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The Perceptions of Hybrid Learning Experience among Students from the Academy of Language Studies in Universiti Teknologi MARA (UiTM) Shah Alam

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ABSTRACT

Hybrid learning integrates traditional face-to-face instruction with online learning, aiming to enhance students' experiences across synchronous and asynchronous environments. By adapting Erliza and Septianingsih's (2022) PST model (Pedagogical, Social, and Technical), this study explores students' perceptions of hybrid learning at the Academy of Language Studies, UiTM Shah Alam (RO1), and investigates the influence of residency status on their experiences (RO2). A total of 140 students responded to a 30-item online questionnaire. The findings reveal that students generally hold positive perceptions of hybrid learning in pedagogical, social, and technical domains. Although resident students recorded slightly higher mean scores than non-resident students, these differences were not statistically significant. These results underscore that residency status was not a decisive factor, though contextual aspects such as access to campus facilities may still play a role. Overall, this study highlights the importance of continuously improving hybrid learning environments by leveraging positive student feedback, addressing technical challenges, and ensuring inclusivity across diverse living situations.

Keywords: hybrid learning, pedagogical, social, technical, residency status

INTRODUCTION

In recent years, hybrid learning has evolved from a pandemic-driven necessity to an integral component of higher education worldwide. It continues to reshape teaching and learning practices in 2025, as institutions increasingly recognise its potential to enhance flexibility, accessibility, and student engagement. Carper and Friedel (2021) defined hybrid learning as the integration of face-to-face instruction with open distance learning (ODL), blending scheduled in-person sessions with online engagement and assessments. Erliza and Septianingsih (2022) on the other hand, opined that both hybrid and blended are similar as it involves the usage of technologies in their learning and teaching experience. Despite frequent overlaps between the terms "hybrid learning" and "blended learning," scholars point out important distinctions. Graham (2006, as cited in Harun et al., 2019) emphasised that blended learning often refers to a mix of physical classes supplemented by e-learning content, while hybrid learning integrates both formats simultaneously within the teaching process (Carper & Friedel, 2021).

Studies have consistently highlighted hybrid learning's effectiveness in improving English language acquisition and promoting active learning behaviors (Plailek et al., 2022; Yang & Spitzer, 2020). As technology becomes more embedded in educational settings, hybrid models encourage student creativity, collaboration, and autonomy. Europe and North America examining its intersections with digital transformation, emerging technologies, and student engagement (Papadakis et al., 2023a, 2023b; Lavidas et al., 2024). For instance, studies highlight how cloud technologies, simulation, and augmented reality have revolutionised learning environments, extending flexibility and interactivity across disciplines (Papadakis et al., 2023a, 2023b). Similarly, research in Western contexts has explored how students' intentions to use artificial intelligence (AI) for academic purposes are shaped by personal, social, and pedagogical factors (Lavidas et al., 2024). These perspectives underscore that hybrid learning is part of a global shift toward technology-enhanced education rather than a region-specific trend.

Among the various factors that influence students' experiences with hybrid learning, residency status has emerged as an important consideration. Residency status whether living on campus or off-campus may significantly shape their hybrid learning experiences, particularly in terms of technical access, social interaction, and academic engagement (Ayub et al., 2022; Basri et al., 2022). At Universiti Teknologi MARA (UiTM), hybrid-mode pedagogy has been widely implemented, blending online and physical components in course delivery and assessment. Yet, despite its growing adoption, the pedagogical, social, and technical aspects of hybrid learning remain complex and dynamic, requiring continuous exploration. As higher education moves towards more personalised, technology-enhanced learning environments, understanding students' perceptions is crucial for refining hybrid models and ensuring their long-term effectiveness (Erliza & Septianingsih, 2022; Juhairiyah et al., 2022). Therefore, this study aims to contribute more insights into university students' perceptions of hybrid learning from the dimensions of pedagogical, social, and technical based on these research objectives:

1. To analyse the perceptions of hybrid learning experience among the students from the Academy of Language Studies in UiTM Shah Alam.

2. To examine the influence of residency status on the hybrid learning experience among the students from the Academy of Language Studies in UiTM Shah Alam.

