Undergraduate Final Year Project Supervision: A Preliminary Study of Supervisee-Supervisor's Expectations

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Abstract
Supervisory expectations are known to have considerable bearing on undergraduate students' academic projects. The fundamental explanation for this is the incongruent expectations held by both the undergraduates as well as their supervisors. Previous research has primarily relied on qualitative data and is unable to unravel the intricate experiences of the supervision process. Within this backdrop, the present study explored expectations held by undergraduate Final Year Project supervisees and supervisors. Two surveys were carried out to elicit the undergraduates' and supervisors' views on their expectations of the supervision process. The participants' responses were analysed according to a) the expectations of the undergraduates and the supervisors and b) the congruence between the undergraduates' and supervisors' expectations. Overall, the results indicate mismatch in the expectations held by both the undergraduates as well as the supervisors. Furthermore, both parties were uncertain about their roles and responsibilities in the supervision process. The conclusions point to the need for a comprehensive set of guidelines which details specific roles and responsibilities for both the undergraduates and supervisors as well as a rigorous briefing to address the affective needs of the undergraduates as well as the supervisors in order to improve the quality of the FYPs and the supervision process.
Keywords: Undergraduate Thesis, Final Year Project, Research Supervision, Research Expectation, Research Writing

Introduction
It is a commonly held view that undergraduates are inexperienced and ill-equipped to conduct quality research due to their limited skills and knowledge to critically design a research as well as analyse the results. However, this view has been contested by those who have successfully guided many undergraduates in producing quality research known as Final Year Project (FYP). FYP refers to a research component (bachelor thesis) to be completed by undergraduates towards the end of an undergraduate programme. It provides an opportunity for the students to apply their knowledge and skills learned over the semesters to produce a piece of research

while being closely monitored by research supervisors. Fundamentally, the supervisors should focus on ensuring the quality of research as the students are merely novice researchers, while the undergraduates should be committed and independent to be able to confidently claim ownership of the research. Nonetheless, there have been grievances from both parties about the failure to meet each other's expectations. Hence, this study aims to determine and compare the FYP supervisors and undergraduates' expectations.

Background

With the growing demand and enrolment for postgraduate studies, FYP research experience is invaluable. The current economic scenario has driven many graduates to further their studies in order to improve their academic credentials and accordingly be more marketable. Hence, it is important that the objective of an undergraduate programme should not only be primarily focused on preparing students for employment, but also admission into postgraduate programmes. A postgraduate student (by coursework or research) is required to conduct research and produce a dissertation. The basic knowledge of conducting research acquired when completing their FYPs at undergraduate level forms an essential foundation to the successful completion of postgraduate dissertation. In line with that, following the guideline prescribed by the Ministry of Higher Education of Malaysia as laid out in the second edition of the General Subject Guidebook (MPU), FYP has to be offered as a core subject for all undergraduate programmes. Additionally, the Malaysian Quality Accreditation (MQA) lists Academic Project as one of the determining criteria for the accreditation of an 'honours' degree programme. MQA promotes the establishment of such programmes as they:

imitate the good practices of leading international universities increase the stakeholders' understanding of the use of 'honours' in Malaysia facilitate the recognition of qualifications and their equivalence with international qualifications

facilitate the process of graduate mobility to further postgraduate studies abroad improve the graduates' employment prospects, both, locally and globally facilitate the process of determining the salary scale for fresh graduates. (Guidelines on Nomenclature of Malaysian Higher Education Programme, 2019) Clearly, the inclusion of FYP as a core subject for undergraduate bachelor programmes benefits not only those who plan to embark on employment immediately upon graduation, but also those who intend to pursue their studies at postgraduate level.

Problem Statement

Many undergraduates struggle to complete their FYPs as they are generally unfamiliar with the research protocol. Despite the fact that undergraduates are generally familiar with assignments which include some forms of research, they are usually overwhelmed by the methodological concepts as well as anxious about producing a research proposal and accordingly an FYP. Seemingly, meeting the unforgiving deadlines for an FYP alongside having to juggle other course assessments are major challenges for undergraduates. This is predictable considering that they need to work with unfamiliar concepts introduced to them within a short period of two semesters. Apart from that, managing a supervisor-supervisee relationship can be stressful. It is the first time the students are each assigned to research supervisors who are randomly selected to assist them with their research. While some are paired with familiar faces (faculty members teaching the programme), others have to work with unfamiliar ones. This further dampens their motivation as they are unsure of the best way to communicate and maintain their relationship with their supervisors. For instance,

simple decisions like who should initiate communication and who should make all research-related decisions can be perplexing for both parties. On top of that, some of the supervisors are new to the idea of research supervision. Topic unfamiliarity may undermine a supervisor's self-esteem when tasked to supervise unconversant research topics. Additionally, supervisors who are accustomed to postgraduate research supervision will be challenged to pitch their expectations to the undergraduate level. Handling novice researchers such as undergraduates may be problematic for these supervisors as they will need to juggle between lowering their expectations and providing closer supervision to ensure the validity and reliability aspects of the research are soundly addressed. Research-related decisions too can often be tricky as they are often torn between authority and ownership. Although a booklet is provided by the faculty on FYP guidelines, it is incomprehensive and does not take into consideration the affective needs of the undergraduates. Briefly, managing supervisor-supervisee relationship while maintaining professionalism can be challenging as the expectations of the two parties may be incongruent.

