



## Enhanced student satisfaction through effective supervisor- supervisee allocation: A case study

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The dissertation is an independent piece of work which is a key component of many undergraduate taught programmes. To deliver a personalised learning experience and enhance student satisfaction, effective supervisor-supervisee allocation is crucial. This paper employed a case study approach to pilot three allocation methods over three years to improve student dissertation experience through supervisor-supervisee allocation. Online survey data were collected and analysed. The findings revealed that a scaffolded matching approach that allows interaction and expression of interests could significantly enhance student engagement and satisfaction with undergraduate dissertation supervision.

**Keywords:** undergraduate dissertation, supervisor allocation, intervention, speed networking, personalised student learning

### Introduction

All happy families are alike; each unhappy family is unhappy in its own way.

(Tolstoy, 1875-1877/2001, p.1)

An undergraduate degree in the social sciences and humanities often has dissertation as a large and independent piece of work that contributes significantly to the final grade. Although the student needs to take on responsibility and autonomy within the learning process, the key factor is interdependence, rather than the student being completely independent or dependent (Lea, Stephenson, & Troy, 2003). An Honours dissertation is undertaken by most students in the UK and has deservedly “a privileged place within many degree programmes” (Hemmings, 2001, p.41). It is a key indicator of student achievement of programme level learning outcomes, particularly those associated with autonomous thinking (Todd, Bannister, & Clegg, 2004). The experience of the dissertation writing process is unique as both the supervisor and the supervisee experience moments of cosmos and chaos through this process (Todd, Smith, & Bannister, 2006; Todd, Bannister, & Clegg, 2004). However, previous quantitative study on students' experiences of undergraduate dissertation supervision suggests that upwards of a third of students may not be satisfied with the supervision they receive (Vera & Briones, 2015).

This study focuses on the undergraduate dissertation at Higher Education institutions (HEIs) with an aim to improve current understanding of the supervisory relationship and enhance students' experience and satisfaction. Undergraduate students have no or limited previous independent research experience (Cook, 1980); difficulties in collecting primary research data, accessing relevant secondary material and producing a 'researchable' research question (Todd, Bannister, & Clegg, 2004); may have lower interest in conducting research (Cook, 1980); and need to complete their research in a shorter timeframe (Rowley & Slack, 2004). In addition, each student writes on a different topic and faces different methodological skills challenges. Thus, it is important to provide general academic support to the students throughout the dissertation writing process (Brown & Atkins, 1988). This challenge could be addressed by organising skills workshops, drop-in-clinics, etc. (Diarmuid & Day, 2020).

In addition, working on a dissertation highlights the importance of the supervisee and supervisor relationship. Expertise in one's field of specialisation and active involvement in research are prerequisites for a supervisor, though these don't guarantee good supervisory practice (Powles, 1993). A supervisor-supervisee allocation should take multiple dimensions into account, such as student and staff academic interest, skill level to execute various research methodologies, etc. Thus, it is important not only to consider whether a close match exists between dissertation topic and the supervisor's field of expertise, but also whether a positive supervisory relationship can be developed. A good allocation should be able to address both (Elton & Pope, 1989); however, it presents its own challenges.

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The first challenge of forging a robust supervisor-supervisee relationship is that there are greater numbers of students compared to staff. This implies that allocating a supervisor with skills specific to a student's area of research may not be feasible. The second challenge is related to the expectations of supervision itself. Students might face challenges related to perceived differences in what supervision will look like; insufficient support from the supervisor (Gatfield, 2005); and a difference in supervision styles which might lead to conflict. Students who defined their supervisory relationship as negative reported higher levels of intense negative emotions, such as anxiety, frustration, and anger (Hutt, Scott, & King, 1983). These emotions resulted in mistrust and disrespect in the supervisory relationship, reluctance to engage in honest self-disclosure in supervision, and less satisfaction in meeting developmental needs. Therefore, the quality of the relationship can mitigate or exacerbate what is universally considered an "emotional rollercoaster" (Shadforth & Harvey, 2004). Feedback remains a prominent source of students' dissatisfaction in higher education, as they seek timely and helpful dialogue about their progress (Yang & Carless, 2013). Undergraduate dissertations entail dialogic feedback that involves relationships in which participants think and reason together (Gravett & Petersen, 2002) within a trusting environment.

The above-mentioned challenges can be addressed by gathering information from students and staff members. To achieve that, we designed two interventions that involved staff and students. We firstly consulted students in determining the field of research, and potential supervisors, to capture their academic focus. Carless (2006, p. 192) conceptualises feedback as "a dialogic process in which learners make sense of information from varied sources and use it to enhance the quality of their work or learning strategies". Thus, secondly, we offered students a chance to interact with staff members in an informal research-based environment, which captures elements of interpersonal relationship. After each intervention was introduced, we collected data to assess the impact of the different allocation methods on students' satisfaction.

