**STUDENTS' PERCEPTION OF THE SUPERVISORY PROCESS:
A CASE STUDY AT A PRIVATE UNIVERSITY IN MALAYSIA**
Norbaizura Mohd Naim & Saroja Dhanapal (PhD)

ABSTRACT

The purpose of this article is to present undergraduate students' perception of the Final Year Project's supervisory process. A survey was carried out to elicit the students' views to gain an insight into their experience of the supervision process. The sample consisted of 100 students in a private university in Malaysia. The participants' responses were analyzed according to the research questions and recurring themes. It was found that the supervisor's area of expertise, timely feedback, duration of the research project and the number of meetings with supervisors were the only factors affected according to gender of students. The findings resulted in a number of implications which can be extended further in future research to add to the literature in this area.

Keywords: **Undergraduate student, Supervision, Final year project, Higher education, Malaysia**

**Taylor's Business School,
Taylor's University, MALAYSIA**

Corresponding Author:
Taylor's University, MALAYSIA
Email:
saroja.dhanapal@taylors.edu.my

INTRODUCTION

Supervision of graduate students is a crucial part of the teaching and learning process in higher education. Jewell and Brew's (2010) report on the undergraduate research programs in Australian universities based on 39 Australian universities and 31 external research institutions reveals that undergraduate research programs are becoming increasingly common, with 58% of the universities surveyed providing research experience as part of their undergraduate programs. According to Ho (2003), currently many programs in Hong Kong universities as well as universities in other parts of the world require students to do final year undergraduate projects, which means writing a thesis on a topic specifically related to an area studied in the program which requires expert supervision. The nature and quality of the educational supervision which is complex and diverse depends on a number of factors (Dainty, 2010).

Research on the supervisor-supervisee relationship in the supervisory process should take into consideration several issues including the sensitivity surrounding the roles and responsibilities of both the supervisor and the supervisee (De Trude, 2001). The supervision task becomes more arduous as there are stringent rules attached to it. As stipulated in the Codes of Ethics for the Association of Counselor Education and Supervision (1993), supervisors are prohibited from having any form of social dealings which would cause a conflict of interest in the supervisor-supervisee relationship. It is further claimed that this form of unprofessional relationship can hamper judgments made in the supervisory process especially in terms of objectivity and it is advocated that in such a situation, it is better to terminate the relationship. Further, according to De Trude (2001), supervisors have a high level of responsibility to ensure that their supervisees are carrying out research in their own area of competency and not in an area that the supervisor is competent in for the role of the supervisor is to enhance the student's existing competence. Lessing (2014) has listed a number of responsibilities of a supervisor in assisting the students. The responsibilities are:

- selecting a research topic and design;
- formulating a researchable research question;
- developing an understanding of the field of study;
- arriving at a research design;
- dividing the research into different phases;
- conducting a literature review; and
- relating the present study to the ongoing dialog in literature

A recent survey on students' experiences at a university in Denmark shows that an alarming number of students feel isolated and adrift (AU, 2011, as cited in Nordentoft, Thomsen & Wichmann-Hansen, 2013). It is claimed by Remley and Herlihy (2001) that competent practitioners do not necessarily make competent supervisors. In the recent decade, concern has been raised on the nature and success of the supervisory process in institutions of higher education and this concern is further intensified as a result of a dearth of research in this area. Supervision of research is a critically important and highly specialized form of academic teaching. According to Armstrong (2014), the high failure rates in research dissertations especially in the social sciences are partially caused by students' dissatisfaction with the supervision process and poor student-supervisor relationships.

In this research, we investigated the potentials and challenges faced by supervisees in the supervisory process. The findings will enable supervisors and academic management to gain awareness of supervisees' perceptions on the supervisory process and with this knowledge; they can take the necessary steps to overcome the negative issues raised to ensure more effective future supervisory relationships. The research questions underpinning this investigation are:

1. What are supervisees' perceptions of the supervisory process?
2. What are supervisees' perceptions of the role of the supervisors?

This study is highly significant for it is important for academicians to understand the necessity to create a secure environment when supervising to support the students' growth both academically and professionally as research is now part and parcel in all areas of employment. Further, understanding the dynamics of the supervisor-supervisee relationship and how it affects the supervisory process is the key to effective and successful research.

LITERATURE REVIEW

There is extensive research on the supervisory process, both at undergraduate and post graduate levels. The objective behind this wide research can be attributed to the nature of the subject itself, where it involves relationships between two individuals. The nature of this relationship is very crucial as it could determine whether the project/dissertation is successful or a total failure. For the purpose of this section, the literature review will be discussed under three headings; the supervisory process, supervisor roles and responsibilities, and research on supervision.

Supervisory Process

According to Salmon (1992), in agreeing to supervise a project, the supervisor is involved in taking the supervisee through an arduous journey which can be exciting as well as difficult, risky and painful. Lessing (2014) suggested that efficient supervision requires a good relationship and interaction between supervisors and postgraduate students to ensure quality and successful research outcomes. He added that it is crucial for supervisors to understand the challenges students experienced in the process of completing their postgraduate research projects. He based his claim on views of other researchers such as Kiley and Mullins (2005), Lee (2010), Sambrook, Stewart, and Roberts (2008), Watts (2008) and Wisker, Robinson, Trafford, Warnes and Creighton (2003, as cited in Lessing, 2014). Lessing (2014) also claims that since students lack experience and knowledge in the various aspects of research, supervisors need to provide comprehensive advice, support and direction. On the other hand, Elawar and Corno (1985) assert that students demonstrate higher levels of intrinsic motivation when they are provided with constructive and informative feedback. Nadar (1997) adds to this by claiming such feedback provides discernments that act as a robust motivation for further improvement.

