

Routledge
Taylor & Francis Group

Higher Education Research & Development

ISSN: 0729-4360 (Print) 1469-8366 (Online) Journal homepage: www.tandfonline.com/journals/cher20

Thriving through transitioning: unravelling the interplay of transitional challenges and adjustments into university

Jiajing Li & Vivian W. Y. Lee

To cite this article: Jiajing Li & Vivian W. Y. Lee (2025) Thriving through transitioning: unravelling the interplay of transitional challenges and adjustments into university, Higher Education Research & Development, 44:2, 465-479, DOI: 10.1080/07294360.2024.2401016

To link to this article: https://doi.org/10.1080/07294360.2024.2401016

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 18 Sep 2024.

Submit your article to this journal

Article views: 13548

View related articles

View Crossmark data

Citing articles: 23 View citing articles

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=cher20

HIGHER EDUCATION RESEARCH & DEVELOPMENT
2025, VOL. 44, NO. 2, 465–479
https://doi.org/10.1080/07294360.2024.2401016

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Thriving through transitioning: unravelling the interplay of transitional challenges and adjustments into university

Jiajing Li and Vivian W. Y. Lee

Centre for Learning Enhancement And Research, The Chinese University of Hong Kong, Hong Kong, People's Republic of China

ABSTRACT

First-year students encounter a plethora of challenges upon entering university. However, little is known about how they adjust and work through these challenges during the transition phase. This study investigates the relationships among transitional challenges, well-being, help-seeking, and students' adjustments to the university by combining the variable- and person-centered approaches. Data were collected from 710 Hong Kong first-year university students. We employed structural equation modeling (variable-centered approach) and latent profile analysis (person-centered approach) to analyze the data. Results showed that socio-emotional challenges, academic challenges, and coping were negatively related to students' adjustment to university. Three profiles emerged for students' transitional challenges and adjustments: 'maladaptive', 'average', and 'adaptive' learners. This study underscores the significance of considering students' perceived challenges to promote a smooth transition to university life.

ARTICLE HISTORY
Received 2 January 2024
Accepted 26 August 2024

KEYWORDS
transitional challenges; adjustment; university students; variable-centered approach; person-centered approach

1. Introduction

Transitioning into university life can be significant but challenging for students (Baik et al., 2019; Tett et al., 2017; Williams & Roberts, 2023). In this process, they have to encounter a myriad of challenges from the aspects of personal, social-emotional, and academic areas (Korhonen, 2021). Many of them feel overwhelmed when making adjustments, ill-prepared for the change, and struggle to adapt to the demands of university (Cameron & Rideout, 2022; Huang & Lee, 2022). Maladjustments during this phase can adversely impact students' university journey, hampering both academic performance and overall well-being. Moreover, maladjustments in the first year of university life place students at risk of dropout and even potentially affects their future career prospects (Trautwein & Bosse, 2017; Van Rooij et al., 2017).

CONTACT Vivian W. Y. Lee vivianlee@cuhk.edu.hk Centre for Learning Enhancement And Research, Chinese University of Hong Kong, Room 502, Hui Yeung Shing Building, The Chinese University of Hong Kong, NT, Hong Kong, People's Republic of China

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Despite the maladaptive outcomes of transitioning to a new setting being noted in Western cultures, the existing knowledge about students' transitioning experience in Chinese universities remains limited and fragmented (Hang & Zhang, 2022). In addition, the first-year transition experience 'is not a homogeneous experience but a multiplicity of experiences contingent on the type of institution and student characteristics' (Harvey et al., 2006, p. 135). However, a scarcity of studies has accounted for the individual differences in transitional challenges and adjustments. Hence, a holistic understanding of first-year students' transitional mechanisms is needed.

To address this gap, the present study investigated the relationship between transitional challenges and adjustments using both variable-centered and person-centered approaches. The findings of this study could enrich the literature on the transition to first-year university life by uncovering interplay of transitional challenges and adjustments. Specifically, the general relationship between them can be uncovered with a variable-centered approach, while individual differences in the combinations of these two factors can be detected with a person-centered approach. Our findings also inform educators on how to tailor instructions to help students to overcome challenges and achieve a smooth transition.

2. Literature review

2.1. Transitional challenges and adjustments from high school to higher education

The transition from high school to university is a major concern globally (Baik et al., 2019; Coertjens et al., 2017). To cope with a multitude of challenges is inevitable for university beginners. Studies have been conducted to examine the challenges encountered by students in the transitional process and the consequences that arise (e.g., Cameron & Rideout, 2022; Williams & Roberts, 2023). For example, Cameron and Rideout (2022) interviewed 27 first-year students about their perceptions of university life adaptation. They found that students were not prepared to be self-directed learners and they were still figuring out how to be effective learners even at the end of the first year. In another study, Williams and Roberts (2023) found that first-year university students were hampered by a negative emotion (i.e., awkwardness) and were vulnerable to a heightened risk of dropout. The countless challenges can be conceptualized and broadly categorized into three aspects (i.e., personal, socio-emotional, and academic challenges). Personal challenges refer to challenges students may have in balancing their study and life as well as family; Socio-emotional challenges involve the hurdles associated with forming meaningful connections with others; Academic challenges denote difficulties in fulfilling academic expectations and changed modes of learning (Sanagavarapu et al., 2019).

Aside from coping with challenges from personal, social-emotional, and academic perspectives, students are also required to handle challenges to their well-being (e.g., Kyndt et al., 2017; Virtanen et al., 2019). Researchers demonstrated that once students enter a university, their well-being is likely to be impaired. Those who struggle with well-being issues are inclined to suffer from maladjustments (Bewick et al., 2010).