The findings suggest that a good supervisory match is generated by directing our attention on two person-specific variables: clear academic focus and good interpersonal relationship. This type of allocation can enhance student satisfaction with overall supervision and open a channel for more creative discussion with students about how to improve the supervision experience (Glenice & Glenn, 2005). Moreover, the results indicate that supervisors' attributes play an important role in students' dissertation experience (Brown & Atkins, 1988; Wilkin, Bowers, & Monk, 1997).

This research is important on two counts. Firstly, HEIs can use the findings to improve students' experience and satisfaction with dissertation and degree programmes. Secondly, supervisors can use the findings to improve their own supervisory work which contributes to the personal and professional development of students (Bernard & Goodyear, 2004). In addition to student satisfaction, the recommended interventions may prove to be helpful in overcoming the usual challenges that many British universities face due to the increasing student/staff ratio.

### **Supervisor-Supervisee Relationship and Matching**

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A key aspect of effective supervision is the supervisor-supervisee relationship. A supervisory relationship is a working alliance that should provide support to supervisees and ensure that their personal and professional development needs are met (Bordin 1983, 1979; Bennett & Deal, 2009); and its effectiveness depends on supervisor's self-disclosure (Ladany & Lehrman-Waterman, 1999).

The relationship with supervisors is also known to be related to the satisfaction that students experience in their supervision (Harrow & Loewenthal, 1992). A positive relationship between the supervisor and supervisee can be identified as an essential part of effective supervision and the working alliance (Ladany & Lehrman-Waterman, 1999; Magnuson, Wilcoxon, & Norem, 2000; Ramos-Sanchez et al., 2002; Ghazali et al., 2016). A weak supervisory relationship might result in less confident, less open and less experimental supervisees. This could lead to limited self-disclosure and supervisees holding back from acquiring new learning techniques and strategies (Nelson & Friedlander, 2001; Ellis, 2010).

Supervisees' choice of supervisor can positively influence the perception that clinical supervision has been enhanced (Martin & Milne, 2017). Martin, Kumar, Lizarondo and Tyack (2016) found that a positive supervisory relationship is a critical factor for effective and high-quality supervision. The matching of postgraduate students to supervisor is also regarded as being crucially important for effective relationships (Egglestone & Delamont, 1983). Postgraduate students who felt involved in supervisor selection, whose topics were matched with their supervisor's expertise and who developed good interpersonal working relationships with supervisors, were more likely to make good progress and be satisfied (Glenice & Glenn, 2005).

In most institutions, undergraduate students are allocated to supervisors based on supervisor's subject expertise or the need to ensure even workloads between supervisors (Armstrong, Allinson, & Hayes, 2004). However, previous research has shown that matching students and supervisors based on certain personal characteristics as well as academic compatibility may be beneficial (Elton & Pope, 1989); and that students are more interested in personal compatibility (Hill, Acker, & Black, 1994). Interestingly, Armstrong, Allinson and Hayes (2004) found that, irrespective of the supervisor cognitive style, performance outcomes significantly depend on whether students and supervisors share a nurturing relationship and like one another.

From this brief exploration of the literature, it is concluded that the supervisory relationship depends on a complex interaction between supervisor and supervisee; and that it is important to understand the significance of the 'match' between supervisors and

supervisees on the supervisees' satisfaction. There has been relatively little research aimed at enhancing our understanding of these issues providing recommendations about the systematic allocation of undergraduate students to supervisors. This study aims to contribute towards this direction.

## Supervisor-Supervisee Allocation Methods of the Study

### Background

The University of Glasgow's regulations require all undergraduate honours students to carry out independent work which is worth at least 20 credits (at SCQF and ECTS level 10). The undergraduate dissertation is one such assessment that students must undertake in the final year of their undergraduate Economics honours degree programme. This course is designed to provide students an opportunity to develop graduate attributes such as independent critical thinking, effective communication, resourcefulness, subject specialty, etc.

Typically, students begin the writing process of the dissertation at the end of their penultimate year by submitting a dissertation proposal which contains the research question, its motivation, and the research methodology. A supervisor is assigned to students after their dissertation proposal is submitted. As the final year commences, students begin to work on their dissertation under the guidance of an assigned supervisor. Students meet their supervisors several times a year and submit progress of their work in a formative form. The supervisors provide feedback and constructive advice. The role of a supervisor in the Handbook (ASBS, 2017) is defined as "... provide guidance on the structure of dissertation, the nature of the argument, the availability of appropriate material, and how best this material might be deployed in relation to chosen argument." However, it is not uncommon for supervisors to also provide pastoral and career support (e.g. academic references).

