

Rekindling the Sense of Place among University Students of Hybrid Learning

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ABSTRACT

University campuses are not merely academic spaces; they are a second home for many students, where they engage in meaningful interactions in social areas, libraries, and classrooms. Sense of place denotes an individual's psychological and emotional connection to a specific location, cultivating a feeling of belonging. The post-pandemic transition to hybrid and online learning has changed the way students interact with their university environment, prompting enquiries regarding the extent to which their physical absence affects their connection to the institution. This research investigates the sense of place among university students engaged in hybrid learning environments. The investigation was conducted with the participation of 260 students from a public university in Malaysia. A one-way ANOVA was conducted to evaluate whether the duration of hybrid learning (1–6 semesters) influenced students' sense of place, measured through Place Identity, Place Attachment, and Place Dependence. The results suggest that students' connection to the university was not significantly affected by their time spent in hybrid learning ($p > .05$ for all variables), as there were no significant differences between the groups. These results underscore the fact that a sense of place is not solely determined by physical presence; students establish profound emotional and psychological connections to their university, even when they are engaged remotely. It is important for future study to investigate the variations that exist across genders, academic fields, and institutional strategies to facilitate a sense of belonging among students.

Keywords: sense of place; hybrid learning; place identity; place attachment; place dependence

INTRODUCTION

Coming to terms with the aftermath of the COVID-19 pandemic, many different sectors have been readjusting to the profound changes that have taken place worldwide, including the educational landscape. Educational institutions have now started to comply with the new setting of teaching and learning by shifting away from the traditional approach in physical classrooms to a more hybrid method of delivering teaching and learning remotely or through online distance learning (ODL). This transition towards digital teaching and learning is considered essential since it provides students with flexibility and access to education, ensuring that they do not fall behind in meeting academic demands. Remote learning or online distance learning (ODL) is becoming a recognised and vital component of education since it provides students with access to education and allows them to learn in various ways (MQA, 2019) while maintaining the same level of quality (UNESCO, 2020).

However, after facing the pandemic phase for two years, Malaysia is shifting to the endemic phase in April 2022, which requires people to become used to a practically regular norm, including educational institutions that offer a blend of physical and online classes or hybrid learning. Following the Standard Operating Procedures (SOP), most educational institutions have revised their instructional structure by incorporating

hybrid learning, which enables students to learn both physically and through the use of technology for online classes. Hybrid learning, also known as blended learning, is the combination of face-to-face education with synchronous and asynchronous learning via computer, mobile phone, and other electronic media (Rahman et al., 2020). Nevertheless, returning to campus life and physical classrooms following prolonged durations of remote education may pose challenges for many students. Many students may find it challenging to adapt to a combination of physical and virtual classes, prompting apprehensions regarding their involvement, adaptability, and sense of place within the university setting. Some students appreciate the flexibility and accessibility of online learning, while others struggle to re-establish social relationships and adapt to strict in-person schedules. Considering that universities significantly influence students' perspectives and future pathways; it is imperative to comprehend how hybrid learning affects their sense of place and attachment to their academic surroundings. Investigating this transition can assist educational institutions in adopting techniques that cultivate a heightened sense of belonging and community, hence improving students' academic experiences and performance.

Problem Statement

Prior to the COVID-19 pandemic, students committed the majority of their time to campus, participating in both academic and social activities that significantly influenced their personal growth and future professional progression. Students acquired knowledge not only through their coursework but also through their interactions with classmates, instructors, and the university environment, extending the learning experience beyond the classroom. Mohd Fadhli Shah and Mafarhanatul Akmal (2023) assert that a strong sense of attachment—whether positive or negative—to a place of study is the result of continuous exposure to one's learning environment, which fosters emotional connections. Over time, students may develop a strong attachment to both the physical and social components of their university, a process known as sense of place. An individual's academic experience and personal identity are influenced by their attachment to their surroundings, which affects their perception and engagement with their environment. Nevertheless, the pandemic's restriction of face-to-face learning opportunities may have disrupted students' connection to their university, potentially influencing their sense of belonging, character development, and preparedness for professional life. While continuing to participate in online education, students are reintroduced to the on-campus experience as universities transition to hybrid learning. Consequently, the objective of this study is to investigate the extent to which hybrid learning influences students' sense of place and whether this sense of place is limited to physical environments or can be cultivated in virtual and integrated learning environments. It is imperative for universities to comprehend these dynamics to cultivate a more robust sense of engagement and belonging among students as they adjust to post-pandemic learning structures.