LITERATURE REVIEW

The PST model, encompassing pedagogy, social and technology aspects in hybrid learning examine the impact of teaching methods (pedagogy), social interactions among students and educators (social), and the integration of technology in hybrid learning environments (technical). Previous studies investigated this mode of learning from various angles. Erliza and Septianingsih (2022) explored how students perceive hybrid learning in English major programs at university level, focusing on the PST model. Adas and Abu Shmais (2011) observed the impact of blended learning in terms of its process, content and the ease of using online course components. On the other hand, Sanpanich (2021) focused on the impact of gender, prior experience in hybrid learning, and computer literacy on students' perceptions of hybrid learning.

Table 1. The PST model: Pedagogy, Social and Technology

Pedagogical	Social	Technical
The selection of appropriate content, activities, and how to use resources	The construction of safe and comfortable environment where students can share and communicate	The availability, accessibility and attractability of technical space

Adapted from Undergraduate Students' Perception of Hybrid Learning: Voices from English Language Education Students in Pandemic Era, by Erliza and Septianingsih (2022), p. 235.

Hybrid Learning in Global Context

Beyond Asian and Malaysian contexts, the exploration of hybrid learning in Western higher education has increasingly focused on how digital tools, student perceptions, and institutional practices shape teaching and learning outcomes. According to Papadakis et al. (2023a, 2023b), the transformative role of cloud technologies, simulations, and augmented reality in supporting hybrid and open learning models. Their findings suggest that technical affordances not only enhance access but also redefine pedagogical possibilities.

Similarly, Lavidas et al. (2022a, 2022b, 2024) investigated how contextual and personal factors affect students' use of technology in higher education, ranging from survey response behaviors to the integration of artificial intelligence in academic work. These studies highlight that hybrid and technology-enhanced learning environments are complex and mediated by social, cultural, and motivational dynamics. By incorporating such global perspectives, this study acknowledges hybrid learning as a worldwide phenomenon while also addressing the underexplored issue of residency status in a Malaysian context.

Hybrid Learning in Malaysia

Hybrid learning is considered as the third most common type of learning aside from physical and online learning (Carper & Friedel, 2021). Nonetheless, Ignatius (2022) stated that this kind of

learning was not commonly executed until the Covid-19 global pandemic happened in Malaysia. As reported in the New Straits Times, the Senior Education Minister of Malaysia, Datuk Dr Radzi Jidin declared the implementation of hybrid learning classrooms to officially open beginning in October 2022 under a groundbreaking effort by the Education Ministry with the aim to promote innovative learning that suit the endemic phase of Malaysia (Povera, 2022). Due to that, hybrid learning has potentially become more recognisable in Malaysia after the outbreak.

Recent developments in Malaysian higher education show a clear movement towards more flexible and hybrid modes of delivery. In 2023, the Ministry of Higher Education (MoHE) introduced a policy requiring students to attend physical lectures only during their first and final years of study, while the middle years could be completed more flexibly, including online modes (Malay Mail, 2023). In line with this policy, several public universities began restructuring programmes, with some bachelor's degrees shortened from four to three years and new hybrid formats introduced to reduce costs and increase accessibility (Malay Mail, 2023).

At the institutional level, research in Malaysian public universities highlights that platform quality and technological infrastructure are among the strongest predictors of satisfaction in hybrid learning environments (Abdul Rahman et al., 2024). Students reported that well-designed e-learning platforms and reliable connectivity significantly enhanced their hybrid learning experiences, although persistent technical issues, particularly in internet reliability, remain a challenge. A case study among health science undergraduates at Taylor's University similarly found that while 66.7% of students expressed positive satisfaction with hybrid learning, their perceptions were strongly influenced by course structure, usability of online platforms, and the quality of instructor interaction (Paneerselvam et al., 2024).

These trends suggest that Malaysian higher education institutions are moving beyond experimentation with hybrid learning towards more formalised policies aimed at improving flexibility, reducing costs, and the need to strengthen technical support to ensure equitable hybrid learning experiences across different student groups.

