Technology	☐ Law ☐ Science ☐ Education
Supervisor	ry practices:	:		
1 - How did	you select you	ır thesis	s topic?	
Sub-q	questions:			
Did y	our supervisor	direct y	you to a certain topic? Or	
Did your supervisor give you some ideas for topics and you selected one? Or				
Did you discussed different topics with your supervisor and you made a decision together to study one? Or				
Are you the one who selected the topic alone? (Your supervisor gave you the complete freedom)				
How satisfied are you with the supervisor's behavior in "selecting the research topic"?				

2 - Ho	w did you formulate the research problem?
•••••	
	Sub-questions:
	Did your supervisor direct you to a certain way to formulate the problem and you had to follow it? Or
	Did your supervisor show you different ways of formulating the problem and you selected one way to write it? Or
	Did you reach an agreement with your supervisor on how to formulate the problem? Or
	Did your supervisor give you the freedom to formulate the problem the way you want?
	atisfied are you with the supervisor's behavior in "formulating the ch problem"?
3 - Ho	w did you frame the literature review?
	Sub-questions:
	Did your supervisor had a viewpoint of the literature and you had to cope with it? Or
	Did your supervisor suggested different ways to frame the literature and you made your selection? Or
	Did your supervisor and you discussed different ways to frame the literature and you made a decision together to adopt one? Or
	Did your supervisor give you complete freedom to frame the literature as you understand it?
How s	atisfied are you with the supervisor's behavior in "framing the ure"?

4 - Ho	w did you decide on the research methodology?
	Sub-questions:
	Did your supervisor prefer a certain methodology and you had to use it? Or
	Did your supervisor told you about the different research methodologies and asked you to select one to use? Or
	Did your supervisor and you reach an agreement on the research methodology? Or
	Did your supervisor give you the freedom to select the methodology of your study?
	atisfied are you with the supervisor's behavior in "deciding on the ch methodology"?
5 - Ho	w did your supervisor provide you with feedback?
	Sub-questions:
	Did your supervisor give you direct feedback and you had to do as he/she directed? Or
	Did your supervisor give you multiple feedback and you were allowed to select the ones you see suitable? Or
	Did your supervisor give you enough freedom to discuss his/her feedback and you agreed on the things you should change? Or
	Are you the one who led the feedback process and your supervisor did not give you direct feedback?
How s	atisfied are you with the supervisor's behavior in "providing feedback"?
6 - Ho	w did you write the discussion chapter?

	Sub-questions:
	Did your supervisor direct you to produce the discussion chapter and you had to follow his directions? Or
	Did your supervisor give you some alternatives for writing the discussion chapter and you selected one to follow? Or
	Did your supervisor and you reached an agreement on the way of writing the discussion chapter? Or
	Did your supervisor give you the complete freedom to write the discussion chapter in your way?
How s	satisfied are you with the supervisor's behavior in "writing the discussion er"?
that y	rerall, during the writing of your thesis/dissertation, what the approach our supervisor used?
	Sub-questions: Is it?
	Directive approach: giving you specific ideas and steps to follow.
	Alternatives approach: giving you options and asking you to select from them.
	Collaborative approach: giving you complete chance to share your ideas and you agree together on what to be done.
	Non-directive approach: giving you complete freedom to write the thesis/dissertation as you like.
In gen	neral, how satisfied are you with your supervisor's approach?