All the issues discussed have encouraged investigations into research supervision. Unfortunately, previous studies on research supervision have mainly focused on postgraduate studies (Jassim et al., 2015; Doğan & Bıkmaz, 2015; and Lee, 2008). Moreover, they mainly focused on supervisors' feedback (Baydarova et al., 2021; Moxham, 2016). One study by Steppenbelt and Basu (2019) investigates not only the expectations of the supervisors and undergraduates, but also the university's expectations of undergraduate thesis in Australia. On the other hand, in Malaysia, there are few studies (Seri Intan Mokhtar, 2017; Djamila & Makinda, 2016) which examined the expectations and concerns of the undergraduates, while others focus on the management system (Sharifah Afifah, 2020; Kannan, 2019). One study by Razali et al (2020) investigates the perceptions of Malaysian undergraduates and supervisors, but it was a qualitative study. Therefore, this study aims to fill the gap by quantitatively determining the undergraduates' expectations of their supervisors and undergraduate supervisors' expectations of their undergraduates, as well as evaluating the congruence of their expectations. The results would offer ways to improve their respective roles and consequently the quality of FYPs.

Literature Review
The process of producing an FYP is closely linked to the supervisor-student interaction (Razali et al., 2020). According to DeTrude (2001), a good interactive supervisory relationship necessitates careful consideration of several factors, including sensitivity to the roles and responsibilities of both the supervisor and the supervisee. Previous research (Jamaludin et al., 2021; Razali et al., 2020; Howells et al., 2017) also confirmed that a constructive relationship between students and academic advisors is critical to the quality and success of their projects. Correspondingly, we may anticipate that the effectiveness of a research project and the ability of the students to develop their roles as researchers are highly dependent on the level of supervision that the students receive.

Student's Responsibilities and Expectations
The FYP is a transition from teacher-directed to self-directed learning that allows for further development of specific graduate attributes and skills (Healey et al., 2013). Al Ajmi et al (2022) agree that through such research, students acquire and improve various skills as well as help them in becoming learners who are active and research oriented. Students are expected to explore and progress on their final year project independently as well as accept responsibility

for their own learning, which is perhaps the biggest challenge for them. However, this may create uncertainty among the students because as novice researchers, they doubt their capabilities to conduct independent research. Lessing (2011) asserts that students lack experience and knowledge to complete a project, hence they require guidance and support from their supervisors. Although Lessing's argument is reasonable, Phillips and Pugh (2000) as mentioned in Lessing (2011) stated that students should not rely on their supervisors' instructions. Instead, students are expected to start discussions, ask for help when needed and discuss their research. Most importantly, the guidelines provided for them are perfunctory and do not address the affective aspects of managing the relationship.

Supervision Challenges and Expectations
Regardless of the type of evaluation offered to the students, supervisor communication must be explicit. Both, the instructors and students, must clearly communicate their expectations. Knowing the students' interests, shortcomings, and strengths will make it easier to help them enhance their knowledge and achieve academic success. FYP is a one-of-a-kind sort of evaluation. Final-year project coordination and supervision are difficult, especially when it is mandatory for undergraduates to work individually because large numbers of them working independently necessitate a high number of supervisors (Rasul et al., 2009). Because the project is delivered differently and involves a large number of teaching staff, there are many styles and techniques to supervising FYPs which may result in challenges for both parties.

The relationship between an undergraduate and supervisor has a significant impact on student experience, satisfaction, and achievement. According to Naeem et al (2019), the project should be aligned with the interests of both the undergraduate and the supervisor because this has a major impact on the undergraduate's motivation and engagement with the project, which will be reflected in the entire learner experience. However, a positive learner experience does not always translate into a positive performance. According to Razali et al (2020), not all students are prepared to take on an active, autonomous role when they first begin supervision. Timely supervision and mentoring play a vital role in influencing learners' motivation to learn and work efficiently towards reaching their goals within their programme of study (Bryson & Hand, 2007).

McGinty et al (2010) claim that while students may have different expectations of their supervisors and expect them to provide emotional support, supervisors are more concerned with the intellectual components of supervision. Another critical challenge that arises between a supervisor and the student is the supervisor's workload (Roberts & Seaman, 2018). The increased number of supervisions puts a psychological strain on the supervisors and creates additional responsibilities for educators who still need to ensure research projects are completed on time. As a result, it affects the interpersonal relationship between the student and the supervisor. In addition, Rowley and Slack (2004) stated that assigning students to a supervisor whose expertise does not match the students FYP research area could lead to irreconcilable personality conflicts between stakeholders. This is common especially among new supervisors whose supervision knowledge is insufficient due to lack of experience, hence they are unsure of the kind of support to provide. The initial practices of experienced supervisors and the perspectives of new supervisors on undergraduate supervision have a noticeable impact on the supervision process and contribute to students' learning, particularly when supervision is offered as part of teaching other courses and as a requirement for students' academic work (Al-Doubi et al., 2019). According to Bikanga (2021, p. 64), "the quality of student learning experience, feedback, and satisfaction level depends

on support and supervision during their studies". So, when there is no fitting guidance, the students may get frustrated as they feel their time and effort has been wasted. This can subsequently affect their project performance.

Supervisors' Roles and Supervisory Styles
The way in which supervisors view their roles and responsibilities determine the style of their supervision (Holmberg, 2006). Literature has highlighted that the supervisors play the role of a facilitator, dictator, friend, counsellor, consultant, and examiner (Razali et al., 2020; Wisker et al., 2003; MacKeogh, 2006) while others offer their pupils greater autonomy over the direction of their work and advancement (Holmberg, 2006). However, Todd et al. (2004) add that there is no one single style adopted by the supervisors. The supervision styles can change during the duration of the research to accommodate the needs of the students, supervisors and the demands of the research project. However, Abiddin et al (2009) believe that the supervisors' and students' roles should be clearly determined right from the beginning of the supervision process. This unfortunately is challenging as there are no detailed guidelines for both, the supervisors and the undergraduates. Hence, Frith (2020, p.7) considers the undergraduate supervision as a "highly complex, pressured teaching practice for which there is little training and guidance".