Our focus is on allocation which was challenging due to staff unavailability (workload allocation, attrition, sabbatical, medical leaves etc.) and an unequal distribution of staff members across different field research areas. Hence, it was impossible to assign every student to a supervisor with same academic focus. For example, many students consistently wanted to work on topics in Macroeconomics, but the Macroeconomic research team-student ratio was very low. This problem was further exacerbated as some research methodologies were more in demand than others. Many students wanted to apply econometric analysis or incorporate data into their dissertation, even though they are not required to use such techniques as stated by the dissertation Handbook. These challenges motivated us to rethink and redesign the supervision allocation approach, as it is described next.

### Interventions and Allocation Approaches

Three allocation approaches were implemented for the full cohort in different years. Their key components are described below.

1. First Year Cohort (pre-2017): Students were allocated supervisors after the dissertation coordinator read individual dissertation proposals. A drawback of this process was that students' proposals were often vague and broad making allocation tedious, time-consuming, and an ambiguous process. In addition, there was no opportunity to express their preferences for supervisors.
2. Second Year Cohort (2017-2018): Students filled a supervisor-supervisee matching (SSM) survey and chose options from a drop-down menu which helped them streamline their ideas in a scaffolded manner. Students indicated potential supervisors based on prior interactions in classrooms or other pastoral roles. They also answered questions related to academic focus, for example, area of research interest, methodology etc. Based on this information, students were allocated a supervisor.
3. Third Year Cohort (2018-2019): Hi-Tea Ideas Event, a speed networking event, was introduced to provide students the opportunity to discuss potential research ideas with academic staff. After this interaction, students completed the SSM survey and academic staff members expressed interest in supervisees. Information on students and staff preferences was then combined and compared for verifying mutual preferences. Another novelty of this approach was therefore that students were allocated a supervisor based not only on their academic focus and supervisor preferences but also on supervisor preferences for supervisees.

### Data and Methodology

The effectiveness of the three approaches in terms of students' satisfaction and experience was measured using the University of Glasgow's EvaSys online system, which collects qualitative and quantitative data on all courses' evaluation which are fully anonymised. Researchers do not have access to identifying information on participants and the dataset complies with ethics requirements on the use of secondary data. Ethics approval for the use of this data was obtained from University of Glasgow, College of Social Science Research Ethics Committee.

The evaluation window opens for two weeks at the end of the year and students can access the survey through email. All students who were enrolled on Economics Dissertation module were invited to participate.

This survey focuses on the following questions:

1. My project/dissertation supervisor was helpful.
2. I am satisfied with the overall quality of the supervision.
3. What was good about the dissertation experience?
4. How could the dissertation experience be improved?

This type of survey produces both qualitative and quantitative data. Questions 1-2 are closed-type choosing an answer from a five-point scale (i.e., Likert Scale). We examined the survey results using descriptive statistics and graphical analysis. Descriptive statistics such as median and standard deviation describe distribution of and variability in students' satisfaction. Lower standard deviation along with a lower median is desirable and it would indicate that a higher number of students are satisfied. A lower median would indicate that students are highly satisfied and pertain to strong positive agreement with the survey statement. A higher standard deviation would imply that more students are having different experiences while a smaller number would indicate similar experiences. The graphical analysis illustrates changes in students' responses over the years.

Questions 3&4 are open-type questions and were analysed using the semantic and inductive thematic analysis procedure described by Braun and Clarke (2006). First, the data were read carefully to identify meaningful units of text relevant to the research topic (semantic analysis) and the entire dataset (inductive analysis). Second, the data have been organised to show patterns in semantic content and data-driven content, and summarised, to interpret and theorise the significance of the patterns and their broader meanings and implications in relation to previous literature. The inductive and semantic thematic analysis resulted in 5 key themes that included all data. To aid readability, categories of each theme are presented with ordered bar charts.

The survey was shared with 344 Senior Honours students (n=114 in 2016-17; n=108 in 2017-18 and n=122 in 2018-19). The response rate was between 29-43% (n=49 in 2016-17; n=31 in 2017-18 and n=43 in 2018-19), as Table 1 shows.

**Table 1** Total number of participants

First Year Cohort (2016-17)	Second Year Cohort (2017-18)	Third Year Cohort (2018-19)
49	31	43

In 2017-18, 56% of the whole cohort was assigned a supervisor of their choice (n=60) and 29% of the cohort was not assigned a supervisor of their choice (n=31). They matched with a supervisor based on other variables such as research interest, methodology, etc. However, it was impossible to provide them an exact match due to the challenges mentioned previously. 15% of the cohort did not indicate any preference on supervisor and their allocation was based only on the dissertation proposal (n=16). In 2018-19, 57% of the whole cohort was assigned a supervisor of their choice (n=70); and 36% of the cohort were not assigned any supervisor of their choice (n=44). 7% of the cohort did not indicate any preferences at all (n=9).