According to Ho (2003), the importance of helping students to plan the research from the very beginning is widely stated in the literature (Allen, 1973; Gottlieb, 1994; Mauch & Birch, 1989; Moses, 1985, 1992; Rudd, 1985; Watson, 1970; Zuber-Skerritt & Knight, 1992).

These studies suggest that the supervisor and supervisee relationship plays a significant role in ensuring successful supervision. As supported by Dispenser (2013), prolific supervision depends on a number of elements consisting of trust, respect, and safety in the relationship besides an active, intelligent and responsible involvement by all parties. She added that supervision is also affected by issues of matching and difference. According to Dainty (2010), besides the supervisor-supervisee relationship, other factors contributing to effective educational supervision consist of the following:

- Plan of action
- Frequent meetings and liaison
- Supervisor enthusiasm and collaboration
- Feedback

Peterson (2007) has brought a new perspective to the supervision process by introducing a new term, where he equates research supervision as "category boundary work". He went on to define how academics are continually involved in a struggle to establish and maintain boundaries in the relationship to ensure the focus of the research project does not deviate and the final outcome is kept in focus. Thus, any failure which threatens successful completion is rectified and any success is reinforced through compliments. There is ample evidence in the literature that supervisors tend to base their supervisory approach on their own experiences as research students (Bitzer, 2010). Although these researchers' views are based on postgraduate students' experience, it can also apply to supervision of undergraduate students. According to researchers such as Hockey (1994), Pearson (1996), Phillips and Pugh (2000), Sayed et al. (1998), as cited in Lessing (2014), students should not be dependent on the supervisors but rather take it upon themselves to initiate discussions by requesting assistance when needed.

However, according to Worthington and Stem (1985), the type and quality of counseling supervision depends on the supervisor-supervisee relationship and it is further postulated that this is influenced by three classes of variables; structural variables, cognitive variables and the events of supervision. Miars et al. (1983) assert that structural variables include participants' gender and experience level, the physical facilities and equipment used in supervision and participants' personalities or stable interactional styles which are the fixed elements of supervision. Bartlett, Goodyear, and Bradley (1983) defined the cognitive variables as the participants' characteristics which guide behavior during supervision including aspects such as the supervisor's theory of supervision, counseling theory of the supervisee, expectations each has for supervision and evaluative styles of participants. The events of supervision are the ephemeral occurrences between two people that change the structures of supervision and the participants' cognitions. These events are called supervision interventions (Loganbill, Hardy, & Delworth, 1982) or supervisor behaviors (Worthington & Roehlke, 1979). Kadushin (2002) delineated three main elements of the supervision process as educative, administrative and supportive while on the other hand, Proctor (1988) stated that supervision encompasses formative, normative and restorative elements. Norhasni Zainal Abiddin (n.d.) identified five crucial points with regard to supervisors for effective supervision, namely; (1) to provide comment and guidance, (2) to meet, discuss and negotiate with student with ease, (3) have good knowledge and experience in their respective fields of study, (4) give personal support to students, and (5) should supervise students according to their ability.

Thus, it can be concluded that numerous studies have been done on the role of supervisors in the supervision process. However, the aim of this research is to investigate uundergraduate students' perception of the Final Year Project supervisory process with focus on the Malaysian scenario.

Roles and Responsibilities of a Supervisor

MacKeogh's (2006) research explores the roles and responsibilities of a supervisor in undergraduate dissertations for both on campus and off-campus students through the use of online methods and peer supervision. The findings describe the roles and responsibilities of supervisors of undergraduate students as subject experts, gatekeepers, and resources for research literature, project managers, shapers, editors, promoters of student self-efficacy, and ensures of safe and ethical research, providing support while instilling autonomy and independence. He added that good supervision is posited as lying on a continuum between and active and passive and direct and indirect supervision, with the most appropriate supervision for undergraduate research as indirect-active (welcome student contact, provides advice, and asks for student justifications and explanations of their ideas) and indirect-passive (adopt a listening non-directive approach, and allows the student to solve their own problems).