رضا طلبة الدراسات العليا عن أساليب المشرفين على كتابة أطروحة البحث (مقابلة شبه مقننة)

سية:	1 601		
سىيە•	الاستا	ىات	البيا
	,		

ا لجنس ذكر أنثى	المستوى التعلم]	عملت مع: مشرف واحد أكثر من مشرف	التخرج: تخرجت على وشك الت	تخرج
الكلية الهندسة القانون التربية		الإدارة والاقتصاد العلوم الإنسانية والا تقنية المعلومات	لاجتماعية	الأغذية والزراعة الطب والعلوم الصالحات العلوم الصالحات العلوم	
الأساليب الإشر	ِا ف ية				
1 - كيف تم أختي	بار موضوع الر،	بقاله؟			
أسئلة فر	غيد.				
هل وج؛	هك مشرفك إلى	ر اسة موضوع معين	ن؟ أو		
				يار أحدها لدراسته؟ أو	
				ما عن موضوع الدراسة؟ أو	أو
		رية الكاملة لاختيار م			
إلى اي حد انت را	ِاضٍ عن سلوك	لمشرف تجاه ''اختيـ	بار موضوع البحث"؟	,	
2 ـ كيف قمت بص	سياغة مشكلة ال	حث؟			
أسئلة فر	عية:				• • • • • • • • • • • • • • • • • • • •
هل وجه	هك مشرفك إلى	سياغة مشكلة البحث	، بطريقة معينة وتوجب	ب عليّك اتباع توجيهاته؟ أو	أو
هل اقتر	ِح مشرفك طرق	مختلفة لصياغة المش	لْىكلة، وقمت باختيار إ	إحداها؟ أو	
هل توص	سلت أنت ومشر	ك إلى اتفاق على كي	يفية صياغة المشكلة؟ أ	؟ أو	

هل أعطاك مشرفك الحرية الكاملة لصياغة المشكلة؟
ى أي حد أنت راضٍ عن سلوك المشرف تجاه "صياغة مشكلة البحث"؟
﴾ ـ كيف قمت بكتابة الإطار النظري والدراسات السابقة؟
أسئلة فر عية:
هل كان لدى مشرفك وجهة نظر معينة عن الإطار النظري والدراسات السابقة، وتوجب عليّك تبنيّها؟ أو
هل اقترح مشرفك طرقاً مختلفة لكتابة الإطار النظري والدراسات السابقة وقمت باختيار إحداها؟ أو
هل ناقشت أنت ومشرفك طرقاً مختلفة لكتابة الإطار النظري والدراسات السابقة وقمتم باتخاذ القرار معًا؟ أو
هل أعطاك مشرفك الحرية الكاملة لكتابة الإطار النظري والدراسات السابقة؟
ى أي حد أنت راضٍ عن سلوك المشرف تجاه "كتابة الإطار النظري والدراسات السابقة"؟
، ـ كيف قمت باختيار منهجية البحث؟
7 : 7 ! f
أسئلة فرعية:
هل فضّل مشرفك منهجية معينة و توجب عليّك استخدامها؟ أو هل أخبرك مشرفك عن طرق مختلفة لمنهجية البحث وطلب منك اختيار إحداها؟ أو
هل اخبرت مسرفت على طرق محسفه لمنهجيه البحث وصلب منك اخليار إحداها: او هل توصلت أنت ومشرفك إلى اتفاق على اختيار منهجية البحث؟ أو
هل أعطاك مشرفك الحرية الكاملة لاختيار منهجية البحث التي تريدها؟
من اعطال مسرف العرب الماهد وعلي منهجيد البعث التي تريده . من عن سلوك المشرف تجاه "اختيار منهجية البحث"؟
ئى بي سەرىسى ئىسى سەرىسى ئىسى ئىسى ئىسى ئىسى ئىسى ئىسى ئىسى
؛ _ كيف قدم لك مشرفك التغذية الراجعة؟
أسئلة فر عية:
هل أعطاك مشرفك تغذية راجعة مباشرة ، وتوجب عليّك تنفيذ توجيهاته؟ أو