LITERATURE REVIEW

Sense of Place

The sense of place is a concept that relates to the emotional bonding between an individual and their spatial surroundings. Jorgensen and Stedman (2001) define "sense of place" as the meaning attached to a spatial setting by a person or group. This relationship that exists between the two may influence their way of perceiving their environment based on the way they think and behave. This is echoed in Hashemnezhad et al. (2013), who argue that the sense of place is a factor that converts the space into a place with special behaviour and emotional characteristics for individuals. In order for the sense of place to be felt, Jorgensen and Stedman (2001) revealed three sub-concepts that are closely associated with the relationship between an individual and the place: place identity, place attachment, and place dependence. Place identity focuses more on the establishment of the self, which involves the individual's personal way of perceiving the physical environment. The place attachment emphasises an individual's positive bond and emotional impact on their environment. Riley (1992) uses the term "place attachment" to regard it as an affective relationship between individuals and the landscape that moves beyond perception, preference, or judgement. Finally, place dependence examines the functionality and effectiveness of a place in providing the individual's objectives and goals among other spatial environment alternatives. Because the dependence is primarily based on specific behavioural goals, the outcome or strength of dependence in a location may differ between individuals and can be either positive or negative.

A personal bond and strong dependence can emerge between an individual and a location through their everyday interaction with the physical environment (Mohd Fadhli Shah et al., 2022), resulting in a meaningful experience that may impact students' sense of place towards their university. Therefore, one could contend that the traits of the immediate environment can determine whether a positive or negative bond develops between an individual and a place. As defined by Esposito (2022), a sense of place pertains to the students' subjective perceptions of the ways in which a specific environment impacted their overall educational experience, in which they actively participated. The students' active engagement in the learning process, especially in physical classes where they may interact with their lecturers and classmates in person within the classroom's four walls, forms the basis of this impression. Mohd Fadhli Shah and Mafarhanatul Akmal (2023) suggest that students who lack attachment to their institutions may struggle to recognise the importance of completing their studies, which may result in a diminished sense of place at the university and reduced motivation to pursue education. Furthermore, these students may encounter social isolation, which hinders their ability to interact with their peers or request assistance from university staff and lecturers. The researchers further elaborated that students typically establish a strong bond with their university, which is influenced by place dependence, place attachment, and, in the end, place identity. Place identity, as shown in Figure 1, received the highest score among these, indicating that universities are instrumental in influencing the personal development and sense of belonging of students.

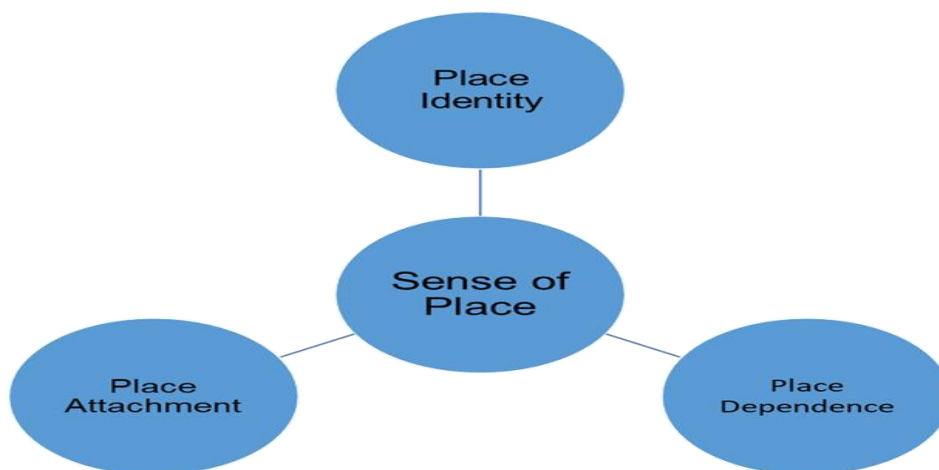


Fig. 1 The Concept of Sense of Place (Mohd Fadhli Shah & Mafarhanatul Akmal, 2023)

