

# Recent Development on Library Space and the Satisfaction of Academic Library Users Need

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## ABSTRACT

This paper aims to discuss on the previous and current study of the library space in the academic library. To make sure the reader fully understand about the topic, information regarding the academic library and library space are been discussed in details. Furthermore, in this article information regarding the history of library space also are been available for the users to get some knowledge on the development of library space in the academic library. Besides that, there is a section where the reader can know about what are the factors that contribute to the need of library space in the academic library. Knowing about the factors which is the reducing number of gate count and circulation activities the academic library have shift and change the traditional function of library that storing material to the need of providing various space in supporting the process of effective learning and teaching environment. Having the various spaces by fully understanding the need of user will attract the user's attention in the use of library. Additional information regarding the importance of library space in academic library also have been stated in order to make reader especially the librarian become aware on the effective library design by knowing the space that are required to be available in the library. If the library have consider all the need of their users this indirectly can tackle the issues that been arise in the academic libraries.

**Keywords:** academic library, library space, user satisfactions, user needs

## 1.0 INTRODUCTION

Library or information center are one of the place that are really importance to the nation or society as they provide valuable information of the great thinker which has been documented. Focusing to the academic library basically this library store information which is connected to the academic institution in providing the material that can support the teaching and learning activities. The existence of academic library really help the member of the institution stay alive with the past and current information as for supporting material in solving many issues or problems. Function of the academic library is providing reading material that is suitable with the courses offer by the institution (Seung & Tae, 2015). Other than that, academic library act as information provider which the user can search and retrieved the material that they want in order to fulfill their task or works (Gayton, 2008). The academic library also are been known as importance place for the student to meet each other in doing their tasks, as well as a place in

giving the student the opportunity in demonstrate their involvement towards the institutional objective (Haddow, 2013).

Although the academic library been recognized as a good and importance place to the academic institution but in recent the academic library have face the problem where users tend to shift their ways in retrieving information needed. These indirectly give big impact to the academic library where many of previous study show the decline number of gate count and circulation activities. The authors stated that nowadays library resources are not been fully utilized by the members and it bring the result on decline number of circulation in the use of printed material that are available inside the library building (Gayton, 2008; Montgomery, 2014; Seung & Tae, 2015). Apart from that, the ever growing of technology make the function of library are not been the number one preference of user in searching and retrieving the information that they wanted. In the last 20 years the users have change the ways of retrieving information from the printed material to the use of online resources which this give bad impact to the academic library performance (Ojennus & Watts, 2015). As the result it can be seen that from time to time the users are no longer want to use the printed material as their reference in doing and completing any tasks. Many of the users are more focusing to get information in the web rather than looking the material at library. As been mention before rapid development of technology makes the academic library reduce their valuable function as information provider to the institution. Most of the students are really use the technology in searching the information that they need. This been agree by the previous author the member of faculty more focus on using the electronic resources as the medium for them in getting or gather information for completing the task (Gayton, 2008). Further discussion been point out that the ever growing of technology has shifted the role on traditional academic library function where the student nowadays are not fully utilize the existence of academic library (Young & Schottenfeld, 2014).

The decline number of gate count and circulation activities can be seen from the aspect of minimum and crowded space that available inside the library building. The ever growing of printed material to be store inside the library has minimized the space for the student to do their individual or group work inside the library. These indirectly make the student tend to find another place in doing their works. If the academic library are not thinking about the space and just storing the books this will effect on the academic library existence which it can contribute to the death of academic library usage (Gayton, 2008). There is the issue regarding on the crowded and inappropriate management of space for the student to make any works inside the library which this give difficulties for student to find suitable space (Seung & Tea, 2015). From the authors perspective this can be said that the decline number of gate count and circulation activity can be seen trough the aspect of space available inside the library which make the user are prefer to not come to the library in using the facilities or services available.