In Malcolm's (2012) study, the students and supervisors viewed the dissertation experience as a "capstone opportunity"; this refers to the greatest differences related to what exactly was achieved through the dissertation process. The students and supervisors in the study agreed that the research process is more important than just the outcome and the significance of learning and achievement. Brydon and Flynn's (2013) research which was carried out to assess what students deemed as appropriate pedagogy of supervision using interviews revealed that students who described supervision and their supervisors as using a multifaceted approach were the most satisfied. The researchers asserted that the core approaches of supervision included education (expert opinion on the methodology), administration (processes of the Honors program) and support (on aspects in life that affected individuals in the Honors year). On the other hand, Anderson, Day and McLaughlin (2007) carried out a study to examine students' and supervisors' perceptions of Masters dissertations and showed that supervisors tend to view themselves as "gatekeepers" and commit to helping students produce work that is up to standard. Their findings also indicated that the supervisors possessed a commitment to help students remain motivated and excited about their research. They characterized this as a "shaping" and "supporting" role which are inseparable elements that must be incorporated in everyday practice in supervision. In another study, Anderson, Day and McLaughlin (2008) stated that a good supervisory relationship was characterized by the confidence of a supervisor, assistance in shaping the project and research time, guidance on writing, a knowledgeable supervisor with research experience and the relation of specific academic advice. De Kleijn et al. (2013) examined Masters students' perceptions of face-to-face feedback provided by supervisors and concluded that supervisors who provide positive feedback and relate how students are doing and the next steps to take, are considered as effective by students.

Research on Supervision

Harrison and Whalley (2008) carried out a research to examine students' experiences of being involved in an undergraduate dissertation and findings indicate that the key areas of focus in helping students are choosing and studying the right topic, ensuring student motivation and enjoyment, and good student-supervisor relationships. The same study identified the main issues of difficulty for most students included time management and understanding expectations. Baker et al. (2013) carried out research on the benefits of group supervision in comparison to individual supervision for undergraduate students undertaking a dissertation and the findings indicated that students' reactions to group supervision were positive. The students valued group supervision as it provided support from peers, enabled comparison and the use of other students as "yardsticks" for performance, as resources for information and as a means to solve problems. The report written by Healey et al. (2013) to identify new and more creative methods of developing a dissertation through the examination of approximately 70 case studies across a range of countries recommended that students and staff be equally involved and be given a choice as to the type of dissertation they undertake and the type of outcomes that are assessed to increase transformational learning among students.

METHODOLOGY

In order to understand how students perceived the supervisory process, we carried out a survey. This study can be considered descriptive in nature as it aims at depicting the findings in an accurate way. It has been noted that descriptive research is about describing people who take part in the study and their perceptions. According to Mills (1959), although some people dismiss descriptive research as mere description, good description is fundamental to the research enterprise and it has added immeasurably to the knowledge of the shape and nature of our society. Descriptions can be concrete or abstract. A relatively concrete description might describe the ethnic mix of a community, the changing age of a population or the gender mix of a workplace. Alternatively the description might ask more abstract questions. Good description provokes the "why" questions of explanatory research (Mills, 1959).

Measures

Based on literature, a self-administered questionnaire using existing scales was developed to measure all constructs (Chiaburu & Takleab, 2005; Foxon, 1993; Ismail et al., 2007; Tai, 2006; Tsai & Tai, 2003; Xiao, 1996; Yamnill & McLean, 2001). All the items used in the questionnaire were measured using a 5-point scale ranging from "strongly disagree" (1) to "strongly agree" (5). Demographic variables were used as the controlling variable because this study also focused on the relationship. The survey questionnaire was distributed to 100 final year students in the School of Business in a selected university. The adapted questionnaires had three sections: section A collected demographic data, section B identified the factors affecting the supervision process and Section C investigated students' views on their experience of the supervision process.

A number of variables were investigated; gender, nationality, qualification, experience, expertise, number of supervisees, timely feedback, have taught the supervisee before, duration of completion and number of meetings. The questionnaire was distributed to Final Year students; to ensure confidentiality, they were completed anonymously.

Sampling

After considering the research, a convenience sampling technique was used to distribute the questionnaire. The targeted population for this study consisted of 107 students who have gone through the university system. Of the number, 100 usable copies of the questionnaire were returned, yielding a response rate of 92.9%. The survey questions were answered by participants based on their consent and on voluntary basis. The number of this sample exceeds the minimum sample of 30 participants as required by probability sampling technique, showing that it may be analyzed using inferential statistics (Leedy & Ormrod, 2005).

Data Analysis

The SPSS version 16.0 was used to analyze the questionnaire data. Firstly, exploratory factor analysis was used to assess the validity and reliability of measurement scales (Hair et al., 1998; Nunnally & Bernstein, 1994). A factor analysis was first done for all the items representing each research variable and this was followed by Cronbach alpha test. The value of factor analysis for all items that represent each research variable was .4 and more, indicating the items met the acceptable standard of validity analysis. On the other hand, Cronbach alpha research variables exceeded the acceptable standard of reliability analysis of .70, indicating that the variables met the acceptable standard of reliability analysis (Nunnally & Bernstein, 1994).

FINDINGS AND DISCUSSION

Background Data of Samples

There are 91 respondents of whom 42.6% are males and 53.4% are females. These students are from different majors such as Business Administration (28.6%), International Business (22%), International Business and Marketing (48.4%) and Banking and Finance (1.1%). The findings are shown in Table 1 and Table 2.

