

**Master's Thesis in Graduate School of Library,  
Information and Media Study**

**Evaluating the Educational, Social and  
Recreational Functions of University Library  
Cafés  
- A Cross-National and Cross-Cultural Comparative  
Study**

**March 2018**

**201621655**

**Qi Deng**

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**Graduate School of Library, Information and  
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University of Tsukuba**

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# Evaluating the Educational, Social and Recreational Functions of University Library Cafés

## - A Cross-National and Cross-Cultural Comparative Study

大学図書館カフェの教育的、社会的、娯乐的機能の評価

—国際比較の観点から—

Student No.: 201621655

Name: Qi Deng

Although food and drink have traditionally been prohibited in libraries, in recent years, there have been increased joint ventures between libraries and coffee shops like Starbucks. Although library cafés are perceived mostly for social networking and recreational purposes, an increasing number of students are conducting both their formal and informal learning at the library cafés, instead of inside the physical libraries. Using a quantitative comparative approach, this study also aims to identify the similarities and differences in the usage of library cafés amongst students at three different universities in Asia and the United States — namely, The University of Tsukuba, located in Japan, The University of Hong Kong, and The University of Kentucky in the USA. Furthermore, this study explores the educational, social, and recreational roles that library cafés play in the students' college experience and daily lives.

Online questionnaire surveys were used to gauge library patrons' usage and perceptions of both the library and café spaces, as well as their preferences for formal and informal learning and recreation. From the 314 responses collected from all three universities, the results indicated that a majority of the respondents considered the library café as an important part of their campus life, though a majority of them would still prefer formal learning within the library building, and certain recreational activities outside the library café. Besides, the library café also functions like a multi-functional hub where everyone can find their own use, ranging from being a place for learning to a place for socialization purposes.

Academic Advisor: Principal: Norihiko UDA

Secondary: Patrick LO

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## **Introduction**

Based on my observation as a graduate student in Library Science, in recent years, there is an increasing amount of both formal and informal learning activities being carried out outside the traditional classroom and library environments. As digital library services and various mobile devices also facilitates learning anytime and anywhere (Dukic, Chiu & Lo, 2015; Ko, et al., 2015; Lau, et al., 2017; Lo, et al., 2016), the differences between formal and informal learning have become increasingly less distinctive. For example, if a Political Science student is assigned to listen to a public speech made by a famous politician such as Donald Trump on YouTube, and does so with a mobile device in a restaurant – would this be considered formal or informal learning? If a Music major listens to an audio-recording from Naxos Music Library, or watches a pre-performance lecture over the Internet before attending a live performance at the Metropolitan Opera – would this be considered formal learning or recreational use?

A quick scan of any university campus will reveal that students are hanging out alone or in small groups while reading in solitude, taking notes, writing, socializing, or simply wandering aimlessly around campus, and simply enjoying their lives as students. However, there is another layer of learning activity that is taking place outside the traditional teaching and learning venues (Lomas & Oblinger, 2006). Such informal learning activities outside the traditional learning venues are not always obvious to those who are not students themselves. A number of studies report that university students today learn and acquire information differently (Oblinger, 2003), and the design of different learning spaces can favor or disadvantage various styles of learning (Scott-Webber, 2004). According to Acker & Miller (2005), “Learning grows through a syncopated rhythm of interaction and argument, clarifying discussion and sometimes confusing next steps, presentation and critique... a guiding principle for the location of these conversations is that space should adapt to students, not students to space” (p.

4). In lecture halls, in classrooms, laboratories, in student union centers, in the library, or an Internet café, even in a library café amongst friends, different forms and levels of learning can, and do frequently take place. Being able to talk, share ideas, discuss and debate is unarguably an important part of a student's learning. Conversations can be where "significant learning can occur" (Kolb & Kolb, 2005, p. 208).

Students will spend much of their academic lives in classrooms, laboratories, and libraries – the places on campus where formal education takes place. On the other hand, informal social learning spaces have the potential to impart a feeling of the campus culture and sense of belonging to students. A commitment to student-centered learning encouraged us to think of the library café as a communal place on campus, in which individuals and groups of students often come together—actively engaging themselves in different forms of social networking and learning—sharing their knowledge in both structured or non-structured ways, as well as actively engaging in building each other's understandings mutually. According to Acker & Miller (2005), "Informal learning spaces support chance encounter, divergent conversations, and reflection and study about content presented in formal settings" (p. 5). Furthermore, such informal environments (including library cafés) where food and drink, comfortable chairs, and social areas with moveable furniture to encourage students to linger, meet, and talk informally out of class – via which a great variety of active and social learning activities could actually occur (Brown & Long, 2006).

With reference to physical learning spaces, the library is often seen as a formal place where people acquire, exchange and share knowledge—in short, a place for formal learning. But, it is also advocated that libraries should support multiple types of learning (Beagle, 1999, Hunter & Cox, 2013), such as the information commons, as a conceptual, physical, and instructional space, that involves an organizational realignment from print to the digital environment. In fact, Sinclair (2007) describes the information commons as a natural extension of the library's traditional mission in

a wired world. Therefore, an increasing number of libraries (both public and academic) are modeling their interior designs after coffee houses as well as commercial bookstores, with the aim of creating a much more inviting, and relaxing atmosphere to attract more users for various purposes, ranging from recreational, social networking, or simply for rest.

Many libraries have taken this approach to allow their users to create their own space for different collaborative learning, and socialization purposes (Lo, Chiu, & Chu, 2014; Lo & Chu, 2015). On the other hand, a café is generally viewed as a place for refreshments, relaxation, leisure, and sometimes business communications, etc. (Woodward, 2005). Libraries and the cafés are seemingly unrelated, but surprisingly, there are many similarities and connections between the two. Reading and refreshment are often associated with each other. Atkinson (2001) stated that “The new library must be mainly a social gathering place, somewhat noisy, with plenty of coffee.” As Woodward (2005) notes, “If you were to ask many people to describe a favorite pastime, they would picture themselves curled up in a large, cozy armchair, possibly by a fire, with a good book and a favorite hot drink” (p. 196). Moreover, in recent years, the library café is becoming increasingly popular as a space for collaborative learning/work as well. Taking the internationally famous Starbucks coffeehouse as an example, many of them are now equipped with Wi-Fi, working-desk-like spaces with electric outlets, allowing their patrons to carry out all sorts of office and study tasks, for example, writing emails, essays, academic reading, and so on. Despite close proximity between the library and its café, whether it be inside the library itself or in another part of the building, we have witnessed an increasing number of students worldwide choosing their library cafés to conduct their academic activities or different types of learning activities. “This generation of time-constrained students is comfortable with multitasking, and sees nothing unusual about going online to check class notes between other [social] commitments” (Acker & Miller, 2005, p. 8). Many library cafés also allow their users to create their own preferred forms of spaces that

would facilitate collaborative learning in many different formats, etc. For example, a collaboration was established between University of Washington and Starbucks Coffee. They created a new coffeehouse inside the Suzzallo Library, which is the central library of the university. The collaboration created a warm, modern space in addition to the library's rich history. While some prefer doing group discussions over social media, many others would prefer to do so at cafés not just for personal contacts, but also the relaxing atmosphere of being allowed to eat and drink at the same time. It is apparent that the differences between these physical spaces (library and café), in terms of their functions as a learning space have become increasingly less distinctive, along with other factors associated with library space design, and students' evolving learning practices, which motivate this research.

## **Background information**

### *The University of Tsukuba*

The University of Tsukuba (UT) was established in October 1973. It was relocated from Tokyo to Tsukuba, while the name was changed from Tokyo University of Education due to the relocation. With a history stretching back over 140 years, UT is one of the oldest and most respected universities in Japan.<sup>1</sup> UT was ranked in Japan's top 10, and in the top 250 globally in comprehensive strength ranking. UT strives to produce graduates who are well-placed to succeed in an increasingly complex and competitive world. In addition to various types of Japanese courses, UT also offers international undergraduate programs taught in English in Life and Environmental Science, majoring in Biology, Agrobiological Science or Geoscience, International Social Sciences, majoring in Sociology, Economics, Law, Political Science, International

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<sup>1</sup> University of Tsukuba - Homepage. Available at: <http://www.global.tsukuba.ac.jp/>

Relations or International Development and so on. A wide range of Masters and PhD degree programs taught in English are also available.

The UT library system was established in October 1973, and, over decades of change, the UT Library is dedicated to be the core of academic information through cooperation with the local community, research laboratories and educational organizations in Japan and overseas. It consists of the Central Library and four specialized libraries (Art and Physical Education Library, Medical Library, Library on Library and Information Science, and the Otsuka Library). They are managed in a unified administrative system for collecting materials and operate on a completely open-stacks system.

The library provides a variety of services, including well-developed reference services, which includes reference inquiries, in-library copy service, inter-library cooperation, and contents sheet service, disability services, and so on. The library continues to strengthen its collection, resources and services in order to become even more attractive and reliable library recent years considering its's international programs in science and social sciences. As a new open access university library, the UT Library aims at functioning as the center of academic information, having close cooperative relationships with the other research and educational constructions in and outside Japan, as well as in the local community and Tsukuba Science City, and aims to be the core of academic information through cooperation with the local community, research laboratories and educational organizations in Japan and overseas.

The central library at UT is open to the general public as well. The general public can use the library service and loan materials from it as they provided their identity to the staff. It also welcomes visits from various groups, and it also gives tours to potential prospective students from both middle and high school. The volunteer staff members also provide general guidance to the users, and offer reading service, which support in

different foreign languages. The central library also has special collections exhibitions to open to the public sometimes.