## Results

### Quantitative analysis

Figures 1 and 2 show the results from questions 1 and 2, respectively. These results indicate that the students' satisfaction with the overall quality of supervision and supervisor's help had been increased by more than 30% from 2016-2017 to 2018-2019.

In 2016-17, most students agreed that their supervisor was helpful, and they felt satisfied with the quality of supervision (median=2). However, they do not have common experiences. While 60% agree (n=29) that the supervisor was helpful, 24% disagreed (n=12) and 16% were neutral (n=8). Similarly, while 56% were satisfied (n=27) with the quality of supervision, 27% disagreed (n=13) and 17% were neutral (n=8).

In 2017-18, satisfaction scores are higher compared to the previous year which suggests that there was an improvement in student satisfaction. The median values were lower (median =1), although standard deviations remained greater than one indicating that there is still room for further progress. 74% of respondents (n=23) stated that the supervisor was helpful and 20% disagreed (n=6). 68% were satisfied (n=21) with the quality of supervision and 18% disagreed (n=4).

Similar results were observed in 2018-19. The agreeability median was also high (median=1) and standard deviation was the lowest of all three years, which suggests that students have common thoughts in terms of supervision experience. 79% of students agreed (n=34) that the supervisor was helpful and 73% were satisfied (n=31) with the overall quality of supervision.

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The Mann-Whitney *U*-test and the Cohen’s *d* (1969) indicated that students’ satisfaction with supervisor’s helpfulness ( $U=749.5, d=0.512$ ) and supervision ( $U=780.5, d=0.457$ ) was significantly greater in 2018-19 than in 2016-17. In comparison, the impact was smaller in 2017-18 for supervisor’s helpfulness ( $U=609.5, d=0.336$ ) and supervision ( $U=597.5, d=0.364$ ). These results indicate that a mutually agreed matching process, which is small and inexpensive, where both staff and student co-create supervision experience can raise students’ satisfaction substantially (Glass, McGaw, & Smith, 1981).

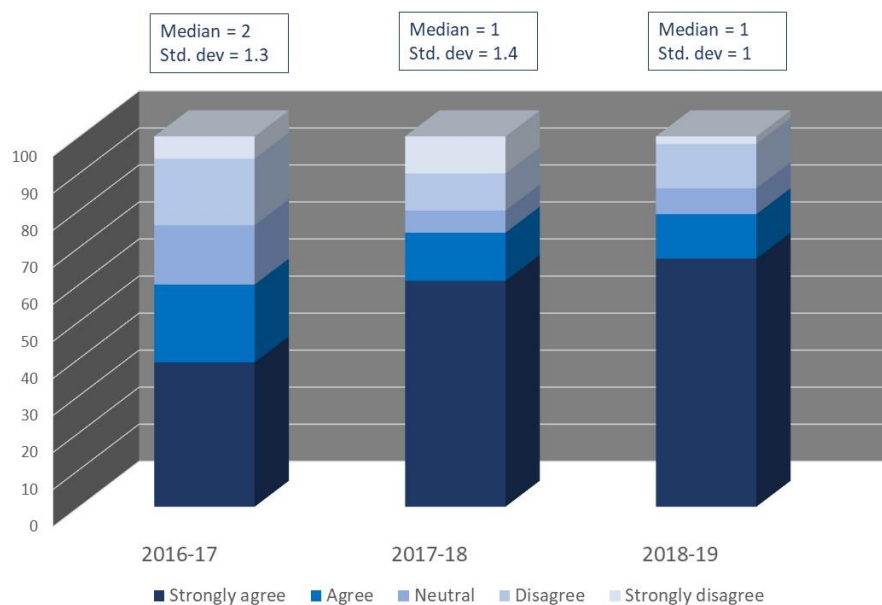


Figure 1 'My project/dissertation supervisor was helpful' (responses in %)