Project supervisors are also expected to be knowledgeable in the field, able to tell students to clarify their topics, focused and realistic (not overly ambitious). In addition, it is important that the supervisors provide moral support, useful advice and constructive feedback to their students (Ishak et al., 2021), assuring them that the project is feasible and can be completed within the allocated time frame. Bikanga (2021, p. 54) stated that "students value when a supervisor is accessible and available". Supervisors can allocate certain time for supervision and other available resources to ensure the completion of the research project. The positive learning environment that the supervisors create, can encourage student motivation and learning, which is much needed in completing their final project successfully. Although much has been said about the roles of the supervisors, little is known about the students' responsibilities. Available literature has reported that in general, the students are expected to be independent learners without having their supervisors to dictate and do the work for them (Frith, 2020; Roberts & Seaman, 2018; Anderson et al., 2006; Todd et al., 2006). While this is the nature of supervision, Sidhu et al. (2014) claim that in some cultures where students receive more support from their educators tend to be more dependent and expect their supervisors to help them organise their research and select the best approach to analyse data. According to research by Sidhu et al. (2014), Malaysian postgraduate students are very reliant on their supervisors. On the other hand, research has also revealed that Malaysian supervisors adopt the position of an authority with greater control over the direction of students' learning (Razali et al., 2020). Because of this power relationship, students have the tendency to look up to their supervisors and be submissive since they feel that the success of their project depends on their supervisors' intellectual prowess, which is stereotypical of the Asian learning environment (Hallinger, 2010).

Method
This study adopts a quantitative approach by employing descriptive statistics. The quantitative approach is able to provide statistical evidence on the magnitude of the issue investigated (Allen, 2017). Hence, two matching sets of surveys (one-to-one match for all

items) were created via Google Form to obtain the expectations of both, the undergraduates and supervisors, on similar areas. Each set is divided into two sections. The first section aims to collect the demographic data of the respondents. In the second section, using the 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), the respondents were requested to respond to a total of 39 statements on the following 14 themes:

Communication
Meeting
Supervisor Selection
Topic Selection
Relationship
Methodological Decisions
References and Materials
Policies and Procedures
Study Plan and Completion of Tasks
Checking of Drafts
Language Accuracy and Academic Tone
Standard of FYP
Recognition for Contribution
Evaluation of FYP

Note, however, that this paper only reports on five themes (17 statements) - Communication, Meeting, Supervisor Selection, Topic Selection, and Relationship due to space limitation. The respondents were also given an opportunity to provide overall comments on their expectations in the last section of the survey.

The two sets of surveys were distributed online via WhatsApp by providing the URL to all 40 supervisors and 176 undergraduates. This is the most prevalent method for boosting online survey response rates as reminders can be sent to encourage participation (Nulty, 2008). By the end of the survey period, data had been collected from 123 individuals - 96 undergraduates (54.5%) and 27 supervisors (67.5%) responded to the survey. Keeter et al (2006) argues that although informative, return rates on their own are not good proxies for study validity. Therefore, researchers need to provide details about both, their respondents and non-respondents, attempt to improve participation and state the denominators for the calculation of the response rates in order to more accurately assess the validity and relevance of the results (Morton, 2012). In this study, the surveys were distributed during the semester break and this explains the response rate. The Google Form was designed to ensure no questions were missed out prior to submission.

The responses were analysed using IBM SPSS Statistics version 26. Descriptive statistics were used to determine the respondents' expectations by calculating the frequency, percentage and mean for all the items. The results were tabulated into a figure and tables. Note that although all of the items in Section B of both surveys correspond with each other, they are framed from opposing perspectives as 'my supervisors should' (for the undergraduates) and 'my undergraduate supervisees should' (for the supervisors). Hence, for an accurate quantitative comparison, the data from the supervisors' responses were reversed.

Results and Discussion

This section is organised by firstly laying out the profiles of the two groups of the respondents. It is followed by the analysis of the expectations of both, the undergraduates and the supervisors, and the comparison to determine the congruence of their expectations based on the five themes - Communication, Meeting, Topic Selection, Supervisor Selection, and Relationship. 27 supervisors participated by responding to the survey. 37% of the respondents are seniors who are more than 50 years old, another 37% are between the ages of 30 to 39, 22.2% are aged between 40 to 49 years old, while the remaining are less than 30 years old. 81.5% of them have a Master's degree, while the rest are PhD holders. Their fields of interest are diverse as shown in Figure 1
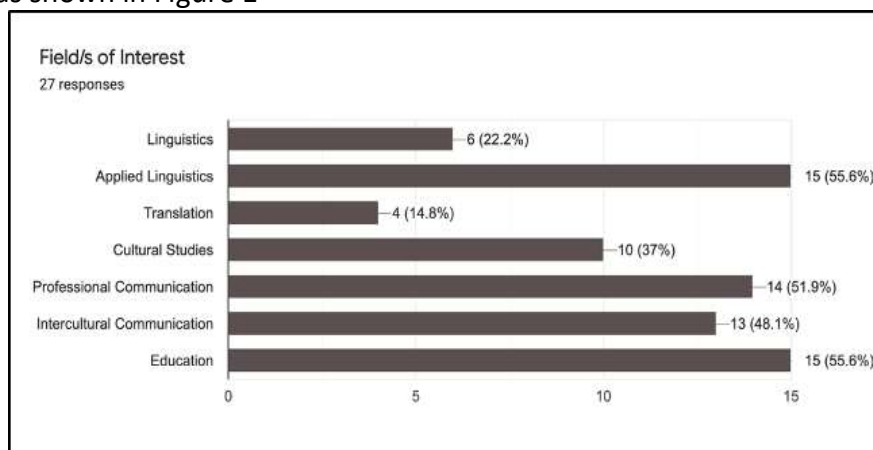

Figure 1: FYP Supervisors' Fields of Interest

Slightly more than half of the supervisors are interested in the fields of Applied Linguistics (55.6%), Education (55.6%), and Professional Communication (51.9%). Almost half of them are interested in Intercultural Communication (48.1%), while the remaining of them are keen on Cultural Studies (37%), Linguistics (22.2%) and Translation (14.8%). It should also be highlighted that their supervision experience varies staggeringly where 85.2% are without undergraduate supervision experience and 70.4% are without postgraduate supervision experience.

