

Degrees of Freedom: Students' Preferences in Choosing Their Graduation Research Theme

Paul Moritoshi

*Department of International Liberal Arts, Faculty of International Liberal Arts, Chugokugakuen University,
Niwase 83, Kitaku, Okayama City, 701-0197, Japan*

Conducting original research is a standard component in the latter stages of most degree programs worldwide, but the matter of who chooses the research question varies across educational cultures. Some allow students to decide the research area for themselves while others require students to investigate a question set by the supervisor. This paper examines the pros and cons of both approaches and conducts a study among freshman and sophomores (N=54) at a private Japanese university to examine their preferences. The quantitative and qualitative data are discussed with reference to Deci & Ryan's (1980) Self-Determination Theory. It was found that 85% of the sample (n=35) prefer to be allowed to choose their research question for themselves, citing various reasons relating to motivation, academic performance and emotional health.

Keywords: Self-determination theory, Learner autonomy, Dissertation, Seminar research

Introduction

The inclusion of a research dissertation or thesis in which the student writes up a piece of independent and original research is a common aspect of most degree programs in most countries and is seen as the culmination of several years of study in the student's field, intended to showcase what they have learned and the skills they have developed.

It is probably generally true that in Western universities, students are required to choose their general research area and specific research question for themselves, even at the Bachelor degree level. However, within the Japanese university context, it is not uncommon for the seminar teachers who generally supervise their students' graduation research to de-

cide, or even dictate the research area and question to their supervisees.

Within the Department of International Liberal Arts (DILA) at Chugokugakuen University (CGU), the Bachelors degree dissertation is referred to as 'graduation research' and is supervised in the junior year during Technical Seminar I and II, and in the senior year during Technical Seminar III and IV. Currently, the department has 11 full-time teachers accredited to supervise these subjects. Of these, some choose their supervisees' research areas for them, while others allow their supervisees the freedom to decide their research area for themselves.

Rather than advocating for either practice, the purpose of this paper is to examine students' preferences between these two opposing options and to discuss the pros and cons of each and related quantitative and qualitative data. This will then help to better inform supervising teachers' decisions as to which practice to apply in order to best meet the needs of their supervisees, department and institution.

The pros and cons

When a supervisor selects the supervisees' research topic(s), this can confer several advantages. The first is that from the outset, both parties know what the research question is and can start to work towards answering it from the first lesson. Also, the research has been approved by the supervisor so it is appropriately scaled to be sufficiently large and complex to meet the requirements of the degree but not so large or too complex as to be impracticable within the permitted timeframe or other available resources.

If the supervisor is using the same topic each year, this allows them to re-use the materials, activities, etc. year-on-year, making for a more efficient use of the teacher's time. It also allows the teacher to refine their approach, materials, activities, choice of field trip venues, etc. year-on-year to provide a higher quality educational experience. Furthermore, in cases where there are two or more students in the seminar class, they will all do the same topic and so can work in pairs or groups and can form study teams. Finally, since the senior students will have already completed their junior year, they can provide peer support for the juniors following behind them.

These advantages are mirrored as drawbacks when a supervisor allows students the freedom to choose their own graduation research theme. Even with the guidance of the supervisor, it can take several lessons for a student to settle upon a research question that is sufficiently broad and complex without being impractical. Since each student will likely select a different content area, supervisors cannot recycle materials or activities year-on-year but must instead create a new course of study for student. One way to reduce the burden this creates might be to apply a schedule of work which students adhere to regardless of their content area or research question. Also, since each student's research question is unique, pair work, group work and peer support from seniors becomes problematic. However, peer support can be utilised if applying the Process Writing approach whereby students review and offer formative feedback on each others' writing. Allowing students to choose their own research topic also requires a teacher to be able to supervisor a range of themes using a variety of research designs and data collection methods. To some extent, this can be resolved by matching the student with a

suitably knowledgeable supervisor, but this may not always be possible.

