

Servicescape in transnational higher education: the effects of campus design, physical environment and facilities on student experience and satisfaction

Stephen Wilkins^a, Joe Hazzam^b and John J. Ireland^c

^aFaculty of Business and Law, The British University in Dubai, United Arab Emirates; ^bStaffordshire Business School, Staffordshire University, Stoke-on-Trent, United Kingdom; ^cDepartment of Business and Management, Rochester Institute of Technology Dubai, United Arab Emirates

ABSTRACT

Previous research suggests that campus design and facilities may influence students' institution choice, perceived teaching and learning quality, student experience, and student satisfaction. However, to our knowledge, this is the first study to investigate – from the student perspective – the possible benefits of a new purpose-built campus in a transnational education setting. It was found that campus design, physical environment, and facilities may influence students' choice of institution, but these have less weight than other factors such as the university's reputation and teaching quality. Most students believe that opportunities for higher quality teaching and learning exist at the new campus, as all participants reported that the new teaching rooms have improved layouts and incorporate more technology. Also, most students perceive their overall student experience at the new campus as good or excellent, and every participant rated their overall satisfaction as the same or higher at the new campus compared to the old campus. No student was less satisfied with the new campus. The research findings suggest that institutions and students may both derive considerable benefits from a new purpose-built campus that has been well-designed and constructed.

KEYWORDS

Servicescape; international branch campuses; physical environment; university facilities; teaching and learning; student satisfaction

Introduction

Universities are increasingly using their campuses to achieve a competitive advantage. A university campus may be regarded as the land and buildings used by a higher education institution to achieve its strategic and operational goals (den Heijer, 2011). Previous research suggests that the physical environment and facilities of a university may influence students' institution choice (Price et al., 2003; Winter & Chapleo, 2017); perceived teaching and learning quality (Uline & Tschannen-Moran, 2008); students' motivation, attendance, and persistence (Durán-Narucki, 2008); academic attainment (Huesman Jr. et al., 2009); and satisfaction with the institution (Hanssen & Solvoll, 2015; Wells & Daunt, 2016).

To achieve growth and internationalization objectives, many universities have established satellite campuses in foreign countries. Commonly referred to as 'international branch campuses', at the start of 2022, there were 306 such campuses operating globally (C-BERT, 2022). International branch campuses are the riskiest form of transnational education both in terms of

potential reputational damage and financial loss (Healey, 2015). Until a campus opens, it is never known whether forecasted student demand will translate into actual enrolments. Several institutions have opened an international branch campus only to quickly close after being unable to attract more than 100 or 200 students in their first few years of operation (Wilkins, 2020a).

To minimize the risks of financial loss, many institutions begin their overseas operations in temporary premises, which often may be just one or two floors in an office block. For example, in a review of transnational education provision in the United Arab Emirates (UAE), the Quality Assurance Agency for Higher Education (QAA), based in the United Kingdom (UK), declared that only two of the eleven British universities operating in the UAE could reasonably be recognized as campuses in terms of their infrastructure and facilities (QAA, 2014). When an institution establishes an international branch campus with insufficient investment in physical infrastructure and facilities, students may perceive it as offering a poor experience and recruitment may suffer.

Institution managers face a dilemma: if they do not invest in a purpose-built campus, this may impact negatively on student recruitment and satisfaction, but if they do construct such a campus they may incur substantial financial losses if student enrolments fail to materialize. Some elite institutions, such as New York University Abu Dhabi, have been able to secure funding from the host country government to construct a campus, which minimizes the university's financial risk. Other institutions form partnerships with local organizations (such as property developers and investment companies) that assume responsibility for the provision of premises, infrastructure, and equipment.

By identifying the possible benefits of a new purpose-built campus in a transnational education setting, the purpose of this research is to help decision makers determine whether such investment is worth the financial cost and reputational risk. The study focuses on the effects of campus design, physical environment, and facilities on student experience and satisfaction, but it also considers the influences of campus-related factors on student choice of institution. Thus, the study's research question actually comprises four sub-questions that may be stated as:

To what extent do the campus design, physical environment, and facilities of a new purpose-built campus impact upon:

- (1) Student choice of institution?
- (2) Students' perceived quality of teaching and learning?
- (3) Student experience?
- (4) Student satisfaction?

Although we may assume that students would prefer to study at a new, attractive, and well-designed campus, we do not know the extent to which students perceive that such a campus enhances their learning and overall student experience. Moreover, we don't know the tradeoffs they would make regarding campus quality, for example, whether they would rather study at another institution if that institution charges substantially lower tuition fees, or if it is located in a more convenient location, even if its premises consist of only one or two floors in an office block. To answer our research questions, we interviewed 25 students who studied at a purpose-built campus in the UAE that was opened within the last 18 months. The data were analyzed using a process of thematic analysis that involved manual coding and categorizations.

The remainder of this paper is organized as follows. First, we consider servicescape as a general concept before examining the role of physical environment and facilities in higher education and reviewing recent campus development in the Emirate of Dubai. Then, we present the study's method and a summary of the key research findings. Finally, we finish the paper with

a discussion of the main implications of the findings and a conclusion that acknowledges the study limitations and identifies further research opportunities.

Servicescape

Many authors recognize the importance of the physical environment in service settings, including Kotler (1973), who wrote about retail store atmospherics, and Bitner (1992), who proposed a servicescape framework that explains how physical surroundings affect both customers and employees. A servicescape may be regarded as the environment that facilitates service delivery, and which activates internal cognitive, emotional and physiological responses in individuals that influence their sense of well-being and satisfaction (Booms & Bitner, 1981; Pareigis et al., 2012). Although Bitner (1992) identifies three distinct physical factors – namely ambient conditions (e.g., lighting, temperature, noise); spatial layout and functionality (e.g., room layouts, furnishings, equipment); and signs, symbols and artefacts – she argues that individuals respond to environments holistically.

Individuals are also influenced by social and safety factors, as well as the organization's nested servicescapes (Siguaw et al., 2019). For example, a customer's overall satisfaction with a shopping experience may be influenced by both the store's and mall's servicescape. Likewise, in a higher education context, a student's decision of where to enroll, their study and life experiences, and their overall satisfaction, may be influenced by the servicescapes of both the campus and the town in which the university is located. An individual's overall judgement of an environment is likely to influence their satisfaction and behavior.

