

PERCEPTIONS OF LEARNING ENVIRONMENTS AND ACADEMIC PERFORMANCE AMONG THE ARTS STUDENTS IN HONG KONG: A COMPARATIVE STUDY OF VERTICAL TRANSFER STUDENTS AND DIRECT ENTRANTS

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Abstract — This study investigates the academic outcomes and learning environment perceptions of art students in Hong Kong, with a focus on comparing vertical transfer students (TSs) and direct entry students (DEs). In the Hong Kong higher education system, an estimated 30% of community college students advance to four-year institutions as TSs. The phenomenon of "transfer shock," characterized by a temporary decline in grade point average (GPA) among transfer students, is well-documented in prior research. However, the occurrence and underlying causes of transfer shock within the context of arts education have not been extensively examined.

To bridge this research gap, our empirical investigation assessed GPAs and gathered data through questionnaires that measured students' perceptions of their academic environment, their engagement with learning tasks, and their response to academic workloads. Responses were gauged using a Likert scale, which ranged from "strongly disagree" (1) to "strongly agree" (5), to capture the nuances of student sentiment. The study sample consisted of both TSs and DEs enrolled in the arts faculties of local universities.

Our preliminary analysis reveals a marginal difference in average GPAs, with DEs scoring 3.15 and TSs scoring 3.18, a discrepancy that does not reach statistical significance. Both student groups reported positive perceptions of their learning environments, deemed their workloads to be manageable, and displayed constructive emotional responses to academic challenges. A notable distinction arose in the area of academic experience appreciation and the quality of advising received, where TSs reported a significantly higher level of satisfaction (2.76) compared to DEs (2.32). These outcomes indicate that, contrary to expectations, transfer shock does not present a significant issue among art students in the Hong Kong higher education sector.

Index Terms — Art students, Perception of learning environments, Transfer shock, Vertical transfer students.

INTRODUCTION

The academic trajectory of college transfer students (TSs)—individuals who have completed a two-year postsecondary qualification and subsequently enroll in a four-year university program—is a global educational paradigm [1–4]. This transitional process is particularly prevalent among graduates from secondary schools who initially pursue associate degrees or higher diplomas at community colleges [2]. In the Hong Kong educational landscape, it is estimated that 30% of community college attendees qualify for transfer to four-year university programs as TSs [5]. Despite this educational route providing an alternative avenue for obtaining bachelor's degrees and ostensibly promoting educational equity and democratization within society, it is marred by the phenomenon of "transfer shock." This term, first coined by Hills [6], denotes a temporary decline in students' grade point averages (GPA) upon transferring to university. Hills' seminal review, which synthesized over 20 studies, identified 46 datasets pertinent to transfer shock, with 44 evidencing the phenomenon and a mere two refuting it [7]. Contemporary research has yielded mixed findings concerning academic performance disparities between TSs and direct entry students (DEs), further contributing to the discourse [8-11].

The concept of "campus culture shock," a potential catalyst for transfer shock, is posited to stem from the adjustment to novel academic and social ecosystems following a student's transition to university [12-14]. Compounded by increased workloads and the acclimatization to different study resources and social settings, these factors collectively pose significant challenges to TSs, potentially influencing their academic performance adversely [13,14].

Prevailing research has predominantly focused on mixed cohorts of arts and science students or exclusively on those within Science, Technology, Engineering, and Mathematics (STEM) fields, with scant consideration given to the experiences of students immersed in the arts. Furnham and Crump's recent inquiry [15] into the disparate personality traits and cognitive abilities of Arts versus Science students suggests that Arts students tend to exhibit more extroverted, amiable, and adaptable characteristics. The impact of such distinctive personality profiles on Arts students' university experiences and academic outcomes has yet to be elucidated.

Thus, the impetus for the current investigation is to explore the prevalence and contributing factors of transfer shock specifically among Arts students. By delving into this under-researched demographic, this study aims to elucidate the relationship between the unique attributes of Arts students and their navigation of the university milieu, including any resultant effects on their academic performance.

METHODOLOGY

Recruitment of Participants and Ethical Considerations

The methodology of this study entailed conducting a cross-sectional survey via an online platform, implemented through the use of convenience sampling. Data collection was carried out from April to November 2018 within a designated university in Hong Kong. The cohort

consisted solely of full-time undergraduate students who were beneficiaries of government funding. Recruitment methods included direct in-class promotions, strategically placed posters throughout the campus, and targeted email campaigns. To maintain the integrity of the study's focus, international and postgraduate students were precluded from participation. The research protocol was rigorously reviewed and subsequently approved by the institutional review board, as evidenced by the approval number HSEARS2018004005-01.

