

*The Perceptions and Experiences of Graduate Students:  
Evidence From a Japanese National Research University*

Lilan Chen, Osaka University, Japan  
Akari Kikuchi, Osaka University, Japan  
Yuichiro Wajima, Nagoya University, Japan  
Tatsuo Kawashima, Osaka University, Japan

The IAFOR International Conference on Education in Hawaii 2024  
Official Conference Proceedings

**Abstract**

The study is devoted to exploring the perceptions and experiences of graduate students at a case Japanese national university through a comparison between graduate students in Humanities and Social Sciences and those in Sciences and Engineering. The data from the Students Experiences in the Research University (SERU) survey conducted at the case university from 16th November 2020 to 19th February 2021 was utilized in the study. The data analysis indicates that both academic resources and financial support of the case university provided in Sciences and Engineering were perceived as higher than those in Humanities and Social Sciences. Despite the perceptual disadvantages, the graduate students in Humanities and Social Sciences were more inclined to consider their institutions as diverse and inclusive for students with diverse backgrounds. The institutional climate of the case university was characterized as open and accommodating for minority students, including those who are international, female, disabled, LGBT, etc. Regarding their individual issues, the study found that graduate students in Humanities and Social Sciences were more prone to professional and mental issues and be less competent in their professional capabilities and achievements regarding applying research methods, sharing research findings, following best practices of integrity and reproducibility in scientific research, collaborating with other researchers and staff, and managing research projects to completion, which contributes to their greater concern about securing a job after graduation in the case university. Moreover, they were more likely to encounter mental issues, such as general anxiety and depression disorder, than those in Sciences and Engineering.

Keywords: Students' Experiences, Graduate Students, Japanese University

**iafor**

The International Academic Forum  
[www.iafor.org](http://www.iafor.org)

## **Introduction**

Since the 21<sup>st</sup> century, there has been a growing dual perspective on higher education that emphasizes developing “the whole person” as well as job training. Accordingly, a challenge that many academics in higher education institutions (HEIs) face is that the viewpoint of higher education as primarily career preparation is now widely held by policymakers and governing boards, resulting in increased pressure to shift the focus of higher education from pure research to applied research and to evaluate the teaching and research missions based on their returns on investment. Additionally, faculty members in the arts, humanities, and social sciences found themselves working in an environment where funding and attention are mostly directed toward STEM disciplines.

In addition, it is acknowledged that the degree attainment rate of graduate students in Humanities and Social Sciences is much lower than that of graduate students in Sciences and Engineering at Japanese higher education institutions (HEIs) (MEXT, 2019). Such a context, therefore, raises scholarly questions concerning how graduate students at Japanese universities perceive institutional practice from a microscopic perspective in this regard. Therefore, the study is devoted to exploring the perceptions and experiences of graduate students at a case Japanese national university through a comparison between graduate students in Humanities and Social Sciences and those in Sciences and Engineering.

## **Literature Review**

Extensive literature investigating students’ experiences has been conducted. Regarding the daily lives of students, a web survey conducted in 2020 revealed that many activities such as “club activities,” “gatherings and activities with friends,” and “event experiences,” which students had expected from university life, were largely absent due to COVID-19 pandemic (Asakawa & Sakita, 2021). Moreover, studies have shown that reductions in part-time work hours due to the pandemic (Kobayashi, 2021; Matsumoto, 2022) and self-restraint measures due to the declaration of a state of emergency accompanying the spread of COVID-19 significantly impacted the daily lives of university students. Research on students’ learning lives has also been conducted. A study analyzing the relationship between online class operations, which primarily consist of online classes, and students’ sense of burden and learning motivation found that although online classes had received much criticism, they were positively evaluated by many students (Nakamura, 2022). Additionally, concerning mental well-being, it has become evident during the pandemic that university students continue to experience sustained depression, high-stress levels, and a decline in mental health (Nakao, 2021; Matsumoto, 2022). Furthermore, in addition to specific concerns, it has been noted that university students have uncertainties and anxieties about their future career plans (Ito et al., 2020).