Service setting design may influence an individual's service experience and their perceptions of service quality. As well as cognitive responses, the individual's interaction with a servicescape generates emotional responses, such as feelings of pleasure or comfort. The service provider's physical environment is rich in cues, which are used by customers before and after purchase to form judgements about the provider's capabilities, performance and quality (Ezeh & Harris, 2007). An attractive, functional and well-designed service environment may help attract new customers and reassure existing customers that they chose the right provider. Hutton and Richardson (1995) argue that satisfaction with an organization's servicescape is likely to produce satisfaction with the whole service encounter.

Mehrabian and Russell's (1974) stimulus-organism-response (S-O-R) model offers a theoretical explanation for consumers' responses to servicescape stimuli. The model suggests that individuals evaluate a servicescape based on the degree of emotional stimulation they receive from it, which determines their future behaviors to approach or avoid the servicescape. Many studies have confirmed the relationship between servicescape stimuli and consumer responses (Ezeh & Harris, 2007). In particular, it has been found that pleasure drives satisfaction directly, and arousal acts as an amplifier of the pleasure-satisfaction and pleasure-behavior relationships (Lin & Mattila, 2010).

Role of physical environment and facilities in higher education

The marketization of higher education has encouraged many universities to invest in physical infrastructure and facilities, as institution decision makers commonly believe that such investments communicate success, prestige, and quality to students and other stakeholders

(Wells & Dunn, 2015). International branch campuses typically claim that they offer students a comparable experience to that enjoyed by students at the home campus (Wilkins, 2020b). However, the vast majority of these campuses are fully self-funded from tuition fees, and in the early years after establishment, these institutions usually have limited funds available for investment in premises, facilities, and equipment. Nevertheless, students in transnational education still expect a study environment that is attractive and functional, which satisfies both their academic and social needs.

A number of studies suggest that the physical environment may strongly influence students' choice of institution (e.g., Angulo et al., 2010; Price et al., 2003; Wilkins, 2013; Winter & Chapleo, 2015). When evaluating the attractiveness of a campus, potential students may consider the quality of the teaching spaces and facilities; the quality of the library and learning resources; the provision of facilities for leisure and recreation; the availability of shops, banks and catering outlets; the availability of spaces for quiet time, group work and socializing; as well as the overall visual and atmospheric appeal of the campus buildings and grounds (Price et al., 2003; Reynolds, 2007). However, campus design, physical environment, and facilities is just one set of factors that may influence students. For example, Kassem et al. (2021) found that in addition to the quality of facilities, students' choice of institution is most influenced by institution reputation, accreditation, quality of teaching, and employability. Likewise, another study, conducted in the UAE, found that the most influential factors determining students' choice of the university include academic reputation; facilities and services; the availability of scholarships; and campus location (Nuseir & El Refae, 2021).

Given that higher education requires considerable commitment in terms of time and money, many potential students attend open days to evaluate alternative providers and the servicescapes in which they might learn, study, rest and socialize (Simões and Soares, 2010). Students want to see that the university's buildings, grounds and facilities are functional, safe, clean, and well-maintained. These physical aspects influence judgements about the university's teaching quality and the quality of the student experience. Most international branch campuses recruit a high proportion of their students from the surrounding areas, so most students can easily visit the institution's campus for open days and campus tours to evaluate the servicescape before making the decision to enroll (Wilkins, 2013; Wilkins & Huisman, 2015).

The physical environment and campus facilities may influence student's teaching and learning experience (Kolb & Kolb, 2005; Wells & Daunt, 2016); engagement and involvement (Wells & Daunt, 2016); academic achievement (Durán-Narucki, 2008; Huesman Jr. et al., 2009; Uline & Tschannen-Moran, 2008); attendance and staying intentions (Durán-Narucki, 2008; Huesman Jr. et al., 2009; Reynolds, 2007); and overall satisfaction with the institution (Kärnä & Julin, 2015; Weerasinghe & Fernando, 2018; Wells & Daunt, 2016). Although teaching occurs mainly in the classroom, or online, much student learning occurs outside the classroom, in informal spaces where students work independently and in groups with other students (McLaughlin & Faulkner, 2012). In the past, students may have met at a café or one of the student's homes, but increasingly they expect their institution to provide quiet and appropriately equipped study rooms that are suitable for individual or group use.

To enhance student satisfaction, and avoid dissatisfaction, institutions rely on the campus environment and facilities to promote academic life and the student experience (Douglas et al., 2006). Thus, a university's campus must satisfy a student's learning, physical (e.g., need for food and rest), and social needs. The campus should offer a welcoming and comfortable environment

that promotes learning, social interaction, and participation in extra-curricular activities. Overall satisfaction results from all of the student's encounters and experiences with the institution (Kärnä & Julin, 2015), so institutions must ensure that service quality is excellent throughout the organization, which includes the teaching experience; library and learning resources; computing facilities; careers advice and support; housing; car parking; and facilities for dining, sports, and recreation.

Campus development in the Emirate of Dubai

The United Arab Emirates (UAE) is an established higher education hub. The term 'education hub' refers to locations that have a critical mass of students and education institutions, which through interaction and in some cases colocation, engage in education, training, knowledge production and innovation initiatives (Knight, 2011). The UAE has a population of 9.54 million and over 100 licensed higher education providers. In Dubai, one of the UAE's seven emirates, there are 33 higher education institutions, many of which are the branches of foreign universities (KHDA, 2022). Many of Dubai's higher education institutions are located in one of two purpose-built higher education zones, namely Dubai Knowledge Park (DKP) and Dubai International Academic City (DIAC). Among the largest international branch campuses in the UAE, the University of Birmingham Dubai is located at DIAC; Heriot-Watt University Dubai and the University of Wollongong in Dubai are at DKP; while Rochester Institute of Technology Dubai is situated in Dubai Silicon Oasis, a free trade zone that is only a few kilometers from DIAC.

Higher education hubs exist in a variety of settings, but many of the areas designated by governments as transnational education zones are located outside the capital or major cities. DIAC is such an example, as it is located about 25 kilometers from Dubai, and it is not within walking distance of any residential or commercial/retail areas. It is accessible only by car or bus. DKP, in contrast, is located in a central downtown area in Dubai, adjacent to Dubai Internet City, where major information technology companies such as Cisco and Google have corporate offices. The area is well-served by buses, a tram, and a metro, and is relatively close to both residential areas and a major mall. Our participants study at both city center and rural/out-of-center locations, which contributes to the generalizability of our findings.