The advantages of allowing students the freedom to choose their graduation research question draw heavily on Deci & Ryan's (1980) empirically-based Self-Determination Theory (SDT). This examines various types of motivation and demotivation and how their presence or absence can be used to predict the extent to which individuals will or will not perform on, or engage with a task, form positive relationships with others and experience beneficial or detrimental psychological health. It also incorporates the issue of intrinsic and extrinsic life goals and aspirations. In particular, SDT emphasises the importance of autonomous motivation and controlled motivation in determining these factors and how the prevailing social context can impact those motivations, and hence performance, relationships and psychological health. Deci & Ryan conclude that these are determined by the extent to which basic psychological needs for autonomy, competence, and relatedness are supported or frustrated. In short, SDT posits that self-determination, in this context learner autonomy exhibited by the freedom to choose one's own graduation research question, leads to positive motivational, psychological health and performance outcomes. If this theory is correct, it might be better to allow students the freedom to decide the direction of their research rather than imposing one upon them.

Method

This study used a mixed data questionnaire administered to a convenience sample, as set out in more detail below.

Setting, Timing and Participants

This study was situated within the Department of International Liberal Arts at Chugokugakuen University during week five of the spring semester, with 23 freshmen and 31 sophomores from that department participating. These years were selected because the conclusions drawn from this research can then feed directly into their subsequent junior and senior years' Technical Seminar I-IV studies and would also be of use to those teachers acting as graduation research supervisors.

A decision was made to exclude existing juniors

and seniors from the study for two reasons. Firstly, the simplest way to collect data from these students would be via their Technical Seminar classes, but asking these students about their research theme decision preferences while in the Technical Seminar class itself, with their supervisor present, might have caused friction both between the supervisors and the researcher, and between the supervisors and their supervisees in cases where the latter's research theme decision preference did not match their supervisor's pedagogic practice. Secondly, given that the supervisors would be present when the participants completed the form, the latter may have felt pressured to answer in line with their supervisor's pedagogic practice, even if it did not match their actual research theme decision preference. Thus, including juniors and seniors in the study would have introduced a methodological weakness into the research design.

Materials

The five-item questionnaire shown in the appendix was developed to collect data on the participants' preferences relating to dissertation research theme choice. Item 1 asked which grade the participant was in. Item 2 asked whether the participant had already decided their program course, and if they had, which they had chosen: English, Business or Culture. Item 3 inquired whether the participant had already started thinking about their graduation research area. These first three items were included to highlight any differences among or between years, courses or those making early research area decisions which might inform the discussion of the results of the principal items 4 and 5. Item 4 asked whether the participants preferred to choose their Technical Seminar graduating research theme themselves or if they would prefer their supervisor to decide it for them. Finally, item 5 was a qualitative follow-up item asking students to explain their response to item 4 and could be answered in Japanese or English.

Procedure

The questionnaire was distributed among the two teachers of the Integrated English A course for freshman and the three teachers of the Integrated English C course for sophomores. These teachers then distributed the questionnaire among the students in their respective groups at the start of their lesson. They then

explained the questionnaire's purpose, as shown at the top of the form, and asked students to answer the questions if they were willing. The questionnaire took approximately five minutes to complete. Those who did not wish to participate simply returned a blank form. To maintain anonymity, the forms were then collected by a student in the class and returned immediately to the teacher, who then returned them promptly to the researcher.

Analysis

The quantitative data were input into a Microsoft Excel (2007) file with separate columns for data corresponding to items 1 to 5. The quantitative data for items 1 to 4 were tallied manually as absolute values and also calculated as percentages rounded up or down to the nearest integer.

For item 5, of the 54 participants, 50 wrote their response in Japanese, one in English and three gave no response. The Japanese responses were translated into English by a Japanese teacher of English within the Department of International Liberal Arts. These translations were then coded using a process adapted from Saldana (2013, pp. 13, 53) in which the participants' responses are placed into conceptual themes and categories which emerged as the dataset was analysed and which could be fine-tuned into sub-categories as coding progressed. This helped the researcher to generate an overarching description and interpretation of the qualitative dataset, which in turn could support interpretation of the quantitative results.