When facing challenges from academic, personal, social relationships, and well-being perspectives, help-seeking is essential. However, existing literature has demonstrated that young people are not willing to seek help for many reasons, such as a lack of service information,

stigma related to Asian culture, misconceptions about counseling, ethnic identities, gender, and cultural values (Radez et al., 2021). Help-seeking concerns the processes of one's adapting and coping with problems with both internal and external assistance (Rickwood & Thomas, 2012). The internal help-seeking processes correspond to psychological barriers, which stem from the lack of emotional openness to seek help. External help-seeking processes correspond to socio-demographic barriers, which means barriers result from being a member of a religious, ethnic minority, or linguistic group (Soorkia et al., 2011).

Transitional adjustments refer to the processes that students make to manage educational demands (Jackson, 2003). A seamless transitional adjustment not only significantly shapes the trajectory of students' university experience but also casts a far-reaching influence on their future career prospects. It was found that students' adjustments to university life were multiply determined by factors such as challenge coping, well-being issues, and help-seeking barriers (Barros & Simão, 2018). Nonetheless, to what extent these factors contribute to Hong Kong first-year students' overall transitional adjustments and how transitional challenges and adjustments are configured into different groups of students remain under-investigated.

2.2. University students' transitioning in Hong Kong

Hong Kong Special Administrative Region (HKSAR) has several elite universities that attract a large number of students from all over the world (Yu et al., 2021). Admission to prestigious universities in HKSAR is highly competitive, with over 39,000 students applying for undergraduate admission and only 40.12% of students being eligible to be enrolled in the university (Joint University Programmes Admissions System, 2022). However, being enrolled in the top-ranking university in HKSAR does not guarantee a promising future; instead, it is just the beginning of a journey with numerous forthcoming challenges. Notably, first-year university students have to adjust to an unfamiliar learning pedagogy, accustom themselves to a fast-paced lifestyle, cultivate self-directed learning competence, and adapt to a competitive atmosphere in HKSAR (Wang et al., 2022). Securing a smooth transition to university is critical to undergraduate education quality and to elevating the international competitiveness of institutions.

Influenced by the collectivistic culture, some students in Hong Kong are unwilling to openly express their difficulties and reach out for help in university transitions. On the one hand, they are afraid of 'losing face', as admitting to struggles may be seen as a sign of personal failure or incapability (Li et al., 2022; Lin & Fan, 2023). On the other hand, the collectivist culture admires resilient students and discourages expressing vulnerability (Özcan & Bulus, 2022; Xu et al., 2023).

2.3. Transition theory

The core tenet of transition theory is that individuals may react differently to changes. Schlossberg et al. (1995) defined transition as '… any event, or non-event that results in changed relationship, routines, assumptions, and roles …' (p. 27). Four pivotal factors underpin the transition process: situation, self, supports, and strategies (Chickering & Schlossberg, 1995). The situation concerns students' perceptions of issues such as the aspects of change and students' perceptions of changes. Self is related to an individual's characteristics, demographic

features, and the psychological resources available. Supports refer to relationships and networks shaping students' transition. Strategies pertain to the approaches that can be employed during the process of transition (Kyndt et al., 2017). These factors collectively contribute to understanding and navigating the complexities of transitions in various contexts. Corresponding to the transition, the adaptation was defined as 'a process during which an individual moves from being totally preoccupied with the transition to integrating the transition into his or her life' (p. 7). The transition theory postulates that successful adjustment hinges on how well an individual navigates challenges arising from the situation, themselves, the support available, and their coping strategies.

Our decision to use transition theory stems from its comprehensive perspectives on students' adaptation to university life (Barclay, 2017). It explains a range of challenges that students might encounter, informing efficient interventions to secure a smooth transition and adjustment (Meehan & Howells, 2018). The present study followed the challenges informed by the transition theory. In decades of research, transition theory has been extensively applied to the higher education context (Evans et al., 2022). For example, grounded in transition theory, Fong et al. (2016) explored predictors of adjustments to academic writing among first-year university students. They disclosed that factors such as teachers' grading, supportive resources, and independent thinking contributed to students' transition. Evans et al. (2022) reported the effectiveness of the interventions on personal-disclosure mutual sharing in first-year university students' transition to higher education. However, a dearth of research has simultaneously looked into the correlation between multiple aspects of transitional challenges and adjustments and the existence of subgroups of individuals characterized by distinct levels of transitional challenges and adjustments.

2.4. Variable- and person-centered approaches

Variable- and person-centered approaches represent two broad categories of research methodologies. The variable-centered approach focuses on discerning the overall patterns of relationships among variables within an entire population. Conversely, the person-centered approach focuses on individual differences and identifies subgroups within the population (Masyn, 2013). Variable-centered approaches commonly employ regression analysis, structural equation modeling, and hierarchical linear modeling, while person-centered approaches encompass techniques such as latent profile analysis (Woo et al., 2024). The research on the transitional experiences of first-year university students has predominantly employed variable-centered approaches (Fosnacht et al., 2018; Fryer, 2017). Nevertheless, those studies using variable-centered approaches may have overlooked students characterized by diverse configurations of transitional challenges and adjustments. The current study marks an initial endeavor to embrace the complementarity of both variable- and person-centered approaches, aiming to provide a more comprehensive understanding of the nuances in the transitional experiences of first-year university students.

3. The current study

The current study aimed to investigate the transitioning experience of first-year university students in Hong Kong. Two research questions guided the study:

(1) What are the relationships between transitional challenges and adjustments?
(2) What are the different profiles of transitional challenges and adjustments among first-year university students in Hong Kong?

4. Methodology

4.1. Measures

To gauge students' transitional challenges and adjustments, the adapted version of the *Transition, Well-being, Help-seeking, and Adjustments Scale* (TWHAS) by Sanagavarapu et al. (2019) was employed. There were 33 items with four subscales: challenges (10 items), well-being challenges (12 items), help-seeking barriers (10 items), and transitional adjustments (3 items). As the survey was conducted in English, concerns about translation processes and validity were erased.