The fortunes of foreign universities that have attempted to establish a branch campus in the UAE are mixed. A number of ventures have failed – such as the branches established by Abasyn University, George Mason University, Michigan State University, and the University of South Wales – for a variety of reasons, which include the lack of student enrolments, regulatory issues, and problems with local partners. In contrast, other institutions have thrived, growing rapidly and substantially, with several providers now enrolling more than 3,000 students, which is a high number in transnational education. What is particularly notable is that in an 18-month period in 2021-2022, four foreign universities in Dubai relocated from existing premises to new, purpose-built campuses (see Plate 1). These campuses demonstrate the universities' commitment to providing higher education in Dubai for many years to come and their belief that the local higher education market is sustainable. This study investigates the experiences and attitudes of students who are studying at the newly established campuses, to assess the effects of campus design, physical environment, and facilities on student choice of institution, experience, and satisfaction.



University of Birmingham Dubai, 2021



University of Birmingham Dubai, 2022



Heriot-Watt University Dubai, 2020



Heriot-Watt University Dubai, 2021



Rochester Institute of Technology Dubai, 2020



Rochester Institute of Technology Dubai, 2021



University of Wollongong in Dubai, 2020



University of Wollongong in Dubai, 2021

Plate 1. Old and new campuses of selected foreign institutions in the Emirate of Dubai

Note: All photographs were taken by Stephen Wilkins

Method

Research design

We used an inductive, exploratory qualitative research method involving semi-structured interviews to answer our research questions. This is a common approach used by researchers to understand how human subjects make sense of their world and the experiences they have in it (Cresswell & Poth, 2018). The study population is full-time undergraduate students studying at a purpose-built campus that was opened within the last 18 months. Graduate students were not included in the sample because in the UAE the vast majority of graduate students study on a part-time basis. They are likely to visit the campus only for lectures and specific events, and make minimal use of the campus facilities. Thus, a purposive sampling strategy was adopted, to recruit participants who could provide in-depth and detailed information about the phenomenon under investigation. This judgemental approach enabled the researchers to achieve samples that were broadly representative in terms of student gender and nationality, and which included students studying a range of subjects (Vehovar et al., 2016).

An interview guide, informed by the literature, was created. It consisted of nine open-phrased questions designed to answer the study's four research questions and obtain detailed and informative responses that explain the individual's attitudes, feelings and experiences. Examples of questions include 'Are the lecture and teaching rooms well-designed for teaching and learning?' and 'To what extent do you believe that the new campus has enhanced your overall experience as a student?'. Some of the interview questions had prompt or sub-questions. For example, when asking interviewees about their overall student experience, they were asked to comment specifically on things such as sports, leisure and recreational facilities; options for buying and consuming food and beverages; spaces and opportunities for socializing; and car parking. Interviewees were encouraged to reflect on their thoughts, attitudes and feelings, so that they could offer explanations for them.

Sample

The data were obtained from three case example institutions, namely Heriot-Watt University Dubai, Rochester Institute of Technology Dubai, and the University of Wollongong in Dubai. The University of Birmingham Dubai did not give permission to interview its students. A total of 25 self-selected students were interviewed online by three researchers, mainly using the Zoom platform. The researchers are confident that data saturation was achieved, as little new information was gained after about the 16/17th interview. However, the researchers continued interviewing new participants in order to get a greater spread of students in terms of subject studied and year of study, as well as the institution attended. The participants were recruited using a variety of means including inviting students who had previously been taught by one of the researchers; chain referral whereby one student recruited another; and students who

responded to calls for research participants distributed by the institution's senior management or student engagement officer. The average interview lasted 33 minutes, with the longest interview lasting 62 minutes and the shortest 15 minutes. All interviews were audio recorded.

Of our 25 participants, 52% are male and 48% are female; 52% study a business-related subject, 20% computer science/information technology, 16% psychology, and 12% engineering; 8% are in their first year of study, 16% in their second year, 44% in their third year, 24% in their fourth year, and 8% in their fifth year; 28% are of Indian nationality, 24% are Pakistani, 12% are American, and Emiratis, Iranians and Syrians account for 8% each, with the remainder of participants each coming from a different Middle Eastern country; 44% study at an Australian institution, 32% at a British institution, and 24% at an American institution. It should be noted that some of the second year students had direct entry to year 2, so are in fact new students at the university, while the fifth year students had completed a one-year internship, so were taking their fourth year of taught courses.

The data were analyzed using a process of thematic analysis that involved manual coding and categorizations. Thematic analysis is a well-proven method that helps researchers to make sense of the attitudes, opinions, and experiences that were conveyed by participants in the interview (Cresswell & Cresswell, 2014). The data analysis was initially undertaken by one researcher, who identified the key ideas and patterns in the data, to determine not only the participants' shared attitudes, opinions and experiences, but also the contradictions and differences between individuals. In the process of corroborating the findings, interpretations, and conclusions no notable discrepancies arose, thus confirming inter-rater reliability.

Findings

In this section, the key findings of the study are presented in four sub-sections or themes, which relate to the study's four research questions. A selection of interviewee quotes are included to illustrate the findings.

Student choice of institution

The most popular reasons given by our participants to explain their choice of institution at which to study were the institution's reputation or ranking; the accreditations held; the desired subject and program content being offered; likely career benefits; entry requirements that are high – indicating a high quality institution – but which are achievable; and a competitive or affordable level of tuition fees, including the availability of a high-value scholarship. The final choices were made solely or mostly by the student; solely or mostly by the parent/s; or jointly between the student and their parent/s in fairly equal proportions. Several participants mentioned that they had a sibling who had previously studied at the institution and recommended it.

Surprisingly, few students mentioned the new campus as a factor influencing their institution choice until they were prompted to talk about it. Once prompted, virtually every student agreed that the new campus *was* actually a factor that had played a role in their choice, but an attractive, well-designed and equipped campus was a secondary factor when considered alongside academic and career-related factors, or even financial factors. All of the students who were in their first year of study had visited the campus for an open day, program briefing, or campus tour before enrolling at the university. The general consensus among these students was that visiting

the campus was a positive experience that left them impressed, and it confirmed to them that enrolling at the university would be a wise decision.