Results

The results for item 1 were that of the 54 participants, 23 were freshmen and 31 were sophomores.

For item 2, of the 54 participants, 43 indicated a preferred course of study. Of these, 20 participants (47%) selected the English course, 12 (27%) chose the Business course and 11 (26%) opted for the Culture course.

The results for item 3 showed that none of the freshman had yet started to think about their graduating research theme, while ten (32%) sophomores had.

The key quantitative result for this study was that for item 4 relating to whether participants preferred to choose their graduating research theme themselves or for their supervisor to decide. These results are

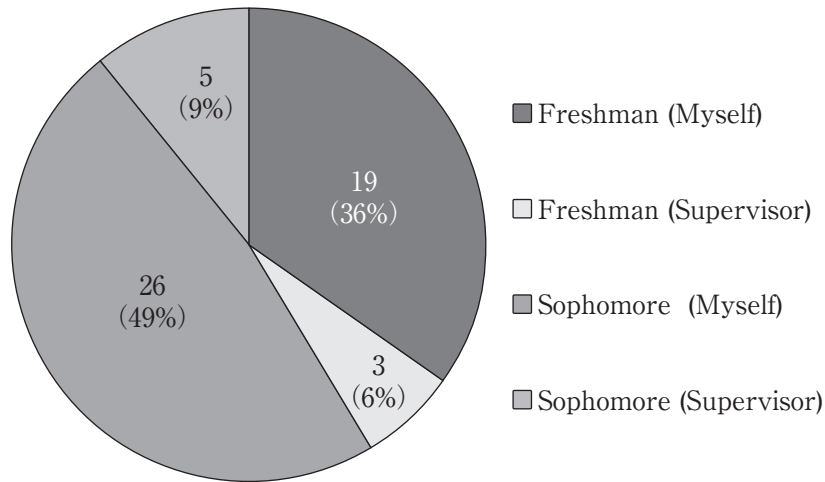


Figure 1 Results for item 4 – Who should choose the graduating research theme?

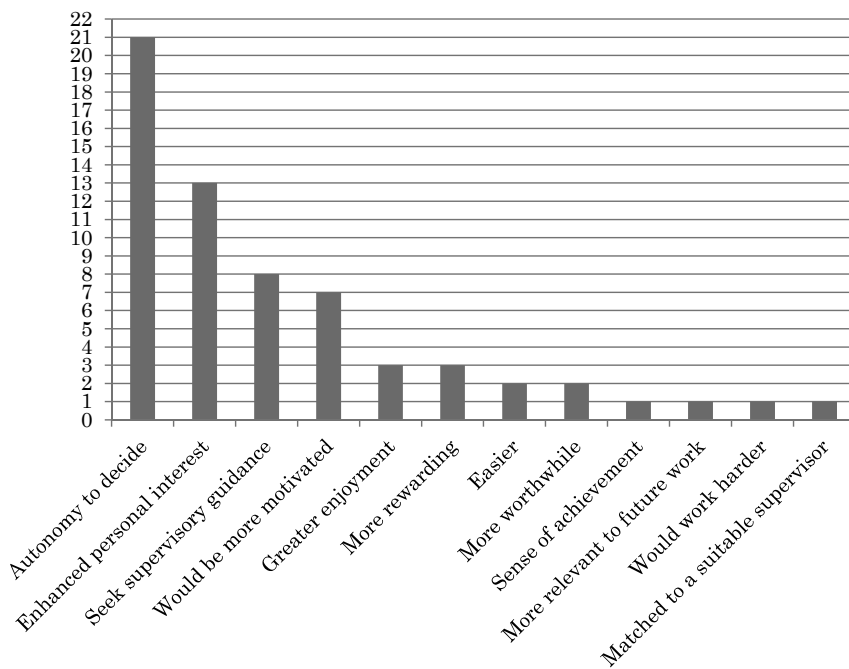


Figure 2 Frequency of themes elicited from item 5 for self-selected research

presented in figure 1 above in terms of number of respondents (percentage).