Concern to the issues been discuss many of academic library have play some initiative on redesign the library space in order to reflect the need of the user and give satisfaction toward the service and facilities. The traditional function of academic library that more focus on the availability and storing printed material without concerning on the space and the way users searching information are been changes to the area on providing the various space that are supported with suitable equipment for the member of institution in doing their work inside the library. Previous author have stated that in the last 10 years a drastic changes been made by the academic library on the library space planning (Webb, Schaller & Hunley, 2008). The changes of academic library space are to support the library activities and the institution itself (Turner, Welch & Reynolds, 2013). Many of the academic libraries nowadays are towards

improving the design and layout of the library in order to tackle the issues on the number of gate count and circulation activities.

Focusing to the different space which can support the various need of the user are become the main priority for the changes (Seung & Tae, 2015). In fact with the availability of various spaces can make the student engage to each other in sharing their opinion and information which this can lead to effective information transfers instead of using the printed material in gathering the information that are been required (Fatt & Su, 2016). To discuss further about the library space the previous research have been review in order to know in deep the information regarding this changes towards the academic library. Focusing to the scope of academic library space several of databases have been review such as Elsevier, Emerald Insight and Sage. Most of the paper that been reviewed are more focusing to the area of library management, academic librarianship, new library world and librarianship and information science. The oldest paper that been reviewed is in the year 2005 (Houlihan, 2005) and for the latest paper it been publish in the year 2016 (Fatt & Su, 2016). In the conclusion the discussion about the academic library space are depend on the past literature that has been reviewed. The discussion on the academic library space has been structure into the history of academic library space, factor that contribute to the development of academic library space, need of library design for the physical space and the importance of library space. The remainder of this paper is organized as follows. Section 2 is literature review. Section 3 discusses on the analysis of review. The final section contains some concluding remarks.

## **2.0 LITERATURE REVIEW**

### **2.1 History of academic library space**

Information common take a first intention in the academic library within the year of 1990. This information common have been the first attention to the academic library with the existence of the World Wide Web and influence of information technology that indirectly change lots of people ways to access information that are been required (Heitsch & Holley, 2011; Sullivan, 2010). The ever growing of technology gives big impact on the replacement of printed resources or materials. In the early day of IT development many of the libraries have belief that digital information available can give changes on the user use of printed materials that been store in library building (Demas (2005 cited in Turner, Welch & Reynolds, 2013, pg.2). Respond to the issues many of professional have play their role on focusing to the library space initiative which can engage to the need of user in getting, delivering or sharing information in the library that indirectly give satisfaction to the entire academic users. The discussion on the beginning of library space movement has been point out in order to respond to the issues (Bonnanda & Donahuea, 2010). As been understood, information common is focus on the physical space of the library (Smith, 2011). This means that to bring the library resources or reference material by the use of IT service.

Knowing that the academic library are engage to the activities of teaching and learning the availability of required space inside the library can produced good statistic on the user use the library. The availability of space that available in the library can effectively support the academic institution activities which they have the required place for them to make the teaching and learning process or even the study activities among student (Turner, Welch & Reynolds, 2013). Concern to the space and understanding of information common it can contribute to the

development of information and the use of IT equipment. The previous author have suggested that the development of library space will involve on the changes of the ways IT staff and librarians engage to each other in developing and providing the better service to the entire academic library users (Bennett, 2009). This can be seen from the aspect of providing appropriate space that are been supported by the technology like computer or internet for the user to search material inside the library.

The topic of the learning common becomes more famous to be discussed in the literature of Library and Information Science (LIS) in the early 2000s. Reason for this topic become interesting to be discussed is because the learning common has clearly give input on the direction of academic libraries which make the academic institution to shift their style of teaching and learning to the culture of learning (Turner, Welch & Reynolds, 2013). Besides that, in the year 2003 Bennett has proposed learning commons model that give direction to the academic library on the new approach of teaching and learning activities (Bennett, 2003). This new approach really change the way of teaching and learning activities at the academic institution where it influence the activities of self-discovery of learning. It takes place when the individual participate with the other member in the social learning activities which involve sharing idea, skills or information of other person to another. Having a space like discussion room inside the library can make the process of sharing information or idea would be done in such a meaningful ways.