As of 2004, the collections of the UT Libraries were over 2.4 million, which includes books and periodicals (both in Japanese and in other languages).<sup>2</sup> According to the website of the UT Library, the digital library provides two tools for searching items via the online library, namely RefWorks and Tulips Warp. RefWorks is a web-based tool for managing reference documents, and this is a convenient software for students loading search results from document databases to create and manage database of their personal reference documents, and they can access and manage their own document information from any location and any computer. “Tulips Warp” allows users access the electronic journals and the databases which the UT Library subscribes, when the end-users are outside of the campus. From this point of view, UT’s digital library is also developing well. Full-text and image databases, online journals, abstracts and indexes databases are both included in the digital library. Users can use Tulips Search, OPAC, and Site Search. Tulips Search is a new service for quickly and easily searching for a variety of materials held by the library. OPAC is an online database of materials held by a library or group of libraries. Users can search a library catalog (OPAC) principally to locate books and other material available at the UT’s library.<sup>3</sup>

Nagata (2009) mentioned that the commons concept of learning commons or information commons is different from those traditional services, and he also argued that the two commons should had the important position of *ba* for nurturing knowledge and learning in her research. Donkai, Toshimori & Mizoue (2013) mentioned that, new types of learning spaces called “information commons” or “learning commons” at

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<sup>2</sup> Collections of UT Libraries - Homepage. Available at: <https://www.tulips.tsukuba.ac.jp/pub/outline/outline-english.htmlrtertert>

<sup>3</sup> University of Tsukuba Library - Homepage. Available at: <https://www.tulips.tsukuba.ac.jp/lib/en>

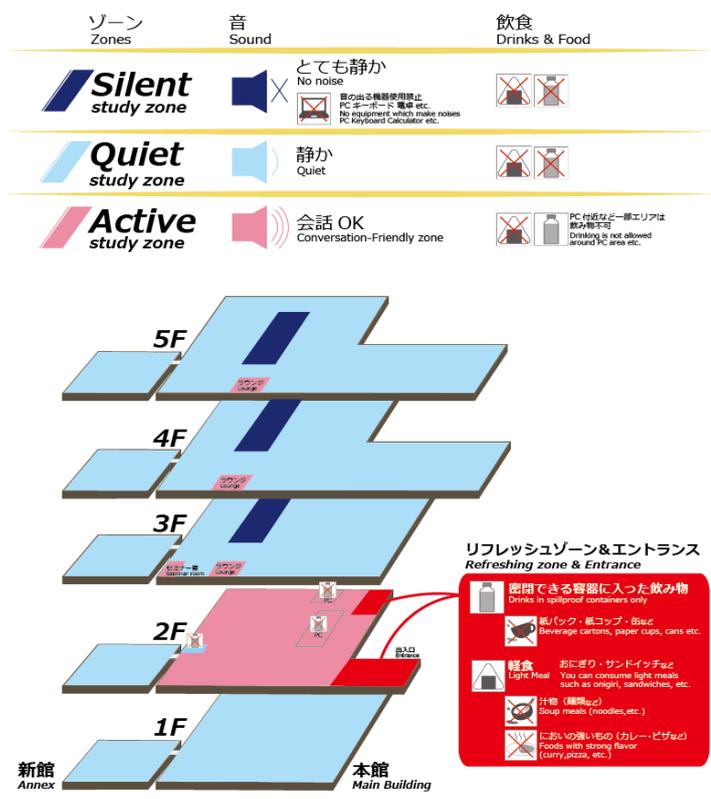
academic libraries have emerged mainly in North America since early 1990s, given that the various kinds of services, facilities, and materials in one location to support students' learning they provided, the idea of learning commons has been introduced to colleges and universities in Japan as well. Their research also revealed that many libraries in Japan provide computer clusters, cafés and/or beverage vending machines in libraries, but they are still few in number. But, thanks to UT's focus on developing students' collaborative learning, the Learning Commons was established in the Kasuga area as the first Learning Commons of UT in 2008, which is also known as the KLC. Originally, it just had one classroom that provided a tutoring service which focused on helping the students including graduate students doing consultations on lectures, then it was renovated and moved into the Library on Library of Information and Science. Furthermore, it did further refurbishment and extension in 2012 and then became a structure for now days. As for one Learning Commons, it should equip with three elements, which including spaces, devices, and people. There are movable desks and chairs, which can accommodate individual learning and group learning. There are 17 computers, color printers, plasma displays, white boards, and meeting tables set up in KLC, which can be used by anyone who enter the library. In addition, there are always have at least one tutor to help users doing consultation on weekdays.<sup>4</sup>

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<sup>4</sup> Learning Commons of UT (KLC) - Homepage. Available at: <http://klis.tsukuba.ac.jp/lc/about-klc>

# 音・飲食のルール

## Sound, Drinks & Food Code of Behavior



筑波大学附属図書館 University of Tsukuba Library

Figure 1. The Central Library's Sound, Food and Drink Policy<sup>5</sup>

Speaking of the library manner in UT, Japanese attach importance to refrain from causing disturbance to other users. For the preservation of the library material and environment, smoking and eating are not permitted. The so-called “Refreshing Zone” on 2nd floor in the central library of UT is the only place for refreshments where library users can eat or drink in the library.<sup>5</sup> In addition, drinks in sealed containers may be brought into the library. Kawamoto & Tsuji (2016) noted that preservation is the main

<sup>5</sup> Manners in UT Libraries - Homepage. Available at:  
<https://www.tulips.tsukuba.ac.jp/lib/en/service/manners>

reason for restricting refreshments in Japanese libraries, as food tends to attract pests, and this poses a threat to the collection.

Based on the phenomenon that the research revealed above, the café near the central library was established in 2008. The café is located within the library building at the entrance, and it provides a relaxing space for users to have refreshments while they study. The Starbucks on the first floor provides service basically from Monday to Friday which also includes regular holidays. The Library Café in the library of UT is already an integral part of the central library building. It is a bright, vibrant space with floor to ceiling window around the shop, and provides users with a space for sitting and talking with each other. With a cup of coffee or juice while chatting or enjoying themselves sitting in the huge curvy sofas, they also can dine at the tables or continue working with laptops by sitting around the areas with large desks. The coffee shop inside the library of UT also provide some specific Japanese style lunch, and it also have two or three Japanese staffs working around. The coffee shop opened in the entrance hall of the Central Library, which can be seen as an important step for library development in UT, and a new transform for library space.



Figure 2. The Main Entrance of the Central Library



*Figure 3. Library Café in the Central Library*

### ***The University of Kentucky***

The University of Kentucky (UK) is a public co-educational university in Lexington, Kentucky. It was founded in 1865 by John Bowman as the Agricultural and Mechanical College of Kentucky, the university is one of the state's two land-grant universities, which sits on 784 acres of land in Lexington. UK regularly is listed in many "top" or "best of" categories by national publications or organizations. Besides, the university is also an excellent research university, according to the U.S. News and World Report.<sup>6</sup> Students in UK are divided into 16 colleges, that includes the College of Agriculture, College of Arts and Sciences, College of Business and Economics, College of Communications & Information Studies, College of Dentistry, College of Design, College of Education, College of Engineering and so on.

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<sup>6</sup> University of Kentucky - *The U.S. News* - Homepage. Available at: <https://www.usnews.com/best-colleges/university-of-kentucky-1989>

The library system of UK is divided generally by subject, and it consists of 9 major facilities: William T. Young Library, Agricultural Information Center, Design Library, Education Library, Lucille Little Fine Arts Library & Learning Center, Medical Center Library, Science & Engineering Library, Special Collections Research Center, and Law Library. UK Libraries also manages the Lexmark Library.

The William T. Young Library was opened in April 1998, as the new main library—replacing the former Margaret I. King Library. It was named for prominent Lexington businessman and horse-breeder, William T. Young, who was a mechanical engineering graduate of UK. It houses a general undergraduate collection and social sciences, humanities, business, biology and agricultural materials. As the central library in the system of the university library, it also is home to a mount of centralized library and university services.

As for the library service aspect, the staff from reference services area are available at the Reference Desk on the 2nd floor of William T. Young Library. It aims to help students, faculty, and other library patrons making effective use of the library and its resources. Staff can assist users by locating answers to specific questions, finding other electronic resources and databases, journal indexes, and other reference materials. They will also assist users in verifying and locating the Libraries' periodicals holdings. The reference services staff will also schedule library tours and instructional sessions for classes and other groups. Online request forms are available to schedule a tour or schedule an instruction session. Information Literacy instruction sessions in UK is focus on the research skills required to define, locate and evaluate information in all disciplines. Librarians work with faculty in constructing research assignments and compiling research resources.<sup>7</sup>

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<sup>7</sup> Reference Service of the Library of UK - Homepage. Available at:  
[https://libraries.uky.edu/libpage.php?lweb\\_id=146&llib\\_id=14&ltab\\_id=390](https://libraries.uky.edu/libpage.php?lweb_id=146&llib_id=14&ltab_id=390)

Besides, the most different points that the UK libraries have are that they offer the general public, the UK community, and citizens of the commonwealth of Kentucky free access to tangible and online Federal Government information provided through the Federal Depository Library Program (FDLP). In addition, the goal of Distance Learning Library Services is to provide access to information resources for the students who take classes through UK Online and for the faculty who teach those classes. The Distance Learning Library Service is staffed by a full-time, which also is one of the different point than other two universities.

The most interesting and worth to knowing is the unique part of Hub. It was established in 2005, and functions as the information commons at UK. The Hub located in the basement of William T. Young Library and some other learning areas in the campus, it provides study space and a number of key student support services in one convenient location. The Hub also offers flexible, comfortable furniture for students to arrange to meet their group study needs, including rolling cubicle walls and whiteboards. It also offering a variety of academic services, technology, and flexible study areas.<sup>8</sup> Greenwell (2007) mentioned that the Hub has been a terrific opportunity for teamwork among the different entities involved throughout the planning process. It's equipped with Mac systems and software for research, and it's available on all computers. Students can also use the rolling whiteboards in the Hub for study session and group work collaboration. It also equipped with free wireless in the whole Hub area. In addition to programs and events offered by the libraries, the Hub periodically serves as a space for other campus events.

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<sup>8</sup> The Hub of William T. Young Library - Homepage. Available at: <http://libraries.uky.edu/hub>



Figure 4. The Hub – The University of Kentucky<sup>9</sup>

### First Floor

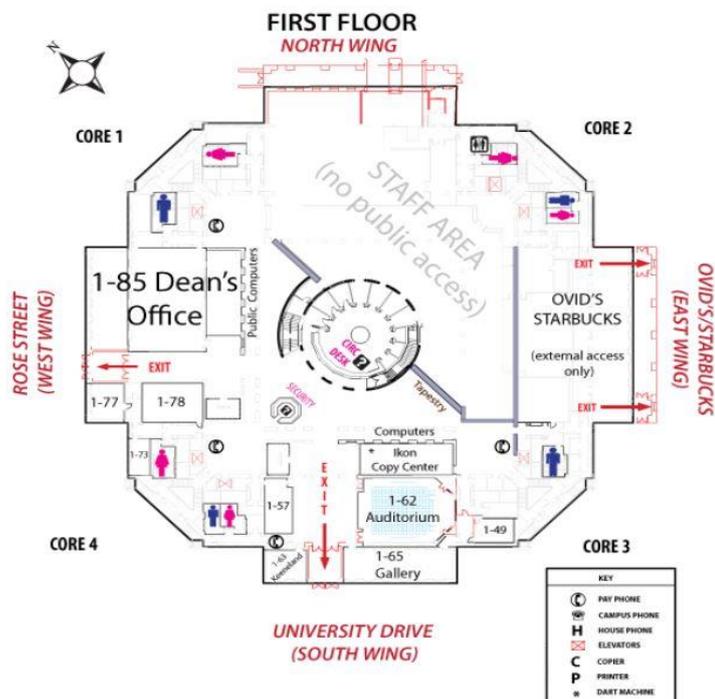


Figure 5. The First Floor of the William T. Young Library (University of Kentucky)<sup>10</sup>

<sup>9</sup> Beginner's Guide to UK Libraries: The Hub - Homepage. Available at: <http://libguides.uky.edu/c.php?g=221069&p=1498394>

<sup>10</sup> First floor of the William T. Young Library in UK - Homepage. Available at:

In terms of the food policy in UK, library patrons may drink non-alcoholic beverages from securely covered containers except in the areas of computer workstations, copiers, scanners, other electronic equipment, and in areas marked "No Drinks Allowed." Uncovered beverage containers are not permitted on all floors of the William T. Young Library. However, items such as coffee cups with lids, sport bottles or soda bottles allowed to bring into the library in some extent. Besides, library patrons need to clean themselves up and handle empty containers and wrappers properly before they were left.<sup>11</sup> In general, dry snacks, fruit, and some food in containers may be allowed except somewhere like computer work stations, scanners or some other electronic devices' area, including the areas marked "No Food Allowed."