Figure 2 above shows the frequency of the various explanatory themes drawn out from the qualitative data collected via item 5 which were offered by those students who prefer to choose their own research area (n=45), while figure 3 below shows those for students who prefer their supervisor to select their research

area for them (n=9). Some students offered more than one explanatory theme.

Discussion

Cross-referencing the results for items 1 and 4 shows that very similar percentages of freshmen and sophomores prefer to choose their graduation research theme for themselves, which suggests that,

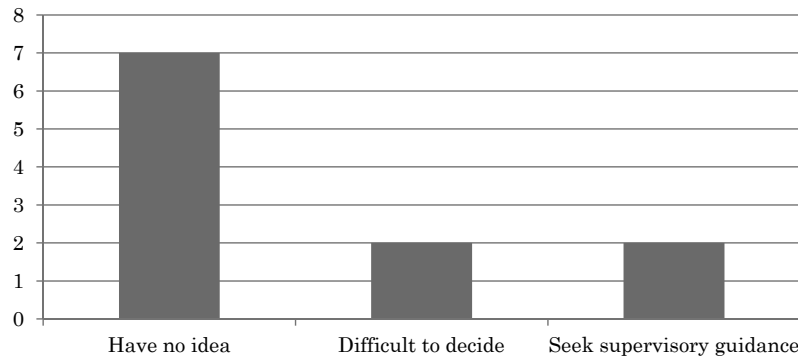


Figure 3 Frequency of themes elicited from item 5 for supervisor-selected research

at the start of the academic year at least, the participants' year does not seem to influence their research theme decision preference and that, instead, other determinants are at play.

Cross-referencing the results for items 2 and 4 suggests that there is no substantial relationship between whether or not a student makes an early decision on their choice of course and whether or not they prefer to decide their research area for themselves. Similarly, there is no sizeable relationship between a student's choice of course and whether or not they want to choose their research topic for themselves. Thus it seems that the main finding, that most students want to decide their own research question, applies more or less equally to English, Business and Culture course areas. This is a particularly important finding for the teachers of the Business and Culture courses, some of whom currently dictate the research theme to their students, which according to Deci & Ryan's (1980) Self-Determination Theory could have detrimental effects on their supervisees' motivation, performance and emotional health with respect to their Technical Seminar I-IV studies.

The results for item 3 showed that no freshman had given any consideration to their graduation research topic, though this is not surprising given that they had only just started their four-year degree program. Conversely, all ten of those who had started to think about their research topic were sophomores, but this is unsurprising since their 3rd-year Technical Seminar I is drawing nearer, which would tend to focus their attention on choosing a research topic. Perhaps the most surprising point to be drawn from these results is that they show that most sophomores had not yet given any thought to their research area at

this stage, despite having commenced Basic Seminar I which aims to achieve exactly that goal.

This study's primary finding, related to item 4, was that 45 students representing 83% of the sample want greater autonomy in deciding their research question. This proportion holds true for both freshmen and sophomores separately. That a large majority of both freshmen and sophomores prefer to decide their graduating research theme for themselves is very much in line with, and can be explained with reference to Deci & Ryan's (1980) Self-Determination Theory in that the freedom to choose brings with it several affective benefits. The qualitative responses to item 5 indicate that students would find self-selected research questions more interesting, motivating, enjoyable, rewarding, worthwhile and easier, that they would offer a greater sense of achievement and relevance to future studies and work, and that students would work harder on their research than if the theme was decided by the supervisor. Conversely, the majority of those who responded that they would prefer their supervisor to decide their research theme for them also indicated that they had no research ideas of their own at this early stage. However, this could change as they progress through their Basic Seminar I and II studies, at which point they too may prefer greater autonomy.