The Implementation of Hybrid learning in Higher Education Institutions in Malaysia

Higher education institutions in Malaysia include universities, college campuses, and university colleges (Lee et al., 2017). The Higher Education Ministry stated that higher education institutions are permitted to conduct their teaching and learning sessions online or in a hybrid format, subject to the university's own judgement after the reopening in October 2022 (Bernama, 2022). After reviewing past studies, most researchers stated that both public and private universities lean more towards hybrid learning. Based on an analysis by Ayub et al. (2022) that examined how hybrid learning is applied at Taylor's University in Subang Jaya, Malaysia, they found that it is an approach that can serve both on-campus and off-campus students. Khoo (2021) supported the study as he quoted a statement by the Parent Action Group for Education president, that hybrid learning can help students make up for the learning loss caused by the disease outbreak and reduce the pressure on teachers.

Almost every higher education institution in Malaysia opted for hybrid learning following one of the orders mentioned in the Malaysia Education Blueprint 2015-2025 where online education will be a necessary component to be maintained for higher education (Ministry of Education

Malaysia, 2015). Hence, hybrid learning was seen as the best solution where both face to face and online learning will be maintained for new semester students after they have gone through full ODL in the pandemic era. Although Chen et al. (2022) raised an issue regarding the unsuccessfulness of employing hybrid learning to Malaysia's private higher education institutions due to issues related to students' attitudes, learning quality, and technical accessibility, it is contradictory with observation by Ignatius (2022) towards the implementation of hybrid learning in a private university, Multimedia University (MMU) where they employed high quality technological equipments to support their students' learning. As a result, students' learning performance increased alongside with boosted their immersion and attention. No matter any drawbacks found in conducting this kind of learning, both private and government-linked higher education institutions are generally supportive of the method.

The Relationship between Hybrid Learning and Residency Status

Ayub et al. (2022) observed students' perceptions towards hybrid learning and found that there is a significant difference based on their demographic location depending on their technical support, internet access and their environment for study. Some previous studies found that hybrid students perceived that this kind of setting is a more cost-effective choice for them. With hybrid learning, students do not face any financial problems attending their classes regardless of their physical condition or location (Chen et al., 2022). This is owing to the fact that educators would let the students choose their preference to be present in the classes whether through online or physically. For instance, Ayub et al. (2022) studied synchronous hybrid learning in Taylor University where it was performed in a way that both on-campus and off-campus students can participate in class with the off-campus students appearing in class using video conferencing software without having to travel to campus. Another similar research done in Universiti Putra Malaysia, Serdang Selangor by Basri et al. (2022) stated that the strategic demographic locations of their students do not cause to the absenteeism in the classroom since they either attend class from their hostel or house in an urban region with reliable internet access and close distance with campus.

Apart from being cost-friendly in terms of transportation to the classroom, students are not worried about accessibility either. This is because the Malaysian government and university measures to guarantee that every student has an appropriate device to access to their class were likely to make the students feel more accountable for their studies and find a way to prevent nonattendance during class (Basri et al., 2022). Nonetheless, Chen et al. (2022) clarified that campus support has no significant influence on college students' views regarding hybrid learning in Malaysian private colleges. This is due to their different patterns of attending classes limiting their interaction with other peers in hybrid learning. Based on the previous research done, it can be seen that there are only minimal studies that touched on the correlation between students' opinions towards hybrid learning and their demographic location which particularly stated whether the students experiencing hybrid while residing at their hostel or their own house that could be in a rural or urban area. Most research focused on the technicality features for both in-campus and off-campus students. Thus, this study will do further research for these two elements.

METHODOLOGY

The sample of this study consisted of a total of 140 UiTM Shah students from the Academy of Language Studies. According to an online sample size calculator with 2000 population size, 95% confidence level and 8% margin of error, the right sample size for this study is 140. Survey researchers usually determine an "acceptable" margin of error, which is between 5% and 8% at a 95% confidence level (Pollfish, 2022). Finally, the sampling technique method is simple random sampling. This kind of sampling randomly chooses a sample of units from a population in order to prevent biases that could affect the sample (Shadish et al., 2002, as cited in Reeger & Aloe, 2019). Simple random sampling is also the most widely used technique for selecting a sample from the general population to achieve a variety of objectives. Hence, the respondents had an identical chance of being chosen using the simplest random sample.