The library café in UK, known as the Willy T. Starbucks, is located on the ground floor of the Young Library building. Originally, this place was a small restaurant called Ovid's, then it was renovated and changed as a new coffee shop named Willy T. Starbucks. Besides, this Starbucks is quite different from other traditional Starbucks since it has enough equipment to provide the service to more customers at the same time, which shortens the wait time for users. Considering that the large space the Willy T. Starbucks has, it is large enough to offer programming events, group study activities, which giving its users a "third place" between the formal learning and informal learning activities.<sup>12</sup>

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[https://libraries.uky.edu/libpage.php?lweb\\_id=123&llib\\_id=14&ltab\\_id=194](https://libraries.uky.edu/libpage.php?lweb_id=123&llib_id=14&ltab_id=194)

<sup>11</sup> Food, Drink & Tobacco Policy in UT - Homepage. Available at:  
[http://libraries.uky.edu/libpage.php?lweb\\_id=122&llib\\_id=14](http://libraries.uky.edu/libpage.php?lweb_id=122&llib_id=14)

<sup>12</sup> An Inside Look at The New Starbucks in the Library of UK - Homepage. Available at:  
<https://www.theodysseyonline.com/inside-look-starbucks>

## *The University of Hong Kong*

The University of Hong Kong (HKU), is a public research university located in Pokfulam, Hong Kong. It was founded in 1911, and it is also the oldest tertiary education institution in Hong Kong. The HKU is organized into 10 academic faculties with English as the language of instruction. It exhibits strength in scholarly research and education of accounting & finance, biomedicine, dentistry, education, humanities, law, linguistics, political sciences, and social sciences.<sup>13</sup> HKU delivers impact through internationalization innovation and interdisciplinarity. It also attracts and nurtures global scholars through excellence in research, teaching and learning, and knowledge exchange. It aims to make a positive social contribution through global presence, regional significance and engagement with the rest of China.<sup>14</sup>

HKU Libraries was established in 1912, being the oldest academic library in Hong Kong with over 2.3 million current holdings. The HKU library system consists of the Main Library, Dental Library, Fung Ping Shan Library, Lui Che Woo Law Library, Music Library, Tin Ka Ping Education Library, and the Yu Chun Keung Medical Library. The Main Library comprises a well-rounded collection of materials in the arts, humanities, architecture, social sciences, and science and technology, giving vital support to teaching and research in the University. The Main Library occupies the Library Building which is composed of the Old and New Wings. The Old Wing was opened in 1961 and renovated in 1992/93. And the New Wing was opened in 1991.

The Main Library itself offers a variety of services to assist users with reference and research enquiries. These include general consultation, library orientations, database workshops, as well as printed and online research tools. Other important services

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<sup>13</sup> Faculty and Department of HKU - Homepage. Available at: <https://www.hku.hk/publications/faculty-department-unit.html>

<sup>14</sup> Vision & Mission of HKU - Homepage. Available at: <https://www.hku.hk/about/vision.html>

include the registration and borrowing service, requesting items, information services, collection development, technical support, and in-library copy/scanning etc. The basic services that the library provided among the three universities are including registration and borrowing, information services, in-library copy/scanning. The self-service collection in HKU was quite different than UT and UK. Located on the 2/F of the Main Library, this section houses course reserves and books on hold.

Except for the learning commons in the on the 3rd floor of the Main Library, there are some special areas for users such as the Collaboration Zone, Study Zone, Technology Zone. These are ideal places for group projects, and they also support reflective self-study. The Technology Zone, equipped with the computers and software applications, offers a one-stop shop place for students to search for scholarly information and produce their student assignments. The Enquiries Counter and Lending Services Counter at the 2/F Main Library Entrance and the Information Counter at Level 3 provide face-to-face support in the use of the facilities and in searching the myriad information resources subscribed by the Libraries or available on the Internet. Besides, there also have breakout zone offers a place for relaxation.<sup>15</sup>

As for the food policy in HKUL, in order to protect the Libraries' collections, furnishings and equipment, no food is permitted in the public areas, including study rooms and carrels, of the Libraries. But, water is permitted in the libraries. Furthermore, the Level 3 - Breakout Zone in the Main Library contains vending machines for those wishing to have some packaged snacks or beverages in library. But, these packaged snacks and beverages are forbidden to be taken out of the Breakout Zone. The food and drink policy is to ensure a clean study and work environment for library users, helping preserve and maintain collections and to maintain a pest-free building.<sup>16</sup>

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<sup>15</sup> Study Zone in the Library of HKU - Homepage. Available at: <https://lib.hku.hk/level3/zones.html>

<sup>16</sup> Food and Drink Policy of the Library of HKU - Homepage. Available at: [https://lib.hku.hk/general/food\\_and\\_drink.html](https://lib.hku.hk/general/food_and_drink.html)

Considering of the food and drink needs, the coffee shop in the first level of HKUL was established. As shown in the picture below, the Starbucks is located next to the Main Library on the first floor of the Old Wing building, which connected the two areas and provided a more open food and drink spaces for users. Seating capacity of it can be reached into 40 persons. Considering the fast-paced life in Hong Kong, the operation hours of it was also different than UT and UK, it will open to 10:00 p.m. in weekdays. The food service in there are focused on salads, sandwiches, baked goods, desserts, coffee, and so on. Due to the location of the library café in HKU, the atmosphere in there is more arbitrary and casual than other two library cafés mentioned above. The customer layer of the library café in HKU are not just for students and staff, but also the to the public and visitors.



*Figure 6. The Old Wing and The New Wing in The University of Hong Kong<sup>17</sup>*

## **Data comparison**

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<sup>17</sup> Learning Facilities of HKU Libraries - Homepage. Available at: <https://hkuspace-plk.hku.hk/about-us/campus-and-facilities>

<b>Table A.</b> <b>The comparative table of three academic library</b>			
	UTL	HKUL	UKL
Affiliated Libraries	5	7	9
Collections	<ul style="list-style-type: none"> <li>▪ 2,391,645 volumes</li> <li>▪ 22,625 Periodicals titles.<sup>18</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ 3 million volumes</li> <li>▪ 4.6 million e-books</li> <li>▪ 247,000 e-Journal subscriptions and titles.<sup>19</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ 4,023,142 volumes,</li> <li>▪ 588,428 e-books</li> <li>▪ over 400 commercial databases.<sup>20</sup></li> </ul>
Services	<ul style="list-style-type: none"> <li>▪ Registration/ Borrowing</li> <li>▪ Reference inquiries</li> <li>▪ Learning Commons</li> <li>▪ In-library copy/scanning</li> <li>▪ Interlibrary cooperation</li> <li>▪ Contents sheet service</li> <li>▪ Audio Visual Services</li> <li>▪ Seminar Room</li> <li>▪ Study Space</li> <li>▪ Disability Services<sup>18</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Registration/Borrowing</li> <li>▪ Self-Service Collection</li> <li>▪ Reference Services</li> <li>▪ Interlibrary Services</li> <li>▪ Self-Photocopying/ Printing</li> <li>▪ learning commons style facility</li> <li>▪ E-Learning Lab</li> <li>▪ Study Space</li> <li>▪ Library Corner<sup>21</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Academic Liaisons</li> <li>▪ AV Services</li> <li>▪ Borrowing</li> <li>▪ Course Reserves</li> <li>▪ Disability Services</li> <li>▪ Distance Learning</li> <li>▪ Information Literacy</li> <li>▪ Interlibrary Loan</li> <li>▪ Research Help &amp; Services</li> <li>▪ Class/Meeting Room Reservations</li> <li>▪ Study Space Reservations</li> <li>▪ Student Printing<sup>22</sup></li> </ul>
Homepage	<a href="https://www.tulips.tsukuba.ac.jp/lib/en">https://www.tulips.tsukuba.ac.jp/lib/en</a>	<a href="http://lib.hku.hk/">http://lib.hku.hk/</a>	<a href="http://libraries.uky.edu/">http://libraries.uky.edu/</a>
Library café	Next to the front door of Central Library (same building)	Next to the Main Library, the first floor of the Old Wing	Inside of the W. T. Young Library
Food policy	Refreshing zone on 2nd floor only	Breakout Zone only (The 3/F of Main Library)	Closable spouts bottles / coffee cups are allowed inside library expect electronic equipment area.

<sup>18</sup> Outline of the Library of UT - Homepage. Available at: <https://www.tulips.tsukuba.ac.jp/pub/outline/outline-english.html>

<sup>19</sup> Collections of the Library of HKU - Homepage. Available at: <http://lib.hku.hk/general/about/hku/index.html>

<sup>20</sup> Collections of the Library of UK - Homepage. Available at: [http://libraries.uky.edu/page.php?lweb\\_id=988](http://libraries.uky.edu/page.php?lweb_id=988)

<sup>21</sup> Service of the Library of HKU - Homepage. Available at: <https://lib.hku.hk/mainlib/facilities.html#InterlibraryServices>

Equipment	<ul style="list-style-type: none"> <li>▪ 71 rooms</li> <li>▪ 2,287 seats</li> <li>▪ Wireless network capability</li> </ul>	<ul style="list-style-type: none"> <li>▪ 118 seats in Main Library</li> <li>▪ Wireless Access</li> </ul>	<ul style="list-style-type: none"> <li>▪ 4,000 seats</li> <li>▪ 600 computer workstations</li> <li>▪ 3,600 network ports</li> <li>▪ Wireless network capability</li> </ul>
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As it shows in the Table A, the three universities library quite have some similarities in library services and library café. But, they also have a little bit difference among collections and quantities. As for the number of affiliated libraries, UT has five, HKU has seven, and UK has nine. In addition, in terms of collections, UK has much more resources than the other two university libraries both in the quantity of collections and facilities. The basic service of the three universities provided are quite similar, which are both including the registration, borrowing & lending, reference, inquiries, learning commons, and AV services, etc. The reference service in all the three university libraries are quite same, concentrating on general consultation, library orientations, database workshops, as well as printed and online research tools introducing.