Table 1 presents the demographic profile of the undergraduates. A total of 96 students responded to the survey - 62.5% of them are in Semester 4, 8.3% are in Semester 5 and 29.2% in Semester 6. Only 2.1% of them are more than 25 years old. 74.7% are between 20 to 22 years old and the remaining 23.2% are between 23 to 25 years old. 20 of them are male while the other 76 are female students.

Table 1
Demographic Profile of the Undergraduates

Total number of respondents	96	
Gender	Male	20 students (20.8%)
	Female	76 students (79.2%)
Age	20-22 years old	74.7%
	23-25 years old	23.2%

	> 25 years old	2.1%
Semester of study	Semester 4	62.5%
	Semester 5	8.3%
	Semester 6	29.2%

Undergraduates and Supervisors' Expectations
Table 2 compares the overall results based on the variables investigated which are communication, meeting, topic selection, supervisor selection, and relationship.

Table 2
Overview of Undergraduates and Supervisors' Expectations Based on the Variables

Themes	Undergraduates' Expectations		Supervisors' Expectations	
	Mean	SD	Mean	SD
Communication	3.8785	0.74003	2.5185	0.75862
Meeting	3.7896	0.69244	2.8889	0.79679
Supervisor Selection	3.8403	0.87189	3.8395	0.63630
Topic Selection	3.8889	0.70365	2.0494	0.65830
Relationship	3.9340	0.75799	3.9340	0.75799

The mean and standard deviation (SD) of the responses obtained from all undergraduates (n=96) and supervisors (n=40) for all the 5 themes are compared in Table 2. These were calculated based on their responses to the 5-point Likert scale statements. In the following subsections, we will closely examine each of the 5 themes in detail.

Communication
A total of 3 items address the theme of supervisee-supervisor communication. The undergraduates, as presented in Table 3, mostly agreed with the first and third statements (with 62% and 76.1% either agreed or strongly agreed with the statements respectively). However, on coordinating all forms of communication, 39.6% of them were unsure that it should be the supervisors' responsibility, while another 24% agreed with the statement.

Table 3
Supervisee-Supervisor Expectations on Communication

Item [Expectation]		Mean	Response Distribution (%)				
			1 [Strongly Disagree]	2	3	4	5 [Strongly Agree]
Supervisors to initiate Communication	Undergraduate/ Supervisee	3.83	1.0	6.3	30.2	33.3	29.2
	Supervisor	1.89	37.0	37.0	25.9	0	0
Supervisors coordinate all forms of communication	Undergraduate/ Supervisee	3.68	1.0	8.3	39.6	24.0	1.0
	Supervisor	2.63	18.5	25.9	33.3	18.5	3.7
Supervisors decide on mode of Communication	Undergraduate/ Supervisee	4.13	0	3.1	19.8	34.4	41.7
	Supervisor	3.04	7.4	25.9	25.9	37.0	3.7

Their supervisors, on the other hand, believe that the undergraduates should be the ones initiating communications with 74% of them who agreed, while another 25.9% were unsure. Similarly, the supervisors expect their undergraduates to coordinate all forms of communication (Disagree: 25.9% and Strongly Disagree: 18.5%). Another 33.3% were unsure, while the remaining 22.2% either strongly agreed or agreed). Their responses on deciding the mode of communication were also divided as the majority of them either Strongly Agree (3.7%), Agree (37%), Not Sure (25.9%), Disagree (25.9%) or Strongly Disagree (7.4%) that it should be done by the undergraduates.

Meeting
Table 4 summarises both the undergraduates and supervisors' expectations on meetings based on 5 statements. 54.1% of the undergraduates agreed or strongly agreed for supervisors to insist on regular meetings, another 36.5% were unsure, while the remaining 9.3% disagreed or strongly disagreed. A similar trend is observable across the other 4 items where most of the undergraduates either strongly agreed, agreed or were not sure that the items are the responsibilities of the supervisors, while a smaller proportion of them either disagreed or strongly disagreed with the statements.

Table 4
Supervisee-Supervisor Expectations on Meeting

Item [Expectation]		Mean	Response Distribution (%)				
			1 [Strongly Disagree]	2	3	4	5 [Strongly Agree]
Supervisors insist on regular meetings	Undergraduate/ Supervisee	3.72	1.0	8.3	36.5	26.0	28.1
	Supervisor	2.30	22.2	33.3	37.0	7.4	0
Supervisors decide on time for the meeting	Undergraduate/ Supervisee	3.83	0	5.2	34.4	32.3	28.1
	Supervisor	3.00	11.1	22.2	33.3	22.2	11.1
Supervisors decide on the frequency of meeting	Undergraduate/ Supervisee	3.93	0	6.3	28.1	32.3	33.3
	Supervisor	3.04	14.8	14.8	33.3	25.9	11.1
Supervisors decide on the length of each meeting	Undergraduate/ Supervisee	3.81	0	6.3	34.4	31.3	28.1
	Supervisor	3.52	7.4	3.7	37.0	33.3	18.5
Supervisors are quick to reply to queries	Undergraduate/ Supervisee	3.66	1.0	16.7	25.0	30.2	27.1
	Supervisor	2.59	25.9	25.9	22.2	14.8	11.1

The supervisors, on the other hand, generally believe that all the responsibilities listed should be on the undergraduates. It should also be noted that a rather huge percentage of the supervisors is unsure on whose responsibilities they should be (Insist on regular meetings (37%), Decide on time for the meeting (33.3%), Decide on frequency of meeting (33.3%), Decide on length of each meeting (37%) and Respond to queries within 24 hours (22.2%).