4.1.1. Transitional challenges

Students were asked to report their perceptions of challenges encountered in transitioning to university. There were three dimensions of transitional challenges: personal challenges (3 items; e.g., challenges in balancing family commitments with studies), socio-emotional challenges (3 items; e.g., challenges in making friends with people from similar backgrounds on campus), and academic challenges (4 items; e.g., challenges in participating in online study and discussion). High scores on the construct indicate higher challenges encountered by students. Students rated from 1 (very easy) to 5 (very difficult).

4.1.2. Well-being challenges

The well-being challenges subscale was comprised of moods and coping constructs, which correspond to students' anxiety (6 items, e.g., feeling worried, nervous, and tense) and stress (6 items, e.g., feeling lonely, tired, irritable, low motivation, and self-worth), respectively. Student rated from 1 (never) to 5 (all the time). Higher values denote higher levels of well-being challenges.

4.1.3. Help-seeking barriers

Help-seeking barriers were assessed via students' perceptions of barriers to seeking help when facing adjustment challenges in university. The scales of socio-demographic barriers and psychological barriers, which measure students' external and internal barriers to seeking help, were used to gauge help-seeking barriers. It consists of psychological barriers (3 items; e.g., balance family commitments with studies), socio-demographic (3 items; e.g., make friends with people from similar backgrounds on campus), and academic challenges (e.g., 4 items; understand the course requirements). Students rated from 1 (strongly disagree) to 5 (strongly agree). Higher values denote higher levels of help-seeking barriers.

4.1.4. Adjustments

Three items were used to represent students' overall adjustment in transitioning to the university. A sample item was '*How well do you think you are adjusting to your university*'. Students rated from 1 (very bad) to 5 (very good).

4.2. Participants and sampling

Convenience sampling was used to recruit participants. A total of 710 Hong Kong first-year university students were involved. There were 300 female students (42.3%). Most of the participants' ages were 18–21 ($n = 669$, 94.2%). Our participants were enrolled in humanities and social sciences ($n = 363$; i.e., arts, business administration, education, law, and social science) and STEM ($n = 347$; i.e., engineering, medicine, and science) majors. Students were predominantly from Hong Kong (70.1%), followed by those from mainland China (22.5%) and other regions.

Approval was obtained from the institutional review board of the Chinese University of Hong Kong for the practice of the present study. All participants signed the consent form before being involved in the study, which specified the purposes of the research, the participants' roles, and the confidentiality of the research. There were no monetary incentives. A designated research assistant was in charge of data collection.

4.3. Data analysis

Since the students were asked to answer all items, there were no missing data in the present study. We first analyzed descriptive statistics with SPSS 26.0. Means, standard deviations, correlational coefficients, and Cronbach's alpha coefficients were computed.

Next, confirmatory factor analysis (CFA) using Mplus 8 was carried out to evaluate the validity of students' responses to the questionnaires. A series of goodness of fit indices were employed, including χ^2 statistics, Tucker-Lewis index (TLI), comparative fit index (CFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA). RMSEA and SRMR $\leq .08$, meanwhile, CFI and TLI $\geq .90$ were deemed as acceptable model fit (Byrne, 2010).

Then, structure equation modeling (SEM) was adopted to uncover the extent to which transitional challenges related to well-being, help-seeking barriers, and adjustments in the university. We utilized the benchmark established by Keith (2019) to interpret effect sizes: βs of 0.05, 0.10, and 0.25 were deemed as small, medium, and large, respectively.

Finally, we used the latent profile analysis (LPA) to identify the distinct combinations of transitional challenges and adjustments. Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), ample-size adjusted BIC (aBIC), Lo-Mendell-Rubin Likelihood Ratio Test (L-M-R LRT), Bootstrap Likelihood Ratio Test (BLRT), and entropy were employed to detect the optimal number of profiles. The lower values of AIC, BIC, and aBIC indicate a better model fit (Muthén & Asparouhov, 2012). Significant values of L-M-R LRT and BLRT imply that the k-model performed better than the k-1 model. Additionally, an entropy value that approximates 1 indicates the best data fit (Muthén, 2004).

5. Results

5.1. Descriptive statistics

Results of confirmatory analysis suggested acceptable model-data fit according to the criteria suggested by Byrne (2013), with RMSEA = .061 [.058, .064], SRMR = .06, CFI = .91, TLI = .90. Moreover, all factors loaded significantly on latent variables, with factor loadings ranging from .64 to .89 (Figure 1).