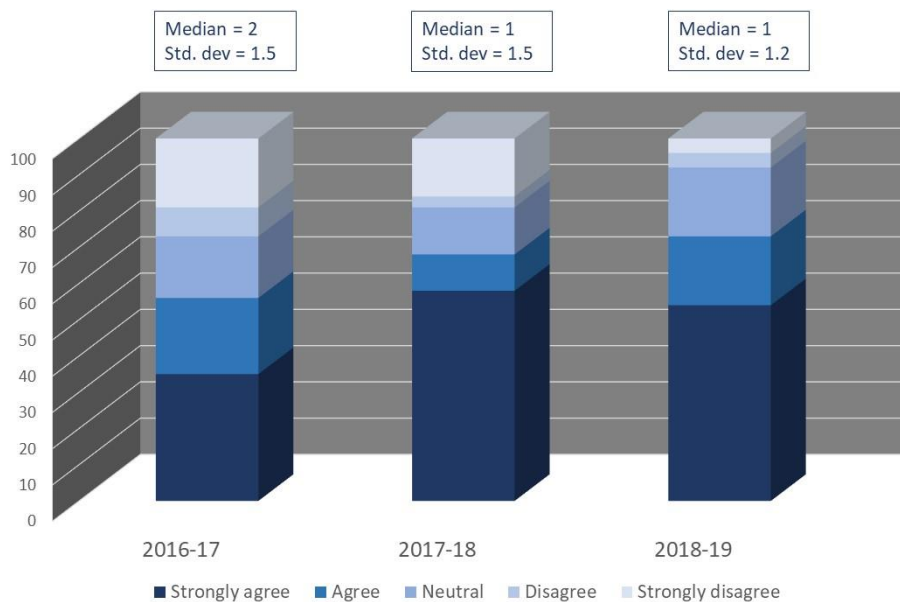


Figure 2 'I am satisfied with the overall quality of the supervision' (responses in %)

**Thematic analysis**

The five themes identified by the thematic analysis of questions 3 and 4 are: Supervisor, Dissertation writing process, Opportunity, Information dissemination and Miscellaneous. The first two themes are relevant to both open-ended questions while the latter ones are more specific to either question 3 or question 4. All the main results from qualitative analysis of questions 3 and 4 are presented in Figures 4 and 5, respectively.

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The first theme is *Supervisor*– ‘a caring, considerate and professional guide’- corresponds to students’ experience with their supervisor and the supervisory relationship. This theme can be further categorised into supervisors’ characteristics, availability of the supervisor, timely and substantial feedback provided by the supervisor and subject expertise of the supervisor. These sub-categories are associated with interpersonal skills and essential attributes that facilitate a smooth working relationship between a supervisor and a supervisee.

The second theme is *Process* - ‘workshops, drop-in session, guidance on how to prepare for dissertation, past dissertations’- corresponds to dissertation writing process which includes preparation and work associated with beginnings, middle and endings of the research work. It also covers time and deadline management.

The third theme is *Opportunity* – ‘to engage with topics, improving time management skills, gain practical experience, motivated to apply for Masters’ - corresponds to the opportunity that writing a dissertation provides to students. This theme is relevant when students are asked specifically about good elements rather than how to improve dissertation experience.

The fourth theme is *Information dissemination* - ‘skills development, technical and data support, students’ expectations’ - includes students’ comments on what did not work for them and ways to improve it. Most of these comments were related to policy or documentation that students could not easily find and classified as information dissemination issues. Another part of this theme is related to the perception and expectation of students which extends to standardising supervision experience.

The last theme is *Miscellaneous* -‘study abroad, interaction with senior peers, marking criteria’ - corresponds to any other comment that is not related to the previous mentioned themes.