Hybrid Learning

Hybrid learning or blended learning are two terms interchangeably used in describing the teaching and learning process outside of the confined four walls in a physical classroom. Rather than focusing on online learning, where the learning process takes place online, hybrid or blended learning uses both online and offline methods of learning. Bennet et al. (2020) defined hybrid learning as educational settings that integrate information and communications technology (ICT) applications with face-to-face learning. This pedagogical method mixes conventional face-to-face teaching with computer-mediated instruction, thereby allowing the teaching and learning process to no longer be confined to classroom settings, but can now take place anywhere, provided that the learning process can be carried out. Snart (2010) previously expressed concerns regarding the efficacy of hybrid learning, which incorporates digital tools and engaging technologies into course instruction. He highlighted that hybrid learning requires a reassessment of curriculum design and teaching methods to guarantee meaningful student engagement, even in the absence of advanced technology. However, the previously deemed unattainable strategy is now unquestionable, since the global outbreak of Covid-19 has had a profound impact on various sectors, including the sphere of education.

During Covid-19, educational settings encountered abrupt hurdles when forced to rely entirely on online, which is tough, especially given that digital technology has become a vital element of the instructional process (Nechita et al., 2023). Teaching and learning must be done online, with challenges to guarantee that the learning process is carried out appropriately. Furthermore, the quality of the internet connection significantly contributes to providing high-quality education, especially for students who prefer to study from home. Those

courses that required laboratory work or experimentation encountered additional challenges due to the widespread adoption of online and distance learning methods. Discussions have arisen regarding student engagement and disengagement in online learning as a result of the transition to synchronous and asynchronous learning during the COVID-19 pandemic. Traditionally, learners are perceived to be more interactive and engaged in face-to-face educational settings, which has resulted in a greater degree of concerns regarding the level of engagement in virtual environments (Gamage et al., 2022). Li et al. (2023) also emphasised that students, despite feeling at ease with the style of instruction, were hesitant to actively engage in their learning process, although they had become accustomed to hybrid learning, which encompassed both synchronous and asynchronous formats.

Sense of Place in Hybrid Learning

The sense of place in the context of education refers to the platform used for teaching and learning. Ardoin (2006) refers to the concept of sense of place as a holistic one comprising psychological, social, cultural, biophysical, political, and economic systems. Furthermore, Farnum et al. (2005) and Stedman (2003) define sense of place as human connection to places, thus conceptualising the term in both physical and digital. Since the teaching and learning process takes place between the instructors and students, the interactions built into the experience create a sense of place, despite engaging in hybrid learning. According to Ni and Aust (2008), the sense of place in the classroom refers to a feeling of belonging, trust, and commitment in the interaction between and among the students. This sentiment is also echoed by Rovai and Lucking (2000), who defined the sense of place in classroom community as a feeling that the members have of belonging, a feeling that they matter to one another and to the group consisting of duties and obligations to each other and to the institute, and that they have shared expectations that need to be met through their commitment to shared goals.

However, many educational institutions are now implementing hybrid learning, in which the teaching and learning process can be done synchronously or asynchronously to ensure students have the opportunity to meet and interact in the actual class or online. Since its implementation, various platforms such as Microsoft Teams, Google Meet, Zoom are used to conduct hybrid learning especially for their online classes. Furthermore, synchronous learning can be done online in real-time, with students and instructors participating in live, interactive sessions such as virtual classrooms or video conferences. This strategy encourages instant feedback, collaboration, and a sense of community, but participants must stick to a strict timetable. Asynchronous learning, on the other hand, allows students to access instructional materials at their pace and convenience, typically through recorded lectures, discussion forums, or self-paced courses. This adaptability benefits individuals with varying schedules and learning methods, fostering independence and fitting different time zones. The lack of real-time engagement, on the other hand, may result in a diminished sense of community and quick support. The decision between synchronous and asynchronous learning is influenced by educational goals, participant preferences, and the nature of the content being given. Bennett et al. (2020) contend that learning environments are intrinsically personal, regardless of whether they are in physical, institutional, or virtual environments. Students engage in strategies that they believe are the most effective for their learning within these environments. There is a general consensus that more enjoyable learning results in improved academic outcomes, and the defining characteristics of a specific learning environment are closely linked to successful learning experiences. The relationship between place and learning can be both subtle and profound, influencing the way in which students interact with their educational environment and their sense of place in their educational institutions as a whole.