Previous studies examining students’ experiences generally fall into the following categories, their living conditions, satisfaction levels, and mental well-being of university students. A closer zoom into the individual variations according to students’ attributes, such as their academic discipline, remains lacking.

## **Research Objectives and Data Collection**

The study is devoted to exploring the perceptions and experiences of graduate students at a case Japanese national university through a comparison between graduate students in

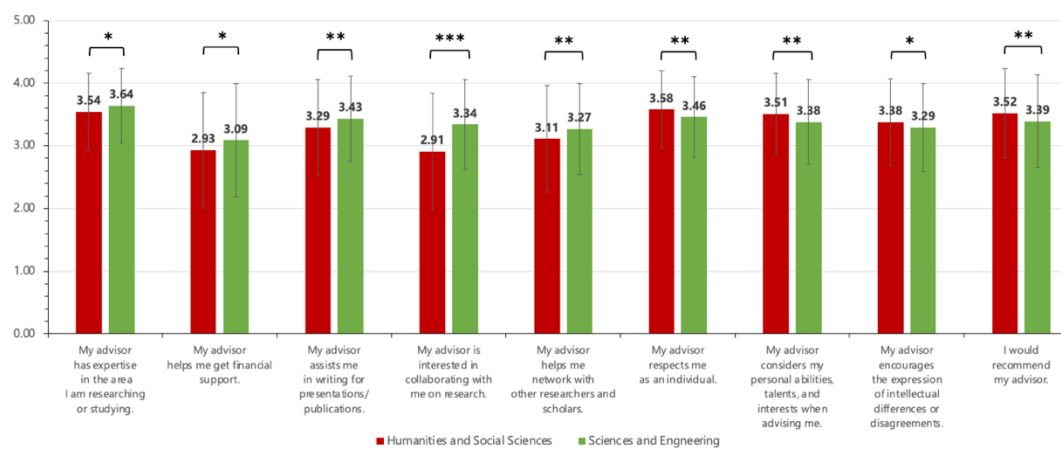
Humanities and Social Sciences and those in Sciences and Engineering. The data from the Students Experiences in the Research University (SERU) survey conducted at the case university from 16<sup>th</sup> November 2020 to 19<sup>th</sup> February 2021 was utilized in the study. Based on the general principle concerning the discipline provided in HEIs, 27.9% of the participants were categorized as graduate students in Humanities and Social Sciences, including those from Management, Marketing, Economics, Education, Linguistics, International Public Policy, etc. In addition, 48.9% were identified as graduate students in Sciences and Engineering, comprising students from Agriculture, Architecture, Biomedical Sciences, Computer and Information Sciences, Engineering Sciences, and so forth. And 23.2% of the participants' majors were missing, thus, could not be defined.