Methods of Data Collection

This investigation constitutes a segment of a larger collaborative project that seeks to examine the learning experiences of Senior-Year-Admission (SYA) students at higher education institutions in Hong Kong. The instruments and procedures for the survey have been previously documented [16]. In summary, a compendium of questionnaires, as presented in Table 1, was employed to gather the necessary data. The reliability of these questionnaires has been corroborated through earlier scholarly inquiries [17-19]. For the purpose of this specific analysis, 56 items addressing students' perceptions of their learning environments were meticulously chosen. These items span across various sections of the HowULearn and HKML-TSQ questionnaires, namely HowULearn subsections ii (21 items) and iv (3 items), along with HKML-TSQ sections i (4 items) and ii (20 items) [20], and were earmarked for subsequent statistical evaluation (Table 2).

The response scales for the questionnaires included a 5-point Likert scale for HowULearn and HKML-TSQ section i (ranging from 1 = strongly disagree to 5 = strongly agree), and a 4-point Likert scale for HKML-TSQ section ii (with 1 = very dissatisfied and 4 = very satisfied).

C. Data Analysis

To analyze the collected data, the student t-test was administered for the assessment of age and GPA disparities between Transfer Students (TSs) and Direct Entry students (DEs) as depicted in Table 2. Additionally, the Mann–Whitney U test was applied to discern variances in other collected metrics between TSs and DEs, detailed in Table 3. Statistical significance was established at a p-value of less than 0.05. For the processing and analysis of data, SAS software, Version 9.4 for the Windows operating system (SAS Institute Inc., Cary, NC, USA), was utilized.

Table 1. Questionnaires to be used in this project.

<i>Questionnaire</i>	<i>Content</i>
Demographic information	age, gender, and type of student (TS or DE)
GPA	Current GPA
HowULearn Questionnaire [17-19]	i. learning approaches(12 items) ii. Teaching and learning environment (21

<p>Hong Kong Modified Laanan-Transfer Student Questionnaire (HKML-TSQ) [20],</p>	<p>items) (teaching for understanding and encouraging learning (11 items); peer support (3 items); and alignment and constructive feedback (7 items).</p> <p>iii. Self-efficacy beliefs (5 items). iv. Study workload (3 items).</p> <p>v. General working life skills (7 items) [17].</p> <p>i. Perceived resources/stigma (4 items) and academic study (4 items).</p> <p>ii. University support (20 items) (general support and advising (10 items, academic experience and advising (6 items) and institutional attributes (4 items).</p> <p>iii. Coping style at the university (15 items), including avoidance (4 items), emotional (3 items), active (6 items) and escape (3 items) [20].</p>
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Table 2. Items of perceptions of teaching and learning environment to be examined in this study.

<p><i>Teaching for understanding and encouraging learning (12 items)</i></p>
<p>1. It is clear to me what I am expected to learn in subjects.</p> <p>2. We are allowed some choices over what aspects of the subject to concentrate on in subjects.</p>

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3. What we are taught seems to match what we are supposed to learn.
 4. I can see the relevance of most of what we are taught.
 5. Subjects have given me a sense of what goes on “behind the scenes” in the subject area.
 6. The teaching helps me to think about the evidence.
 7. Teaching encourages me to relate what I learned to issues in a wider context.
 8. I found most of what I learned in subjects really interesting.
 9. Academic staff try to share their enthusiasm about the subject with us.
 10. Academic staff are patient in explaining things which seem difficult to grasp.
 11. I enjoyed participating in subjects.
 12. Academic staff help us to see how we are supposed to.

Peer support (3 items)

1. Students support each other and try to give help when it is needed.
2. Talking with other students helps me to develop my understanding.
3. I can generally work comfortably with other students.

Alignment and constructive feedback (7 items)

1. Subjects provide plenty of opportunities for me to discuss important ideas and topics.
 2. I receive enough feedback about my learning (e.g., assignment work).
 3. It is clear to me what is expected in the assessed work (e.g., final examination).
 4. I can see how the subject assessment fits in with what I am supposed to learn.
 5. The feedback given on my work helps me to improve my ways of learning and studying.
 6. The subject assessment helps me to make
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connections to my existing knowledge or experience.

7. The feedback given on my subject assessments helps to clarify things I hadn't fully understood think and reach conclusions in subjects underpinning different views.

RESULTS

The study sample comprised 290 art students, which included 85 Direct Entry students (DEs) and 205 Transfer Students (TSs), all of whom completed the entire set of questionnaires. Table 3 summarizes the general demographics and current Grade Point Averages (GPAs) of the participants. The results revealed that DEs had an average GPA of 3.15 with a standard deviation of 0.29, while TSs had a slightly higher average GPA of 3.18 with a standard deviation of 0.38. However, this difference was not statistically significant ($p > 0.05$).