Some senior students and graduates have expressed to this researcher their dissatisfaction with having a research theme forced upon them, stating that they are or were not that interested in the topic which their supervisor required them to study or that it is or was not useful for, or relevant to their intended career path, and that it was selected primarily because it is of keen personal, academic and/or professional interest to the supervisor. Again, this dissatisfaction relates

to Self-Determination Theory. When autonomy is removed, it can result both in demotivation which may adversely impact academic performance, and poorer emotional health exhibited in the form of dissatisfaction, and possibly even resentment.

Finally, a limitation of this study might be the timing of the data collection itself. Had the questionnaire been administered at the end of the academic year, as freshmen approach their sophomore year and sophomores have worked through their Basic Seminar I and II subjects, the responses may have differed.

Conclusion

This paper examined preferences among freshmen and sophomores within the Department of International Liberal Arts relating to whether they should be allowed to choose their own Technical Seminar research theme or whether the supervising teacher should decide or dictate it.

The results of the quantitative analysis showed that a large majority of these students prefer to choose their graduation research topic for themselves. The reasons offered by the participants for this stance were that they want a greater degree of autonomy and that a self-selected research question would bring a range of affective and performance-related benefits. This preference would likely remain stable over time. Conversely, a small minority of the participants stated a preference for their supervisor to decide their research area because they had no idea or were finding it difficult to decide a theme. However, this preference might, and indeed should change as they work through their Basic Seminar I and II courses.

There are some pedagogic advantages in having a supervisor determine the direction of students' graduation research, particularly in terms of recycling of materials and activities which can save time, and

also in terms of peer support. Furthermore, requiring supervisees to choose their own research area and question can take up some time at the start of the Technical Seminar I course while they work through the decision-making process with support from their supervisor. However, once this initial barrier has been overcome, the enhanced motivational, performative and emotional health outcomes predicted by Deci & Ryan's (1980) Self-Determination Theory could help the student to successfully complete the graduation research with fewer affective issues.

Perhaps as with many dichotomies, the best practice may be to form a hybrid approach in which the general research area is determined by the supervisor but within that theme, each student can choose one aspect to work on, at times independently and at others in collaboration. This in turn brings complications with respect to assessment, but that is a topic for another paper.

References

- Deci, E. L. & Ryan, R. M. (1980). Self-determination theory: When mind mediates behavior. *The Journal of Mind and Behavior*, 1(1), pp. 33-43.
- Excel (Version 2007) [Computer software]. Microsoft.
- Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: Sage Publications Ltd.

Acknowledgement

The researcher wishes to acknowledge the work of Professors Kazuko Matsuura and Craig Yamamoto of the Department of International Liberal Arts at Chugokugakuen University for their help in data collection, as well as of Professor Noriaki Ohashi (same affiliation) for his assistance in translating the qualitative responses from Japanese into English.

Accepted August 19, 2019.

Appendix: Student survey

Choosing your Technical Seminar theme

Professor Moritoshi is researching the topic of whether or not students prefer to choose their own research theme for their 3rd and 4th year Technical Seminar I-IV courses. He would like your opinions about this. If it is OK with you, please answer the questions below. The questionnaire is anonymous, so you can give your honest opinion. Please check the correct answer for each question.

1. 1年生ですか、2年生ですか？ 1年生です 2年生です

2. あなたはまだあなたのコースも決めましたか？
 いいえ はい →どれ？ 英語プロフェッショナル・コース
 地域発ビジネス・コース
 日本探究・コース

3. あなたはまだあなたの研究テーマについて考え始めましたか？
 いいえ はい

4. 自分であなたの3, 4年生の専門ゼミ I-IV科目の研究テーマを選びたいですか、または専門ゼミ先生にテーマを選んでもらいたいですか？
 自分で 先生に

5. どして？あなたの理由を教えてください。

ありがとうございました。