## Data Analysis

### *Perceptions of Host Institutions*

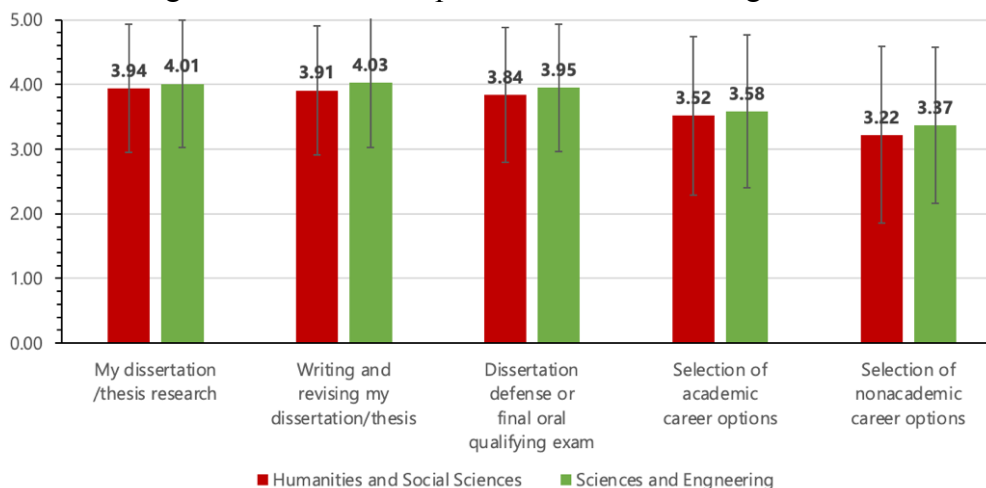
To better explore the experiences of graduate students in case university, their perceptions of host institutions were investigated through a comparative approach between the graduate students in Humanities and Social Sciences and those in Sciences and Engineering, including their perceived academic support, financial support, and lastly organizational climate. The results of the data analysis are shown subsequently. Firstly, the academic support of graduate students was addressed from three main aspects, namely, advising, guidance, and institutional facilities and opportunities. According to Figure 1, graduate students in Sciences and Engineering tend to perceive a higher level of tangible advising from their institutions, especially regarding their research and networking establishment. In contrast, graduate students in Humanities and Social Sciences considered that the advising provided to them is more autonomous and freer, taking into account their individuality, in line with the instructions and pedagogy used specifically in the Humanities and Social Sciences fields. Regarding their perceived helpfulness of institutional guidance (Figure 2), without statistical significance though, the mean of graduate students in Sciences and Engineering is higher than those in Humanities and Social Sciences. Finally, except for instruction, graduate students in Sciences and Engineering were more likely to express a higher satisfaction regarding the facilities and opportunities at the case university (Figure 3).

Figure 1. Perceived advising of participants.



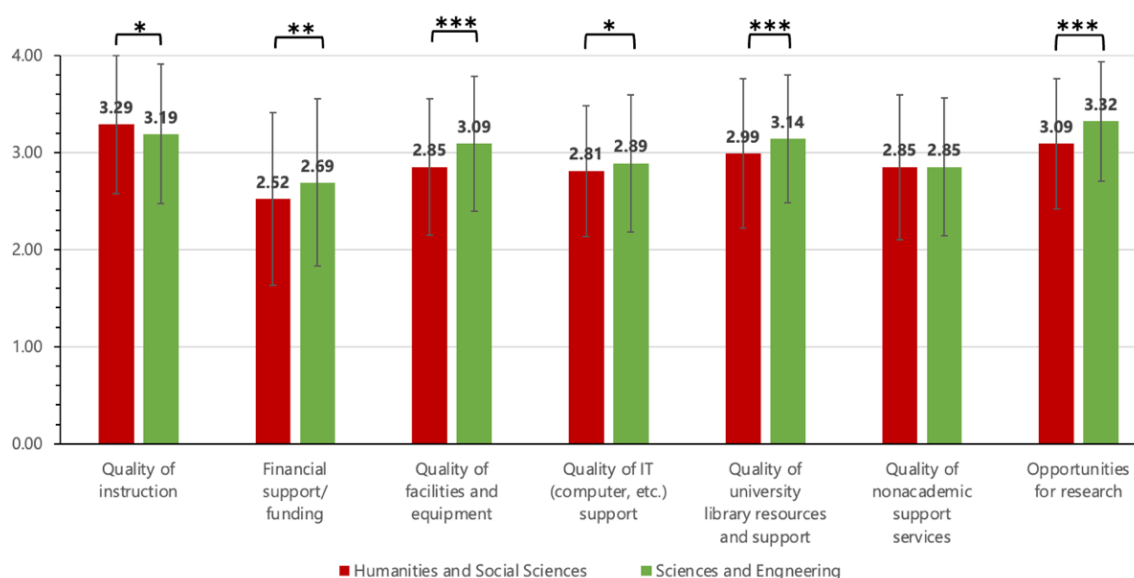
Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 2. Perceived helpfulness of institutional guidance.