Supervisor Selection
Table 5 summarises the supervisee-supervisor expectations on Supervisor Selection based on 3 statements. 57.3% of the undergraduates believe that their supervisors should be appointed from the pool of programme lecturers, 33.3% were unsure, while the remaining 9.4% disagreed or strongly disagreed with the statement. Similarly, they expect their supervisors to be experts in the field (62.6%). However, 27.1% were unsure and the remaining 10.5% disagreed. The majority of them also believe that supervisors should be committed to not only their students, but also the research (63.5%). Only 6.2% disagreed with the statement, but almost half of them (30.2%) were unsure.

Table 5
Supervisee-Supervisor Expectations on Supervisor Selection

Item [Expectation]		Mean	Response Distribution (%)				
			1 [Strongly Disagree]	2	3	4	5 [Strongly Agree]
Supervisor should be a lecturer teaching the programme	Undergraduate/ Supervisee	3.81	3.1	6.3	33.3	20.8	36.5
	Supervisor	1.81	37.0	44.4	18.5	0	0
Supervisor should be an expert in the field	Undergraduate/ Supervisee	3.79	4.2	6.3	27.1	31.3	31.3
	Supervisor	2.67	14.8	22.2	44.4	18.5	0
Supervisor should be committed to, both, the student, and the research	Undergraduate/ Supervisee	3.92	1.0	5.2	30.2	28.1	35.4
	Supervisor	4.00	3.7	0	18.5	48.1	29.6

The supervisors, on the other hand, seem to have a different idea altogether. The majority of them (81.4%) disagreed that supervisors should be selected from those teaching the programme with only 18.5% who were unsure. Interestingly, however, 37% of them actually disagreed with the statement that the supervisors have to be experts in the field. Almost half of them (44.4%) were unsure, while another 18.5% felt otherwise. Their responses to their commitment to both the undergraduates and research are also interesting as 77.7% of them agreed with the statement. 18.5% of them were unsure, while another 3.7% strongly disagreed. Clearly, the supervisors are confident as they are qualified with research writing experience.

Topic Selection
In terms of Topic Selection, as shown in Table 6, similarly, majority of the undergraduates either strongly agreed or agreed that two of the three responsibilities listed should be placed on the supervisors - Provide guidance on topic selection (87.5%), and Supervisors' familiarity with the research area (73.9%). However, in relation to Topic selection only 39.6% agreed or strongly agreed that it is the responsibility of the supervisors, while the biggest portion was unsure and the remaining disagreed or strongly disagreed. Only a small percentage of them either strongly disagreed or agreed to the three statements - 26%, 2.1%, and 4.2% respectively. Of the three statements, a huge majority of the undergraduates believe that the supervisors' role is to guide the undergraduates on topic selection.

Table 6
Supervisee-Supervisor Expectations on Topic Selection

Item [Expectation]		Mean	Response Distribution (%)				
			1 [Strongly Disagree]	2	3	4	5 [Strongly Agree]
Supervisors responsible for selecting topics	Undergraduate/ Supervisee	3.20	10.4	15.6	34.4	22.9	16.7
	Supervisor	2.11	18.5	55.6	22.2	3.7	0
Supervisors provide guidance on selecting topics	Undergraduate/ Supervisee	4.36	0	2.1	10.4	36.5	51.0
	Supervisor	1.93	29.6	55.6	7.4	7.4	0
Supervisors are familiar with the research area	Undergraduate/ Supervisee	4.10	0	4.2	21.9	33.3	40.6
	Supervisor	2.11	22.2	51.9	18.5	7.4	0

Table 6 also shows the Supervisors' Expectations on Topic Selection. Again, in relation to Topic Selection, the supervisors believe otherwise as a huge majority of them placed the listed responsibilities on the undergraduates. 74.1% of them either strongly agreed or agreed on topic selection, 85.2% on suggesting research topics, and 74.1% on undergraduates' familiarity with the research area. Generally, both the undergraduates and supervisors agree that the supervisors' role is to guide, and the undergraduates should independently decide on the research topic.

Relationship
Table 7 tabulates the findings on the undergraduates' expectations on their relationship with their supervisors.

Table 7

Supervisee-Supervisor Expectations on Managing their Relationship

Item [Expectation]		Mean	Response Distribution (%)				
			1 [Strongly Disagree]	2	3	4	5 [Strongly Agree]
Supervisors should ensure that the relationship with student is purely professional	Undergraduate/ Supervisee	4.18	0	2.1	25.0	26.0	46.9
	Supervisor	1.85	44.4	29.6	22.2	3.7	0
Supervisors should make students feel more comfortable to be approached	Undergraduate/ Supervisee	4.54	0	0	11.5	22.9	65.6
	Supervisor	2.44	22.2	29.6	33.3	11.1	3.7
Supervisors should play the role of a mentor	Undergraduate/ Supervisee	4.47	0	0	8.3	36.5	55.2
	Supervisor	4.19	0	3.7	11.1	48.1	37.0

Three responsibilities were listed. While 2.1% of them disagreed that it should be the supervisors' responsibility to ensure their relationship is purely professional, 25% were unsure, and the remaining 72.9% either strongly agreed or agreed. In response to the supervisors' responsibility to make the undergraduates feel more comfortable to approach them, almost all of them (88.5%) either strongly agreed or agreed with the statement. 11.5% were not sure, and none disagreed. Similarly, 91.7% of the undergraduates expected their supervisors to play the role of a mentor, and the remaining 8.3% were not sure.