METHODOLOGY

The research employed a quantitative method due to its efficiency in collecting data, as it demands the collection, analysis, and interpretation of measurable data to explore the sense of place among university students during hybrid learning as well as to investigate the types of association between students' sense of place and hybrid learning. Using a survey design with a questionnaire as the data collection instrument is an effective strategy since it is straightforward to produce statistically significant results. The data acquired from the sample using the questionnaire can also lead to outcomes that are impartial and objective. The questionnaire used in this research was validated through a successful pilot study conducted by Mohd Fadhli Shah and Mafarhanatul Akmal (2023) to evaluate a sense of place among university students in hybrid learning

environments. The questionnaire employed a seven-point Likert scale, which ranges from "Strongly Disagree" to "Strongly Agree," as this format offers a more accurate, user-friendly, and precise representation of respondents' genuine evaluations (Finstad, 2010). The questionnaire has four (4) demographic questions pertaining to gender, fields of study, place of residence, and duration of exposure to hybrid learning. Additionally, it includes 12 questions pertaining to a sense of place that are divided into three elements of place attachment (PA), place identity (PI), and place dependence (PD).

As for the sample size, Israel (2013) suggests that a sample size of 204 is appropriate for populations above 25,000, while aiming for a 95% confidence level and a 7% margin of error. Hence, this study encompassed an ensemble of 260 undergraduate students from a public university in Malaysia who were enrolled in three distinct academic disciplines, namely Science and Technology, Business and Management, and Social Sciences and Humanities. This research used a random sampling approach to provide an equal chance of selection for all individuals in the population. According to Taherdoost (2016), the random sampling approach has the least bias; thus, exploring the sense of place among university students of hybrid learning would provide a thorough overview of the situation. The Research Ethics Committee of the public university has authorised the study (REC/05/2023 (ST/MR/135)) prior to the commencement of data collection. This approval is being sought to protect and keep confidential the respondents' participation in this study. All participants were completely aware of their right and granted the liberty to discontinue their involvement in the research at any given moment. Data collection was conducted using a Google Forms questionnaire, which was disseminated to participants through a shared link. The responses were subsequently analysed using the Statistical Package for the Social Sciences (SPSS), Version 28. Descriptive statistics were produced, and a one-way ANOVA test was performed to examine the significance of the duration of hybrid learning (1–6 semesters) on students' sense of place, encompassing place identity, place attachment, and place dependence.

The reliability and internal consistency of the questionnaire items were evaluated by calculating Cronbach's alpha. Cronbach's alpha ranges from 0.00 to 1.00, where higher values signify enhanced internal consistency. A Cronbach's alpha score lower than 0.50 indicates inadequate reliability, necessitating a review and potential modification of the questionnaire items. Scores ranging from 0.70 to 0.90 demonstrate good reliability, whereas values exceeding 0.90 indicate excellent internal consistency. The results presented in Table 1 indicate that the Cronbach's alpha coefficient for all items in the questionnaire was 0.933, reflecting a strong internal consistency among the measures used in this study. This indicates that the responses from participants were uniform across the items, thereby affirming the questionnaire's reliability in assessing students' sense of place within hybrid learning environments.

Table 1 Reliability Statistics

Cronbach's Alpha	N of Items
.933	12

RESULTS

The results of the research will be presented and discussed according to the research objectives, starting with the demographic findings and progressing to the research objectives. Table 2 describes the demographic findings from the 260 respondents, including their gender, fields of study, place of residence, and the length of hybrid learning exposure.

Table 2 Demographic Findings

Factor	Items	Percentage (%)
Gender	n	100
	Male	27.7
	Female	72.3

Fields of Study	n	100
	Science & Technology	40.0
	Business Administration	38.1
	Social Science & Humanities	21.9
Place of Residence	n	100
	College	71.9
	Rented House	20.0
	Family House	8.1
Duration of Hybrid Learning Exposure	n	100
	1 semester	35.0
	2 semesters	25.0
	3 semesters	14.2
	4 semesters	13.1
	5 semesters	7.7
	6 semesters	5.0