I joined the old campus before the new one was built, but my friends, new students, tell me that they wouldn't have joined the old campus. They like this new campus. People like nice new things, they like to be impressed. *(4th year business student, American institution)*

When deciding where to study, I was mostly focusing on the major. I did go to an open day and took a tour, and honestly it did add to my decision to submit an application, but for me it was really the university reputation, the major itself, the experience, and what I'm going to gain from this, like a good job afterwards. The building is nice, but for me, more important is the quality of the education, the curriculum, and the experience. You know, at the end of the day, the campus is just a building. *(1st year psychology student, British institution)*

I help with giving campus tours and always see parents leaving very impressed with the campus, which is quite a delight to see, as you feel that you are not the only one who feels very positive about the campus. I do speak about the university and the campus with others. In fact, family and friends have commented that I speak so highly about my university, they ask if they are paying me. No it's not that, I am just generally proud to be a student at this university. *(4th year business student, British institution)*

Teaching and learning

Many international branch campuses are small in size, and they often lack the specialized equipment and resources needed for high quality learning and practical hands-on experience. Of our 25 participants, 23 agreed that in moving to a new purpose-built campus their institution has invested in more specialized equipment and resources, which has enriched their learning experience. For example, one institution has developed specialized laboratories for chemistry, physics, manufacturing, robotics, thermodynamics, and media communications, among others. It was observed by some participants that gaining more knowledge and skills in practical settings would be attractive to employers, and hence may improve their career prospects after graduation.

The new campus has more labs, different labs like the digital transformation lab and the AI lab, so we now have specialized labs that focus on specific subjects, which is good. In the old campus, we had only one lab for electrical engineering, which was the control lab, where everyone did their experiments, but it had the same equipment. *(4th year engineering student, American university)*

For business students, we have the whole fifth floor, called the entrepreneur zone, which has, for example, the Bloomberg trading room. In fact, every floor has a theme that caters specifically for a different program. For example, the fourth floor is for design and architecture, and the top floor is for engineering and robotics. On the sixth floor we have a new concept, the Innovation Hub, which is open to all students to work on their projects and use the equipment, like 3D printers. *(4th year business student, British institution)*

In many instances, it was perceived by students that investments in technology has enabled lecturers to improve their teaching style and how they present information. In all institutions, the students reported that the new campus has good design, layout, and functionality, both for

teaching and learning, including individual and group learning outside the classroom. In addition, the vast majority of students agree that the ambient conditions are good, such as the ability to hear lecturers clearly, appropriate levels of lighting that can be varied, pleasant temperature levels, and a lack of any noise that could disrupt teaching or study.

The furniture in all institutions was generally perceived as being modern, attractive, and well-designed. Students were generally pleased that institutions had bought more comfortable seating, which was particularly appreciated in lessons lasting three hours or longer. There were, of course, a few exceptions, with several students perceiving the seating as uncomfortable, particularly seats that offered insufficient back support. All institutions have provided more charging points in rooms, so no students reported having availability issues charging their laptop, tablet, or phone, although outlets placed on the floor were perceived by some students as being inconvenient and possibly a safety hazard, as people could trip on the cables.

All institutions appear to have provided more rooms for individual and group study outside of lessons. These may be prebooked using a variety of methods, including online platforms. One institution has barcodes on the door handles of rooms, which can be scanned. Most private study rooms have equipment such as screens, whiteboards, and/or TVs. Students generally perceive that the quality of their work and learning is superior studying in these rooms compared to previous study in a café or at a student's home. In two institutions, students remarked that the library lacks physical books and that it is more of a social space, and a few participants described the library as having wasted or unproductive space.

In comparison to the old campus, at the new campus there have been a lot of updates and advancements in how the lecturers teach. Now, the lecturers have good mics, so we can hear well even if it is a big lecture hall, and they don't rely on PowerPoint as much. They use more technology, like the pointers, and interact with the students more, playing Kahoot games for example, and also having other fun digital activities. (*3rd year business student, Australian institution*)

The teaching rooms have different layouts and equipment, which is nice. In one lecture room, three or four people sit together in a booth, in a U-shape with one table in front, which I think is better because when the professor asks a question we can discuss and do work together, rather than just sitting alone and finding the answers on our own. Other rooms also have layouts designed for group work, which is good for interaction between students in lessons. We can also book these rooms for private study, and they have a TV to which we can connect our laptop, for example, to practice a presentation. In fact, all over the campus there are 30 or 40 bookable study rooms, whereas in the old campus there were only three or four in the library. (*3rd year psychology student, British institution*)

Student experience

The term 'student experience' is generally used to refer to a student's overall interaction with an institution, which refers to teaching and learning activities, non-academic support, and student life (Wilkins, 2020b). However, in this section, we focus on factors and issues related only to student life and non-academic facilities and activities, as teaching and learning issues were already discussed in the previous section. Of our 25 participants, 23 agreed that their overall student experience is better at the new campus, compared to the old campus, and 22 students rated their overall student experience as good or excellent. The words used most often to

describe the quality of the sports, leisure and recreational facilities are 'good', 'reasonable' and 'acceptable'. The three students who perceived that they do not receive a good student experience believe that the standard is lower than they would receive at the institution's home campus in Australia or the UK.

Several students at the two institutions located at DKP perceive a lack of outdoor space for relaxation, sports and events. Other students mentioned that several sports had to be played off-campus, which could require 30 minutes of travel. However, these two institutions do have some on-campus facilities for sports and recreation, including soccer pitches, basketball courts, and outdoor exercise machines, and the institutions' cafés provide outdoor seating. Every institution has indoor recreation rooms that offer a range of games and activities, as well as spaces with seating, which are suitable to promote social interaction between students. One institution has a large studio that is used for yoga, keep-fit classes, and dancing. All of our participants reported that their institution has regular events, competitions, sports teams, and workshops that are not directly related to academic programs. For example, one institution has a careers office that provides workshops to help students write their curriculum vitae (c.v.). It is clear that campus facilities which facilitate student participation in sports, social activities, and team-based projects have a beneficial impact on students' campus experience and social integration, as observed by Volkova and Kolesov (2022).