An online questionnaire adapted from Erliza and Septianingsih (2022), Adas and Abu Shmais (2011) and Sanpanich (2021) to investigate the students' perspective on hybrid learning environments was disseminated on Google Form. The questionnaire consisted of 30 items, and was divided into four sections namely Section A, Section B, Section C and Section D. The first section gathered students' demography such as the respondents' gender, programme, and residential status (resident and non-resident). The second section focused on 10 items for the first domain which is pedagogical. Next, the third section covered the social domain with item number 11 to 20 addressing students' perception of hybrid learning socially. Finally, the fourth section highlighted responses on the technical domain with item 20 to 30 observing students' perceptions towards hybrid learning in terms of technical support. All items number 1 to 30 were close-ended questions and the respondents rated their responses in the five-point Likert scale such as '1 = Strongly Disagree', '2 = Disagree', '3 = Neutral', '4 = Agree', '5 = Strongly Agree'. Lastly, the variable of the study is residency status.

The questionnaire items were adapted from previous validated studies to ensure relevance and comparability. To establish content validity, the instrument went through experts review with expertise in educational technology and language pedagogy. Minor adjustments were made to refine wording for clarity and context suitability. In addition, a pilot test was conducted to confirm comprehensibility and alignment with the study objectives. Construct validity was further supported by aligning all items with the Pedagogical, Social, and Technical (PST) model. These steps helped ensure that the instrument not only measured perceptions consistently but also captured the intended domains.

For data analysis, descriptive statistics (means and standard deviations) were first calculated to summarise students' perceptions of hybrid learning across the pedagogical, social, and technical domains. Independent-samples t-tests were then used to compare resident and non-resident students' mean scores. This test allowed the researcher to examine whether residency status was associated with statistically significant differences in perceptions. The t-tests, however, revealed no statistically significant differences between groups (all $p > .05$), indicating that while mean values varied slightly, these differences cannot be generalised with confidence to the wider population.

The reliability of the instrument was tested using Cronbach's alpha. Table 2 shows the value of Cronbach's Alpha for all 30 items in the questionnaire which is .817. This indicates a high level

of internal consistency for the scale with this specific sample. As the Cronbach's Alpha value exceeds 0.70, it indicates that the researcher's questionnaire is reliable and consistent.

Table 2. Reliability Statistics

Cronbach's Alpha	N of Items
.817	30

RESULTS AND DISCUSSIONS

Research Objective 1: To analyse the perceptions of hybrid learning experience among the students from the Academy of Language Studies in UiTM Shah Alam

Table 3 demonstrates the means for the perceptions of the students towards hybrid learning experience in terms of pedagogical are described in the data above. Interestingly, the highest mean found was for P1 "*the learning objectives are clearly stated in each English lesson*" at 4.0, while the lowest mean was for P3 "*the structure of the environment in hybrid learning helps me focus on learning English*" at a mean of 3.84. Overall, all of the data shows a favourable view regarding the respondents' experience based on the pedagogical domain.

Table 3. Mean Score for Pedagogical Domain

	Item	Mean
P1	The learning objectives are clearly stated in each English lesson.	4.00
P2	The organisation of each English lesson in hybrid learning is easy to follow.	3.87
P3	The structure of the environment in hybrid learning helps me focus on learning English.	3.84
P4	The tasks given in each English lesson are appropriate to reach the learning objective.	3.92
P5	Activities related to the English language in hybrid learning are carried out carefully.	3.91
P6	The content of the English course runs well in the hybrid learning environment.	3.95
P7	The content of the course in each English lesson is appropriate in hybrid learning to reach the learning objective.	3.88
P8	The lecturers share extensive information about the English language for face-to-face learning in hybrid learning.	3.91

P9	The lecturers share extensive information (e.g., resources' links) regarding English lessons for online learning in hybrid learning.	3.98
P10	The presentation of the course content using English language in hybrid learning is clear.	3.97

Table 4 displays the means for the perceptions of the students towards hybrid learning experience in terms of social. The highest mean was for S5 "*when learning English, I am encouraged by my lecturers' and friends' positive attitudes in hybrid learning*" at the mean of 3.98, while the lowest mean score was obtained by S8 "*hybrid learning makes me more active in learning the English language*" and S9 "*hybrid learning encourages me to interact with my classmates using the English language*", tied at 3.84. On average, item S6 and S7 were ranked similarly at 3.90. In general, the items for social domain also received favourable view by the respondents.