Table 4 provides a detailed comparison between TSs and DEs regarding their perceptions of the university environment. It was observed that both DEs and TSs held positive views of the learning environment and deemed the workload to be reasonable. The analysis did not reveal any statistically significant differences in the perception of the learning environment between the two groups ($p > 0.05$). Moreover, students reported minimal recognition of discrepancies in resources, stigma, and academic study. They expressed contentment with the institutional attributes, peer support, and the availability of general support and advice, with no significant differences between TSs and DEs ($p > 0.05$).

Despite broadly similar attitudes, TSs demonstrated a significantly higher level of appreciation for academic experiences and advising compared to DEs ($p < 0.01$). Finally, all participants indicated satisfaction with their overall university experience, and statistical analysis confirmed that there was no significant difference in this regard between TSs and DEs ($p > 0.05$).

Table 3. Summary of general information and current GPA of the TSs and the DEs

	<i>TSs (n = 205)</i>	<i>DEs (n = 85)</i>	<i>P</i>
Age	21.2±1.6	21.3±1.9	0.67
Current GPA	3.18±0.38	3.15±0.29	0.47

Table 4. Comparison of the TSs and the DEs on their perception of university learning environment

	<i>TSs</i>	<i>DEs</i>	<i>P</i>
Teaching and learning environment (5-point Likert scale, mean of score)			

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Teaching for understanding and encouraging learning	3.83±0.3 7	3.71±0.4 9	0.06
Peer support	3.75±0.6 5	3.79±0.7 7	0.25
Alignment and constructive feedback	3.75±0.5 5	3.67±0.6 1	0.47
Study workload	3.29±0.7 3	3.27±0.7 7	0.81
Perceived disparity (4-point Likert scale, mean of scores)			
Resources/stigma	3.56±0.4 9	3.48±0.5 3	0.49
Academic study	3.48±0.5 5	3.38±0.4 8	0.17
University support (4-point Likert scale, mean of scores)			
General support and advising	2.39±0.7 8	2.18±0.8 6	0.08
Academic experiences and advising	2.76±0.5 8	2.32±0.8 9	0.00 *
Institutional attributes	2.64±0.7 0	2.48±0.8 3	0.23
Overall university experience satisfaction (4-point Likert scale)			
	2.82±0.5 2	2.75±0.5 7	0.64

* $p < 0.05$, statistically significant.

DISCUSSION

The present study has elucidated that in the realm of arts education, Transfer Students (TSs) attain Grade Point Averages (GPAs) that are commensurate with those of Direct Entry students (DEs). This trend mirrors findings within the Science, Technology, Engineering, and Mathematics (STEM) disciplines in Hong Kong and beyond [21]. However, contrary to the STEM counterparts where TSs were significantly older, age discrepancies between TSs and DEs

within the arts cohort were not evident.

Moreover, while STEM TSs in Hong Kong have reported a heightened awareness of resource disparities, stigma, and academic stress, and were less satisfied with institutional support and peer interactions, leading to a diminished overall university experience [16], these issues appear to be absent among arts TSs. Notably, arts TSs expressed a non-significant, yet higher level of satisfaction across the aforementioned domains compared to DEs. This could potentially be attributed to the distinctive personalities of arts students—who are often characterized as more extroverted and open to new challenges [15]—which might facilitate a smoother transition and adaptation to new learning environments, thus mitigating the effects of transfer shock and cultural adjustment.

Furthermore, our findings indicated that arts TSs profoundly valued their academic experiences and advising within the university, significantly more so than DEs. This heightened appreciation may be due to the intrinsic teaching methodologies within the arts disciplines, which emphasize personal development, creativity, and individualized support, enabling students to maximize their potential. The arts curriculum is designed to not only challenge the students academically but also to support their unique talents both in and out of the classroom setting.

CONCLUSION

The comprehensive analysis undertaken in this research has provided valuable insights into the academic and environmental perceptions of arts students within a university setting. Both TSs and DEs have showcased equivalent academic prowess, as reflected in their similar GPA scores. The study has also highlighted that the often-discussed challenges associated with transitioning into a new academic environment—such as transfer shock and cultural adjustment—are not prevalent within the arts TS population, indicating a successful assimilation into the university culture.

The positive perceptions and high levels of satisfaction with academic experiences, advising, and institutional support reported by arts TSs underscore the efficacy of the university's inclusive and supportive educational approach. This is particularly notable against the backdrop of contrasting experiences reported by STEM TSs, suggesting that discipline-specific factors significantly influence student adaptation and satisfaction.

As universities continue to diversify and expand their student bodies, including increased numbers of transfer students, the findings of this study serve as an encouraging indicator that with appropriate support and a conducive learning environment, successful integration and academic parity are achievable outcomes. This research not only contributes to the existing body of literature on transfer students in higher education but also offers actionable insights for academic institutions looking to enhance the experiences of their diverse student populations.

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Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The data presented in this study are available on reasonable request from the corresponding author.