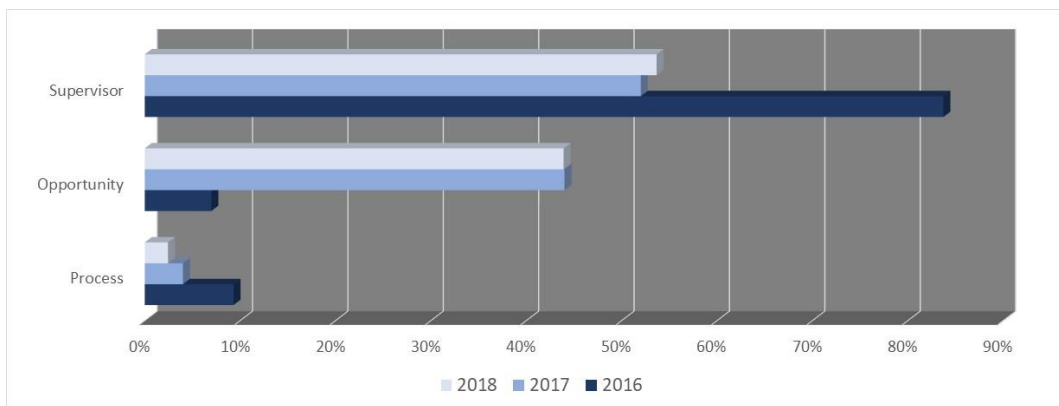


Figure 4 Distribution of main themes in Question 3

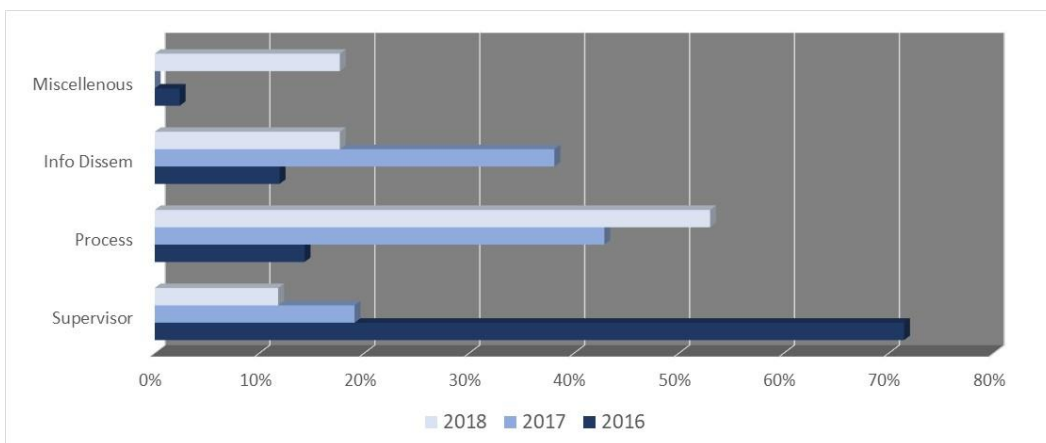


Figure 5 Distribution of main themes in Question 4

What was good about the dissertation experience?

Figure 6 presents results from question 3. In 2016, most of the comments were around what they do and do not value in a supervisor (n=8). Less recurring comments were about the independent nature of dissertation, learning new things and being able to work on a topic of their interest (n=3). Some comments were criticisms (n=9).

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Students want supervisors who are helpful, friendly, caring, approachable and supportive (n=16). These qualities are followed by importance of having a supervisor who has subject expertise and interact with them professionally (n=5).

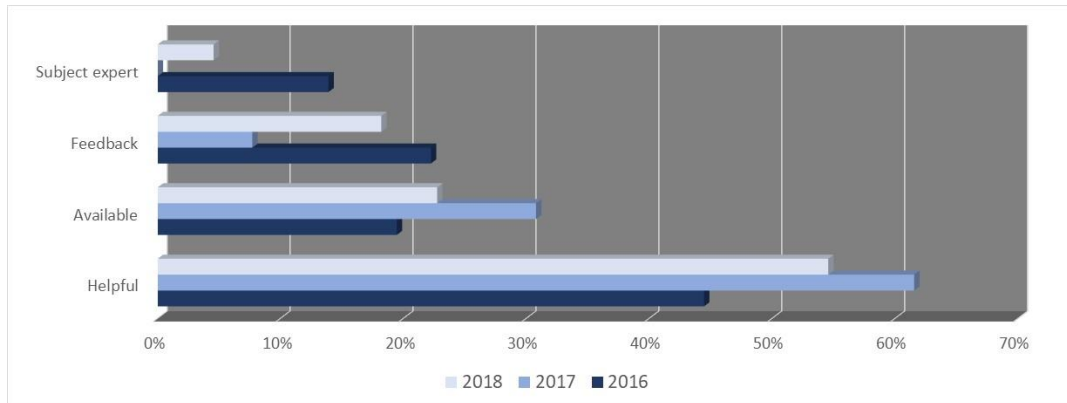


Figure 6 Qualities of a good supervisor

Students valued supervisors who gave them adequate and timely feedback (n=8). They also wanted supervisors who are available to meet whenever students need their advice (n=7). An example of such comments is:

My supervisor was helpful ... they were always available for meetings... gave useful feedback on how to improve my writing and gave hints on what to develop.

In 2017, interestingly, most of them thought positively about their supervisor (n=8). More specifically, they characterised supervisors as an approachable guide who is keen to help (n=4). Some of these comments suggest that supporting relationships between supervisors and students could help to avoid disengagement at different stages of the dissertation process.

My supervisor is always available, independently how busy she is ... I will be happy by the end having her as my supervisor.

I appreciate the support of my supervisor who was very supportive and helped me to find and explore perspectives I had not considered.

Other comments emphasized the importance of the dissertation experience in providing new opportunities (n=11) such as the possibility of doing independent research, enhancing time management skills, etc.

This was the most challenging experience in the university that helped me improve time management skills and the initiative to work on my own.

In 2018, students remained focused on good aspects and there was a slight shift in their thinking process. There were two main themes that emerged—supervisors and the opportunities that the dissertation provided to them—with both themes being equally important. Students continued to value supervisors who were helpful and caring (n=12). The subject expertise of the supervisor did not emerge as important (n=1), thought students continued to emphasise the value of good feedback and availability of supervisors (n=5).