Table 4. Mean Score for Social Domain

	Item	Mean
S1	Hybrid learning can improve communication with the lecturer, not only face-to-face but also online learning mode through online learning platforms.	3.92
S2	I can ask my teacher about anything I do not understand regarding English lessons in hybrid learning.	3.96
S3	The lecturers timely provide me with comments on my work regarding English lessons in hybrid learning.	3.89
S4	My classmates and I frequently review each other's English work in hybrid learning.	3.85
S5	When learning English, I am encouraged by my lecturers' and friends positive attitudes in hybrid learning.	3.98
S6	Learning English in hybrid learning enables me to become self-motivated and responsible towards my learning.	3.90
S7	I feel motivated to explore English language content related to the given materials in hybrid learning.	3.90
S8	Hybrid learning makes me more active in learning the English language.	3.84
S9	Hybrid learning encourages me to interact with my classmates using the English language.	3.84

S10	The activities in hybrid learning give me the chance to read, give opinion, and interact with other students on topics related to English language materials.	3.94

Table 5 shows the means for students' perception towards hybrid learning experience in terms of technical. It can be seen that the highest mean was for T4, *"With the Hybrid learning method, I can finish my tasks in my course anywhere and at any time."* at a mean of 4.01, followed by T9 "*I am familiar with hybrid learning environment when learning this course*" at 4.00 mean score. On average, T1 and T6 were tied at 3.89, while the lowest mean was obtained by *T2 "It is boring to learn this course in hybrid learning in the technical environment of the course (e.g. connectivity, user interface)."* at 3.84. All of the other items generally received favourable view as well in the technical domain.

Table 5. Mean Score for Technical Domain

	Item	Mean
T1	It is convenient to learn this course through hybrid learning.	3.89
T2	It is boring to learn this course in hybrid learning in the technical environment of the course (e.g. connectivity, user interface).	3.48
T3	It is difficult to learn this course in hybrid learning in the technical environment of the course (e.g. connectivity, user interface).	3.59
T4	With the hybrid learning method, I can finish my tasks in my course anywhere and at any time.	4.01
T5	Hybrid learning method enables me to manage my time efficiently in learning this course.	3.93
T6	I have enough internet access for online learning in hybrid learning to learn this course.	3.89
T7	My university provides suitable facilities for face-to-face learning in hybrid learning to learn this course.	3.79
T8	Technical problems that occurred in hybrid learning when learning this course are not frequent.	3.65
T9	I am familiar with hybrid learning environment when learning this course.	4.00
T10	I believe that we should maintain hybrid learning for this course.	3.91

Table 6 portrays the comparison of means for the perceptions of students towards hybrid learning experience in terms of pedagogical, social and technical. It can be seen that the highest mean for

the perceptions was the pedagogical aspect with the mean of 3.92. Looking at the social aspect, the mean was 3.90. The technical aspect had the lowest mean which was at 3.81. According to the observation above, most students from the Academy of Language Studies in UiTM Shah Alam perceived that hybrid learning positively impacted them in terms of pedagogical, focusing on the English content that is taught using this kind of learning.

Table 6. Mean Score for Pedagogical, Social and Technical

Aspect	Mean
Pedagogical	3.92
Social	3.90
Technical	3.81

Research Objective 2: To examine the influence of residency status on the hybrid learning experience among the students from the Academy of Language Studies in UiTM Shah Alam

The most suitable method to analyse two different types of residency status, resident and non-resident, was the Independent-Samples T-Test. In this analysis, the mean scores of pedagogical, social, and technical domains were compared between the two groups. Table 7 presents the descriptive results, while Table 8 displays the outcomes of the t-tests.

The descriptive statistics showed that resident students recorded slightly higher mean scores than non-resident students across all three domains. For instance, in the pedagogical domain, resident students scored M = 39.30 (SD = 4.73), while non-resident students scored M = 39.17 (SD = 4.43). Similar small differences were found in the social (M = 39.36 vs. M = 38.70) and technical domains (M = 38.43 vs. M = 37.85).

However, the independent-samples t-tests (Table 8) indicated that none of these mean differences were statistically significant (pedagogical: t = .175, p = .368; social: t = .729, p = .362; technical: t = .688, p = .291). Since all p-values were greater than .05, the null hypothesis of no significant difference cannot be rejected.

These findings suggest that while resident students appeared to hold marginally more positive views of hybrid learning than non-resident students, residency status did not play a decisive role in shaping perceptions in this study. The descriptive patterns may still reflect contextual factors, such as easier access to campus resources for resident students, but these differences were not strong enough to be statistically meaningful.