In response to the initial demographic inquiry concerning gender, the data reveals that female students comprise the majority of respondents at 72.3%, while male students remain at 27.7%. In terms of the distribution of their fields of study, the majority of students are from the Science and Technology field, accounting for 40% of the total. This is followed by Business Administration, which comprises 38.1% of the students. Lastly, Social Science and Humanities compose 21.9% of the student population. Furthermore, it is evident that while the participants are engaged in hybrid learning, not every subject may be impacted. As a result, the majority of respondents, accounting for 71.9%, reside in colleges, while 20.0% reside in rented houses, and a mere 8.1% live with their families. The respondents' exposure to hybrid learning is evident in the distribution of their experiences. The majority of respondents (35.0%) had one semester of hybrid learning, followed by 24.0% who had two semesters, 14.2% who had three semesters, 13.1% who had four semesters, and a minority of respondents, 7.7% and 5.0% respectively, had five and six semesters of hybrid learning.

Research Objective 1: To Explore the Sense of Place Among University Students During Hybrid Learning

In examining the sense of place among university students during hybrid learning, the three concepts of sense of place from Place Identity, Place Attachment, and Place Dependence are provided in each table. Table 3 addresses the first concept, which is place identity (PI), with an overall mean of 5.58.

Table 3 Place Identity (PI)

Item No	Place Identity	Mean
PI2	This university helps me develop as a person.	5.78
PI1	This university means a lot to me.	5.72
PI3	This university allows me to be myself.	5.52
PI4	This university is a representation of who I am.	5.29
	Overall Mean	5.58

Among the four items pertaining to place identity, item PI2, which states “*This university helps me develop as a person*” obtained the highest mean score of 5.78. Following closely in second place is item PI1, which expresses “*This university means a lot to me*” with a mean score of 5.72. Subsequently, item PI3 exhibited a mean value of 5.52, signifying that “*This university enables me to express my true self*”. Lastly, the final thought, item PI4, obtained a mean score of 5.29, showing that “*This university reflects my identity.*”

Next, Table 4 presents the second concept of sense of place, which is place attachment (PA), with an overall mean of 5.10.

Table 4 Place Attachment (PA)

Item No	Place Identity	Mean
PA4	This university will be missed when I graduate.	5.77
PA2	This university makes me feel happy.	5.10
PA3	This university is one of my favourite places to be.	4.94
PA1	This university makes me feel relaxed.	4.57
	Overall Mean	5.10

According to Table 4, item PA4, which states “*This university will be missed when I graduate*” had the highest score with a mean of 5.77. On the other hand, item PA1, which states “*This university makes me feel relaxed*” received the lowest score with just 4.57. In addition, item PA2, referred to as “*This university brings me joy*” ranked second with a score of 5.10, while item PA3, “*This university is one of my favourite places to be*” ranked third with a mean score of 4.94.

Subsequently Table 5 displays the final concept of the sense of place, which is place dependence (PD), which, similar to the preceding concept of place attachment (PA), has an overall mean of 5.10.

Table 5 Place Dependence (PD)

Item No	Place Identity	Mean
PD1	This university is the best place for doing the things that I enjoy.	5.18
PD4	As far as I am concerned, there are no better places to be than this university.	5.14
PD3	This university is a good place for me to do the things I like to do most.	5.05
PD2	This university meets my academic, mental, and personal demands better than any other place.	5.04
	Overall Mean	5.10

Notably, the first and second highest-scoring items received similar scores, while the third and fourth items also had nearly identical scores. The item that received the highest mean score of 5.18 was PD1, which stated, “*This university is the best place for me to do the things that I enjoy*”. Item PD4, “*As far as I am concerned, there are no better places to be than this university*”, which further supported this notion, obtained a mean score of 5.14 and ranked second position. Meanwhile, item PD3 states that “*This university is an ideal environment for pursuing my greatest interests*” ranked the third highest score with 5.05, while the PD2 “*This university meets my academic, mental, and personal demands better than any other place*” received the lowest score of only 5.04.

Consequently, Table 6 outlines place dependence (PD), place identity (PI), and place attachment (PA) as the three concepts constituting a sense of place.