It should be noted that the majority of the supervisors (74%) believe that it is not the supervisor's responsibility to establish a professional relationship with the undergraduates, 22.2% were unsure, and the remaining 3.7% felt otherwise. Likewise, in relation to approachability, 51.8% of the supervisors (29.6% disagreed and 22.2% strongly disagreed) believed that it is not their responsibility. 33.3% of them were unsure, while 14.8% responded otherwise. Interestingly, however, the supervisors' responses on them playing the role of a mentor are aligned to the undergraduates' expectations with 85.1% of them either strongly agreed (37%) or agreed (48.1%) with the statement. Many also were unsure across the three items - 22.2%, 33.3% and 11.1% respectively. The findings can be explained by the power distance that exists between the two parties as well as cultural influence.

Discussion

Interestingly, the results reveal marked differences at varying degrees in the undergraduates and supervisors' expectations across four of the five investigated themes. These findings contradict Jamieson and Gray's (2006) study but concur with Razali et al.'s (2020) findings. Firstly, for the theme - communication, the supervisors and undergraduates generally have conflicting views on who should initiate and coordinate communication as well as decide on

the mode of communication between them. In fact, a significant percentage of them indicated that they are unclear about who should take responsibility in this area.

A similar trend is also observable in relation to meetings. While they are generally incongruent in their expectations, a significant number of them also expressed their uncertainties. Generally, the undergraduates believe that the responsibilities fall on the supervisors, while many supervisors express uncertainties instead of placing the responsibilities on the undergraduates. It should also be noted that some supervisors prefer to have some control in relation to time, length and frequency of meetings. The results suggest that while the supervisors generally demand for authority and respect, the undergraduates are careful not to overstep the boundary.

The next section of the survey on supervisor selection also shows contradictory expectations between the undergraduates and supervisors. Although many of the supervisors expressed their uncertainties, others mainly believe that supervisors should not necessarily be from the programme or even experts in the field. In fact, it is interesting to highlight that a proportion of the supervisors disagreed with the statement that they should be committed to their undergraduates and the research. This suggests their expectation for the undergraduates to be independent in order to claim ownership of the research.

Turning to the theme of topic selection, the undergraduates again mainly assume that the supervisors should be responsible for choosing the topic and offering guidance on topic selection, apart from being an expert in the field. The supervisors, on the contrary, were mostly indecisive, especially on the last two items. The local culture which acknowledges power distance is partly able to explain these contradictory expectations.

Finally, the last theme - relationship, shows that the undergraduates largely believe that the supervisors are responsible in ensuring professional relationship, comfort, and approachability, as well as playing the role of a mentor. In point of fact, none of them disagreed on the last two items. It should be noted that almost all of the supervisors also see themselves as a mentor and this is the single striking congruence between the supervisors and the undergraduates' expectations.

Together, the present findings confirm the issues discussed earlier in relation to managing relationships and meetings, communication, as well as topic and supervisor selection. These issues can be a result of various factors including absence of clear comprehensive guidelines, novice research skills and cultural values.

The absence of a clear set of comprehensive guidelines for the undergraduates and supervisors mainly contribute to not only the incongruent expectations between the two parties, but also the high level of uncertainties among the undergraduates and supervisors. This concurs with the literature on the importance of clarifying the supervisor's role in advance as this can influence the skills the undergraduates develop (Del Río et al., 2018) and avoid undergraduates' frustration with supervisory support (Neupane Bastola & Hu, 2021). Although a booklet of guidelines for FYP is shared with the undergraduates as early as the proposal writing stage, it superficially explains the aspects of supervisor assignment, topic selection and consultations/meetings. It is also a general reference for all undergraduate programmes at the faculty; it explains that each one of them will be assigned to one supervisor and provides basic tips on topic selection. Likewise, the explanation on consultations is also brief focusing on the consultation form and the frequency of meetings. Hence, the undergraduates are clueless as to how to best approach and communicate with their supervisors as well as manage their relationship. The supervisors, unfortunately, also refer to the same booklet. This explains the incongruent expectations between the

supervisors and undergraduates. Clearly, the present guidelines can be further improved with more details to help both undergraduates and supervisors, particularly when the undergraduates look to the supervisor for emotional support, while the supervisors' primary attention is on the academic issues of supervision (McGinty, Koo, & Saeidi, 2010). We suggest that a briefing be conducted to attend to the more affective aspects of managing their expectations especially when it relates to attitudes and emotions. At the session, possible situations can be shared and ways to best deal with them can be discussed.

While the shift from instructor-directed learning to autonomous learning presented by the FYP provides an opportunity for the undergraduates to develop related skills and qualities Healy et al (2014), it unfortunately can create uncertainties as they are novice researchers. It is also understandable for a novice to doubt their capability to carry out independent research. Stappenbelt (2013) explains that the undergraduates must be prepared to mentally shift from guided learning in large group settings to autonomous learning with supervision. Clearly, undergraduates must be prepared for the transition to independent research. The supervisors should acknowledge this challenging transition and supervise the undergraduates as proposed by Stappenbelt et al (2019) by focusing on the research skills rather than the output. We believe that the shift of mindset by both the supervisors and undergraduates will to a certain extent align the mismatched expectations between the two parties.