There's always an event happening, and in busier weeks there will be more than one thing happening, like talks, and workshops that give you a participation certificate, which you can add to your c.v. There is a new café and pool competitions all the time, and upstairs there are video games. Everybody goes and tries their luck, and sometimes you can learn a new trick from someone. We have sports teams, and some of these practice outside on the football pitch or basketball court. And if you are not good at playing, there are benches outside, so you can watch a game and cheer for your friends. (*3rd year business student, Australian institution*)

We have the student hub on the first floor, where we have a reasonable number of games to play, like pool and table tennis, and a number of board games can be played at different tables, like chess, Jenga, and Uno, the card game. There is also a PlayStation, a PS5. On another floor, we have a foosball table, and further space for recreational activities, where friends can socialize and relax. Alternatively, we can go and spend time in the café or the food court. (*2nd year computer science student, British institution*)

Of our 25 participants, 22 reported that the new campus satisfied their everyday needs for food and beverages, car parking, socializing with friends, and fulfilling religious requirements. Of course, there are minor grievances. For example, a couple of participants mentioned the lack of vegetarian food options, while others mentioned that the café prices are too high to be student friendly. Another student observed that the opening of her institution's new campus had been accompanied with a considerable increase in student numbers, and that this resulted in her feeling a bit lost and that she didn't belong in the new campus. In fact, despite reporting improved physical environments, several participants (who studied at different institutions), perceived that their social relationships with friends and peers had been stronger in the old, smaller campus. At one institution, a couple of participants mentioned that they sometimes arrive at lessons late because of an insufficient number of elevators, which often stop at every floor of the seven floor building.

The new campus has everything that students need. It's very convenient to have two cafés in the university's building and there is also a food court nearby, which has a good choice of food outlets. Our café has very nice seating and is very spacious. Everything is very accommodating. The quality of the food is great and it is quite well-priced. We have three levels of basement parking and there is more parking behind the building, so it has never been a problem for me to find parking, and it is free for students to use. For me personally, the presence of a prayer room is important, and a lot of people use it. And having bathrooms on each floor is important, and they are well-maintained and always clean. I would say the university has definitely spent a lot of time and money on creating this facility. (*1st year psychology student, British institution*)

Student satisfaction

In the services marketing literature, customers are regarded as satisfied when the quality of service received matches or exceeds their expectations (Swan et al., 2002). Similarly, Elliott and Shin (2002) claim that student satisfaction occurs when perceived performance meets or exceeds the student's expectations. The most common determinants of student satisfaction are the quality of education and educational environment, and the feeling of belonging (Mark, 2013).

Every participant reported that their *overall* satisfaction with their institution was the same or higher at the new campus compared to the old campus, with no student being less satisfied with the new campus. This includes the three students who perceived that they do not receive a good student experience, as these individuals believe that the high quality education offered compensates for the lack of sports, recreational, and social facilities, and the limited range of options for buying food and beverages.

When asked what they most or least liked about their new campus, many participants struggled to provide a clear and concise answer. This suggests that they assess their campus-related satisfaction on a holistic basis, not focusing on any particular aspects related to aesthetics, design, appearance, comfort, or functionality, which supports Bitner's (1992) claim that service users respond to environments holistically. It is clear that many students want to study at a university that fits with their perception of what a university should look and feel like. A couple of participants mentioned that after their institution opened the new purpose-built campus their friends and relations then perceived that they were studying at a 'proper' university.

I like the new campus and how it looks from outside. I think that it does have a wow factor. I like the greenery and landscaping, and if you walk or drive by at night it looks really nice. I like the new classrooms and the technology they have. There is a room with table tennis, foosball, billiard tables, and a PlayStation, but the space where these are located is a bit small. (*4th year business student, American institution*)

The new building is visually appealing. It is beautiful and looks modern. The new teaching rooms are comfortable and make use of the latest technology, and the student room, where they have a TV, billiard tables, table tennis, and other games, is in a much bigger room than the old campus, so more people can go there. There are also more games, like another billiards table, in the café. The car parking here is great too. Being at university is not just about going and attending a class and leaving the campus, so I really like the additional spaces where you can meet with friends or be alone to do some work. (*3rd year business student, Australian institution*)

Campus location is important to many students, not only in relation to accessibility and the length of time needed to reach the campus from their home, but also its proximity to food and beverage outlets, grocery stores, banks, and even commercial businesses. Several students at DKP, particularly business students, mentioned that having businesses such as Google and Cisco as neighbors was motivational and convenient for organizing and undertaking internships and employment. In contrast, the students at DIAC and other outlying city areas were more likely to value the open spaces and less congested roads. At one institution, several students perceived a lack of food and beverage outlets.

In some cases, participants' responses indicated that the new campus exceeded the individual's expectations. However, although campus design, physical environment, and facilities are important to most students in determining their overall satisfaction with the institution, these factors are secondary to the quality of teaching and learning resources, and factors that may promote academic success and desirable future careers. Students are more concerned about program content and practical experiences, for example, finance students wanting to gain work-related knowledge and skills in the Bloomberg trading room. Given that the new campuses satisfy academic, social, and recreational needs quite well, several students reported that their attendance at lectures has improved and that overall they spend more time at the campus

The old campus was quite simple and not very advanced. However, the new campus has provided us with luxuries and necessities that we never even thought of having in a university. The classrooms are a lot more luxurious and spacious, and make use of all the latest technologies. The seats are comfortable and we have more space on the tables for our things, like laptops, tablets, or whatever. The audio sound system is absolutely fantastic. Even in the biggest rooms when the lecturer is using a microphone, the sound is clear and always at the right level. What I really like about this campus is that the university invested a lot to give us a great student experience. (4th year psychology student, British institution)

I'm someone who has been through all three phases of being a student at the old campus in Academic City, then doing online studies because of the Covid pandemic, and now I'm at the new campus in Knowledge Park. Since moving to the new campus, I can see a massive improvement in my well-being and general satisfaction with life. Online studies in my personal opinion was not fun. I am someone who is very social, who needs interaction with others, and a physical space to be active and creative to bring out the best in me. I enjoy performing different roles for the student council and I now come to the campus whenever I can, even if I don't have any lectures. (4th year business student, British institution)

Discussion

Constructing a new purpose-built campus from scratch is a massive undertaking for any higher education institution, and it comes with a huge financial cost. For example, RIT Dubai's new campus cost US\$136m to build. It is essential that institutions undertake a rigorous cost-benefit analysis before making such a commitment. Students are the main consumers at these campuses, so it is important to consider their needs, expectations, attitudes, and opinions with regard to the campus's design, physical environment, and facilities. This information need provides the rationale for this research.