Note: \*p<.05, \*\*p<.01, \*\*\*p<.001

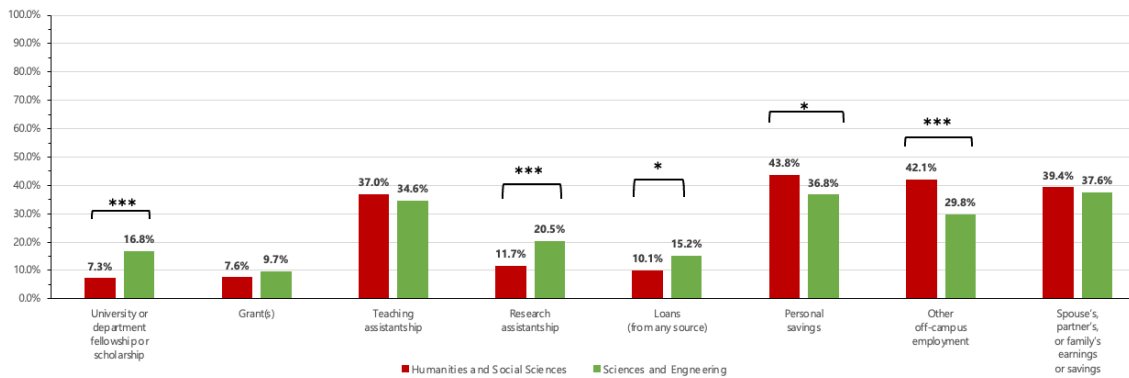
Figure 3. Participants' satisfaction with facilities and opportunities from their institutions.



Note: \*p<.05, \*\*p<.01, \*\*\*p<.001

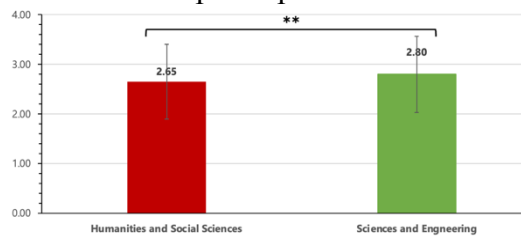
Secondly, the financial support received by the participants was investigated. Figure 4 shows that graduate students in Sciences and Engineering were more inclined to be engaged with on-campus financial resources, such as universities or departmental fellowships or scholarships, and research assistants. Whereas the main financial resource of graduate students in Humanities and Social Sciences tend to be their personal savings and their other off-campus employment. In addition, it appears that comparatively graduate students in Sciences and Engineering were more likely to apply for loans to continue their studies in case university. Consequently, as noted, graduate students in Sciences and Engineering expressed slightly higher satisfaction with financial support from their institutions (Figure 5).

Figure 4. Financial support of the participants.



Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

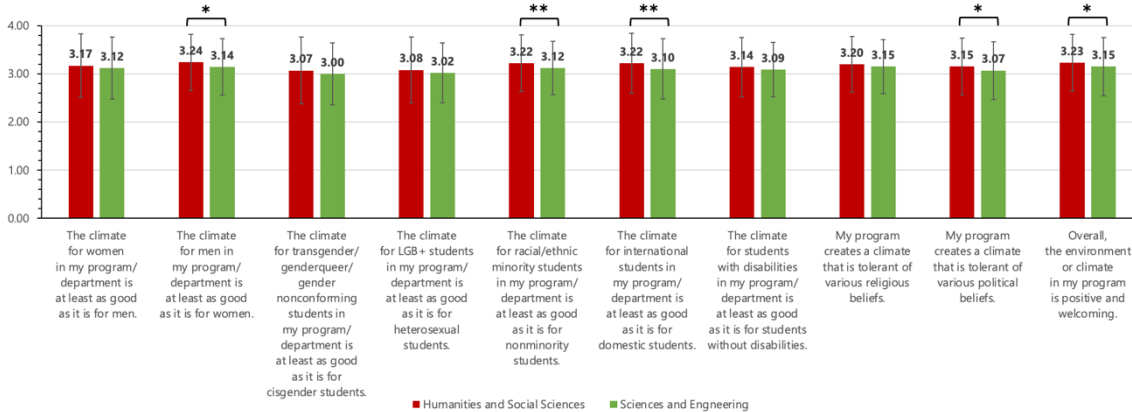
Figure 5. Satisfaction of the participants with their financial support.



Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Finally, the participants' perceptions of their organizational climate were asked. Data analysis suggests that compared with those in Sciences and Engineering, graduate students in Humanities and Social Sciences were more aware of the equality and accommodation of their institutions, covering gender, race, and political beliefs (Figure 6).

Figure 6. The agreement of the participants with their organizational climate.



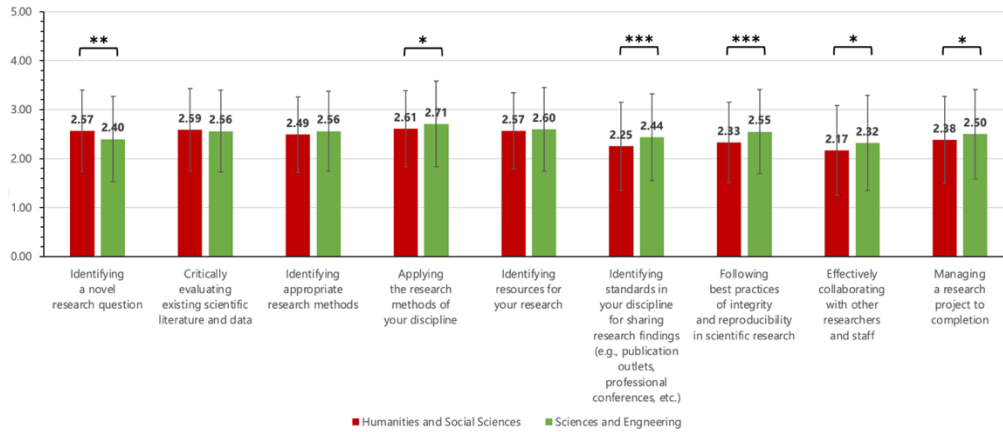
Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

### Perceptions of Individual Issues

In addition to their perceptions related to their institutions, the study further investigates their cognitions and feelings at an individual level. We found that except for the ability of “identifying a novel research question”, graduate students in Sciences and Engineering were more confident with their research competency in various aspects, comprising those in applying research methods, sharing research findings, following best practices of integrity

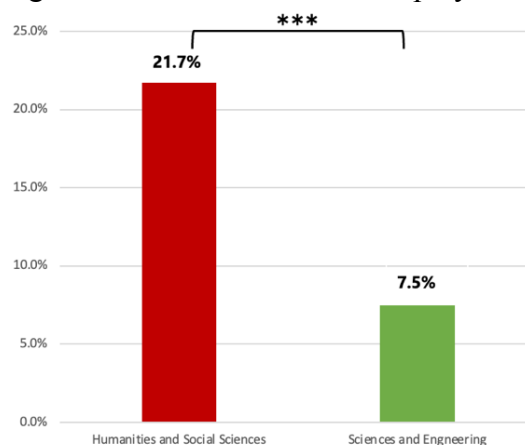
and reproducibility in scientific research, collaborating with other researchers and staff, and managing a research project to completion (Figure 7). In a related vein, more graduate students in Humanities and Social Sciences shared their concerns about securing a job after graduation, as shown in Figure 8. Finally, a higher level of mental problems faced by graduate students in Humanities and Social Sciences, such as anxiety and depression disorder, were observed (Figure 9).

Figure 7. Competency in relation to research within the fields/discipline.