Towards the details history of academic library space it can be said that the required and suitable space should be design effectively by knowing the need of the user to each activities that they engage too. This is because if the required space is available in the library indirectly the users will come to use the service and facilities available which this indirectly can increase back the use or library resources and make the library become a place for sharing information among the group members. Furthermore, having the suitable space also can connect people to each other in sharing idea for decision making and it will shape a good community.

## **2.2 Factor that contribute to the development of effective library space**

Looking to the above history academic library been consider as importance place for the member of academic institution in getting or acquired library resources for supporting the teaching and learning activities. The academic library is a building block that store and manage the information resources that meet the student, faculty and also the staff of academic institution itself (Reitz, 2006). Basically, the collection of academic library is more focus on the courses offer by the faculty or institution this is because to support the material regarding the subject offers which can help the student and lecturer getting required material for the reference purpose or completing their task. So, this can be clearly say that without having the meaningful library in the campus can make the users failed to get priceless information that been documented to be refer.

The presence of history about the concerns on the construction of academic library building have shown that this library really needed for the academic institution. In the previous study, author have indicate that between 2003 until 2009 new academic library building have been fully developed in the United States and Puerto Rico (Stewart, 2011). The concern on the academic library design are been priority in improving the need of academic institution. Most of the academic library during that time trying to get funding in improving the design of library. The ever growing of the printed material make the library need to store all information that been

required inside the library in order to provide reference material to the entire users. From this aspect it can clearly see that academic library being the importance role in the higher institution because the basic task that the library do is acquiring, storing and preserving the valuable information to the academic member in getting the information regarding the subject that they learn.

Even though academic library been really give big impact on the sources of information for the academic institution but in recent this library have shown the decrease number of usage. Nowadays the use of academic library as a place for searching information become weaker among the users although the library give the opportunity to the user in checking the availability of resources and searching the database to find reference materials (Gayton, 2008). In previous study show that about 33% decline number of library usage (Stewart, 2011). Knowing that in the era of 21<sup>st</sup> century the fast development of technology in retrieving the information make the existence of library are not fully been used by it users. The rapid improvement and development of information technology for example the use of internet make the student shift the way they searching and acquiring information resources in supporting their task this indirectly make the student become not interested to go to the library in gathering the information that been stored and also to use the service or facilities offer by the library (Saori, Atsushi & Chieko, 2011).

Confirm by previous study the issues on the obsolete function and role of traditional academic library when the development of advance technology (Young & Schottenfeld, 2014). The present of technology also give bad impact to the academic library which the libraries are facing the problem on decline number of usage and circulation activity that involved the process of borrowing and returning of the books. The arrival of electronic resources like books and journals article which can be easily access by the users have make the statistic of library circulation activity become decreases (Montgomery, 2014). The users can simply access the content of information that they want without going to the library for searching information in the printed format.

By having this problem the library have face the crisis on the circulation activities statistic. Study has shown that about 13% of decline number for the circulation activities between the year 1994 and 2004 (Gayton, 2008). Besides that, the decline number of reference transaction also have been stated which about 32% between the year 1994 and 2004. These statistics really reveal that users nowadays change the ways of retrieving information as the use of internet access can simplify and faster the process of acquiring the information resources. Having the internet access in searching information at the web make the users become lazy to go to the library for searching the printed material in getting information. Confirm by the previous author the readily information which available in the web truly effect on the student ways of searching and retrieving the information (Houlihan, 2005). Also been mention that the information like fact, idea and theories which before this can only be find in the printed material that are available in the library can now been fully access by the use of internet in just minimum time. In addition, fast growth of technology would also affect the user to fully utilize the library as they can search any information in the web in order to support their activities or work that need to be completed. Also been prove that nowadays academic library would not be use by the user in searching information this is because student are more prefer to use the ever growing of technology (Gayton, 2008).