Comparing the difference of service in each university provided, it can be simply listed as below. Firstly, the seminar room in UT was quite different than other two universities. Due to the requirement of weekly seminar presentations in each lab, the school provides rooms equipped with display devices in the campus even including the libraries in UT. Besides, the E-Learning Lab in HKU library should particular in providing a multi-purpose mini-theatre designed for library instruction, conferences and seminars. The room has a seating capacity of 46, and each seat is equipped with a high-end notebook computer connected to the Internet. As for the special service in UK, Distance Learning Library Services seems different than other normal service that the UT and HKU libraries provided. The University Libraries in UK and UT provide services and assistance that permit access to and use of library resources for people with disabilities, and it cooperate with the campus Disability Resource Center for the benefit of patrons with disabilities. Distance Learning Library Services means the Librarians assist students and faculty by offering research consultations or providing access to

information resource to use academic library research materials, via e-mail, chat, phone or in person.<sup>22</sup>

Speaking of the library café in the three universities, there is one common thing: the coffee shops are both inside the library or just close by the central library. The café in the library of UT is next to the front door of Central Library, and they share the same library building. The café in the library of HKU are next to the Main Library building, which called The New Wing. And the building that the café belonged is on the first floor of the Old Wing, which always played the library building role in the past days until the New Wing were built. The café in the library of UK is inside of the Young Library, which also on the first floor of the central library. But there are still difference in atmosphere, structure, decoration and style and so on.

Besides, the food policy that the three university libraries providing are quite different. But the university of UT and HKU were both set up some specific areas inside library for the users to meet their food or drink needs. Considering the difference of the food and drink policy that the three university libraries provided, it is obvious that the rules for food & drink do not have some specific areas. In contrast, the food policy in UT and HKU were even specific to a certain level of buildings or areas, which can be seen that the culture and inclusion towards it were quite different in Asia and United States.

## **Literature Review**

### ***Bans on food and drink***

As much of the literature on library cafés has pointed out before, traditionally, food and drink had been banned in libraries - even in the present day (Clement & Scott, 1994; Foster, 2008; Kawamoto & Tsuji, 2016; Lyons, 2000; Weaver-Meyers & Ramsey,

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<sup>22</sup> Service of the Library of UK - Homepage. Available at: <http://libraries.uky.edu/>

1990). Despite patrons' desire to eat and drink inside the library, librarians often defended such policies because of the potential issues with collections and preservation, as Woodward (2005) points out. Abba (2016), building on this discussion using examples from university library policies, notes that food can attract unwanted pests, warp library materials if food or drink is spilled, fingerprints from grease, and an increase in garbage bins. Although most of the literature on this deals with the North American context, Kawamoto & Tsuji (2016) note that preservation is the main reason for restricting refreshments in Japanese libraries, as food tends to attract pests, and this poses a threat to the collection. Increasing library use has therefore become a secondary concern amongst the Japanese librarians. Even in the present day, 43.8% of Japanese public libraries and 37.7% of academic libraries prohibit both food and drink (p. 43-44). With this in mind, librarians in the past have been highly concerned with preservation issues when evaluating food and drink policies.

At the same time, scholars have pointed out many of the issues with maintaining these policies. Davis & Boyer (1996) note that having such a restrictive policy could be a problem for staff, who would be forced to deal with potential conflicts with patrons as well as staff with the policymakers. Policy enforcers would be required to patrol the library and confiscate food and drink while other libraries instituted fines for violators of these policies. Pierce (1997) calls such policies "unrealistic, and perhaps even somewhat draconian," and often reduces the periods in which patrons use the libraries -- especially in rural areas with few places to eat around the library. As a result of this, librarians have been faced with various challenges in dealing with food and drink within the library.

### *Implementing the library café*

However, in the past few decades, there has been an increased call for a café space within the library building. The bookstore is often seen as being the model for library

spaces. Sannwald (1998) highlights the importance of the atmosphere of the bookstore, where customers can relax in a comfortable, appealing space as they enjoy a conversation over a cup of coffee. He also encourages librarians to visit bookstores to gain insight as to what attracts patrons. Woodward (2005), in her book exploring the bookstore model in public libraries, notes that the café strategy has been especially helpful in bringing in more customers, and increasing the length of stay within bookstores. Furthermore, implementation of cafes within the library can be an opportunity for collaboration between libraries and food service companies. Although the bookstore and the library are two different institutions, the bookstore is nevertheless an important model that librarians have looked to for influence in café services.

Many articles have highlighted the various benefits of having a café within the library, as well as the various strategies that libraries have taken to implement them. Gerding (2006), highlighting various public libraries in the United States, offers some tips on planning for a library café. For example, staff will ultimately have to deal with marketing, staffing, equipment, and especially funding. At the same time, as she notes, despite the challenges, cafes are often very popular and can bring in new library traffic (p. 45). Even more, as mentioned before, planning can be a collaborative endeavor. LaPointe (2006), in a case study at Moravian College, collaborated with a marketing class in creating a marketing plan for a new library café on-campus. The results of this implementation led to the creation of a thriving space that all patrons have been able to enjoy, and it also serves as a place for hosting events. Rockman (2001) mentioned that cyber cafés could be good opportunities by establishing a variety of partnerships for university library. Especially, partnerships like library café could improve the learning environment and enrich the cultural life of the campus. Diers & Simpson (2009), in a proposal for a new library café at the U.N.I. Reed Public Library, also realize the benefits of such a space in broadening their user base at the library. Furthermore, they note that a café could further enhance the library as a community

space with an aesthetically-appealing café for users. From these success stories, librarians can see the benefits from adding café services within their libraries.

### ***The library as a place—formal and informal learning spaces***

The literature on library spaces also points to the library as a place, as well as all the different types of spaces conducive to both formal and informal learning practices. Although the academic library is often seen as being solely a space for quiet, formal study and research, there is a trend in the literature for seeing the library as a social space where collaborative, informal learning can take place. Gayton (2008) notes this shift to social spaces being a result of three major factors: (1) the increase in use of electronic resources, (2) declining circulation of print materials, and (3) decreased library usage from student populations (p. 61). Libraries have responded to these trends by implementing informal learning spaces, such as learning/information commons to support collaborative learning. Cunningham & Walton (2016), in a study at Loughborough University, noted the wide variety of activities going on within its refurbished library spaces. Along with using the spaces for revision and assignments, they were also being used as a meeting space. Furthermore, student respondents in this survey appreciated the new learning spaces' large, open area. Bilandzic & Foth (2013), in interviews with users of a bookless library space at the Queensland University of Technology, noted the importance of spaces in the library being conducive to collaboration and low-intensive meeting spaces. Some of the student respondents explained instances where they felt that they were able to learn through social interaction with other users and through participation in Hackerspaces. From this, there is a sense that academic libraries are providing more social spaces for collaborative learning.

Finally, there is a discussion on the potential for the library café as being an important space for informal learning. Waxman, *et al.* (2007), looking at coffee shop

development at Florida State University, explored the important factors making the library café an ideal third place -- namely, appealing layouts, atmosphere, as well as customer service, etc. With these factors, the café can be an essential space for students to relax and socialize with each other. This notion was further supported by Hunter & Cox (2013). In their study of the University of Sheffield, the authors found that students felt that many of the informal learning spaces -- especially the library café -- to be relaxing places for them to focus on their assignments. Morell (2004) and Rockman (2001) both analyzed the feasibility of using the library café for marketing the university library and its services, but none of them mentioned the original values and the potential functions of the library café itself. There have also been a number of studies from Chinese-speaking countries concerning library cafés. Zheng (2009) and Peng (2013) have explored the functions of the library and café separately, but they did not examine the relationships between them. Besides, Yu (2010) mentioned that learning commons (LC) could be used as a new way for expanding the functions of a library café in the educational context. However, it was only considered the function of the learning space, and does not reveal other functions which library café may have. With this in mind, the café has a potential to contribute to students' student life by providing an environment conducive to both socializing, and learning. As there are relatively few studies on the roles of the library café specifically, this article seeks to fill in these gaps.

### ***Informal learning and Formal learning***

Dabbagha & Kitsantas (2012) deemed that personal Learning Environment is a potentially promising pedagogical approach for both integrating formal and informal learning. Formal learning is education normally delivered by trained teachers in a systematic intentional way within educational institutions like school, higher education or university, which is individual learning that acquisitioned by vertical or propositional knowledge (Malcolm, Hodkinson & Colley, 2003). The National Science Foundation

(NSF) utilized the term “informal learning” to describe learning activities happens outside formal school settings. Based on their special needs, interests and past experiences, informal learning takes place in people's lives in a highly personalized way. This multifaceted learning is voluntary and autonomous and often conducted in some social activities (Dierking & Falk, 2001). Considering that library café now plays a role as gathering and socialize hub, the educational functionality of library café gradually appears in recent years. To discuss the connection of the collaborative learning and informal learning occurs in library café is quite important.

### **Aims of the Study**

Students often select a space based on their own list of requirements and preferences, the space may not be in the way anticipated by the institution (Harrop & Turpin, 2013). For example, some spaces are often used by students for collaborative work, when they were originally designed for individual study purposes. With the increasing emphasis on collaborative and group work, students are often learning in small groups outside the classroom, that is using different types of space that foster and allow the group work and interactions between them in new ways. Based on the above observations, this study aims to explore what current and future roles the physical academic libraries play, when an increasing amount of learning-related activities (learning communications or collaborative learning) are being carried out in non-traditional settings (such as classrooms, laboratories, and libraries). We also investigate whether creating a more relaxing atmosphere, such as modeling a library’s interior design after a café is a right direction, in terms of attracting more young students to make better use of the facilities and services inside the library.

## Research Questions

- (1) What are the major roles and functions of the library café in the lives of university students?
- (2) How do cultural differences between Asian and North American students affect usage and perceptions of these spaces?
- (3) What are students' perceptions and attitudes towards the library café as a place compared to other spaces within the library?
- (4) What can librarians learn from the library café in bringing more users into the library?