Many students viewed the dissertation as an opportunity to learn new things (n=18). Some of the keywords that students used were around opportunity to learn new things, apply research methods and knowledge, improve transferable skills etc. Examples of such comments are:

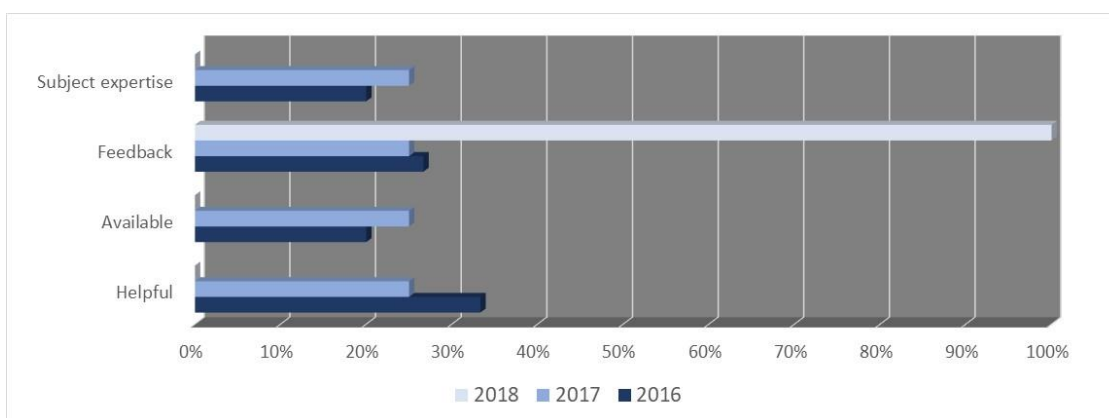
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During the process, my researching ability improved, and when I had troubles, I learned how to get help and stay calm.

Being tasked with completing an independent study, and using knowledge and skills gained from previous years of studies. I have gained practical experience of economic analysis of topics I really like.

*How could dissertation experience be improved?*

Figures 5, 7 and 8 presents results of question 4. In 2016, almost half of the comments were criticisms rather than suggestions for improvement. These complaints can find their roots in the support that students received from supervisors. Mostly, there was dissatisfaction as supervisors either came across as unhelpful and uncaring or did not work in the same area as the student’s dissertation topic. These comments also covered other important issues such as lack of good feedback. There were other comments regarding dissatisfaction with the dissertation writing process (n=2), although these were associated with information dissemination issues. Other comments were suggestions for improvement.



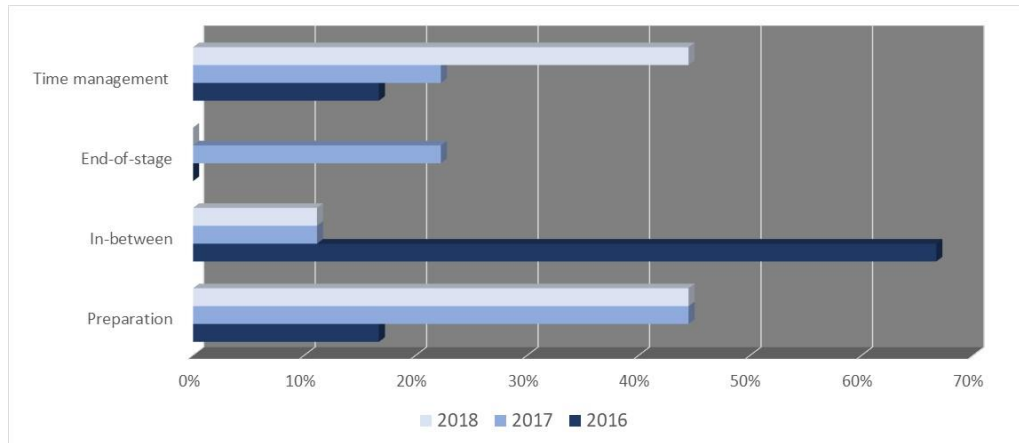
**Figure 7** Improvement in Supervisor allocation

When students were asked to provide recommendations, some students viewed supervision allocation as weak. Students wanted to be allocated to a supervisor who is helpful, caring, engaging, and motivating (n=10). Students felt that not all supervisors were willing to give up their time or provide much help. Therefore, some students appeared to reap greater benefits than others. A recurring comment from students is:

Allocate supervisors who care for students, motivate them, provide feedback and dedicate sufficient time and effort.

Students wanted to see improvement in the feedback process. They wanted it to be regular, elaborative, and specific (n=8). A few students suggested improvement in support for technical aspects and the writing of the dissertation (n=6).





**Figure 8** Improvement with the Dissertation writing process

In 2017 there were fewer comments about improvements related to supervisor allocation (n=4), but some students identified diversity in supervisors' support and styles (n=3) making comments such as:

Everyone is receiving different levels of help and guidance from their supervisor ... this is unfair.

This indicates an inequality of experience and expectations that could result in difficulties in terms of creating effective supporting relationship. This is expected in part since students bring to their studies their personal learning needs and preferences, along with expectations generated by the programme, and experiences from diverse cultural, social, and professional backgrounds (Pathirage et al., 2004). In addition, while supervisors are given recognition for supervision, as with many other roles, the hours allocated do not always reflect the work undertaken which relies on the goodwill and professionalism of supervisors.