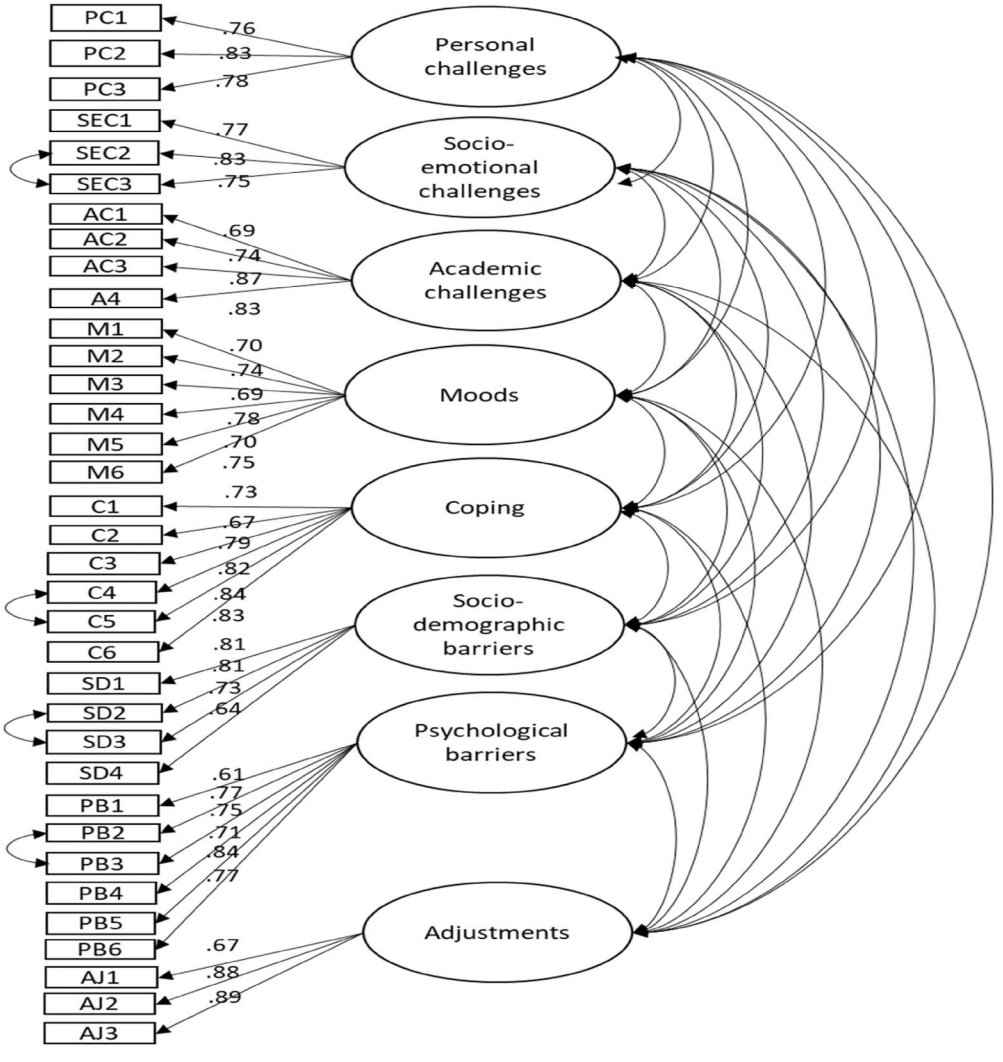


Figure 1. Results of CFA.

Note. For the sake of parsimony, correlations among subscales are not presented.

As shown in Table 1, the correlational coefficients ranged from -.39 to .58. Specifically, students' university adjustments were negatively correlated with all the subscales of transitional challenges, well-being challenges, and help-seeking barriers. Among them, academic challenges had the highest negative correlation with adjustments ($r = -.39$, $p < .001$), whereas psychological barriers had the lowest correlation with adjustments ($r = -.10$, $p < .001$).

5.2. Relationships among transitional challenges, well-being, help-seeking, and adjustments

Figure 2 depicts the relationships among transitional challenges, well-being, help-seeking, and adjustments. Results of SEM showed that socio-emotional and academic challenges, and coping were linked with students' adjustments. The relationships

Table 1. Descriptive statistics and correlations among latent variables of TWHAS.

		1	2	3	4	5	6	7	8
Challenges	1. Personal challenges	–	.23**	.54**	.43**	.37**	.16**	.007	−.29**
	2. Socio-emotional challenges		–	.34**	.42**	.42**	.01	.07	−.26**
	3. Academic challenges			–	.58**	.52**	.21**	.14**	−.39**
Well-being challenges	4. Moods				–	.81**	.20**	.17**	−.33**
	5. Coping					–	.15**	.17**	−.37**
Help-seeking barriers	6. Socio-demographic barriers						–	.49**	−.12**
	7. Psychological barriers							–	−.10**
Adjustments	8. Overall adjustments								–
	M	2.68	3.35	2.60	2.76	2.81	2.59	2.92	2.65
	SD	.87	.97	.84	.81	.94	.89	.81	.81
	a	.83	.85	.86	.87	.90	.85	.89	.84

Note: **. Correlation is significant at the 0.01 level.

between socio-emotional challenges (β = -.12, p < .01), academic challenges (β = -.22, p < .001), coping (β = -.38, p < .001), and overall adjustments was statistically significant.

5.3. Profiles of transitional challenges and adjustments

The results of LPA are displayed in Table 2. The three-profile model was chosen because of the following reasons: (1) AIC, BIC, and aBIC were dropped from 1- and 2-profile

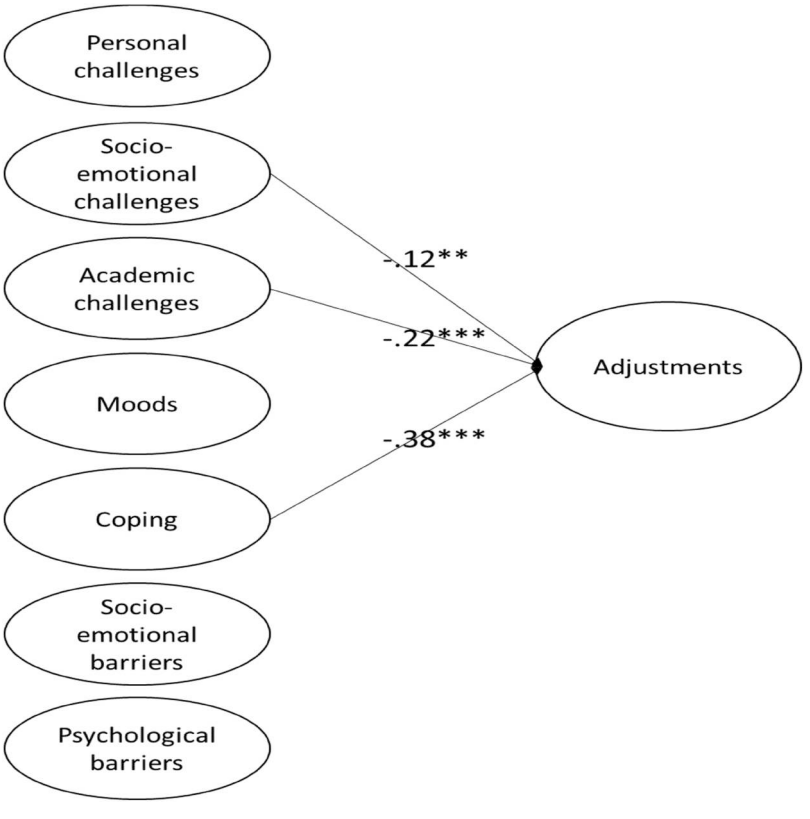


Figure 2. Results of SEM.