Table 1
Demographic Data

	Frequency	Percent
Male	42	46.2
Female	49	53.8
Total	91	100.0

Table 2
Field of Study

	Frequency	Percent
Business Administration	26	28.6
International Business	20	22.0
International Business & Marketing	44	48.4
Banking & Finance	1	1.1
TOTAL	**91**	**100.0**

Students' Perceptions of the Supervisory Process
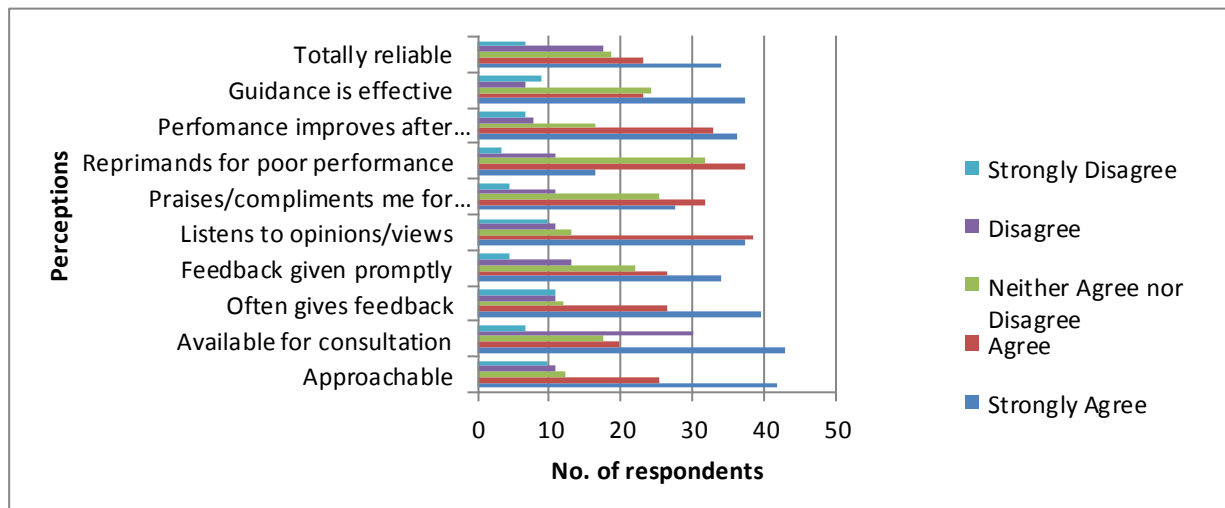

Figure 1. Students' perceptions on the supervisory process

The students were asked to rate the supervision process that they had undergone. The responses to the ten statements given on the whole were above average with the lowest response being 53.9% agreeing that their supervisors have reprimanded them for poor performance. This finding when read with the response of 59.4% agreeing that their supervisors praised and complimented them for good work needs to be addressed as it is crucial for students' good work to be acknowledged and poor performance to be admonished in a positive manner to ensure students enhance the good and eliminate the negativity in their performance. However, a significant percentage of students agreed to the statements that the supervisor is reliable (62.7%), the

supervisor is approachable (67.1%), the supervisor listens to the student's opinions/views (60.5), supervisor gives feedback promptly (66%), the guidance given by the supervisor is effective (60.5%) and lastly, the student's performance improves after the supervisor's feedback. Taken together, all these give a strong indication that the students are satisfied with the overall supervisory process. These findings are similar to findings by Grant, Schofield, and Crawford (2012).

Students' Perceptions on the Role of Supervisors

The survey questionnaire also elicited responses on students' perceptions as to the role of supervisors in the supervision process. The findings revealed that the students actually have very high expectations with regard to the supervisors' roles. The ten statements posted to the students in the survey requested them to identify the key roles played by supervisors in the process. Figure 2 illustrates the findings on students' perceptions of the supervisor role.
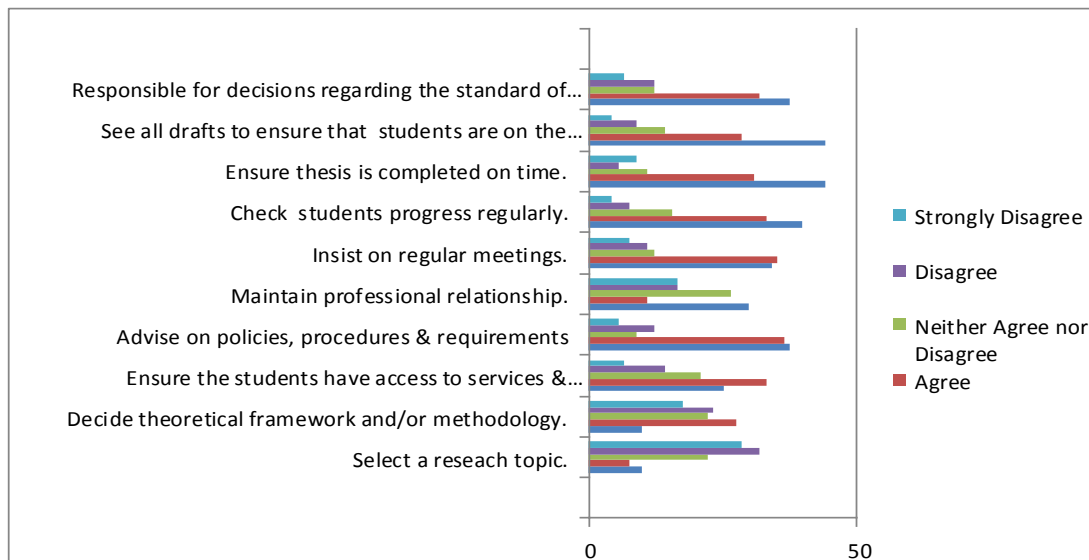