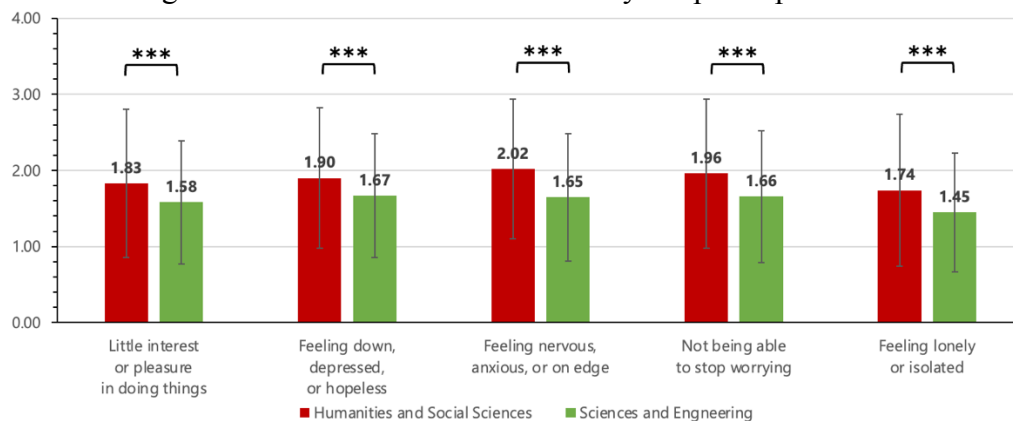
Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 8. The concern of the employment.



Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 9. Mental issues encountered by the participants.



Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Given the acknowledged differences in the degree attainment rate of graduate students in Humanities and Social Sciences and those in Sciences and Engineering, the study is the first attempt in this regard, addressing the different perceptions and experiences of graduate students by disciplines. Despite the usage of the data from a case university, the study found that graduate students in Sciences and Engineering generally had better learning and research experience at both institutional and individual levels. For example, they have a higher level of recognition and satisfaction with academic (e.g., advising, guidance, facilities, and opportunities) and financial support (e.g., scholarships and research assistantships) provided by their institutions than graduate students in Humanities and Social Sciences. With the introduction of neoliberalism-based new public management in Japanese HEIs, Japanese national universities were forced to be incorporated in 2004, which led to a reduction in annual management expense grants. In order to ensure the financial resources of each university, Japanese national universities gradually focused more on the collaboration between universities and industries, and thus, placed more emphasis on the majors in Sciences and Engineering disciplines (Umeki, 1995; Taniguti, 2015). This explains why the overall resources and support for graduate students in Sciences and Engineering were considered better than those provided in Humanities and Social Sciences. This should be of concern, which may further lead to the two dichotomies of the two fields, thus, deteriorating the distinctiveness of the two cultures in higher education as suggested by C.P. Snow (2012).

Regarding the organizational climate, the data analysis, however, reveals that graduate students in Humanities and Social Sciences tend to depict their institutions as a more accommodating and welcoming environment for students with diverse backgrounds. This can be attributed to the fact that the proportion of international students in Humanities and Social Sciences is much higher than those in Sciences and Engineering at the graduate level. Moreover, comparatively, students in Humanities and Social Sciences were more inclined to interact with students from different countries and thus, establish international networks (Kishita, 2004). Students in the Humanities and Social Sciences, therefore, tend to perceive their institutions as more equal and open-minded regardless of students' backgrounds. Alternatively, unlike students in Sciences and Engineering who spend a lot of time in the lab, students in Humanities and Social Sciences have more time to interact with their peers, which indirectly contributes to their perception of a more welcoming and friendly organizational climate regarding their institutions.

In addition, at an individual level, overwhelming differences in professional and mental issues encountered by graduate students from different disciplines were observed. Comparatively, graduate students in Humanities and Social Sciences considered themselves less competent regarding their professional knowledge and skills, which leads to significant anxiety and concern about their future employment. It is undeniable that the lack of a sense of self-efficacy can cause mental issues in individuals. This finding echoes Finnie et al. (2016), asserting that the study in Non-STEM fields may not be able to bring students financial wealth or professional advancement. This is in contrast to what was reported by a recent study (Yogyakarta & Al-Ansi, 2021), suggesting that Social Sciences students were less anxious about their future careers than those specialized in Medical and Natural Sciences majors.