Note. **. p <.01, ***. p < .001.

Table 2. Profiles of transitional challenges and adjustments.

N_{class}	AIC	BIC	aBIC	Entropy	L-M-R LRT (*p*)	Bootstrap LRT (*p*)	Class Size Per Profile
1	14513.081	14586.125	14535.321	n/a	n/a	n/a	710
2	13576.951	13691.083	13611.702	.79	.000	<.001	312, 398
3	**13185.943**	**13341.162**	**13233.204**	**.84**	**<.01**	**<.01**	**106, 201, 403**
4	12989.027	13185.333	13048.798	.85	.001	.001	71, 90, 240, 309

Note. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; aBIC = ample-size adjusted BIC; L-M-R LRT = Lo-Mendell-Rubin Likelihood Ratio Test; LRT = likelihood ratio test; n/a = not applicable.

solutions to 3-profile solutions, which means 3-profile outperformed the previous two solutions; (2) the entropy value for the 3-profile solution is good (entropy = .84); (3) though the L-M-R LRT and BLRT were significant in 4-profile solution, the 4-profile solution added no substantive meaningfulness when compared with 3-profile solution. Considering the means of transitional challenges and adjustments, we labeled the three groups as 'maladaptive' (n = 106; 14.93%), 'average' (n = 403; 56.76%), 'adaptive' learners (n = 201; 28.31%). Figure 3 depicts the three profiles.

6. Discussion

The present investigation mapped out the associations among students' transitional challenges, well-being, help-seeking, and adjustments in first-year university life. We also delved into the different profiles characterized by transitional challenges and adjustments.

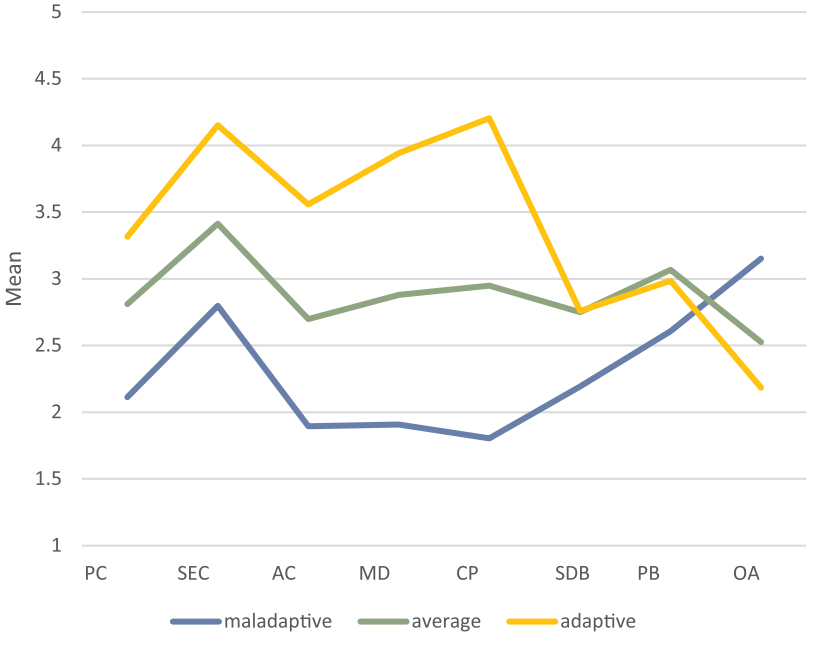


Figure 3. Profiles of transitional challenges and adjustments. *Note*. PC = personal challenges, SEC = socio-emotional challenges, AC = academic challenges, MD = moods, CP = coping, SDB = socio-emotional barriers, PB = psychological barriers, OA = adjustments.

6.1. Relationships among transitional challenges, well-being, help-seeking, and adjustments

As for the relationships between different types of transitional challenges and adjustments, our results indicated that socio-emotional challenges (medium effect size), academic challenges (medium effect size), and coping (large effect size) were among the challenges that were most pertinent to students' adjustments to university (Keith, 2019). The finding partially echoes the study by Sanagavarapu and Abraham (2021). The significant influence of academic challenges can be attributed to the competitive nature of Hong Kong universities, where students are required to tackle difficult assignments, excel amidst a demanding academic environment, and accomplish high academic expectations (Yu et al., 2021). Therefore, the challenges from a high level of dedication and effort to achieve academic success are the most notable determinants of students' adjustments (Van der Zanden et al., 2018).

The challenges arising from forging new friendships or engaging in social clubs also significantly influenced students' adjustments. The substantial influence of socio-emotional challenges aligns with prior research that highlighted the strong predictive role of interpersonal connections on students' academic success (e.g., Sheng et al., 2022; Van der Zanden et al., 2018). This finding might result from the Confucian culture, where students attach greater significance to social interactions and relatedness (Choi, 2002).

As expected, first-year university students' adjustments to university life are intricately intertwined with their capacity to effectively manage and navigate through challenging emotional states (Sanagavarapu & Abraham, 2021). In other words, the higher the frequency of experiencing mental issues, the lower the degree of university preparedness. Interestingly, stress coping (an aspect of well-being challenges) had a larger effect size on adjustments compared with socio-emotional challenges and academic challenges. We attributed this to the low desire of Hong Kong students to seek external support to deal with their coping difficulties, coupled with limited stress-coping support from significant others such as parents and teachers (Li et al., 2022; Lin & Fan, 2023). When entering the university, Hong Kong students have to confront multiple challenges, however, they are probably receiving less stress-coping support from parents and teachers than they previously did during secondary school. They have to independently face loneliness, tiredness, and irritability. Some of them even have a feeling that they are overwhelmed by their stress. This potentially exacerbates stress-coping difficulties and contributes to maladjustment during university transition.