هل أعطاك مشرفك عدداً من الملاحظات كتغذية راجعة، وكان مسموح لك أن تختار النقاط المناسا منها؟ أو
هل أعطاك مشرفك حرية كافية لمناقشة التغذية الراجعة معه، واتفقتما على التغييرات اللازمة؟ أو
هل لم يعطك مشرفك تغذية راجعة مباشرة. شعرت بأنك كنت من يجري التعديلات وقد كان هو في موقف الداعم لك فحسب؟
إلى أي حد أنت راضٍ عن سلوك المشرف تجاه "تقديم التغذية الراجعة"؟
6 - كيف قمت بكتابة فصل المناقشة؟
أسئلة فر عية:
هل وجهك مشر فك لكتابة فصل المناقشة بطريقة معينة، ولم يكن أمامك سوى أن توافق على متطلا أو
هل أعطاك مشرفك بعض الخيارات لكتابة فصل المناقشة، وقمت باختيار أحدها؟ أو
هل توصلت أنت ومشرفك إلى اتفاق عن كيفية كتابة فصل المناقشة، وتقبل بعض اقتر احاتك؟ أو
هل أعطاك مشرفك الحرية الكاملة لكتابة فصل المناقشة بطريقتك؟
إلى أي حد أنت راضٍ عن سلوك المشرف تجاه "كتابة فصل المناقشة"؟
 7 - بشكلٍ عام، خلال كتابتك لأطروحة الماجستير/الدكتوراه، ما هو الأسلوب العام الذي استخدمه مشرفك معك؟
أسئلة فر عية: هل استخدم
الأسلوب التوجيهي: أعطاك أفكاراً محددة وخطوات كان عليّك اتباعها؟ أو
أسلوب التوجيه لعدد من البدائل: قدم لك خيارات أو بدائل وطلب منك الاختيار من بينها؟ أو
الأسلوب التشاركي: أعطاك فرصة كاملة لمشاركة أفكارك واتفقتما معًا على ما يجب فعله؟ أو
الأسلوب غير التوجيهي: أعطاك الحرية الكاملة لكتابة الرسالة كما تريد؟
بشكل عام، إلى أي حد أنت راضٍ عن أسلوب مشرفك؟

Appendix C

Social Sciences Research Ethics Committee -Approval-

Proposal number:	ERS_2017_5534	
Title of Project:	The Relationship between Graduate Stud Interpersonal approach at one University	
PI: Co-PI:	Dalal Mohammed Al Dosari	
CO-11.		
The above proposal	has been reviewed by:	
	the Social Sciences REC the Social Sciences REC	
And the decision is:		
☐ Provisional Opin☐ Unfavourable Op		
Reason:		
	proposal, we see no major ethical concern ation of the research study.	s. Therefore, the proposal is
Name	Clara Margan	
(Chair or designee):	Clara Morgan	
	Clara Morgan	
		March 14, 2017
	Signature	Date

The decisions available to the Committee are defined as follows:

"Favourable with standard conditions" means that the study has ethical approval to proceed, as long as local management approval is in place prior to the study starting.

"Favourable with Additional Conditions" means that the study has ethical approval in principle but there are certain issues, which need to be addressed prior to the study starting such as a minor change to participant documentation. It is the responsibility of the Principal Investigator to ensure that additional conditions are met.

"Provisional Opinion" means that there are more substantial changes, which need to be made before the study starts. These changes would require further ethical review on the basis of which a favourable or unfavourable opinion would be given by the Ethics Committee.

Unfavourable Opinion means that the study does not have ethical approval to proceed and a further application would need to be submitted should the applicant choose to proceed with the study. Advice and guidance will be provided by the Committee setting out the reasons for their decision and suggesting changes which would mean that a favourable opinion on resubmission would be more likely. For applications processed through the Proportionate Review* Service an unfavourable opinion is only given where the application is of such poor quality that it is probable that an unfavourable opinion would be given if it were to be reviewed at a full meeting.

No Opinion (Proportionate Review* only), means that the Proportionate Review subcommittee (3 members) have deemed that the proposed study does have material ethical issues and will therefore need to be reviewed by a full committee.

*The aim of proportionate review is for studies which present minimal risk or burden for participants to be reviewed by a proportionate review sub-committee within 14 days of receipt of a valid application.