Apart from the absence of a comprehensive set of guidelines and novice research skills, cultural values can partly explain the incongruent expectations between the supervisors and undergraduates. Undergraduates who come from a cultural background of instructor-directed learning have the tendency to be highly dependent and require greater support and assistance from their supervisors (Sidhu et al., 2014). Malaysians belong to the high-context culture which places great emphasis on respect, power distance, face, and politeness (Hofstede Insights, 2022). The undergraduates, hence, acknowledge vertical hierarchical structure which places them as the less powerful party in this bipartite relationship. Therefore, it is crucial to portray themselves as being polite by suppressing themselves from giving opposing reactions that may affect a harmonious relationship with their supervisors. The analysis endorses the influence of culture as the undergraduates predominantly believe that the supervisors are responsible for their research. The supervisors, on the other hand, understand that they are of higher status and expect displays of subordination and respect from the undergraduates. The findings also concur with Razali et al's (2020) claim that Malaysian supervisors adopt the position of an authority with greater control over the direction of students' learning. As power imbalance is acknowledged, supervisors are in a better position to take corrective actions Stappenbelt et al (2019) to bridge the gap between their expectations. Although both parties need to make adjustments, we believe that these adjustments should be predominantly initiated or suggested by the supervisors.

Conclusion
The present study extends past work concerning expectations in research supervisions. In general, there are various aspects of the supervision process that were unclear to both supervisors and undergraduates. While the undergraduates and supervisors agree that the supervisors play the role of a mentor in the whole supervision process, their expectations differ in the other aspects, which can be attributed to the teaching and learning culture as well as their cultural values. This study also highlights the importance of having early discussions regarding supervisory expectations to ensure successful and favourable outcomes. Articulating expectations as early as possible will assist both undergraduates and

supervisors to ensure a worthwhile experience whilst working on the FYP. The supervisors may continue to play the role of a mentor, but they need to also acknowledge that the undergraduates are novice researchers needing support, guidance and assurance. In turn, the undergraduates will have to be prepared for directing their own learning and research progress. This implies that the FYP is a shared journey between supervisors and undergraduates from which both parties can learn and benefit. We recommend that future studies employ a different research method, for example interviews, to gain a better understanding of the different aspects/ expectations in the undergraduate supervision process.

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References

Abiddin, N., Hassan, A., & Ahmad, A. (2009). Research student supervision: An approach to good supervisory practice. The Open Education Journal, 2, 11-16. https://doi.org/10.2174/1874920800902010011

Al Ajmi, Z., Al Na'abi, A., Al Rawahi, A. H., Al Saadoon, M., Al Balushi, H. D., Alhabsi, F., & Babiker, H. (2022). Student and supervisor perceptions of undergraduate research in college of Medicine and Health Sciences, Sultan Qaboos University, Oman. Research Square. https://doi.org/10.21203/rs.3.rs-1752029/v1

Al-Doubi, S. H., Fawzi, H., & Walters, J. (2019). Undergraduate research supervision: A case study of supervisors' perceptions at Yanbu University College. Higher Education Studies, 9(4), 112-119. https://doi.org/10.5539/hes.v9n4p112

Allen, M. (2017). The SAGE Encyclopedia of communication research methods. https://dx.doi.org/10.4135/9781483381411

Anderson, C., Day, K. & McLaughlin, P. (2006). Mastering the dissertation: Lecturers' representations of the purposes and processes of master's level dissertation supervision. Studies in Higher Education, 31(2), 149-168. https://doi.org/10.1080/03075070600572017

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, 599-616. https://doi.org/10.1348/0007099042376436

Baydarova, I., Collins, H.E. & Saadi, I. (2021). Alignment of doctoral student and supervisor expectations in Malaysia. International Journal of Doctoral Studies, 16, pp. 1-29. https://doi.org/10.28945/4682

Bikanga Ada, M. (2021). Master's students' perceptions of final year project supervision: on-campus vs online. Open Scholarship of Teaching and Learning, 1(1), 52-69. https://doi.org/10.56230/osotl.8

Bryson, C., & Hand, L. (2007). The role of engagement in inspiring teaching and learning. Innovations in education and teaching international, 44(4), 349–362.https://doi.org/10.1080/14703290701602748

Hofstede Insights. (2022). Country comparison. Malaysia. https://www.hofstede-insights.com/country-comparison/

DeTrude, J. (2001). The Supervision Process: Complications and Concerns. http://www.shsu.edu/piic/summer2001/detrude.html.Accessed 13 June 2014.

Doğan, N., & Bıkmaz, Ö. (2015). Expectation of students from their thesis supervisor. Procedia - Social and Behavioral Sciences, 174, pp. 3730-3737. https://doi.org/10.1016/j.sbspro.2015.01.1106

Frith, H. (2020). Undergraduate supervision, teaching dilemmas and dilemmatic spaces. Psychology Teaching Review, 26(1), 6-17. ISSN-0965-948X

Hallinger, P. (2010). Making education reform happen: Is there an 'Asian' way? School Leadership & Management, 30(5), 401-418. https://doi.org/10.1080/13632434.2010.502524

Healey, M., Lannin, L., Stibbe, A., & Derounian, J. (2013). Developing and enhancing undergraduate final-year projects and dissertations. The Higher Education Academy.