6.2. Profiles of transitional challenges and adjustments

Students were categorized into 'maladaptive', 'average', and 'adaptive' learners. This finding suggests individual differences in first-year university life among Hong Kong students. Most students belong to the moderate transitional challenges and adjustments ('average') group, followed by low transitional challenges and high adjustments ('adaptive') and high transitional challenges and low adjustments ('maladaptive') groups. This finding seems to contradict previous research that reported most Hong Kong university students are found at high risk in their transitioning to university life (Yu et al.,

2021). One potential explanation could be attributed to the collectivist culture prevalent in Hong Kong, where some students may be hesitant to express their maladaptive adjustments in university life and reluctant to voice concerns or difficulties related to their university adaptation process (Lau et al., 2018). They may downplay struggles to maintain a positive social image and avoid appearing inferior or vulnerable compared to their peers.

The classifications of students based on their transitional challenges and adjustments complement the findings using the variable-centered approach by uncovering the variation in transitional experiences. Despite some students adapting well to university life, it is noteworthy that there were still a handful of students who encountered high transitional challenges but struggled with adjustment or demonstrated moderate levels of transitional challenges and adjustments. Hence, it is imperative for educators to identify those students and pay heed to their adjustments in university life. It is worth noting that we did not observe students characterized by 'low transitional challenges and low adjustments' and 'high transitional challenges and high adjustments'.

6.3. Limitations

The study is subject to several limitations. Firstly, it is important to note that only one item was used to assess students' university adjustment. This decision was based on the methodology employed in previous studies conducted by Sanagavarapu et al. (2019) and Sanagavarapu and Abraham (2021). While this allowed for a concise assessment, future researchers could enhance the study by devising multiple items to measure students' adjustment.

Secondly, it is essential to acknowledge that our study primarily relied on self-reports, which may have introduced potential social desirability biases in participants' responses. To address this limitation and enhance the rigor of future research, we recommend that future researchers incorporate multiple data sources such as classroom observations and interviews (De Clercq et al., 2018).

Thirdly, the current study was conducted during the COVID-19 pandemic which has made online learning common. Future researchers may consider incorporating online learning challenges in their questionnaires, thereby expanding the scope of their investigations.

Finally, our data were collected from a one-time point, precluding us from drawing causal conclusions. Longitudinal data collection is suggested to trace the changes in students' perspectives on transitional challenges, well-being, help-seeking, and adjustments to university life over time (Hailikari et al., 2020; Kyndt et al., 2015). We also suggest conducting experimental studies that concentrate on smoothing the transitioning procedures of first-year university students through targeting the four processes of transitions: situation, self, supports, and strategies (Van Herpen et al., 2020).

6.4. Implications

Notwithstanding these limitations, the current study has several theoretical, practical, and methodological implications. Theoretically, the study reinforces the propositions of transition theory by disentangling the interplay between transitional challenges and adjustments and identifying the most pertinent factors for Hong Kong first-year

students' university adaptation. The study illuminates the complex dynamics of the relationship between transitional challenges and adjustments, encompassing both overarching patterns and nuanced individual differences. Practically, the study contributes to the existing transitioning literature by highlighting the prominence of socio-emotional, academic, and coping challenges in making the transition easier. This indicates that greater attention should be paid to these three aspects to ensure a smooth transition to university life. To help students in overcoming socio-emotional challenges, universities may consider improving inter-student interaction and fostering collaborative engagement. Activities such as freshman orientation, freshman social events, and icebreaker activities to help first-year college socialization and forge their sense of school belonging are advisable (Ahn & Davis, 2023). To assist students in handling academic challenges, universities are encouraged to foster a need-supportive climate by organizing seminars and workshops, providing choices, giving structure, and demonstrating support (Shi et al., 2021). To address the well-being challenges arising from the transition to university (such as stress, anxiety, depression, loneliness, motivation, and fatigue), universities should provide sufficient resources and support systems that permit students to effectively manage and navigate these well-being concerns. Our findings also emphasize the need to pay attention to individual differences in first-year university transitional experiences. Particularly, teachers should tailor interventions to support those students with high transitional challenges but poor adjustments.

Methodologically, the study is one of the few studies that combine the variable- and person-centered approaches to delve into transitional experiences among first-year university students, offering a comprehensive understanding of students' transitional experiences.

7. Conclusion

The study seeks to explore the transitional experience in higher education among Hong Kong first-year university students. By combining the variable- and person-centered approaches, the study reveals the interrelationships between transitional challenges and adjustments and uncovers individual differences in these aspects. The study enhances transition theory by introducing empirical evidence that highlights the association between transitional challenges and adjustments within the higher education context. Furthermore, the study expands existing higher education literature by providing valuable insights into Hong Kong first-year students' unique transitional journey.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the The Chinese University of Hong Kong UGC Teaching Development and Language Enhancement Grant under Grant [number 3210906].

ORCID

Jiajing Li http://orcid.org/0000-0002-3810-9277
Vivian W. Y. Lee http://orcid.org/0000-0001-5802-8899

References

Ahn, M. Y., & Davis, H. H. (2023). Students' sense of belonging and their socio-economic status in higher education: A quantitative approach. *Teaching in Higher Education*, *28*(1), 136–149. https://doi.org/10.1080/13562517.2020.1778664

Baik, C., Naylor, R., Arkoudis, S., & Dabrowski, A. (2019). Examining the experiences of first-year students with low tertiary admission scores in Australian universities. *Studies in Higher Education*, *44*(3), 526–538. https://doi.org/10.1080/03075079.2017.1383376

Barclay, S. R. (2017). Schlossberg's transition theory. In W. K. Killam & S. Degges-White (Eds.), *College student development: Applying theory to practice on the diverse campus* (pp. 23–34). Springer.