To answer our first research question about the extent to which a new purpose-built campus impacts upon prospective students' choice of institution, we found that the campus design,

physical environment, and facilities *are* factors that may influence students and parents decision-making, but these have less weight than institution reputation, quality of teaching and learning resources, program content, and likely future career prospects. Nevertheless, the institution's image is important to students. Erkan et al. (2021) identified the physical environment as a key factor influencing university image, but institution image may be shaped by other factors in addition to the campus design and facilities, such as the institution's position in rankings, social networks, and value for money (Alcaide-Pulido et al. 2022).

The vast majority of students in Dubai's international branch campuses are the children of expatriate parents, many of whom have modest incomes, and therefore tuition fee levels and the availability of scholarships are important influences on institution choice for many families. At some universities in Dubai, approximately half of students receive a scholarship. It was mentioned by some participants that when prospective students and parents see an impressive campus that is perceived as high quality, the natural mental association is that the teaching, lecturers, learning resources, and facilities will also be high quality.

To answer our second research question about the extent to which a new purpose-built campus impacts upon students' perceived quality of teaching and learning, it was found that most students believe that teaching and learning improved. Virtually all students reported that the new campus at which they study has teaching rooms with improved layouts and technology, as well as higher quality audio visual equipment. Some students offered examples of how lecturers have improved their teaching, typically by using technology to enhance interaction with students during lessons. However, a few students remarked that while the quality of equipment and resources has improved, the teaching is still the same.

To answer our third research question about the extent to which a new purpose-built campus impacts upon the overall student experience, we found that the majority of students perceived their experience had improved. The two institutions at DKP, which are located in a built-up area, are constrained by the amount of land they occupy, thus limiting the amount of sports and outdoor recreational facilities they can offer directly on their campus. However, it should be noted that both institutions use the general outdoor spaces in DKP for events and competitions, which are, in fact, held quite regularly. Given the great diversity in national and ethnic backgrounds of students in Dubai, cultural events are particularly popular, where students can share music, dance, and food from their countries, and such events are often attended by students from different institutions located at DKP. While institutions undoubtedly hope that a new campus will bring them large increases in student enrollments, several students perceive that the increase in institution size has resulted in them having weaker social relationships with other students.

Finally, to answer our fourth research question about the extent to which a new purpose-built campus impacts upon overall student satisfaction, we found that the answer is somewhat similar to the answer for research question one, about choice of institution. It is clear that campus design, physical environment, and facilities do have an impact on overall student satisfaction, but these factors are secondary to teaching, learning, and career-related factors. This finding supports previous research, which concluded that transnational education students in the Arab Gulf region are particularly concerned about developing academic skills, acquiring self-learning skills, and acquiring employability skills (Al Yafei et al., 2022). The good news for institutions is that no participant reported being less satisfied at the new campus compared to the old campus, even though some individuals perceive some negative factors. The most mentioned negative

factor was that the layout (e.g., tall, multi-story buildings) and increased campus size has resulted in individuals finding it difficult to maintain their social relationships with friends and peers.

Our findings fit broadly with the main conceptualizations of service servicescape, as defined by Bitner (1992), and also later conceptualizations that include all physical, social, symbolic, and natural environmental dimensions, as suggested by Rosenbaum and Massiah (2011), and Siguaw et al. (2019). For example, among our participants, student satisfaction is influenced by functional room layouts, furnishings, and equipment (spatial layout and functionality); good air conditioning and places for quiet working (ambient conditions); innovative and attractive building design and grounds that impress both students and other stakeholders (signs and symbols); and places for group working and socializing with friends (social aspects). However, it is notable that students often mentioned ‘campus newness’ as a positive aspect of their institution’s servicescape. Students clearly appreciate campuses that are distinctive, impressive, functional, and well-maintained.

In the previous sections we provided our key findings. In this section, we offer some additional analysis. Although our participants are satisfied overall with their student experience, it is also clear from our participants’ responses that students have become very demanding ‘consumers’ in Dubai’s marketized higher education system. In terms of teaching and learning, every student stated that they expect a high quality teaching environment, lecturers who can impart knowledge clearly and in an engaging, interactive way, and high quality learning resources. Although there were no criticisms about the teaching rooms or the quality of lectures, several participants – across institutions – perceive that their library does not stock enough physical resources, particularly hard copy books. Several students at the DKP institutions complained about the lack of open space and on-campus sports facilities, while students at institutions in the city’s outlying areas complained about the lack of food and beverage outlets. Although every participant who drives to their university reported that the availability of free car parking has improved at the new campus, several students still dwelled on the negative factors, like the walking distance from the car to the building, or the lack of shading, which the students believe is necessary to cope with Dubai’s summer temperatures that frequently reach 50 degrees centigrade.

Despite some minor grievances, the vast majority of students are satisfied overall with their institution’s new campus. Several participants took considerable pride from the enhanced institution image that they perceive is portrayed to people outside of the institution. Most students judge that the new campus has improved teaching and learning, although it was mentioned that some lecturers should adapt their teaching to take better advantage of the technologies provided at the new campus. It may be beneficial for institutions to conduct a skills audit, to identify any lecturers who would benefit from training or developmental activities to enhance their use of technology in the classroom.

Other things being equal, virtually every participant would prefer to study at their current institution and at their current campus rather than at another institution or their institution’s old campus. However, several students mentioned that their actual choice of institution was highly dependent on the level of tuition fees charged and the offer of a high-value scholarship. A few students mentioned that they would not want to study at a very small university, such as those that occupy just one or two floors in a normal office block. Furthermore, even students who have seen their commute time double – in some cases to more than one and a half hours each way –

would still prefer to study at the new campus, rather than the old campus with the shorter journey time.

Conclusion

To our knowledge, this is the first study to investigate the impacts of campus design, physical environment, and facilities on student choice of institution, perceived quality of teaching and learning, student experience, and student satisfaction for new purpose-built campus in a transnational education setting. Theoretically, our findings suggest that students are influenced not only by ambient conditions, spatial layout and functionality, and signs, symbols and artefacts – the three key dimensions of servicescape identified by Bitner – but they also perceive newness (the age of the buildings) as an attractive feature of a university's servicescape, as this is associated with cleanliness, reliability (e.g., good elevators), and increased functionality (e.g., more outlets providing healthy food, and more car parking, in recognition that more students now drive to college than in past years).

The research findings suggest that institutions and students may both derive considerable benefits from a new purpose-built campus that has been well-designed and constructed. However, an institution should always undertake rigorous market research before committing to any new campus construction, to understand the local market norms and students' expectations, and the impacts of local income levels on expected tuition fee income. This is because most international branch campuses are expected to be self-funding from tuition fees. However, global elite universities may be fortunate in being able to secure host country government funding for campus construction. Alternatively, institutions may locate in ready-made premises that are offered in higher education hubs or transnational education zones, such as DIAC and DKP.