There is another problem that been face by the library which the number of gate count also show the decline. As been stated before this the increasing usage of electronic material brings

the impact on the gate count statistic. Previous study have shown that the inconsistency of statistic on the number of gate count has been stated which in the year 1996 and 1998 institution that offer bachelor degree shows the decline number of gate count and it been increase back on the year 2000 and 2004 (Gayton, 2008). The overall gate count in between the year 1994 and 1998 is about 9.2%. Focusing to the institution which offers master's degree about 5.4% overall number of gate counts in the year 1994 to 2004. Besides that, institutions that focus on the doctorate show the decline number in the year 1996 and 1998. Then the increasing number of gate count been shown about 9.8% from overall 1994 to 2004. There is other author indicate that the decline number of gate count is because the users nowadays more focusing to use electronic information in retrieving the material rather than visit the library and use the printed resources as the medium to find information needed (Montgomery, 2014).

The other factor that direct to the decline number of gate count and circulation activities which the issues on the appearance of the academic library building itself. The gloomy and dull appearance of the library building make the user not satisfied with the design of library and this indirectly will contribute to failure in attracting the user's attention on the library (Houlihan, 2005). In addition, with the bad exterior and interior design of the library will lead to uncomfortable feel to the users in spending their time inside the library in order to perform the activity individually or by grouping. The ever growing of printed material inside the library building also can contribute to the reason why users not come to the library. This is because with the rapid growth of printed material the library needs to expand the space in having the shelf for storing the material.

Although, previously the academic library have plan the design of library space but the issues on rapid growth of printed material are not fully consider when planning the space which this indirectly make the space inside the library become crowded. Prove by the previous author that academic libraries are facing the problem on minimum and poorly management of space that make the library become crowded (Seung and Tae, 2015). Also be confirm by other author traditionally academic library have a little physical space which give the problem for the user to fully utilized the space in doing their works or activities. If the problem on crowded space being happens the user will tend to find another place in doing their work without coming to the library (Freeman, 2005 cited in Turner, Welch & Reynolds, 2013, pg.7). Even though, the user can get the space for doing the individual or group activities but it also can affect their work because they does not get comfortable space which can engage the different type of activities. The productivity of work that been produce by the individual or group become less because of the uncomfortable space that they engage to in making their activities (DeClercq & Cranz 2014). The main reason why the problem of minimum space occurs is because lack of knowledge on the academic users need and want for required space which this indirectly cost several issues on the wasted energy, maintenance cost and construction (Seung & Tae, 2015).

Therefore, from the factor that have been discussed above the academic library need to play their role in doing some initiative about the changes of library construction by focusing the required space that the users want. Knowing the type of space that been required this can tackle the issues or problem that been occurred. Basically, in the era of 21<sup>st</sup> century the academic library should plan an effective space in providing the different need of users to engage with the various activities whether individual or group works (Gayton, 2008; Bennett, 2007). A quality space which supported with the facilities and equipment will give satisfaction and attract the users to fully utilize the academic library existence. A great design of library

supported with the existence of various space can contributed to the increase number of users come to library and solve the problem on the gate count statistic (Seung & Tae, 2015).

### **2.3 Need of library design for the physical space**

Outstanding technology or electronic resources have made the traditional function of academic library which retrieving, storing and preserving the printed material become not importance. Function of academic library become obsolete due to advance technology that is growth from time to time which produced the online information resources that can be easily retrieved by the users (Young & Schottenfeld, 2014). Furthermore, minimum space in the library has also affected the use of library among users which make the decline number of gate count, circulation and reference activities. So, in order to tackle the issues redesign the library by considering the type of space and equipped with useful facilities that are needed by the users can grab back their attention in using the academic library. Redesign or renovation of library building require consideration and understanding on the need of the users in order to provide satisfaction towards what the users want (Fatt & Su, 2016). This is because academic library really been consider the heart of academic institution which this building store and provide valuable information of great thinker for the past and present in order to be use as reference material that support teaching and learning activities. Indicate by previous author that academic library building are often been known as the campus life (Stewart, 2011). Not only that, the existence of library in academic institution is truly importance because the users basically will use the library to perform the activities like sharing idea, skills and information to each other. For that reason, making changes in redesign or renovation of library on the interior or exterior design can attract back the user's attention on the existence of the library. These can be confirmed that library is most places that the users want to come if the looks of library meet the need of the users (Mitchell, 2004 cited in Houlihan, 2005, pg. 9).