Via this study, I aimed to develop a better understanding of the motivations amongst students with respect to the time, and place in which they learn (Lave and Wenger, 1991). Students often select a space based on their own list of requirements and preferences, the space may not be and the way anticipated by the institution (Harrop & Turpin, 2013). For example, some spaces are often used by students for collaborative work, when they were originally designed for individual study. Findings of this study would enable us to determine students amongst these three universities – their distinctive behaviors and preferences in relation to where, what, and how they use formal and informal learning spaces. Using the learning theory developed by Lippman (2010), “The environment shapes the learner, and that learners influence their environment” – via which I attempted to find answers to the ultimate question – what kinds of impacts or in what dimension the library café as a physical environment has on students' overall learning and their campus life as a whole. Furthermore, despite the ongoing popularity of such informal learning spaces, they must continue to be refreshed, and/or expanded, in order to ensure its continuous relevancy to the students. Unquestionably, results of this study would facilitate evidence-based decision making

in the future development of informal learning spaces at these three participating universities.

## **Methodology**

The participating universities for this study were The University of Hong Kong (HKU), The University of Kentucky (UK), and The University of Tsukuba (UT). These three universities were chosen for the pragmatic reason in the sense that they share a lot of similarities in terms of library café services, and their library-related faculties are all members of the iSchool. All three university library cafés are operated by Starbucks. For this reason, the range of services, interior settings, and business models of these three library cafés should be very similar to each other. In addition, I had affiliations and connections with each of the three institutions. This enabled a convenience sample, as the I was able to obtain the necessary permissions for data collection. Moreover, I had direct experience as library café patron at UT, and my familiarity with the university library, and other learning facilities enabled me to use my own reflections and experiences when analyzing the survey results.

The research methods we used for this study is a comparative study using quantitative methods. The questionnaire was chosen as the sole data collection method for the reason of reaching as many respondents as possible. The original questionnaire was created in Japanese (for UT), and it was then translated into English for the HKU and UK surveys respectively.

All three questionnaires were created by using an online Google Form survey, and were made available to the student respondents at all three universities (HKU, UK & UT) from August to October 2016, for a total period of three months. At UT and UK, all students passing through the university library, and the library café during the data

collection period were approached by me and my research partners in person to complete the online questionnaires on a voluntary basis, whereas for HKU, my research partner and I used social networking (Facebook) for spreading the survey. A total number of 314 responses were collected from all three universities (i.e., 106 responses from HKU, 100 from UK, and 108 from UT). See the Appendix for a summary of the list of questions. For details regarding the total number of questionnaire responses collected at each university, see Table 1.

### **Technical limitations**

A majority of the student respondents at HKU and UT were Library and Information Science (LIS) majors. Since LIS majors are trained to become future LIS service providers, they are expected to be more familiar with the ranges of resources and services made available at their university libraries, and know how to make the best out of the services and resources available. For this reason, LIS students' expectations or views towards the library café as an effective, or proper learning space might have some differences from the other non-LIS majors. Finally, a large number of the student respondents at HKU and UT were LIS majors – since they aspire to become future LIS professionals, their responses might have certain idealized views or preferences towards the university library as the most suitable learning place. Also, they are expected to be more knowledgeable about the services and facilities catered for learning at the library when compared with other non-LIS student respondents.

Furthermore, there are many different ways to measure patrons' perceptions, and attitudes towards a library's services and facilities. This study was based on the data collected from quantitative surveys distributed to students at all three universities. While quantitative studies of this kind might be useful in understanding users' perceptions and attitudes toward services on a larger scale, it may not provide insights

into the underlying meanings behind respondents' perceptions of these services. In addition, the total survey populations were rather small in comparison with the overall student populations at each respective school. As a result, the views of the respondents here may not be representative of the whole student population. Finally, though the three universities of this study (UT, HKU, and UK) are all members of iSchool, they were chosen because of the I had affiliation and connections with them, and, as such, may not represent the entirety of students' responses towards libraries and their cafés. Along with this, questionnaires were all distributed to those entering the library during the research period. As a result, the responses only came from those who already used the library, and may not be representative of all students on each campus, as those who did not come into the library, and the library café at that time were not included. Finally, with the more close-ended nature of the questions in the questionnaire, respondents may have been forced to give more simplistic responses to the overarching issues in this subject. In the end, the nature of these methods did not allow for a complete, in-depth analysis and understanding of students' perceptions of the library as a place, as well as the library café's role in contributing to collaborative learning, as qualitative interviews and focus groups would. Nevertheless, the results of this study would be of interest to both LIS professionals in understanding the roles of the library café in the lives of students, and its potential as a place for recreation and learning.

## **Data Analysis**

This questionnaire, ultimately, sought to look at students' preferences for formal and informal learning on-campus, as well as the student respondents' perceptions and attitudes towards the library café as a public space. Although the library is traditionally seen as a space of academic study and formal learning, it can also be a space for socialization and recreation. Furthermore, physical spaces within the

academic library can be used to facilitate collaborative learning and group discussions. With this in mind, this survey intended to examine both formal and informal learning on-campus, and further the library café's role in students' lives. The survey itself was divided into a number of sections starting with the general demographics of the respondents. The next sections looked at students' preferred spaces for formal and informal learning, recreation, and socialization, etc. The SPSS software was used for analyzing the survey data collected at all three universities (HKU, UK and UT). ANOVA with Fisher's Least Significant Difference (LSD) Post Hoc Test was used to test the data (i.e., ANOVA was used to test the difference among three universities, and LSD is used to multiple compare the difference between universities). Through the findings of this study, librarians can gain insights into students' preferred physical spaces in relations to their recreational and learning practices both within and outside of the library building, thereby further improve upon library services and facilities.

***Respondent profiles***

From this survey, there were a total of 314 student respondents at all levels of study, and each campus yielded 100 or more respondents. Most of the student respondents were under 30 years old (the average age of the respondents were unknown). In terms of the current level of study, it differed for each university. With reference to the UK group, more than half of the respondents were at the undergraduate level. Meanwhile, at HKU and UT, however, a majority of respondents were postgraduate students -- with UT having a vast majority at Master's level (62.04%). The results from UK group, on the other hand, had a majority of male students, while the results at HKU had a vast majority female respondents (see Table 1).

<b>Table 1. Profile of Survey Respondents.</b>			
	<b>HKU</b>	<b>UK</b>	<b>UT</b>
	Total (N = 106)	Total (N = 100)	Total (N = 108)

Gender:			
• Male	28 (26.42%)	59 (59%)	54 (50.0%)
• Female	78 (73.58%)	41 (41%)	54 (50.0%)
Age:			
• Under 30	91 (85.85%)	93 (93.0%)	104 (96.23%)
• 30-39	9 (8.49%)	5 (5.0%)	4 (3.7%)
• 40-49	6 (5.66%)	2 (2.0%)	0 (0.0%)
Education:			
• Bachelor's student	48 (45.28%)	53 (53.0%)	18 (16.67%)
• Master's student	56 (52.83%)	34 (34.0%)	67 (62.04%)
• PhD student	1 (0.94%)	12 (12%)	8 (7.41%)
• Others	1(0.94%)	1 (1.0%)	15(13.89%)

Table 2 shows that both UT and HKU groups had an exceedingly large number of students coming from the Department of Library and Information Science (LIS). Particularly for the HKU group, 83 (78.3%) of these respondents were LIS majors. Compared with the other two universities (HKU and UT), the respondents from the UK group had the most diversity in terms of field of study. In addition to the 20 (20%) LIS majors, the UK group had students from Humanities and Social Sciences, Life and Environmental Sciences, Business Sciences, Systems and Information Engineering, and so on (see Table 2).

Fields of Study (Majors)	HKU	UK	UT
	Total (N = 106)	Total (N = 100)	Total (N = 106)
• Life and Environmental Sciences	0 (0.0%)	9 (9.0%)	8 (7.55%)
• Informatics	7 (6.6%)	2 (2.0%)	6 (5.66%)
• Medicine and Medical Sciences	0 (0.0%)	7 (7.0%)	2 (1.87%)
• Health and Physical Education/Physical Culture	0 (0.0%)	4 (4.0%)	2(1.87%)
• Art and Design	0 (0.0%)	1 (1.0%)	5 (4.72%)
• Education	<b>12 (11.32%)</b>	3 (3.0%)	2 (1.87%)
• Humanities and Social Sciences	2 (1.87%)	<b>18 (18.0%)</b>	8 (7.55%)
• Business Sciences	0 (0.0%)	9 (9.0%)	0 (0.0%)
• Pure and Applied Sciences	1 (0.94%)	7 (7.0%)	8 (7.55%)
• Systems and Information Engineering	1 (0.94%)	8 (8.0%)	19 (17.92%)
• <b>Library, Information and Media Studies</b>	<b>83 (78.3%)</b>	<b>20 (20.0%)</b>	<b>39 (36.79%)</b>
• Computer Science	0 (0.0%)	2 (2.0%)	6 (5.66%)
• Foreign language and Business	0 (0.0%)	2 (2.0%)	1 (0.94%)
• Music	0 (0.0%)	1 (1.0%)	0 (0.0%)
• Animal Science	0 (0.0%)	1 (1.0%)	0 (0.0%)
• Law	0 (0.0%)	5 (5.0%)	0 (0.0%)
• Others	0 (0.0%)	1 (1.0%)	0 (0.0%)

### *Students' preferred spaces for formal learning*

On the questionnaire, student respondents were asked, “*When you need to study/prepare for tests/exams, where do you usually like to go?*” Not surprisingly, a majority (42.86%) of the respondents at HKU, and (63%) respondents at UK chose the university libraries as their preferred space for conducting their formal studying, that is including preparing for tests and examinations, etc. (see Table 3), while only very small numbers of students at all three universities indicated a preference for using the library cafés for the same purpose (see Table 3). With reference to the UT group, only 16 (15.24%) UT respondents preferred to use the university library for formal learning purposes. It is also interesting to note that by comparison, a much larger number (17.14%) of student respondents from the HKU group would choose the learning commons for formal learning. Meanwhile, most UT respondents (56.19%) chose other venues when preparing for tests and examinations. Unfortunately, the questionnaire did not ask the respondents to specify what these ‘other’ venues were (see Table 3).