## **Conclusion**

The main findings of the study can be summarized as follows. Firstly, graduate students' perceptions of their host institutions were examined. According to the data analysis, the study

indicates that both academic resources and financial support of the case university provided in Sciences and Engineering were perceived as higher than those in Humanities and Social Sciences. Specifically, graduate students in Sciences and Engineering were more likely to experience better advising regarding their scientific activities, networking, and collaboration. In addition, graduate students in Sciences and Engineering were also found more satisfied with the tangible factors (e.g., academic writing, research network, and computer and library resources) and less satisfied with intangible factors (e.g., autonomy and encouragement) in their programs. Lastly, they were less likely to have financial concerns since the provision of scholarships and salary through being a research assistant in their affiliated programs seemed quite adequate. Despite the perceptual disadvantages, interestingly, the graduate students in Humanities and Social Sciences were more inclined to consider their institutions as diverse and inclusive for students with diverse backgrounds. The institutional climate of the case university was characterized as open and accommodating for minority students, including those who are international, female, disabled, LGBT, etc.

In terms of the perceptions in relation to their individual issues, overwhelmingly, the study found that graduate students in Humanities and Social Sciences tend to face more professional and mental issues. For example, they were more prone to be less competent in their professional capabilities and achievements regarding applying research methods, sharing research findings, following best practices of integrity and reproducibility in scientific research, collaborating with other researchers and staff, and managing a research project to completion, which contributes to their greater concern about securing a job after graduation in the case university. Moreover, they were reported as more likely to encounter mental issues, such as general anxiety and depression disorder, than those in Sciences and Engineering. In general, they were more likely to have little interest in doing things and feel depressed, lonely, and isolated.

### ***Implications and Limitations***

The findings drawn from our study portrayed comparatively bleak experiences of graduate students in the Humanities and Social Sciences at the case Japanese national university. Undoubtedly, their academic and life experiences are closely intertwined with their degree attainment. A negative studying experience generally leads to a lack of interest in academic life, which in turn affects their further endeavor to strive for educational degrees. Having said this, the study offers the following theoretical and practical recommendations for researchers and university administrators.

Extensive previous studies regarding the experiences of graduate students in Japan were conducted. The established literature, however, often took all students as a whole unit, and seldom addresses the characteristics of graduate students with diverse backgrounds. The scholarly focus of our study is placed on their disciplines though, given their distinctive experiences as revealed previously, the study calls for special attention to each distinguished individual university student. In addition, as the selection of discipline is always closely associated with students' gender, a future study, therefore, should be carried out to detect whether student experiences revealed above were influenced by their gender.

A significant difference in experiences between graduate students in Humanities and Social Sciences and those in Sciences and Engineering was identified in our study. To create a more equal and accommodating academic environment and to combat the professional and mental issues encountered by graduate students in Humanities and Social Sciences, special and



specific interventions in terms of institutional configuration, including academic resources, financial support, and mental consultants/mentors, should be provided. Those are integral to establishing a legitimate, impartial, and attractive university environment, especially for those who are specialized in the Humanities and Social Sciences disciplines.

Several limitations of the study should be acknowledged. Firstly, the study's emphasis on disciplinary variation may impede a more in-depth analysis of whether observed differences are attributable to the variation in academic disciplines or to gender disparities among students. Additionally, the study lacks an exploration of other participant characteristics, including nationality, academic rank, and social class, beyond academic discipline. Furthermore, the study overlooks the potential interrelation between students' perceptions of their host institution and their personal issues. Finally, considering the significant impact of the COVID-19 pandemic, it is imperative to further investigate the moderating effects of the pandemic's mechanisms.