A campus that is distinctive and visually attractive, and which is equipped with specialized laboratories and the latest technologies, is likely to impress all stakeholders, which include students, parents, employers, and the local community. A new campus improves the image and profile of an institution in its local setting, which may promote student enrollments, collaborations with industry, and enhanced rates of graduate employment. In the highly competitive higher education markets that exist in many locations globally, a new campus may deliver the institution a competitive advantage in attracting new students. In the longer term, the campus may be a factor that contributes to enhancing the institution's reputation and perceived status. The market for higher education has become globalized, with students perceiving themselves as consumers. This has resulted in students' needs, wants, and attitudes being similar regardless of location (Molesworth et al., 2011), thus it is likely that our findings will be generalizable worldwide.

The research is not without limitations. The study was conducted in one city (Dubai), so city-specific factors may limit the generalizability of the findings. Furthermore, the cross-sectional research design may not capture the changes that may occur in a new campus, even over a relatively short period of time. A longitudinal research design would enable us to assess how and the extent to which institutions react to problems and issues that arise at new premises, and whether the building and its facilities are well-maintained. For example, institutions should undertake regular cleaning of washrooms and servicing of air conditioning equipment, and the quick repair of elevators when they malfunction.

However, the most significant limitation of this research was that it was undertaken at the start of 2022, just as the effects of the COVID-19 pandemic were largely coming to an end in the UAE, i.e., fewer cases and hospitalizations, the resumption of international travel, and the abandonment of the requirement to wear masks outdoors. After the start of the pandemic, and until the fall 2021 semester, most teaching was online and institutions organized few events that were not virtual. So, the student experience in the period just before this research was conducted, is not the same experience that students would have in non-pandemic times. For example, a participant at one institution mentioned that students had been allowed to see a large and impressive gym, but they had not yet been allowed to use it. Therefore, it is somewhat surprising, and to the institutions' credit, that few students complained or spoke negatively about their student experience. However, future studies conducted after the pandemic ends completely may be used to support and extend the findings of this study.

References

- Alcaide-Pulido, P., Gutiérrez-Villar, B., Carbonero-Ruz, M., & Alves, H. (2022). Four key variables for determining the image of higher education institutions: A cross-national analysis based on undergraduate students. *Journal of Marketing for Higher Education*, published online April 18, 2022. <https://doi.org/10.1080/08841241.2022.2056671>
- Altbach, P. G. (2010). Why branch campuses may be unsustainable. *International Higher Education*, No. 58, Winter 2010, 2-3. <https://doi.org/10.6017/ihe.2010.58.8467>
- Al Yafei, K., Ayoubi, R. M., & Crawford, M. (2022). The student experiences of teaching and learning in transnational higher education: A phenomenographic study from a British-Qatari partnership. *Journal of Studies in International Education*, published online January 5, 2022. <https://doi.org/10.1177/10283153211070111>
- Angulo, F., Pergelova, A., & Rialp, J. (2010). A market segmentation approach for higher education based on rational and emotional factors. *Journal of Marketing for Higher Education*, 20(1), 1-17. <https://doi.org/10.1080/08841241003788029>
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57-71. <https://doi.org/10.1177/002224299205600205>
- Booms, B. H., & Bitner, M. J. (1981). Marketing strategies and organization structures for service firms. In J. H. Donnelly, & W. R. George (Eds.). *Marketing of Services* (pp. 47-52). American Marketing Association, Chicago, IL.
- C-BERT. (2022). Fast facts. Retrieved 12 February, 2022 from <http://cbert.org/>
- Cresswell, J. W., & Cresswell, J. D. (2014). *Research design: Qualitative, quantitative, and mixed method approaches*, 4th ed. Sage Publications, Thousand Oaks, CA.
- Cresswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*, 4th ed. Sage Publications, Thousand Oaks, CA.
- den Heijer, A. (2011). *Managing the university campus: Information to support real estate decisions*. Eburon Academic Publishers, Delft.
- Douglas, J., Douglas, A., & Barnes, B. (2006). Measuring student satisfaction at a UK university. *Quality Assurance in Education*, 14(3), 251-267. <https://doi.org/10.1108/09684880610678568>

- Durán-Narucki, V. (2008). School building condition, school attendance, and academic achievement in New York City public schools: A mediation model. *Journal of Environmental Psychology*, 28(3), 278-286. <https://doi.org/10.1016/j.jenvp.2008.02.008>
- Elliott, K. M., & Shin, D. (2002). Student satisfaction: An alternative approach to assessing this important concept. *Journal of Higher Education Policy and Management*, 24(2), 197-209. <https://doi.org/10.1080/1360080022000013518>
- Erkan, I., Unal, S., & Acikgoz, F. (2021). What affects university image and students' supportive attitudes: The 4Q Model. *Journal of Marketing for Higher Education*, published online May 19, 2021. <https://doi.org/10.1080/08841241.2021.1927933>
- Ezeh, C., & Harris, L. C. (2007). Servicescape research: A review and a research agenda. *The Marketing Review*, 7(1), 59-78. <https://doi.org/10.1362/146934707X180677>
- Healey, N. M. (2015). Towards a risk-based typology for transnational education. *Higher Education*, 69(1), 1-18. <https://doi.org/10.1007/s10734-014-9757-6>
- Huesman Jr., R., Brown, A. K., Lee, G., Kellogg, J. P., & Radcliffe, P. M. (2009). Gym bags and mortarboards: Is use of campus recreation facilities related to student success? *NASPA Journal*, 46(1), 50-71. <https://doi.org/10.2202/1949-6605.5005>
- Hutton, J. D., & Richardson, L. D. (1995). Healthscapes: The role of the facility and physical environment on consumer attitudes, satisfaction, quality assessments, and behaviors. *Health Care Management Review*, 20(2), 48-61. No doi found.
- Kärnä, S., & Julin, P. (2015). A framework for measuring student and staff satisfaction with university campus facilities. *Quality Assurance in Education*, 23(1), 47-66. <https://doi.org/10.1108/QAE-10-2013-0041>
- KHDA. (2022). FAQs on universities in Dubai: How many higher education institutions are there in Dubai? Retrieved from <https://web.khda.gov.ae/en/Guides/Students/FAQs-on-universities-in-Dubai> (accessed 23rd April 2022).
- Knight, J. (2011). Education hubs: A fad, a brand, an innovation? *Journal of Studies in International Education*, 15(3), 221-240. <https://doi.org/10.1177/1028315311398046>
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212. <https://doi.org/10.5465/amle.2005.17268566>
- Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of Retailing*, 49(4), 48-64.
- Lin, I. Y., & Mattila, A. S. (2010). Restaurant servicescape, service encounter, and perceived congruency on customers' emotions and satisfaction. *Journal of Hospitality Marketing & Management*, 19(8), 819-841. <https://doi.org/10.1080/19368623.2010.514547>
- Mark, E. (2013). Student satisfaction and the customer focus in higher education. *Journal of Higher Education Policy and Management*, 35(1), 2-10. <https://doi.org/10.1080/1360080X.2012.727703>
- McLaughlin, P., & Faulkner, J. (2012). Flexible spaces... what students expect from university facilities. *Journal of Facilities Management*, 10(2), 140-149. <https://doi.org/10.1108/14725961211218776>
- Mehrabian, A., & Russell, J. (1974). *An approach to environmental psychology*. MIT Press, Cambridge, MA.
- Molesworth, M., Scullion, R., & Nixon, E. (Eds.). (2011). *The marketisation of higher education and the student as consumer*. Routledge, London.