	<b>HKU</b> (N = 105)	<b>UK</b> (N = 100)	<b>UT</b> (N = 105)
The Main Library or other branch libraries	<b>45 (42.86%)</b>	<b>63 (63%)</b>	<b>16 (15.24%)</b>
University Library Café	5 (4.76%)	4 (4%)	2 (1.9%)
Learning Commons inside the University Library	<b>18 (17.14%)</b>	8 (8%)	7 (6.7%)
Group discussion room inside the University Library	2 (1.9%)	5 (5%)	6 (5.714%)
No preference	17 (16.19%)	5 (5%)	15 (14.29%)
Others	18 (17.14%)	15 (15%)	<b>59 (56.19%)</b>

Doing assignments is seen as an integral part of any student’s formal learning. Questionnaire item number 7 asked the student respondents, “*When you want to do assignments, where do you usually like to go?*” A large number of the respondents at

both HKU and UK indicated a preference for the university libraries for this purpose. Unexpectedly, over half (56.7%) of the UT respondents once again selected other venues for doing their assignments. Meanwhile, 27 (25.47%) student respondents at HKU preferred using the learning commons (see Table 4). The learning commons at HKU provide a lot of IT and manpower supports, as well as different software for doing assignments of different types. Perhaps, this explains why a much higher number (25.47%) of the HKU students preferred the learning commons when doing their assignments.

<b>Table 4</b>			
<b>When you want to do assignments, where do you usually like to go?</b>			
	<b>HKU</b> (N = 106)	<b>UK</b> (N = 100)	<b>UT</b> (N = 104)
The Main Library or other branch libraries	<b>32 (30.19%)</b>	<b>57 (57%)</b>	14 (13.46%)
University Library Café	7 (6.6%)	4 (4%)	3 (2.86%)
Learning Commons inside the University Library	<b>27 (25.47%)</b>	8 (8%)	10 (9.6%)
Group discussion room inside the University Library	11 (10.38%)	6 (6%)	5 (35.71%)
No preference	13 (12.26%)	6 (6%)	13 (12.5%)
Others	16 (15.09%)	19 (19%)	<b>59 (56.7%)</b>

With reference to activities associated with collaborative learning, 67 (63.2%) HKU students preferred using the group discussion rooms in the library, followed by the main libraries, and then the learning commons, whereas for the UT group, 35 (33.98%) of them students indicated a preference for the discussion rooms. On the other hand, the library is the most preferred space for doing collaborative learning amongst the UK group (40%). Overall speaking, the library café in all three universities was not selected as a potential space for collaborative work (see Table 5).

<b>Table 5</b>			
<b>When you need to do collaborative learning/group discussions with other students for assignments or research, where do you usually like to go?</b>			
	<b>HKU</b> (N = 106)	<b>UK</b> (N = 100)	<b>UT</b> (N = 103)
The Main Library or other branch libraries	12 (11.32%)	<b>40 (40%)</b>	2 (1.9%)
University Library Café	9 (8.49%)	7 (7%)	11 (10.68%)
Learning Commons inside the University Library	11 (10.38%)	15 (15%)	20 (19.4%)
Group discussion room inside the University Library	<b>67 (63.2%)</b>	26 (26%)	<b>35 (33.98%)</b>

No preference	6 (5.67%)	8 (8%)	15 (14.56%)
Others	1 (0.94%)	4 (4%)	20 (19.4%)

The questionnaire also asked students about their preferred spaces when preparing PowerPoint presentations. The results indicated that a majority (32.8%) of the HKU respondents choose the group discussion room inside the library. Whereas for the UK group, most of the student respondents (36%) simply preferred using the library. Meanwhile, 44.55% of the UT student respondents would choose other venues for preparing their PowerPoint presentations. Unsurprisingly, only a very small percentage of students at all three universities would choose the library café for this purpose (see Tables 6).

	<b>HKU</b> (N = 106)	<b>UK</b> (N = 100)	<b>UT</b> (N = 101)
The Main Library or other branch libraries	19 (17.92%)	<b>36 (36%)</b>	9 (8.9%)
University Library Café	2 (1.89%)	3 (3%)	6 (5.94%)
Learning Commons inside the University Library	21 (19.8%)	14 (14%)	8 (7.92%)
Group discussion room inside the University Library	<b>34 (32.8%)</b>	13 (13%)	17 (16.83%)
No preference	16 (15.09%)	18 (18%)	16 (15.84%)
Others	14 (13.21%)	16 (16%)	<b>45 (44.55%)</b>

Engaging in scholarly reading is unquestionably as important part of any student's formal learning. Results of this study indicated that a much larger number of student respondents at both HKU and UK preferred going to university library for activities related to essay or scholarly reading. It is also interesting to note that a relatively large number of students at HKU preferred to do their scholarly reading at learning commons (inside the university library), which was simply not the case for both UK and UT groups. Unexpectedly, 56 (53.3%) of the UT student respondents indicated that they would rather go to other places for doing study-related reading (see Table 7). The reasons behind UT students prefer using other venues for formal learning activities will be further discussed in the next section.

	<b>HKU</b> (N = 106)	<b>UK</b> (N = 100)	<b>UT</b> (N = 105)
The Main Library or other branch libraries	<b>47 (44.76%)</b>	<b>56 (56%)</b>	17 (16.19%)
University Library Café	9 (8.57%)	4 (4%)	11 (10.48%)
Learning Commons inside the University Library	<b>17 (16.19%)</b>	5 (5%)	9 (8.57%)
Group discussion room inside the University Library	1 (0.95%)	1 (1%)	4 (3.8%)
No preference	19 (18.09%)	20 (20%)	8 (7.6%)
Others	13 (12.38%)	14 (14%)	<b>56 (53.3%)</b>

### *Students' preferred spaces for informal learning*

As for students' location of recreational reading (such as newspapers, magazines, novels, comic books, etc.), results of this study indicated that a majority (30.48%) of the HKU respondents preferred the library café as their choice of space, followed by the main library. On the other hand, most (40%) UK students indicated "No preference," while 37% stated "Others." On the contrary, most (37.14%) of the UT respondents indicated that their preferred other places when doing recreational reading (see Table 8), which once again went against my own original anticipation.

	<b>HKU</b> (N = 105)	<b>UK</b> (N = 100)	<b>UT</b> (N = 103)
The Main Library or other branch libraries	23 (21.9%)	15 (15%)	2 (1.9%)
University Library Café	<b>32 (30.48%)</b>	5 (5%)	26 (24.76%)
Learning Commons inside the University Library	14 (13.33%)	3 (3%)	5 (4.76%)
Group discussion room inside the University Library	0 (0.0%)	0 (0.0%)	2 (1.9%)
No preference	23 (21.9%)	<b>40 (40%)</b>	29 (28.16%)
Others	13 (12.38%)	<b>37 (37%)</b>	<b>39 (37.86%)</b>

### *Students' preference for recreational space*

The next set of questions, as shown in Tables 9 to 11, students were asked questions related to their recreational habits on campus, such as where they tend to use social networking or where they take a break. In terms of taking a break in between their

studies, the results favor library cafés more so than the library itself. The library café was their first choice for relaxation among the HKU and UT students. However, at UK, the students indicated “No preference,” and the library café was the second most popular answer selected.

<b>Table 9</b>			
<b>When you need to do relax or take a break between your studies, where do you usually like to go?</b>			
	<b>HKU</b> (N = 106)	<b>UK</b> (N = 100)	<b>UT</b> (N = 103)
The Main Library or other branch libraries	10 (9.43%)	19 (19%)	0 (0.0%)
University Library Café	<b>58 (54.7%)</b>	22 (22%)	<b>36 (34.95%)</b>
Learning Commons inside the University Library	5 (4.72%)	3 (3%)	9 (8.74%)
Group discussion room inside the University Library	2 (1.89%)	0 (0.0%)	6 (5.83%)
No preference	24 (23.3%)	<b>56 (56%)</b>	<b>35 (33.98%)</b>
Others	7 (6.6%)	0 (0.0%)	17 (16.5%)

<b>Table 10</b>			
<b>When you need to use the Internet for entertainment purposes (e.g., online games, watch TV drama or YouTube), where do you usually like to go?</b>			
	<b>HKU</b> (N = 106)	<b>UK</b> (N = 100)	<b>UT</b> (N = 102)
The Main Library or other branch libraries	9 (8.49%)	14 (14%)	1 (0.98%)
University Library Café	19 (17.9%)	8 (8%)	19 (18.63%)
Learning Commons inside the University Library	13 (12.26%)	4 (4%)	5 (4.92%)
Group discussion room inside the University Library	6 (5.66%)	1 (1%)	3 (2.94%)
No preference	<b>35 (33%)</b>	34 (34%)	29 (28.43%)
Others	24 (22.64%)	<b>39 (39%)</b>	<b>45 (44.18%)</b>

<b>Table 11</b>			
<b>When you want to meet/hangout with classmates or friends, where do you usually like to go?</b>			
	<b>HKU</b> (N = 105)	<b>UK</b> (N = 100)	<b>UT</b> (N = 105)
The Main Library or other branch libraries	9 (8.57%)	18 (18%)	2 (1.92%)
University Library Café	<b>35 (33.33%)</b>	<b>26 (26%)</b>	<b>32 (30.77%)</b>
Learning Commons inside the University Library	9 (8.57%)	5 (5%)	4 (3.85%)
Group discussion room inside the University Library	8 (7.62%)	1 (1%)	6 (5.78%)
No preference	<b>34 (32.38%)</b>	<b>39 (39%)</b>	<b>38 (36.54%)</b>
Others	10 (9.52%)	11 (11%)	22 (21.15%)

### *Students' preferred spaces for social networking and dating*

In terms of social networking, a majority (33.33%) of the HKU respondents expressed a preference for the library café. Meanwhile, despite a majority of respondents at UK (39%) and UT (36.54%) indicated “no preference,” a large number of students from these two universities said the library café would be their preferred venue for meeting their friends and classmates (see Table 11). When students were asked about their preferred venue for dating on campus, despite a majority of respondents at all three universities once again indicated “No preference,” the library café was very much the preferred venue (see Table 12).

	<b>HKU</b> (N = 105)	<b>UK</b> (N = 100)	<b>UT</b> (N = 105)
The Main Library or other branch libraries	4 (3.81%)	2 (2%)	1 (0.99%)
University Library Café	<b>20 (19.05%)</b>	<b>10 (10%)</b>	<b>22 (21.78%)</b>
Learning Commons inside the University Library	0 (0.0%)	1 (1%)	1 (0.99%)
Group discussion room inside the University Library	0 (0.0%)	0 (0.0%)	3 (2.97%)
No preference	<b>65 (61.9%)</b>	<b>87 (87%)</b>	<b>59 (58.4%)</b>
Others	3 (2.83%)	6 (6%)	15 (14.85%)

### *Students' overall attitudes towards the library café*

Students were also asked to rate the library café (with a 5-point Likert scale) as a physical place, and its role in potentially attracting more people to the library. Results of this study indicated that a majority of students at all three universities would feel ‘saddened,’ if their university library cafés were to be replaced by another information or learning commons. Furthermore, a majority of the respondents (particularly students at HKU and UT) stated that vending machines or coffee dispensers are no substitute for the actual café – that is the social aspects that come with the library café, particularly providing a place for students to linger, to be productive in their informal learning, to run classmates, to encounter familiar strangers, and at the same time, to feel anonymous. The university campus is made up of many different communities and of

groups. Very often, members such communities and subgroups go their separate ways, and do not connect with one another to appreciate the richness and diversity of our campus intellectual life with one another (Masters, Arneson and & Lutton, 1994) – in other words, the library café is as an active community center on campus that all come together. The longer time these students, the more they feel a part of the community.