Figure 2. Students' perceptions on the role of supervisors

The survey questionnaire also elicited responses on students' perceptions as to the role of supervisors in the supervision process. The findings revealed that the students actually have very high expectations with regards to the supervisors' roles. The ten statements posted to the students in the survey requested them to identify the key roles played by supervisors in the process. The percentage of responses from the students who agreed to the statements was high in the following statements:

The percentage of responses from the students who agreed to the statements was high in the following statements:

- Ensure thesis is completed on time—74.8%
- Advice on policies, procedures and requirements—73.7%
- Check students' progress regularly—72.6%
- See all drafts to ensure that the students are on the right track—72.6%
- Insist on regular meetings—69.3%
- Responsible for the decisions regarding the standard of the thesis--69.3%

These findings clearly assign a significant role on the part of the supervisors to ensure that students adhere to policies, procedures and requirements, complete the thesis on time as well as ensure that they are on the right track which can be achieved through regular meetings and regular checks on progress and drafts. An interesting finding was that the students felt that selecting the topic and theoretical framework/methodology should not be within the ambit of the supervisors. This was indicated by the small percentage of students agreeing to the statements. Only 17.6% agreed that supervisors should select research topics and 37.4% agreed that supervisors should decide the theoretical framework/methodology. This can be seen as positive findings showing that these students are quite independent and have the ability to think for themselves which proves that the objective of the Malaysian education system to cultivate students who are able to think critically has succeeded. The responses to the statement that supervisors should have a purely professional relationship had a low response (40.7%). We feel that future research should investigate why students take this view to understand the implications behind the expectation for supervisors to go beyond a professional relationship. This area can be further extended to identify if there is a difference between students from Western countries and Asian countries in their expectations of the supervisor and supervisee relationship needed.

Factors that Affect a Supervisory Process

From the literature review (Abadie, 1985; Goodyear, 1982; Goodyear et al., 1984; Friedlander & Ward, 1984), we identified ten factors which affect the supervision process. The students were asked to verify whether these factors do affect the supervision process. Figure 4 shows the responses of the 91 students surveyed in this study.
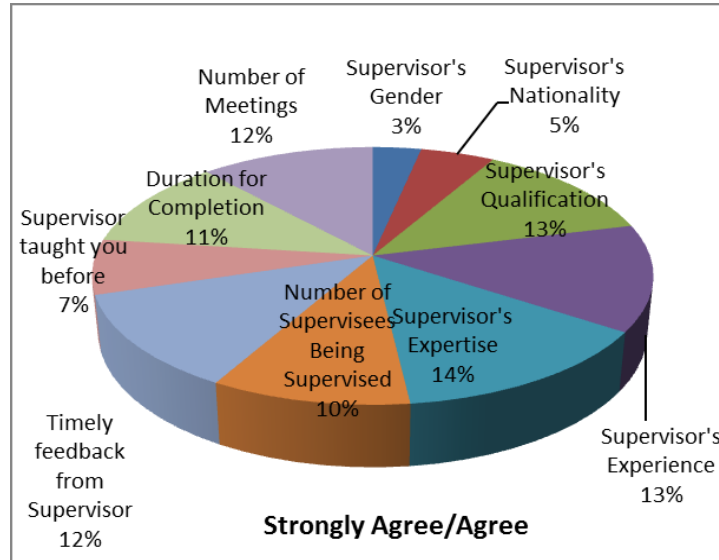
Figure 3. Factors affecting the supervisory process.

The most significant finding is that the students generally feel that the gender and the nationality of the supervisors do not have much impact on the supervision process. This is seen in the low percentage of students agreeing to their importance; gender (18.7%) and nationality (28.6%). The factors that a large percentage of the students agreed had significant impact on the supervision process are the qualifications of supervisors (73.7%), experience (76.9%) and area of expertise (79.1%) This is similar to the findings of Holloway et al. (1989). The students did not mind being assigned supervisors with whom they have not had any prior contact. This was not a problem, as proven by the low percentage of response (39.65%) from those who agreed that supervisors having taught them before is important for successful supervision. The factors of timely feedback (69.2%), duration for completion of project (64.8%) and number of meetings (67%) were considered to be important by more than 50% of the students.

Differences in the Perceptions of the Factors Affecting Supervision between Genders

An analysis was carried out to identify the differences in perceptions of the factors between the genders
and the findings are indicated in Table 3.