Barros, A., & Simão, A. M. V. (2018). Attributions to academic achievements in the transition to higher education. *Current Psychology*, *37*(1), 216–224. https://doi.org/10.1007/s12144-016-9505-4

Bewick, B., Koutsopoulou, G., Miles, J., Slaa, E., & Barkham, M. (2010). Changes in undergraduate students' psychological well-being as they progress through university. *Studies in Higher Education*, *35*(6), 633–645. https://doi.org/10.1080/03075070903216643

Byrne, B. M. (2013). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.

Cameron, R. B., & Rideout, C. A. (2022). 'It's been a challenge finding new ways to learn': First-year students' perceptions of adapting to learning in a university environment. *Studies in Higher Education*, *47*(3), 668–682. https://doi.org/10.1080/03075079.2020.1783525

Chickering, A. W., & Schlossberg, N. K. (1995). Getting the most out of college. Needham Heights, Allyn and Bacon.

Choi, K. H. (2002). Psychological separation-individuation and adjustment to college among Korean American students: The roles of collectivism and individualism. *Journal of Counseling Psychology*, *49*(4), 468–475. https://psycnet.apa.org/doi/10.10370022-0167.49.4.468.

Coertjens, L., Brahm, T., Trautwein, C., & Lindblom-Ylänne, S. (2017). Students' transition into higher education from an international perspective. *Higher Education*, *73*(3), 357–369. https://doi.org/10.1007/s10734-016-0092-y

De Clercq, M., Roland, N., Brunelle, M., Galand, B., & Frenay, M. (2018). The delicate balance to adjustment: A qualitative approach of students' transition to the first year at university. *Psychologica Belgica*, *58*(1), 67. https://doi.org/10.5334/pb.409

Evans, A. L., Slater, M. J., & Turner, M. J. (2022). Using Personal-Disclosure Mutual-Sharing (PDMS) with first-year undergraduate students transitioning to higher education. *British Journal of Educational Psychology*, *92*(4), 1315–1334. https://doi.org/10.1111/bjep.12502

Fong, L. L., Hoon, T. S., Narayanan, G., Fook, C. Y., & Sidhu, G. K. (2016). Adjustments in academic writing among first year ESL students in higher education. *Advanced Science Letters*, *22* (12), 4334–4337. https://doi.org/10.1166/asl.2016.8143.

Fosnacht, K., McCormick, A. C., & Lerma, R. (2018). First-year students' time use in college: A latent profile analysis. *Research in Higher Education*, *59*(7), 958–978. https://doi.org/10.1007/s11162-018-9497-z

Fryer, L. K. (2017). (Latent) transitions to learning at university: A latent profile transition analysis of first-year Japanese students. *Higher Education*, *73*(3), 519–537. https://doi.org/10.1007/s10734-016-0094-9

Hailikari, T., Sund, R., Haarala-Muhonen, A., & Lindblom-Ylänne, S. (2020). Using individual study profiles of first-year students in two different disciplines to predict graduation time. *Studies in Higher Education*, *45*(12), 2604–2618. https://doi.org/10.1080/03075079.2019.1623771

Hang, Y., & Zhang, X. (2022). How Chinese students manage their transition to higher education effectively: Student initiative at Sino-Foreign cooperative universities. *Asia Pacific Journal of Education*, 1–15. https://doi.org/10.1080/02188791.2022.2047610

Harvey, L., Drew, S., & Smith, M. (2006). *The first year experience: A review of literature for the higher education academy*. The Higher Education Academy.

Huang, Q., & Lee, V. W. (2022). Exploring first-year university students' blended learning experiences during the COVID-19 through the community of inquiry model. *The International Journal of Information and Learning Technology*, *39*(4), 373–385. doi:10.1108/IJILT-02-2022-0024

Jackson, C. (2003). Transitions into higher education: Gendered implications for academic self-concept. *Oxford Review of Education*, *29*(3), 331–346. https://doi.org/10.1080/03054980307448

Joint University Programmes Admissions System. (2022). *Official admission results statistics*. https://www.jupas.edu.hk/tc/statistics/main-round-offer/.

Keith, T. Z. (2019). *Multiple regression and beyond: An introduction to multiple regression and structural equation modeling*. Routledge.

Korhonen, V. (2021). Academically engaged or not? An exploratory study on modelling and assessing the engagement of first-year students at a research-intensive university in Finland. *Assessment & Evaluation in Higher Education*, *46*(7), 1048–1064. https://doi.org/10.1080/02602938.2020.1846016

Kyndt, E., Coertjens, L., Van Daal, T., Donche, V., Gijbels, D., & Van Petegem, P. (2015). The development of students' motivation in the transition from secondary to higher education: A longitudinal study. *Learning and Individual Differences*, *39*, 114–123. https://doi.org/10.1016/j.lindif.2015.03.001

Kyndt, E., Donche, V., Trigwell, K., & Lindblom-Ylänne, S. (Eds.). (2017). *Higher education transitions: Theory and research*. Routledge.

Lau, E. Y. H., Chan, K. K. S., & Lam, C. B. (2018). Social support and adjustment outcomes of first-year university students in Hong Kong: Self-esteem as a mediator. *Journal of College Student Development*, *59*(1), 129–134. doi:10.1353/csd.2018.0011

Li, L., Chen, Y., & Liu, Z. (2022). Shyness and self-disclosure among college students: The mediating role of psychological security and its gender difference. *Current Psychology*, *41*(9), 6003–6013. https://doi.org/10.1007/s12144-020-01099-z

Lin, Y., & Fan, Z. (2023). The relationship between rejection sensitivity and social anxiety among Chinese college students: The mediating roles of loneliness and self-esteem. *Current Psychology*, *42*(15), 12439–12448. https://doi.org/10.1007/s12144-021-02443-7

Masyn, K. E. (2013). Latent class analysis and finite mixture modelling. In T. D. Little (Ed.), *The Oxford handbook of quantitative methods* (pp. 551–661). Oxford University Press.