Table 6 Average Mean for Place Identity (PI), Place Attachment (PA), and Place Dependence (PD)

Item No	Sense of Place	Overall Mean
PI	Place Identity	5.58
PA	Place Attachment	5.05
PD	Place Dependence	5.05
	Overall Mean	5.23

From the table above, it can be seen that place identity (PI) had the highest mean out of the three concepts underlying the sense of place with 5.58. Interestingly, place attachment (PA) and place dependence (PD) received the same mean score of 5.05, respectively. This finding supports the finding from Mohd Fadhli Shah and Mafarhanatul Akmal (2023) that the significant concept making up the sense of place is place identity (PI). Nonetheless, contrary to the earlier proposition that place dependence (PD) results in place attachment (PA) and subsequently leads to place identity (PI), the current study revealed that place attachment (PA) and place dependence (PD) play equally significant roles in the formation of PI. The interplay of these two dimensions significantly strengthens a strong sense of place identity, demonstrating the notion that students foster a profound connection to their university.

Research Objective 2: To Examine the Impact of Hybrid Learning on Students' Sense of Place

A one-way ANOVA was used to see if the length of time that students spent in hybrid learning—from one semester to six semesters—had a big effect on their sense of place, which includes their sense of place identity, place attachment, and place dependence.

Table 7 Sense of Place Across Hybrid Learning Durations

	Place Identity (PI)		Place Attachment (PA)		Place Dependence (PD)	
Sem	M	SD	M	SD	M	SD
1	5.55	1.14	5.07	1.17	5.04	1.10
2	5.50	1.35	5.19	1.27	5.14	1.14
3	5.51	1.07	4.97	1.06	5.03	1.22
4	5.65	0.94	5.08	1.35	5.33	1.03
5	5.70	0.90	5.03	0.97	4.80	1.14
6	6.20	0.82	5.37	1.01	5.44	1.05

Table 7 presents the descriptive statistics for each hybrid learning group. The average scores across all groups show small differences in how much students identify with, attach to, and depend on a place. There is no clear pattern that shows that long-term hybrid learning exposure improves or decreases students' sense of place.

Table 8 One-Way ANOVA for Sense of Place During Hybrid Learning

Dependent variable	F (df = 5, 254)	P	η^2
Place Identity (PI)	0.57	.725	.011
Place Attachment (PA)	0.33	.897	.006
Place Dependence (PD)	0.91	.473	.018

Table 8 presents the results of the one-way ANOVA. The analysis indicated no significant differences in place

identity, place attachment, or place dependence among hybrid learning groups ($p > .05$). Due to the fact that all p-values exceed .05, the null hypothesis is not rejected, indicating that the number of hybrids learning semesters does not have a substantial impact on students' sense of place. The effect sizes (η^2) are minimal (below .02), suggesting that the duration of hybrid learning accounts for a small percentage of variance in students' place identity, place attachment, or place dependence. In an additional effort to investigate potential discrepancies, Tukey's HSD post-hoc test was implemented. The findings indicated no significant pairwise differences among hybrid learning groups ($p > .05$). This result indicates that students' sense of place remains stable regardless of the number of semesters spent in hybrid learning.

DISCUSSION

This study investigated the sense of place that university students experience during hybrid learning by examining three fundamental dimensions: Place Identity (PI), Place Attachment (PA), and Place Dependence (PD). The results indicate that Place Identity (PI) is the most significant component, with a mean score of 5.58, followed by Place Attachment (PA) and Place Dependence (PD), both of which have a mean score of 5.05. The highest-rated statement among the Place Identity (PI) items, "This university helps me develop as a person" ($M = 5.78$), indicates that students closely link their academic experience to their personal development. Comparably, "This university means a lot to me" ($M = 5.72$) emphasises even more the emotional value students have for their university. These results complement those of Mohd Fadhli Shah and Mafarhanatul Akmal (2023), who underlined that a student's sense of place is primarily shaped by their place identity. With regard to Place Attachment (PA), students were most connected with "This university will be missed when I graduate" ($M = 5.77$), suggesting that they expect a strong emotional connection long after they leave. The lowest score, however, came from "This university makes me feel relaxed" ($M = 4.57$), implying that students might not always connect their university with comfort or leisure. This finding may be attributed to the academic challenges and responsibilities that students encounter, together with the necessity of balancing hybrid learning with other aspects of life. The necessity to adjust to both online and face-to-face learning environments may induce a feeling of stress or obligation, rather than relaxation, in the university experience. Place Dependence (PD), which assesses the university's functional significance to students, had the highest-rated item, "This university is the best place for me to do the things that I enjoy" ($M = 5.18$), indicating that students find their university well-suited for pursuing academic and personal goals. Nevertheless, the lowest mean was "This university meets my academic, mental, and personal demands better than any other place" ($M = 5.04$), which suggests that students may still pursue other spaces or resources to fully support their needs, although they value their university.