Table 3:

Differences in Perceptions of the Factors Affecting Supervision According to Genders

				Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Total
No of Meetings with Supervisor	Gender	Male	Count	8	13	13	5	3	42
			% within Gender	19.00%	31.00%	31.00%	11.90%	7.10%	100%
		Female	Count	22	18	2	3	4	49
			% within Gender	44.90%	36.70%	4.10%	6.10%	8.20%	100%
	Total		**Count**	**30**	**31**	**15**	**8**	**7**	**91**
			% within Gender	33.00%	34.10%	16.50%	8.80%	7.70%	100%
Area of Supervisor's Expertise	Gender	Male	Count	5	18	6	8	5	42
			% within Gender	11.95%	42.85%	14.29%	19.05%	11.90%	100%
		Female	Count	14	15	9	6	5	49
			% within Gender	28.57%	30.61%	18.37%	12.24%	10.20%	100%
	Total		**Count**	**19**	**33**	**15**	**14**	**14**	**91**
			% within Gender	51.6%	27.5%	4.4%	4.4%	12.1%	100%
Timely feedback	Gender	Male	Count	12	16	7	7	0	42
			% within Gender	28.6%	38.1%	16.7%	16.7%	0%	100%
		Female	Count	22	13	5	3	6	49
			% within Gender	44.9%	26.5%	10.2%	6.1%	12.2%	100%
	Total		**Count**	**34**	**29**	**12**	**10**	**6**	**91**
	Gender	Male	% within Gender	37.4%	31.9%	13.2%	11.0%	6.6%	100%
Duration of the project	Gender	Male	Count	8	14	10	6	4	42
			% within Gender	19%	33.3%	23.8%	14.3%	9.5%	100%
		Female	Count	22	15	3	3	6	49
			% within Gender	44.9%	30.6%	6.1%	6.1%	12.2%	100%
	Total		**Count**	**30**	**29**	**13**	**9**	**10**	**91**
	Gender	Male	% within Gender	33%	31.9%	14.3%	9.9%	11%	100%

The findings indicated a difference in the perceptions between the male and female students with regard to the number of meetings with supervisors and success of supervision. Only 50% of the male students agreed that it was an important factor while 81.6% of female students agreed that it was important. With regards to the factor on the importance of the supervisor's area of expertise to the supervision, the findings between the perceptions of the male and female students showed a small difference of 4.38% only where 54.8% of males agreed it was important while 59.2% of female students agreed that it is important. In response to the question of whether timely feedback and project duration affect the supervisory process, the responses between the genders indicated a significant difference. Some 71.4% of female students found it important as opposed to only 66.7% of male students. Similarly, there was a significant difference in the perceptions on the importance of duration to a successful supervisory process. Compared to an average of 52.3% male students claiming it was important, a larger percentage of 75.5% female students found it important.

In addition, a cross tab analysis was conducted to determine the relationship between the variables and supervision success. The findings are indicated in Table 4.

Table 4

Cross Tab Analysis of Factors

	Gender of Supervisor	Nationality of Supervisor	Qualification Supervisor	Experience of Supervisor	Area of Supervisor's Expertise	No of Supervisees	Timely Feedback	Taught You Before	Duration for Completion	No of Meetings with Supervisor
Gender of Supervisor	1	0.724	0.144	-0.018	-0.062	0.160	0.010	0.221	-0.035	-0.035*
Nationality of Supervisor		1	0.218	0.047	-0.013	0.173	0.028	0.135	-0.006	-0.067
Qualification Supervisor			1	0.790	0.739	0.592	0.620	0.220	0.468	0.473
Experience of Supervisor				1	0.926	0.498	0.723	0.211	0.593	0.559
Area of Supervisor's Expertise					1	0.537	0.692	0.211	0.609	0.599
No of Supervisees						1	0.495	0.050	0.455	0.368
Timely Feedback							1	0.222	0.594	0.523
Taught You Before								1	0.306	0.428
Duration for Completion									1	0.640
No of Meetings with Supervisor										1

$p < 0.001$*
$p < 0.005$**

Cross tab analysis was conducted to determine the relationship between the variables. Cross tabulations provide a way of analyzing and comparing the results for one or more variables with the results of another (or others). In this section, cross tab was done to determine whether factors affecting the success of supervision process differ with the gender of the students. Table 5 shows the result of the Chi-Square Tests. The factors affected by gender of students (all p-values less than 5%) are; Number of meeting with the supervisors (5% sig level), Area of supervisor's expertise (10% sig level); timely feedback (5% sig level) and duration given for completion of the project (5% sig level).

Moreover, a chi-square test also carried out to test the goodness of fit in order to see the difference between the observed value and the expected value. The findings are indicated in Table 5.

Table 5

Chi-Square Test

	Pearson Chi-Square		**Asymp. Sig. (2-sided)**
No. of meetings with supervisor	15.603		.004
Area of supervisor's expertise	8.173		.085
Timely feedback	10.170		.030
Duration of the project	11.265		.004

The goodness of fit test is based on the frequency of occurrence and is used in determining how well the data obtained from an experiment matches the expected data. It is applicable to both qualitative attributes and quantitative variables, as it helps to ensure the experimental results are statistically significant and have not been caused by chance events.

Table 6
Summary of Data

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.023[a]	4	.197
Likelihood Ratio	6.130	4	.190
Linear-by-Linear Association	.030	1	.862
N of Valid Cases	91		

a.   4 cells (40.0%) have expected count less than 5. The minimum expected count is 3.69.