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Conflicts of Interest

The authors declare no conflict of interest.

REFERENCES

- [1] World Education News & Reviews (WENR), "Education System Profiles," New York: World Education Services, 2019. <https://wenr.wes.org/category/education-system-profiles2>.
- [2] K. E. Mehr & R. Daltry, "Examining Mental Health Differences between Transfer and Nontransfer University Students Seeking Counseling Services," *Journal of College Student Psychotherapy*, vol. 30, pp. 146–155, 2016.
- [3] Y. Zhang, F. S. Laanan, & M. Adamuți-Trache, "What Matters to Students' Satisfaction: A Comparative Study between Vertical and Horizontal Transfer Students at 4-year Universities," *Community College Journal of Research and Practice*, vol. 42, pp. 878–892, 2017.
- [4] L. Aulck & J. D. West, "Attrition and performance of community college transfers," *PLOS ONE*, vol. 12, e0174683, 2017.
- [5] D. Fong & K. Cheung, "Transfer capital or transfer deficit: A dual perspective of English learning of ESL college transfer students," *Sustainability*, vol. 14, no. 214, 2021.
- [6] J. R. Hills, "Transfer shock," *The Journal of Experimental Education*, vol. 33, pp. 201–215, 1965.
- [7] H. P. Rodes, "Successful transfer in engineering," *Junior College Journal*, vol. 20, pp. 121–127, 1949.

- [8] P. E. C. Díaz, "Effects of Transfer on Academic Performance of Community College Students at the Four-Year Institution," *Community Junior College Research Quarterly of Research and Practice*, vol. 16, pp. 279–291, 1992.
- [9] M. D. Johnson, "Academic performance of transfer versus “Native” students in Natural Resources & Sciences," *College Student Journal*, vol. 39, pp. 570, 2005.
- [10] W. Y. Lee, "Toward a more perfect union: Reflecting on trends and issues for enhancing the academic performance of minority transfer students," *New Directions for Community Colleges*, vol. 39, 2001.
- [11] K. Cheung, T. L. Yip, C. Wan, H. Tsang, L. W. Zhang, & A. Parpala, "Differences in study workload stress and its associated factors between transfer students and freshmen entrants in an Asian higher education context," *PLOS ONE*, vol. 15, e0233022, 2020.
- [12] T. Ivins, K. Copenhaver, & A. Koclanes, "Adult transitional theory and transfer shock in higher education: practices from the literature," *Reference Services Review*, vol. 45, pp. 244–257, 2017.
- [13] F. S. Laanan, "Studying Transfer Students: Part II: Dimensions of Transfer Students' Adjustment," *Community College Journal of Research and Practice*, vol. 31, pp. 37–59, 2007.
- [14] T. G. Davies & K. L. Casey, "Transfer Student Experiences: comparing their academic and social lives at the community college and university," *College Student Journal*, vol. 33, p. 60, 1999.
- [15] A. Furnham & J. Crump, "The sensitive, imaginative, articulate art student and conservative, cool, numerate science student: Individual differences in art and science students," *Learning and Individual Differences*, vol. 25, pp. 150–155, 2013.
- [16] K. Cheung, C. S. W. Ho, H. Tsang & E. S. H. Lau, "Comparing the learning approaches of transfer students and direct entrants in an Asian higher education context," *Sustainability*, vol. 14, 2523, 2022.
- [17] H. Kymäläinen, M. Luukkainen, & I. Södervik, "HowULearn and Oodikone as tools for enhancing learning and progress in academic studies," in *EDULEARN Proceedings*, 2019. doi: 10.21125/edulearn.2019.0330.
- [18] K. Cheung, T. L. Yip, C. Wan, H. K. Tsang, L. W. Zhang, & A. Parpala, "HowULearn Questionnaire--Asian Adaptation," 2020. <https://doi.org/10.1037/t79349-000>.
- [19] A. Parpala, M. Mattsson, K. J. Herrmann, A. Bager-Elsborg, & T. Hailikari, "Detecting the Variability in Student Learning in Different Disciplines—A Person-Oriented approach," *Scandinavian Journal of Educational Research*, vol. 66, pp. 1020–1037, 2021.
- [20] K. Cheung, J. Ng, H. Tsang, K. Pang, C. Wan, & K. Moser, "Factors Affecting Direct and Transfer Entrants' Active Coping and Satisfaction with the University," *International Journal of Environmental Research and Public Health*, vol. 17, 2803, 2020.
- [21] Van Broekhoven, K., Cropley, D., & Seegers, P., "Differences in Creativity Across Art and STEM Students: We Are More Alike Than Unalike," *Thinking Skills and Creativity*, vol. 38, 100707, 2020, ISSN 1871-1871, <https://doi.org/10.1016/j.tsc.2020.100707>.