Meehan, C., & Howells, K. (2018). 'What really matters to freshers?': Evaluation of first year student experience of transition into university. *Journal of Further and Higher Education*, *42*(7), 893–907. https://doi.org/10.1080/0309877X.2017.1323194

Muthén, B. (2004). Latent variable analysis. *The Sage Handbook of Quantitative Methodology for the Social Sciences*, *345*(368), 106–109.

Muthén, B., & Asparouhov, T. (2012). Bayesian structural equation modeling: A more flexible representation of substantive theory. *Psychological Methods*, *17*(3), 313–335. https://psycnet.apa.org/doi/10.1037a0026802.

Özcan, B., & Bulus, M. (2022). Protective factors associated with academic resilience of adolescents in individualist and collectivist cultures: Evidence from PISA 2018 large scale assessment. *Current Psychology*, *41*(4), 1740–1756. https://doi.org/10.1007/s12144-022-02944-z

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, *30*(2), 183–211. https://doi.org/10.1007/s00787-019-01469-4

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management*, *5*, 173–183. https://doi.org/10.2147/PRBM.S38707.

Sanagavarapu, P., & Abraham, J. (2021). Validating the relationship between beginning students' transitional challenges, well-being, help-seeking, and their adjustments in an Australian university. *Journal of Further and Higher Education*, *45*(5), 616–628. https://doi.org/10.1080/0309877X.2020.1804537

Sanagavarapu, P., Abraham, J., & Taylor, E. (2019). Development and validation of a scale to measure first year students' transitional challenges, wellbeing, help-seeking, and adjustments in an Australian university. *Higher Education*, *77*(4), 695–715. https://doi.org/10.1007/s10734-018-0298-2

Schlossberg, N. K., Waters, E. B., & Goodman, J. (1995). *Counseling adults in transition: Linking practice with theory* (2nd ed.). Springer.

Sheng, L., Dai, J., & Lei, J. (2022). The impacts of academic adaptation on psychological and sociocultural adaptation among international students in China: The moderating role of friendship. *International Journal of Intercultural Relations*, *89*, 79–89. https://doi.org/10.1016/j.ijintrel.2022.06.001

Shi, Q., Crooker, J. R., Drum, C. R., & Drake, B. M. (2021). Investigation of the effect of first-year seminars on student success. *Journal of The First-Year Experience & Students in Transition*, *33*(2), 65–95.

Soorkia, R., Snelgar, R., & Swami, V. (2011). Factors influencing attitudes towards seeking professional psychological help among South Asian students in Britain. *Mental Health, Religion & Culture*, *14*(6), 613–623. https://doi.org/10.1080/13674676.2010.494176

Tett, L., Cree, V. E., & Christie, H. (2017). From further to higher education: Transition as an ongoing process. *Higher Education*, *73*(3), 389–406. https://doi.org/10.1007/s10734-016-0101-1

Trautwein, C., & Bosse, E. (2017). The first year in higher education—critical requirements from the student perspective. *Higher Education*, *73*(3), 371–387. https://doi.org/10.1007/s10734-016-0098-5

Van der Zanden, P. J., Denessen, E., Cillessen, A. H., & Meijer, P. C. (2018). Domains and predictors of first-year student success: A systematic review. *Educational Research Review*, *23*, 57–77. https://doi.org/10.1016/j.edurev.2018.01.001

Van Herpen, S. G., Meeuwisse, M., Hofman, W. A., & Severiens, S. E. (2020). A head start in higher education: The effect of a transition intervention on interaction, sense of belonging, and academic performance. *Studies in Higher Education*, *45*(4), 862–877. https://doi.org/10.1080/03075079.2019.1572088.

Van Rooij, E., Brouwer, J., Fokkens-Bruinsma, M., Jansen, E. P. W. A., Donche, V., & Noyens, D. (2017). A systematic review of factors related to first-year students' success in Dutch and Flemish higher education. *Pedagogische Studiën*, *94*(5), 360–405. https://hdl.handle.net/10067/1521220151162165141.

Virtanen, T. E., Vasalampi, K., Torppa, M., Lerkkanen, M. K., & Nurmi, J. E. (2019). Changes in students' psychological well-being during transition from primary school to lower secondary school: A person-centered approach. *Learning and Individual Differences*, *69*, 138–149. https://doi.org/10.1016/j.lindif.2018.12.001

Wang, F., King, R. B., & Leung, S. O. (2022). Beating the odds: Identifying the top predictors of resilience among Hong Kong students. *Child Indicators Research*, *15*(5), 1921–1944. https://doi.org/10.1007/s12187-022-09939-z.

Williams, H., & Roberts, N. (2023). 'I just think it's really awkward': Transitioning to higher education and the implications for student retention. *Higher Education*, *85*(5), 1125–1141. https://doi.org/10.1007/s10734-022-00881-1

Woo, S. E., Hofmans, J., Wille, B., & Tay, L. (2024). Person-centered modeling: Techniques for studying associations between people rather than variables. *Annual Review of Organizational Psychology and Organizational Behavior*, *11*, 453–480. http://www.annualreviews.org/page/journal/pubdates.

Xu, K. M., Cunha-Harvey, A. R., King, R. B., de Koning, B. B., Paas, F., Baars, M., Zhang, J., & de Groot, R. (2023). A cross-cultural investigation on perseverance, self-regulated learning, motivation, and achievement. *Compare: A Journal of Comparative and International Education*, *53*(3), 361–379. https://doi.org/10.1080/03057925.2021.1922270

Yu, B., Mak, A. S., & Bodycott, P. (2021). Psychological and academic adaptation of mainland Chinese students in Hong Kong universities. *Studies in Higher Education*, *46*(8), 1552–1564. https://doi.org/10.1080/03075079.2019.1693991