Having said that, student respondents at all three universities did not see that café library has an important role to play in terms of attracting more users to come, or to encourage them to spend longer time inside the library (see Table 13). At the end of the questionnaire, students were asked to rate the overall setup and atmosphere of the library café, as well as its quality of services. In addition, students were asked whether the library café played an important role in their campus life, as well as whether it was important for them to drink and eat snacks during their study time. Students’ overall ratings indicated the notion that they were in general satisfied with the library cafés’ overall setup and services, but remained rather neutral in terms of viewing the library cafés’ contributions in their campus lives as students. Moreover, student respondents considered that it was ‘above-average’ important in terms of being above to drink and eat snacks while studying (see Tables 13).

<b>Table 13</b>				
<i>Note: 1 = total agree &amp; 5 = totally disagree</i>	HKU	UK	UT	Weighted average
Would you be happy to see the University Library Café being replaced by another Information Commons? (p<0.01)	3.61	4.02	3.35	3.66
Do you agree that vending machines could completely replace the University Library Café? (p>0.05)	4.07	4.18	3.83	4.03
Do you agree that the University Library Café has successfully attracted more people to come to use the Central Library in person? (p<0.01)	2.70	1.82	2.46	2.33

Would you agree that existing University Library Café has led to patrons spending more time in the Central Library? (p<0.01)	2.84	1.82	2.73	2.46
How would you rate the overall services, operations, setup and atmosphere of the University Library Café? (p<0.01)	2.54	2.14	2.22	2.33
Does the University Library Café play an important role in your student life? (p>0.01)	2.83	3.34	2.93	3.03
When you are studying for exams or doing assignments, being able to eat snacks and drink refreshments (tea, coffee, juice) - is it important to you? (p<0.01)	2.58	2.10	2.28	2.32

## Discussion

This study aimed to examine the multiple roles of library cafés, as well as to compare students' perceptions of various physical spaces and facilities on campus for both formal and informal learning practices. Nowadays, students of higher education have been described as preferring learning experiences that are collaborative, digital, virtually connected, experiential, immediate, social. They also have a tendency to consume information in multiple formats (multimodal), that is including text, audio, photographs and video. Since learning can occur any place and at any time, being constantly connected via a variety of mobile devices, students have no fear of interacting with people they have not met face-to-face. In addition, as mentioned earlier, they also appear to prefer learning-by-doing, rather than learning-by-listening, and often choose to study in groups, and because of the convenience brought by Internet connective, they expect instant gratification, and could easily become impatient in situations where they do not feel engaged (Lomas & Oblinger, 2006). Furthermore, given the current information landscape, the recent emphasis on collaborative learning, and with instant and immediate accessibility brought by mobile devices (e.g., smartphones, iPads and laptop computers, etc.), we originally anticipated that a much higher number of students at all three universities would be using other less formal

venues (e.g., library café) for both their formal and informal learning purposes, but the survey results went against our original hypothesis. According to my own understanding, students would like to choose different venues depends mostly on the learning contents or their learning habits / styles. Although many students in this study chose traditionally formal learning spaces such as the library or the learning / information commons, there is still an apparent trend of using the library café for these, as well as other informal learning purposes.

### ***Recreational and social roles of the library café***

The library café is located at the ground floor of each library at HKU, UK and UT, that is in the heart of the university's central campus area, thereby making it easily accessible to both students and staff throughout the year. At all three universities, the library café is either an integral part of the library building or situated adjacent to it. Because the library cafés in this study are all operated by Starbucks, the interior settings are generally bright and meant to serve as a vibrant and inviting physical spaces – with huge curvy sofas, modern tables and chairs, Wi-fi and outlets for electronic devices, etc. Besides, because of their geographical advantage (being located at heart of campus), findings of this survey indicate that a majority of the student respondents at all three universities preferred the library café as their social meeting / waiting place, particularly for UT and HKU (see Table 11). The library café is also a place where students and teaching staff would walk in, sit down and converse casually with each other in a lively, casual environment. As you can see, the three library cafés have the potential to offer a more social experience, yet provide an important space for a variety of people with different needs and interests. As explained by Orr (1973), it is also the goal of the library managers to encourage the users to spend longer time in the library via the library café, thereby facilitating them to spend more time to make maximum use of the library's services and facilities.

Especially when it comes to taking a break in between their studies, for example, 58 (54.7%) HKU student respondents and 36 (34.95%) UT student respondents chose the library café as their first choice for relaxing when they needed to take breaks between studies (see the Table 9). Considering that in libraries (regardless of public or academic) in most Asian countries, users are expected to stay absolutely quiet. Eating and drinking are absolutely out of the question. So when students are tired after long period of studying or reading, there is a real need to get out of the academic surroundings (such as the library building) and take a break in the coffee shop. However, the situation at UK was quite different than the others, as many of the students indicated no preference in terms of where to go for taking a break between studies (see Table 9).

Moreover, when the students were asked about the dating place they preferred, they generally showed “No preference” except with some minor preference to the university library. Considering that dating is a private event, and most of them did not want the place confined to the campus, the students might prefer going outside or other commemorative meaning place instead. Further research should be explored based on these results. In summary, the university library café provides the abundant functions about the recreational aspects, especially when it related to relaxation, and people can benefit from the library café. At the same time, however, many of the students preferred to stay at home when using social media, as it was a more private space.

### ***Informal learning spaces***

According to Acker (2005), “Informal spaces are the pathways, gathering spots, and points of dispersal amongst other formal learning spaces. Their job is to make the campus sticky,” to support chance encounters of value and social exchange... reduces the need to build more space... Every aspect of learning space that invites both community and students to linger, learn, and beyond the classroom core hours of 7:30

a.m. to 4:30 p.m. is positive use of space” (p. 6). Students these days are used to different entertainment environments. As pointed out by Lomas and Oblinger (2006), “Students will spend hundreds of hours in class. While they might not have much choice where they spend their class time... Once freed from the classroom, students gravitate to the spaces most appealing to them. Comfortable and customizable spaces quickly become candidates for frequent use between classes. The informal learning that take place outside class occurs in libraries, information commons, coffee shops, and any other locations where students can gather” (p. 5.3). Findings of this study clearly indicate that there are students at all three universities who would use the library café for doing recreational and social activities, such as relaxing place or meeting spot. Particularly, a higher number of students at HKU and UT would choose the library café for doing their recreational reading (see Table 8). But there still some of them preferred using the library café for collaborative learning, especially in UT. Interestingly, parallel findings are found in another study carried out by Hunter & Cox (2014), where students at the University of Sheffield also found values in using coffee bars as their informal learning spaces. As summarized and highlighted by Holeton (2004), popular and successful informal learning spaces include flexibility, comfortable and ergonomic seating, “noise zones,” food and drink, and pervasive technology. These characteristics can be found in Starbucks and Borders bookstores. Acker & Miller (2005) further validates our survey findings by highlighting that attractive informal learning spaces are often communal, furniture is comfortable, and lighting is good. Food and beverages are available and through “social magic,” numerous groups form, function, learn, laugh, and disband in short or extended periods of time (p. 6). In other words, the library café has the potential to enhance the level of social learning in the library. They give the students a place to gather, to meet and converse comfortably. In this context, libraries are maintaining the strong customary association between food and socially shaped activities (Bennett, 2003).

Although this study was based in Japan, I have spent extensive time studying as foreign

students at UT, and according to my firsthand experience and my own cross-cultural perspective, students from different cultures / nationalities tend to have different learning styles and preferences for social networking activities, and recreational interests, etc. Furthermore, the curricula exercised by these three universities (HKU, UK, and UT) are absolutely influential in terms of shaping the learning practices (both formal and informal) amongst these three student groups (Horie, 2002; Huang, 2006; McVeigh, 2002; Mock, Kawamura & Naganuma, 2016).

### ***Formal versus informal learning spaces on campus***

The traditional learning venues like library, learning commons, and group discussion rooms, as mentioned above, still have their specific advantages for formal learning. Traditionally, the library is always seen as the most suitable space for students to study, to work on written assignments, or create PowerPoint presentations or other projects, etc. For obvious reasons, most users prefer working in quiet and solitude, free from any noisy distractions. In addition, for the case of Hong Kong, a majority of the local students live with their families in very small and noisy apartments, often need to share the same bedrooms or even writing desks with their siblings. For this reason, the HKU Library is extremely, and crowded with students during the examination periods, as the peaceful and quiet (without any distractions) library environment allows them to fully concentrate on their reading and studying in solitude (Jamieson, 2007, Dabbagha & Kitsantas, 2012, Kolb & Kolb, 2005). In this context, academic libraries will continue to provide quiet learning and information discovery spaces, but might reduce the press on shelving, which should result in more free and flexible spaces to support active or collaborative styles of learning (Acker, 2005). At the same time, libraries, student residence halls, recreation centers and student unions might face increasing pressure to offer more informal and collaborative learning spaces – for the reason that students expect to do their work where they are, rather than traveling to a dedicated location (Acker, 2005).

### *Students' overall attitudes towards the library café*

When students were asked if the library café should be replaced by other formal learning facilities, a majority of respondents at all three universities expressed a high level of disagreement. Similarly, when students were asked if the library café could be replaced with vending machines, students also expressed similarly high level of disagreement. The reason of the disagreement can be attributed to the complex personal preferences on service and atmosphere, quality and range of food and drinks. It is expected that the investors should perform a detailed market demand investigation based on localized consumers' habits and personal preferences (Mesías, & Morales, 2014). Furthermore, there is an aspect of customer service within the library café itself, which vending machines cannot account for (Wakefield, 1999). For example, in addition to not having to leave the library building to get refreshments, being able to work or socialize in close proximity to friends or peers could create a sense of community, for co-support and for someone to take a break is equally important for the students. Besides, learning is a social process. As explained by Lomas and Oblinger (2006), interaction, collaboration, and engagement can be stimulated by placing people in proximity to each other. According to Harrop and Turpin (2013), some students would choose spaces where they knew their friends were likely to come -- meaning that the vending machines only equipped with the convenient supplying function cannot fully satisfied the specific environment needs from the users. Moreover, the vending machines could not replace the social element that come with the library café, although it could be regarded as a distraction at time. In that sense, popular informal learning spaces (such as the library café) contribute to enabling the students to see others, and feel as though they are part of a bigger community on university campus.