Contrary to the previous years, where comments were mostly related to supervisors, the students identified challenges faced by the nature of the dissertation and the supervisory role in connection with this. An example of such comments is:

The engagement with the supervisor could have been more intensive.

Other comments (Figure 8) were related to beginning (n=4), middle (n=1) and ending (n=2) of the dissertation writing process; information dissemination (n=5) and submission deadlines and time management issues (n=2).

In 2018, students continued to provide constructive comments and suggestions regarding submission deadlines and time management issues (n=4), standardization of the supervision process (n=1), supervisors' feedback (n=2), managing expectations of supervisees (n=1), alumni support (n=1), information dissemination (n=2), support for study abroad (n=1), and enhancing the dissertation writing process and training (n=5).

Some students viewed the experience in a very positive light and made statements such as "everything is perfect", "no improvements", which again indicates strong supervisory relationships. This can be attributed to the fact that 57% of the whole cohort was assigned a supervisor of their choice this year. It also shows that once a students' mind is free of mundane yet essential issues (i.e. supervisor allocation), they can focus on more creative discussion on things like peer assisted learning, time management, etc. An example of such comment is:

It's really good... improve further if I asked more advice from students from past years ... it's also good that I solve some difficulties by myself.

There were some reflective comments (n=2) showing students seeing themselves as participants and responsible for their own actions. One such comment is:

Although it could be a work overload... maybe it was my mishandling time management and project completion, but I felt that a big load of writing process felt in the second semester.

## Discussion

While several studies have investigated the relationship between the supervisor-supervisee relationship and matching in clinical and PhD supervision, there has been limited research at undergraduate level. Our study found that a match between supervisor and supervisee on academic focus and interpersonal relationship has an impact on student satisfaction. Interestingly, the match on these two key variables did have a significant influence on student satisfaction, but a matching that accommodates the supervisors' preferences did have a greater influence. This indicates that a personal (Hill, Acker, & Black, 1994) and academic compatibility between students and their supervisors (Elton & Pope, 1989) can increase student satisfaction with supervision experience (Gleen & Glenn, 2005). Moreover, the results confirmed that supervisors' attributes play an important role in students' satisfaction (Brown & Atkins, 1988; Wilkin, Bowers, & Monk, 1997).

Another important finding was that it is not only the necessarily academic focus of the supervisor and supervisee, nor how they match up on these characteristics, but rather the quality of the relationship between the two that leads to satisfaction. The interaction between a supervisee and a supervisor seems to be the vehicle through which the variables lead to satisfaction in supervision and opens a channel for more creative discussion with students about how supervision experience can be improved. The importance of the positive supervisor-supervisee relationship should not be surprising given the range of studies that support strong relationship as a common factor influencing supervision outcome (Harrow & Loewenthal, 1992; Ladany & Lehrman-Waterman, 1999; Magnuson, Wilcoxon, & Norem, 2000; Ramos-Sanchez et al., 2002; Bernard & Goodyear, 2004; Ghazali et al., 2016).

Interestingly, the popularity of networking events provides opportunities for students to interact and seek support from a wider community of peers and academic staff. This could yield more satisfaction than in a traditional personal tutoring setting, which might not allow the complexity in roles embedded in a scholarly community setting especially when students reach maturity and become less dependent on their supervisors.

Our results also identified differences in the ways supervision is constructed. If what are the essential features of supervision being present to different degrees, then differences in the development and performance of students can be generated. Hence, a rethink of the role of the supervisor and clarification of the mutual expectations and responsibilities is required. This discussion on the priority that can be given to supervisory activity could be held with students to avoid mismatching of expectations that are more likely to lead to low student satisfaction. Furthermore, not all teachers are specialised in supervision. Similarly, not all students require the same supervision style. Thus, a deeper form of professional development may be required for supervisors to understand and promote consistent and appropriate practices.

This study shows the importance of exploring the matching of undergraduate students with supervisors in relation to student satisfaction and proposes a matching approach that allows interaction and expression of interests from both supervisors and supervisees. Further research however is needed to identify the matched supervisor and supervisee contextual variables. In addition, the student satisfaction may not be the only benefit from a good matching. How a good matching can impact the student performance is equally important. Finally, another interesting avenue for further research is to assess the supervisors experience with the new matching allocation approach. By doing this, we can provide a more comprehensive picture of the undergraduate supervision experience.

### Biographies

*Lovleen Kushwah* began her academic career at the Adam Smith Business School, University of Glasgow in 2015. She assumed roles of Honours Convenor, Senior Adviser of Studies and Dissertation Convenor for the UG Economics degree. She holds a PhD in Economics from UC3M, Spain. Prior to joining academia, Lovleen worked for HSBC and GE Money.

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