Holmberg, L. (2006). Coach, consultant or mother: Supervisors' views on quality in the supervision of bachelor theses. Quality in Higher Education, 12(2), 207-216. https://doi.org/10.1080/13538320600916833

Howells, K., Stafford, K., Guijt, R., Breadmore, & M. (2017). The role of gratitude in enhancing the relationship between doctoral research students and their supervisors. Teaching in Higher Education, 22(6), 621-638. http://dx.doi.org/10.1080/13562517.2016.1273212

Ishak, N., Khairuddin, F. N., & Aziz, N. S. (2021). Perceived postgraduate research supervisory practices and satisfaction towards supervision among supervisees at Faculty of Education. IIUM Journal of Educational Studies, 9(2), 109-122. ISSN: 2289-8085

Jamaludin, A. R., Fikry, W. A. W. I., Zainal, S. Z., Hadi, F. S. A., Shaharuddin, N., & Abd Rahman, N. I. (2021). The effectiveness of academic advising on student performance. International Journal of Advanced Research in Future Ready Learning and Education, 25(1), 20-29. ISSN: 2821-2800

Jamieson, S., & Gray, C. (2006). The supervision of undergraduate research students: Expectations of student and supervisor. Practice and Evidence of Scholarship of Teaching and Learning in Higher Education, 1(1). 37-59.

Jassim, O.A., Mahmoud, M.A. & Ahmad, M.S. (2015). Research supervision management via a multi-agent framework. Advances in Distributed Computing and Artificial Intelligence Journal, 3(4). 24-34. https://doi:10.14201/ADCAIJ2014342435.

Keeter, S., Kennedy, C., Dimock, M.A., Best, J., & Craighill, P.M. (2006). Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. Public Opinion Quarterly, 70, 759-779.

Lee, A. (2008). Developing effective supervisors: Concepts of research supervision. South African Journal of Higher Education, 21(4), pp. 680-693. https://doi:10.4314/sajhe.v21i4.25690

Lessing, C. A. (2011). The role of the supervisor in the supervisory process. South African Journal of Higher Education, 25(5), 921–936. https://www.ajol.info/index.php/sajhe/article/view/80695. eISSN: 1011-3487

MacKeogh, K. (December, 2006). Supervising undergraduate research using online and peer supervision. In: M. Huba (Ed.). Paper presented at the seventh International Virtual University Conference, (pp. 19-24). Bratislava, Technical University Bratislava. Retrieved from http://doras.dcu.ie/82/

Malaysian Quality Accreditation. (2019). Guidelines on Nomenclature of Malaysian Higher Education Programme (No 7/2019) Retrieved from https://www.mqa.gov.my/pv4/document/pekeliling/2019/Dec/7

McGinty, S.C., Koo, Y.L., & Saeidi, M. (2010). A cross-country study on research students' perceptions of the role of supervision and cultural knowledge in thesis development. International Journal of Inclusive Education, 14(5), 517–531. https://doi.org/10.1080/13603110802668682

Moxham, L., Dwyer, T., Taylor, E., Lauder, W., Stephens, M., Antoniou, C., Roxburgh, M., Reid-Searl, K., Chan, A. E., & Fuller, C. (2016). Articulating Expectations about Supervision. In M. Fourie-Malherbe., C. Aitchinson, E. Blitzer, R. Albertyn R (Eds). Postgraduate Supervision-Future Foci for the Knowledge Society. Stellenbosch: Sun. https://dx.doi.org/10.4314/jssd.v6i2.3

Naeem, U., Islam, S., & Siddiqui, A. (2019). Improving Student Engagement and Performance in Computing Final Year Projects. In 2019 IEEE International Conference on Engineering, Technology and Education (TALE) (pp. 1-9). IEEE. https://doi:10.1109/TALE48000.2019.9225860

Rasul, M. G., Nouwens, F., Martin, F., Greensill, C., Singh, D., Kestell, C., & Hadgraft, R. (2009, December). Good practice guidelines for managing, supervising and assessing final year engineering projects. In Proceedings of the 20th Annual Conference of the Australasian Association for Engineering Education (pp. 6-9).

Razali, R., Hawe, E., & Dixon, H. (2020). How are undergraduate students supervised? Perceptions of students and supervisors in a Malaysian university. Issues in Educational Research, 30(4), 1484-1501. http://www.iier.org.au/iier30/razali.pdf

Roberts, L.D., & Seaman, K. (2018). Good undergraduate dissertation supervision: Perspectives of supervisors and dissertation coordinators. International Journal for Academic Development, 23(1), 28–40. https://doi.org/10.1080/1360144x.2017.1412971

Rowley, J., & Slack, F. (2004). What is the future of undergraduate dissertations? Education and Training, 46, 176–181. https://doi.org/10.1108/00400910410543964

Scott, K., Kennedy, C., Dimock, M., Best, J., & Craighill, P. (2006). Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. Public Opin Quarterly. 2006; 70(5): 759-779.

Sidhu, G. K., Kaur, S., Fook, C. Y., & Yunus, F. W. (2014). Postgraduate supervision: Comparing student perspectives from Malaysia and the United Kingdom. Procedia - Social and Behavioral Sciences, 123, 151-159. https://doi:10.1016/J.SBSPRO.2014.01.1409

Stappenbelt, B., & Basu, A. (2019). Student-supervisor-university expectation alignment in the undergraduate engineering thesis. Journal of Technology and Science Education, 9(2), 199-216. https://doi:10.3926/jotse.482

Stappenbelt, B. (2013). The effectiveness of the teaching-research nexus in facilitating student learning. Engineering Education: Journal of the Higher Education Academy, 8(1), 111-121. https://doi:10.11120/ened.2013.00002

Todd, M. J., Smith, K., & Bannister, P. (2006). Supervising a social science undergraduate dissertation: Staff experiences and perceptions. Teaching in Higher Education, 11(2), 161-173.

Wisker, G., Robinson, G., Trafford, V., Warnes, M., & Creighton, E. (2003). From supervisory dialogues to successful PhDs: Strategies supporting and enabling the learning conversations of staff and students at postgraduate level. Teaching in Higher Education, 8(3), 383-397. https://doi.org/10.1080/13562510309400