The Pearson chi-square statistic is 15.603 and the *p*-value is less than .05. There is evidence to support that the number of times a student meets the supervisor is dependent on the gender of student at 5% significant level. Some 50% of the male students agree that the number of times affects the supervision process. In the case of female students, however, it was higher with more than 82% agreeing that the number of meetings is important. The respondents' supervision process was measured by 9 items which remained after factor analysis was conducted. Based on Cohen's criteria (1989), two variables are said to be associated if the correlation coefficient value is at least .35. In this study, all the variables in a construct are adequately correlated since the highest absolute correlation falls between .35 and .85. Therefore, every item in the construct correlates adequately with at least one item in the construct. The reliability analysis gave Cronbach alpha value of .842 for the supervision process, which is well above the minimum requirement of .7. The KMO value for the factor analysis was 0.785, indicating a good level of data reduction adequacy. According to the students, the majority of supervisors need better training to ensure effective supervision.

CONCLUSION

This research explored the experience, practices and problems of the supervision process of undergraduate students who completed a final year project. Most of the responses revealed that the role played by their supervisors is not very satisfactory. The results show that a large proportion of the respondents were not very happy with the support and guidance given in terms of time allocated for supervision. They felt that the supervisors did not guide them sufficiently in terms of the research requirement; literature review, designing research questions, methodology and data analysis especially with regard to quantitative data analysis. Since academic research is a complex and highly specialized form of learning activity, it is crucial to adopt high standards of practice.

The insights obtained from this study should be a useful source of reference for supervisors, course designers and policy makers in universities or other tertiary institutions. Improvement in the quality of supervision will help to bring about a better quality of student learning. Since this is an exploratory study and the sample size is small, the findings cannot be generalized, but they can definitely help in giving insight into the issues arising from the study. The study may be replicated with different students and supervisors from other disciplines so as to shed more light on the areas of investigation, to benefit both supervisors and students alike. Thus, the findings of this research and other studies on the supervisory process from students' perspective must be taken into consideration in all programs which require research to ensure successful completion of the projects through positive supervisor-supervisee relationships. Future research too can be carried out to understand the social processes occurring in multicultural supervision.

REFERENCES

Abadie, P. D. (1985). *A study of interpersonal communication processes in the supervision of counseling*. (Unpublished doctoral dissertation, Kansas State University).

Anderson, C., Day, K., & McLaughlin, P. (2007). Mastering the dissertation: Lecturers' representations of the purposes and processes of master's level dissertation supervision. *Studies in Higher Education, 31,* 149-168.

Anderson, C., Day, K., & McLaughlin, P. (2008). Student perspectives on the dissertation process in a Master's degree concerned with professional practice. *Studies in Continuing Education, 30(1),* 33-49

Armstrong, S. J. (2004). The impact of supervisors' cognitive styles on the quality of research supervision in management education. *British Journal of Educational Psychology,74*(4), 599-616.

Association for Counselor Education and Supervision. (1993). Ethical guidelines for counseling supervisors. *ACES Spectrum, 53*(4), 270-276.

Baker, M., Cluett, E., Ireland, L., Reading, S., & Rourke, S. (2013). Supervising undergraduate research: A collective approach utilizing group work. *Nurse Education Today*. Advance online publication. doi:10.1016/jnedt.2013.05.006.

Bartlett, W. E., Goodyear, R. K., & Bradley, F. O. (Eds.). (1983). Supervision II [Special issue]. *Counseling Psychologist, 11*(1), 7-79.

Bitzer, E. (2010). Postgraduate research supervision: More at stake than research training. *Acta Academica Supplementum, 1,* 23–56.

Brydon, K., & Flynn, C. (2013). Expert companions? Constructing a pedagogy for supervising honours students. *Social Work Education: The International Journal, 15,* 1-16.

Chiaburu, D. S. & Tekleab, A. G. (2005).Individual and contextual influences on multiple dimensions of training effectiveness. *Journal of European Industrial Training, 29* (8), 604 – 626.

Cochrane, W. S., Salyers, K., & Ding, Y. (2010). An examination of the preparation, supervisor's theoretical model, and university support for supervisors of school psychology interns. *Trainers' Forum, 29* (1)*,* 6-22.

Dainty, P. (2010). *Educational supervision.* Retrieved from http://careers.bmj.com/careers/advice/view-article.html?id=20000908De Kleijn, R. A. M., Mainhard, M. T., Meijer, P. C., Mrekelmans, M., & Pilot, A. (2013). Master's thesis projects: Students' perceptions of supervisor feedback. Assessment & Evaluation in Higher Education. *Journal of Counselling Psychology, 12,* 1-15.

DeTrude, J. (2001). *The supervision process: Complications and concerns.* Retrieved from http://www.shsu.edu/piic/summer2001/detrude.html Despenser, S. (2013). Getting the most out of supervision. *Healthcare Counselling & Psychotherapy Journal, 13*(4)*,* 28-31.

Elawar, M. C., & Corno, L. (1985). A factorial experiment in teachers' written feedback on student homework: Changing teacher behaviour a little rather than a lot. *Journal of Educational Psychology, 77* (2), 162-73.

Foxon, M. (1993). A process approach to the transfer of training. Part 1: The impact of motivation and supervisor support on transfer maintenance. *Australian Journal of Educational Technology, 9* (2) 130-143.

Friedlander, M. L., & Ward, G. W. (1984). Development and validation of the Supervisory Styles Inventory. *Journal of Counseling Psychology, 31,* 541–557.

Grant, J., Schofield, M., & Crawford, S. (2012). Managing difficulties in supervision: Supervisors' perspectives. *Journal of Counseling Psychology*, *59 (4),* 528–541.