Café and food outlets are now common UK higher education libraries (West, 2005). According to Harrop & Turpin (2013), "Catering outlets were regularly observed being

used to learning, although some learners reported the absence of resources as a reason why they did not use them for learning more often (p. 73). In fact, the popularity, the multiple roles and multiple identities of the library café could be seen as a very positive feature amongst the university community, as this means that library café could be used flexibly for a wide range of learning activities. It is also important to note that learning spaces, regardless they are formal or informal, need to support interpersonal communication from a learning perspective, as well as a social one. For this reason, informal learning provision is also beginning to be extended through the use of catering outlets, thus presenting further opportunities for space utilization (Harrop & Turpin, 2013). Besides, a claim has been made that more learning takes place in informal learning space than in the formal class room (Brown & Lippincott, 2003, p.14-16), and they also claimed that “coffee bars should be considered as a place for social learning, especially in libraries,” which means that as one venue of informal learning space, library café can provide its own specific surrounding for students to do their self-directed learning activities. Moreover, Cunningham & Walton (2016) also point out that when informal learning actually takes place, even in this digital age, it needs to take place in an informal learning space.

Despite of its limitations, this study has identified, and compared the preferences for different venues amongst students from three different universities, in relations for their learning, social and recreational needs. For future studies, it would be interesting to see if students of particular academic disciplines (non-traditional academic subjects, e.g., art and design or music, etc.) would have stronger preference for the change of learning venue or if the formats of their assignments would dedicate their choice of venue for studying and doing assignments. Based on the limitations of the literature about library café, especially the comparative studies between East-West culture were insufficient, and the functional positioning around library café also unclear. In summary, via a comparative approach, this study has identified the preferences for different venues, in relations for their learning, social and recreational needs. The

library café as an informal learning space supports some learning preferences or forms of learning practices better than others. However, as mentioned earlier, with the convenience brought by Internet connectivity, library resources being available remotely at 24/7, and the versatility of mobile devices – not everything is so clearly defined. I originally anticipated that students would be actively using the library café for learning purposes. The results indicated the library is still very much for the first choice amongst a majority of students at all three universities, because of the physical environment that is conducive to learning as well as more convenient access to scholarly materials and the study spaces that allow students to carry out their learning in solitude with silence. Meanwhile, other students noted that the library café at their respective universities were too noisy and crowded, and thus, could not fully focus on their studies. In other words, silent or quiet spaces were a preference for many students when it came to formal learning.

Such a notion indicated that despite the notion that the library café does not contribute directly to students' formal learning practices, they do have an important role to play in terms of providing food and drinks, as well as serving as a physical space for socialization and recreation – that is highly valued amongst the university community – all these are important parts of a student's campus life as a whole. Using the learning theory developed by Lippman (2010), "The environment shapes the learner, and that learners influence their environment" to explain the library café's impact on the current learning environment and the life of students on campus – on one hand, the library café is a casual and lively communal physical space that is particularly appealing to students who are prefer collaborative-style group work – a form of learning that could be carried out via spontaneous conversations over a cup of coffee that is particularly favored by students who are into social learning, and not easily put off by noisy distractions.

On the other, the library café's moveable and comfortable furniture, the availability of food and drink, complemented with its close proximity to the library building and

information resources allow students to mediate between different forms of learning (both formal and informal), as well as social networking at varying levels. Given the recent emphasis on group work and collaborative style of learning on campus, together with the tech-savvy-minded students who are used to multi-tasking -- the library café's multiple functions, combined with its multiple identities enable students to create their own form of preferred learning spaces – a concept that other learning spaces across campus should consider in the future. According to Acker & Miller (2005) “Spaces that adapt to the changing needs of scholars will not only support learning, but build community. Coffee shops in high-traffic classroom building or libraries can do far more to encourage faculty-student interaction than an increase in office hours” (p. 8). In fact, Acker (2005) has noted that access to food, coffee, and comfortable seating has done much to support an active learning environment. O’Conner (2005) also found that being able to eat and drink contributes to making a space attractive to learners. Kawamoto & Tsuji (2016) also found that Japanese libraries that allowed food and drink within the building had significantly increased gate counts and higher usage of the library in general.

Even those who did not feel that the library café was especially important in their own student life still felt that the library café has other added values for the library. Despite having a large variety of venues built for different recreational and social networking purposes on campus, they are simply no substitute for the library café. Maintaining a balance between formal learning and recreation and socialization is especially important in students’ college lives. In summary, this study has offered a general understanding of students’ preferences and their use of space with regard to their learning practices, and certain learning behaviors, attitudes and preferences typically go hand in hand. In short, the library café has a unique role to play, and has special functions in providing a safe and open space for recreation, meetups, and socializing, as well as a place that would encourage students to exchange ideas and knowledge, fostering interdisciplinary and innovation, and so on.

The practical implications of this study are that the concept of both formal and informal learning at library café might not resonate on every university campus, however, it is apparent that library café has the potential to increase the use of library resources and facilities outside the library building for a variety of purposes. For many people, university libraries in general could appear to be impersonal places, and large academic libraries in particular can be intimidating to students. A well-designed library café could on the other hand give students a totally different image of their library. As an inviting and welcoming place that is adjacent to the library building – it does not only change many students’ stereotypical image of the library, but could also attract more of them to use the library for an entirely different reason than they normally have. For example, the library café could be the active community center in which intellectual synergy and personal growth that from the interpersonal interactions among scholars and together fellow students to take place. As pointed out by Masters, Arneson and & Lutton (1994), library managers might need to balance technological innovations that foster individual research with the connections of scholars and students to one another through social gatherings and events. The library café could be the perfect venue for such intellectual simulating social gatherings and events to happen -- that is to serve as a “catalyst for the university’s intellectual life” (p. 389). The possibilities are simply endless.

## **Conclusion**

Well-designed spaces invite different forms and varying levels of learning activities. As highlighted by Pobiner (2010), “Space is of importance to all learning activities, but it is perhaps especially important for collaborative learning activities. A space, with its configuration, outfitting, and accessibility, can promote or hinder successful collaborative activities. It is important to know what kinds of activities are appropriate

to different kinds of spaces.” In recent years, we have witnessed a significant growth in the number of cafés or coffee-bar-type services being established amongst both public and academic libraries worldwide. It is apparent that university library cafés have the potential to offer a more social experience, yet providing an important space for a variety of people with different learning styles, recreational interests and social networking needs.

More importantly, library cafés provide an inviting, and yet comfortable environment for the users who need to relax in between their long period of studies. According to the US Department of Labor, Occupational Safety and Health Administration, students are spending so much time with computers that their health can be put at risk. The main recommendation from ergonomic science is to permit change – change in posture, change in eye focus distance, and opportunities to get up and move around. In this context, the library café enables positive change for health, brings new concerns, as well as opportunities. Findings of this study indicate that library cafés allow students to create their own physical spaces that are conducive to collaborative learning space – which is of particular interests and needs amongst the UT, HKU and UK student groups. Despite the limitations, findings of this study verify that even though the library cafés do not contribute directly to a majority of students’ formal learning practices, the student respondents from all three universities (HKU, UK and UT) and I strongly believe that they are important in terms of making students’ campus life more colorful, as well as more enjoyable – both socially and recreationally. Given the wireless network and mobile devices, such as laptops and smartphones, its close proximity to the library building, as well as being a convenient social gathering place, the library café has many potentials to serve as an informal learning space on campus. For such obvious reasons, library cafés should not be replaced by other facilities, as all different learning and recreational venues / facilities have their own roles to play, and they are all important parts of a student’s campus life as a whole. Students are changing, and technologies are changing their social and campus life, as well as their learning

practices. Students will use the different spaces on campus that best suit their learning, recreational and social needs, etc. It is hoped that findings of this study could provide further insights and strategies for designing different and more inviting forms of informal learning spaces on campus, in order to respond to the new generations of learners, as well as new discoveries of how university students learn, socialize, relax and recreate together. With this understanding, librarians, and campus facility managers make themselves to become more student-centered – thereby giving themselves an advantage in attracting and educating students in the digital age.

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## **Appendix.**

### **A Summary of Questions Used for Questionnaire Survey**

1. Age
2. Gender
3. Country of origin
4. Level of study?
5. What is your field of study?
6. When you need to study/prepare for tests/exams, where do you usually like to go?
7. When you want to do assignments, where do you usually like to go?
8. When you need to read essays or other scholarly literature, where do you usually like to go?
9. When you want to do recreational reading (e.g., newspapers/magazines/novels/comic books, etc.), where do you usually like to go?
10. When you need to do collaborative learning/group discussions with other students for assignments or research, where do you usually like to go?
11. When you need to prepare a PowerPoint presentation for a seminar, where do you usually like to go?
12. When you need to do relax or take a break between your studies, where do you usually like to go?
13. When you need to use the Internet for entertainment purposes (e.g., online games, watch TV drama or YouTube), where do you usually like to go?
14. When you need to use online social networking tools (Facebook, Apps, LINE, Twitter), where do you usually like to go?
15. When you want to meet/hangout with classmates or friends, where do you usually like to go?
16. When you want to wait for someone near central campus, where do you usually

go?

17. When you want to go out on a date with your girlfriend/boyfriend, where do you usually like to go?
18. Every time when you go to use the University Central Library, do you also go to the Library Café (Starbucks)?
19. Would you be happy to see the University Library Café being replaced by another Information Commons? *(5-point Likert scale)*
20. Do you agree that vending machines could completely replace the University Library Café? *(5-point Likert scale)*
21. Do you agree that the University Library Café has successfully attracted more people to come to use the Central Library in person? *(5-point Likert scale)*
22. Would you agree that existing University Library Café has led to patrons spending more time in the Central Library? *(5-point Likert scale)*
23. What do you think of the atmosphere in the University Library Café?
24. What do you think are the aspects of the University Library Café that need improvement?
25. How would you rate the overall services, operations, setup and atmosphere of the University Library Café?
26. Does the University Library Café play an important role in your student life? *(5-point Likert scale)*
27. When you are studying for exams or doing assignments, being able to eat snacks and drink refreshments (tea, coffee, juice) - is it important to you? *(5-point Likert scale)*
28. Do you have any comments on this survey? Or do you have any other thoughts or comments which you would like to share about the University Library Café?