Overall, the results highlight that both resident and non-resident students shared broadly similar perceptions of hybrid learning in pedagogical, social, and technical aspects. This aligns with studies such as Adas and Abu Shmais (2011), which found no significant differences in perceptions between students living on campus and those living off campus when reliable internet access was available in both contexts.

Table 7. Mean Score and Standard Deviation for Residency Status

Aspect	Residency Status	Mean	Std. Deviation
Pedagogical	Resident	39.3043	4.73195
	Non-resident	39.1690	4.43359
Social	Resident	39.3623	4.97042
	Non-resident	38.7042	5.70061
Technical	Resident	38.4348	4.63198
	Non-resident	37.8451	5.48933

Table 8. Independent Sample T-test for Residency Status

		Levene's Test for Equality of Variances			
		F	Sig	t	df
Pedagogical	Equal variances assumed	.817	.368	.175	138
	Equal variances not assumed			.175	136.798
Social	Equal variances assumed	.835	.362	.727	138
	Equal variances not assumed			.729	136.418
Technical	Equal variances assumed	1.123	.291	.686	138
	Equal variances not assumed			.688	135.354

DISCUSSION

This study focused on the key components of the PST model, which encompassed pedagogy, social interactions, and technology. Based on the findings to the first research objective, the students participated in this study had a positive perception of hybrid learning in terms of pedagogy and social aspects. However, challenges were observed in the technical aspect, which received the lowest mean score. The highest and lowest mean scores were consistent with the findings from Erliza and Septianingsih (2022) alongside with Adas and Abu Shmais (2011), which highlighted the successful execution of hybrid learning by educators in terms of pedagogy, meaningful interactions between educators and students, and negative perceptions related to technical aspects, such as difficulties in learning English during hybrid learning.

For the second research objective, resident students recorded slightly higher mean scores than non-resident students in all three domains. However, the independent-samples t-tests revealed that these mean differences were not statistically significant. This suggests that residency status, whether living on campus or off campus, was not a decisive factor in shaping students' perceptions of hybrid learning. These findings resonate with Adas and Abu Shmais (2011), who similarly found no significant differences across residency groups when internet access was adequate. At the same time, the descriptive trend indicating marginally higher scores for resident students aligns with Ayub et al. (2022), who observed that students residing in hostels often benefit from proximity to campus facilities and stronger exposure to hybrid learning environments.

Taken together, these findings suggest that while residency status may create small contextual variations in students' hybrid learning experiences, it does not exert a statistically significant effect. Instead, perceptions of hybrid learning appear to be shaped more strongly by pedagogical quality, meaningful social interactions, and the management of technical challenges.

CONCLUSION

This study highlighted the positive perceptions of the students from the Academy of Language Studies in UiTM Shah Alam towards their hybrid learning experience. The incorporation of hybrid methods in language learning proved beneficial, as students recognised the effectiveness of pedagogical practices, the opportunities for social interaction, and the overall learning experience. These findings provide valuable insights for educators and institutions in designing and optimising hybrid learning approaches to meet students' diverse needs and preferences.

There are several recommendations that would be beneficial for future research. Firstly is to expand the sample size. This step will help improve the study's representation and allow for broader insights into the perceptions. Moreover, future researchers could consider conducting a comparative approach to the study in involving students from different universities to ensure a more comprehensive understanding of hybrid learning experiences employed by the universities and colleges in Malaysia. Next, it is also recommended for future studies to utilise a mixed-methods approach that combines quantitative and qualitative methodologies. This approach will enable a more thorough exploration of students' perceptions and experiences within hybrid learning environments.

Besides that, the researchers may also investigate the long-term effects of hybrid learning on students' language proficiency and overall academic performance. Conducting longitudinal studies could provide insights into the sustained benefits and potential challenges that arise over an extended period of hybrid learning implementation. Finally, as technology continues to evolve, future research could examine the efficacy of emerging digital tools and platforms such as edutainment and gamification have an impact on student engagement, motivation, and learning outcomes in hybrid learning.

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Declaration of Generative AI and AI-assisted Technologies in the Writing Process

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Both main and co-author/corresponding author contributed into the study.