Goodyear, R. K. (1982). *Psychotherapy supervision by major theorists*. Manhattan, KS: Kansas State University Instructional Media Center.

Goodyear, R. K., Abadie, P. D., & Efros, F. (1984). Supervisory theory into practice: Differential perception of supervision. *Journal of Counseling Psychology, 31,* 228–237.

Goodyear, R. K., & Bradley, F. L. (1983). Theories of counselor supervision: Points of convergence and divergence. *The Counseling Psychologist, 11*(1)*,* 59–67.

Hair, J. F.; Anderson, R. E., Tatham, R.L., & Black, W. C. (1998). *Multivariate data analysis.* Englewood Cliffs, NJ: Prentice Hall.

Harrison, M. E., & Whalley, W. B. (2008). Undertaking a dissertation from start to finish: The process and product. *Journal of Geography in Higher Education, 32,* 401-418.

Healey, M. Lannin, L., Stibble, A., & Derounin, J. (2013). *Developing and enhancing undergraduate final-year projects and dissertations.* Research Report.

Ho, B. (2003). Time management of final year undergraduate English projects: Supervisees' and the supervisor's coping strategies. *System 31,* 231–245.

Holloway, E., Freund, R. D., Gardner, S. L., Nelson, M. L., & Walker, B. R. (1989). Relation of power and involvement to theoretical orientation in supervision: An analysis of discourse. *Journal of Counseling Psychology, 36(1) ,* 88–102.

Ismail, A., Abu Bakar, R., & Bongs Ogoh, S. (2008). Motivation to learn, supervisor's role and transfer of competency: A mediating relationship. Public Service of Malaysia. *Journal of Psychology*, 3, 89-109.

Jewell, E., & Brew, A. (2010). *Undergraduate research experience programs in Australian universities.* Research Report.

Kadushin, A. (2002). *Supervision in social work.* (4th ed.). New York, NY: Columbia University Press.
Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research: Planning and Design*. Upper Saddle River, NJ: Pearson.

Lessing, A. (2011). The role of the supervisor in the supervisory process, *South African Journal of Higher Education, 25 (5*), 921-936.

Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: A conceptual model. *Counseling Psychologist, 10 (1)*, 3-42.

MacKeogh, K. (2006). Supervising undergraduate research using online and peer supervision In M. Huba (Ed.), *7th International Virtual University Conference, Slovakia* (pp. 19-24). European Centre for the Development of Vocational Training.

Malcolm, M. (2012). Examining the implications of learner and supervisor teaching in Higher Education, *Studies in Higher Education, 17,* 565-576.

Miars, R. D., Tracey, T. J., Ray, P. B., Cornfield, J. L., O'Farrell, M., & Gelso, C.J. (1983). Variation in supervision process across trainee experience levels. *Journal of Counseling Psychology, 30,* 403-412.

Mills, C. W. (1959). *The Sociological imagination*. Oxford University Press.

Nadler DA. (1997). *Feedback and organisation development: Using data-based methods.* Addison-Wesley.

Nordentoft, H., Thomsen, R., & Wichmann-Hansen, G. (2013). Collective Academic Supervision: A Model for Participation and Learning in Higher Education*., The International Journal of Higher Education and Educational Planning, 65*(5)*,* 581-593.

Norhasni Zainal Abiddin (n.d.) *Postgraduate Students and their Supervisors' Perception on Effective Supervisor: A Case Study at One Public University in Malaysia.* http://embt.ens.uabc.mx/posgrado/ecologiamolecularybiotecnologia/formatos/Postgraduates%20and %20supervision.pdf.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York, NY: McGraw- Hill.

Petersen, E. (2007). Negotiating Academicity: Postgraduate Research Supervision as Category Boundary Work., *Studies In Higher Education, 32*(4), 475-487.

Proctor, B. (1988). *Supervision: A working alliance*. East Essex: Alexia Publications.

Proctor, S., & Rogers, M. (2013). Making the invisible visible: Understanding social processes within multicultural internship supervision. *School Psychology Forum, 7 (1)*, 1-12.

Remely, T., & Herlihy, B. (2001). *Ethical legal, and professional issues in counseling.* Upper Saddle River, NJ: Prentice Hall.

Salmon, P. (1992). *Achieving a PhD: Ten students' experience*. Staffordshire: Trentham Books.

Tsai, W. C., & Tai, W. T. (2003). Perceived importance as a mediator of the relationship between training assignment and training motivation. *Personnel Review, 32(2),* 151-163.

Worthington, Everett, L., & Stern, Avner. (1985). Effects of supervisor and supervisee degree level and gender on the supervisory relationship. *Journal of Counseling Psychology, 32*(2)*,* 252-262.

Worthington, E. L., Jr., & Roehlke, H. J. (1979). Effective supervision as perceived by beginning counselors- in- training. *Journal of Counseling Psychology, 26,* 64-73.

Xiao, J. (1996). The relationship between organizational factors and the transfer of training in the electronics industry in Shenzhen, China. *Human Resource Development Quarterly, 7*(1) 55-73.

Yamnill, S., & McLean, G. N. (2001). Theories supporting transfer of training, *Human Resource Development Quarterly, 12,* 195-208.