- Nuseir, M. T., & El Refae, G. A. (2021). Factors influencing the choice of studying at UAE universities: An empirical research on the adoption of educational marketing strategies. *Journal of Marketing for Higher Education*, published online January 31, 2021. <https://doi.org/10.1080/08841241.2020.1852467>
- Pareigis, J., Echeverri, P., & Edvardsson, B. (2012). Exploring internal mechanisms forming customer servicescape experiences. *Journal of Service Management*, 23(5), 677-695. <https://doi.org/10.1108/09564231211269838>
- Price, I. F., Matzdorf, F., Smith, L., & Agahi, H. (2003). The impact of facilities on student choice of university. *Facilities*, 21(10), 212-222. <https://doi.org/10.1108/02632770310493580>
- Qasim, A. M., Al-Askari, P. S. M., Massoud, H. K., & Ayoubi, R. M. (2021). Student university choice in Kurdistan-Iraq: What factors matter? *Journal of Further and Higher Education*, 45(1), 120-136. <https://doi.org/10.1080/0309877X.2020.1742298>
- Reynolds, G. L. (2007). The impact of facilities on recruitment and retention of students. *New Directions for Institutional Research*, 135(Fall 2007), 63-80. <https://doi.org/10.1002/ir.223>
- Rosenbaum, M. S., & Massiah, C. (2011). An expanded servicescape perspective. *Journal of Service Management*, 22(4), 471-490. <https://doi.org/10.1108/09564231111155088>
- Siguaw, J. A., Mai, E., & Wagner, J. A. (2019). Expanding servicescape dimensions with safety: An exploratory study. *Services Marketing Quarterly*, 40(2), 123-140. <https://doi.org/10.1080/15332969.2019.1592860>
- Simões, C., & Soares, A. M. (2010). Applying to higher education: Information sources and choice factors. *Studies in Higher Education*, 35(4), 371-389. <https://doi.org/10.1080/03075070903096490>
- Swan, J. E., Bowers, M. R., & Grover, R. (2002). Customer involvement in the selection of service specifications. *Journal of Services Marketing*, 16(1), 88-103. <https://doi.org/10.1108/08876040210419433>
- QAA. (2014). *Review of UK transnational education in United Arab Emirates: Overview*. The Quality Assurance Agency for Higher Education, Gloucester.
- Uline, C., & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of Educational Administration*, 46(1), 55-73. <https://doi.org/10.1108/09578230810849817>
- Vehovar, V., Toepoel, V., & Steinmetz, S. (2016). Non-probability sampling. In C. Wolf, D. Joye, T. E. Smith, T. W. Smith, & Y. C. Fu (Eds.). *The SAGE handbook of survey methodology* (pp. 329-345). Sage Publications, Thousand Oaks, CA.
- Volkova, N. V., & Kolesov, A. A. (2022). Adaptation challenges of domestic and international students in a Russian English-medium instruction university. *Journal of International Students*, 12(2), 302-323. <https://doi.org/10.32674/jis.v12i2.3594>
- Weerasinghe, I. M. S., & Fernando, R. L. S. (2018). University facilities and student satisfaction in Sri Lanka. *International Journal of Educational Management*, 32(5), 866-880. <https://doi.org/10.1108/IJEM-07-2017-0174>
- Wells, V. K., & Daunt, K. L. (2016). Eduscape: The effects of servicescapes and emotions in academic learning environments. *Journal of Further and Higher Education*, 40(4), 486-508. <https://doi.org/10.1080/0309877X.2014.984599>
- Wilkins, S. (2013). 'Home' or away? The higher education choices of expatriate children in the United Arab Emirates. *Journal of Research in International Education*, 12(1), 33-48. <https://doi.org/10.1177%2F1475240913479519>

- Wilkins, S. (2020a). Two decades of international branch campus development, 2000–2020: A review. *International Journal of Educational Management*, 35(1), 311-326. <https://doi.org/10.1108/IJEM-08-2020-0409>
- Wilkins, S. (2020b). Student experience at international branch campuses. *Australian Universities' Review*, 62(2), 39-46.
- Wilkins, S., & He, L. (2020). Student mobility in transnational higher education: Study abroad at international branch campuses. *Journal of Studies in International Education*, published online October 13, 2020. <https://doi.org/10.1177%2F1028315320964289>
- Wilkins, S., & Huisman, J. (2015). Factors affecting university image formation among prospective higher education students: The case of international branch campuses. *Studies in Higher Education*, 40(7), 1256-1272. <https://doi.org/10.1080/03075079.2014.881347>
- Wilkins, S., & Huisman, J. (2021). Institution strategy in transnational higher education: Late entrants in mature markets - the case of international branch campuses in the United Arab Emirates. *Studies in Higher Education*, 46(4), 704-720. <https://doi.org/10.1080/03075079.2019.1649386>
- Winter, E., & Chapleo, C. (2017). An exploration of the effect of servicescape on student institution choice in UK universities. *Journal of Further and Higher Education*, 41(2), 187-200. <https://doi.org/10.1080/0309877X.2015.1070400>