## References

- Asakawa, K., & Sakita, Y. (2021). The beginning of university life during the “COVID-19 pandemic”: How did students in general education create their lives? [「コロナ禍」における大学生生活の始まり: 全学教育の学生はどのように生活を築こうとしたか] *Hokkaido University Journal of Teacher Education*, 11, 1-25 (In Japanese).
- Finnie, R., Afshar, K., Bozkurt, E., Miyairi, M., & Pavlic, D. (2016). Barista or better? New evidence on the earnings of post-secondary education graduates: A tax linkage approach.
- Ito, M., Kurimoto, M., & Shiramizu, T. (2020). Stress and consciousness about university life among university students due to the COVID-19 pandemic [コロナ禍による大学生のストレスと大学生活への意識]. *Annual Report of the Graduate School of Human Culture and Sciences, Nara Women's University*, 36, 25-36 (In Japanese).
- Kishita, Y. (2004). A Case Study of the Lives and Needs of International Students in Graduate Schools of Science: An Analysis of the Kanazawa University Survey of International Students' Lives [理系大学院留学生の生活とニーズに関する事例研究: 金沢大学留学生生活実態調査の分析より]. *Bulletin of Kanazawa University International Student Center [金沢大学留学生センター紀要]*, 7, 45-58 (In Japanese).
- Kobayashi, M. (2021). Impoverished student life—The economic impact on university students due to the spread of the novel coronavirus infection [困窮する学生生活—新型コロナウイルス感染症拡大による大学生への経済的影響]. *DIO*, 362(6), 9 (In Japanese).
- Matsumoto, M. (2022). Changes in university students' learning and lifestyle habits due to the spread of the novel coronavirus infection [新型コロナウイルス感染症拡大による大学生の学習および生活習慣の変化]. *Journal of Kobe Shoin Women's University*, 55, 67-77 (In Japanese).
- MEXT. (2019). The Ideal Graduate School Education for the Year 2040~Measures to improve the quality of graduate education to nurture human resources who will lead society. (In Japanese). Retrieved from: [https://www.mext.go.jp/component/b\\_menu/shingi/toushin/\\_icsFiles/afieldfile/2019/02/18/1412981\\_001r.pdf](https://www.mext.go.jp/component/b_menu/shingi/toushin/_icsFiles/afieldfile/2019/02/18/1412981_001r.pdf)
- Nakamura, S. (2022). A study on the learning motivation of university students during the COVID-19 pandemic [コロナ禍における大学生の学習意欲に関する研究]. *Journal of Comprehensive Policy Studies*, 30, 59-67 (In Japanese).

- Nakao, T. (2021). Longitudinal relationships between attachment, loneliness, and mental health among university students during the COVID-19 pandemic [コロナ禍での大学生におけるアタッチメントと孤独感や精神的健康との経時的な相互関係]. *Psychological Research*, 92(5), 390-396 (In Japanese).
- Snow, C. P. (2012). *The two cultures*. Cambridge University Press.
- Taniguti, K. (2015). University Policy and 30 Years of the Graduate School of Biosphere Science [大学政策と生物圏科学研究科の30年]. *Biosphere Science: Bulletin of Graduate School of Biological Sciences, Hiroshima University* [生物圏科学: 広島大学大学院生物圏科学研究科紀要], 54, 153–163 (In Japanese).
- Umeki, M. (1995). History of segregated education regarding Humanities and Social Sciences, and Sciences and Engineering in Japan [日本における文系・理系分別教育の歴史] (No. 0). Japan Education Association [日本教育学会] (In Japanese). [https://doi.org/10.11555/taikaip.54.0\\_206](https://doi.org/10.11555/taikaip.54.0_206)
- Yogyakarta, & Al-Ansi, A. M. (2021). Students anxiety and recruitment during Covid-19 pandemic: Role of university, specialization and employment expectation. *Perspectives of Science and Education*, 49(1), 403–413. <https://doi.org/10.32744/pse.2021.1.27>

**Contact email:** kawashima.slics@osaka-u.ac.jp