The current findings reveal that place attachment (PA) and place dependence (PD) equally contribute to the formation of place identity (PI), contrasting with prior studies that proposed a sequential relationship in which PD precedes PA, subsequently reinforcing PI. This study indicates that a strong place identity is profoundly affected by both functional (PD) and affective (PA) attachments, thereby corroborating Esposito's (2022) idea of a sense of place as students' subjective perceptions of how their environment influences their educational experience through active engagement. This is further supported by the one-way ANOVA results, which demonstrated that the number of semesters of hybrid learning has no apparent impact on students' sense of place. All p-values surpassed .05, with place identity (PI) at .725, place attachment (PA) at .897, and place dependence (PD) at .473, indicating that students' affiliation with their university remains consistent irrespective of the duration of hybrid learning. The data indicate that mere physical presence is not the principal determinant of students' affiliation with their university. However, factors such as institutional culture, academic involvement, and peer interactions may have a more substantial impact on cultivating a solid sense of place. Likewise, place attachment (PA) exhibited stability during varying periods of hybrid learning, signifying that students sustain an emotional bond with their university despite diminished on-campus presence. The findings of place dependence (PD) further corroborate this tendency, as students exhibited no increased dependence on physical campus experiences for academic or personal fulfilment. The evidence indicates that hybrid learning methods and digital resources adequately fulfil students' academic requirements, enabling them to maintain a sense of place while participating remotely. This finding coincides with prior research, which emphasises that an established virtual academic community and significant online interactions

can reinforce students' affiliation with their university. This is consistent with Bennett et al. (2020), who

contend that learning environments are intrinsically personal, regardless of whether they are physical, institutional, or virtual, as students implement strategies that they perceive as most effective. Similarly, Ni and Aust (2008) define a sense of place in the classroom as a sense of trust, commitment, and belonging, thereby substantiating the notion that students may establish meaningful connections in both physical and digital environments. Furthermore, Rovai and Lucking (2000) underscore the significance of engagement over physical presence in the establishment of a sense of place within a learning community, which is based on mutual belonging, shared expectations, and dedication to institutional and group objectives.

CONCLUSION

This study investigated the extent to which the duration of hybrid learning (1–6 semesters) affected students' sense of place towards the hybrid learning conducted, which encompassed place identity, attachment, and dependence. The one-way ANOVA results did not reveal any significant differences between the groups, suggesting that students' sense of place remains consistent regardless of the number of semesters they spent in hybrid learning. These results serve to reinforce the notion that students, regardless of whether they are in hybrid learning environments, maintain a profound connection to their university, with place identity being the most significant factor. This conclusion implies that students' greater experiences and interactions with their academic institution shape their sense of place in addition to their actual presence on campus. It is also important to note that space can also be defined in both tangible and intangible aspects, indicating that a sense of place is not exclusively reliant on physical presence within a university environment. The result suggests that students are capable of maintaining their emotional connection and attachment to their institution even when they participate in online learning, as there are no substantial distinctions.

The finding strengthens that the sense of place is influenced by factors beyond mere physical space, potentially encompassing institutional support, peer relationships, and virtual engagement options. These results underscore the tenacity of students' university connections and imply that institutional initiatives to encourage engagement—both in-person and online—are crucial in determining students' sense of space, thereby influencing students' sense of belonging to their educational institutions. Therefore, to fully capitalise on students' potential, educational institutions must increasingly implement hybrid learning models that offer more comprehensive and adaptable educational experiences. This method involves leveraging the strengths of both physical and virtual learning. Future research may want to explore the impact of hybrid learning on students' sense of place for those students who are exposed to full-time hybrid learning or half of their study plans. This could be interesting, as looking at the inability of students to be present physically in class but having a solid foundation in their sense of place, which eventually impacts their sense of belonging and their characters as well as their identity as a person, would transcend the idea that place should be defined as confined space but rather the way students conceptualise their cognitive and emotional capacity to spatial settings.

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