Over the last 20 years the changes ways of academic library users use library have affect on the library design which the requirement are more towards providing the suitable space for them in performing the individual or groups activities (Ojennus & Watts, 2015). The research result show about 76% of users visit the library weekly to make their group or individual work and use the facilities available inside the library. So, it is necessary that the library provide suitable space for the users not only to do their work but engaged to the learning and teaching activities. The successful library space is depending on the stability of required space and type of space that can connect to the teaching and learning activities (Fatt & Su, 2016). As been understand library space been define as the space that will be provided to the user in doing the specific work according to the activities that the users attached. In a past few decades many of the researchers are really concern towards the value of library physical space which it been consider as "library as place" (Applegate, 2009).

Significant to the traditional library that on the past just concern on the development of printed material which making problem in term of space in the future, this indirectly make the academic library realized on the issues that been arrive which make the existence of library are not been fully utilize by its users. Towards making the library as welcoming place to be visit redesign the various library space which have been mention before can be the most effective initiative in fulfill the users demand for providing suitable and comfortable space for the users to meet each other in delivering the information or idea. It have been reveal that academic libraries been the place that provide connection to the institution on the development of information resources which

give value to the users in having the required space (Seung & Tae, 2015). Besides that, the availability of various space are needed because it not only to be use and support for the library activities of the academic institution but it also can be use by the stakeholder in making the academic activities (Turner, Welch & Reynolds, 2013).

As from that the rapid demand of the space are really been required because the availability of space been use to support the teaching or learning activities by the users in the academic institution. Knowing the need of the users on the type of space can produce the users satisfaction and indirectly tackle the problem that been arise. Better understanding on the renovation of academic library can produce best output in meet the need of users (Fatt & Su, 2016). Furthermore, by knowing the need of required space also helped the libraries clearly determine what the consideration that the users want in each of the space that will be available.

Focusing on the mission to providing the better quality service that are concern with technology equipment must be the first target of academic library. Demand on the latest technology is always increased and academic library should be a place where all of the requirement are been fulfill and after that can construct the shifting for the library to be the housing of resources for good quality knowledge that user can use to finish their daily task. It also be found out that, each user that use the library will mostly use the academic library that have been improved their technology equipment like computer from time to time and it is not surprised to let out the impression that 45.5% user surely are effected with that (Ramsden, 2011). In previous finding research libraries must actively find more idea on how to create a proper space that can lead lot of activities in one time such as learning, teaching and sharing for more knowledge discovery (Stewart, 2010). Effective space in library also not only can give benefit to the user if it be design properly but it also can make the work of academic libraries staff become more lot easier (Houlihan, 2005). Then, the academic library staff must also remember that various spaces provided actually will smooth up their work while it can let the user get done many activities. With the natural balance towards the space, user of the academic libraries will fully utilized the resources in the library and at the same time can show the existence of the academic library to more potential user. It also be known for long time ago that user at the academic library mostly will come to library to find sources for their task so by take a important count on redesign the library on term of library space can be seen as one of the greatest way to meet user need and can help them burst for full satisfaction. The diversity of space must be planned properly because the user that comes to library is actually in small or big group (Webb, Schaller & Hunley, 2008). Thus, it is good the library be design on different space as to provide different environment to different type of user (Bryant, Matthews & Walton, 2009).

There is quite of reason why library spaces have been required to provide the individual or group section so that they can do their desire activities. The previous finding have confirmed that learning and teaching activities can be more interactive if the academic library have more supportive spaces in the library for different type of user or group (Hunter& Cox, 2013). Effective space also can bring more meaningful success because it maybe can be one of the factors where the university education performance can be increase in the result. Other than that, there is also statement that describe on availability of space for many activities in the library can portray the good image of learning philosophy for some higher learning institution and give highlight to the library to become one of the important division that need to be give serious attention by the administration's (Smorville & Harlan, 2008 cited in Turner, Welch & Reynolds, 2013, pg.6). One of the other biggest reasons is increasing demand of user so that library always becoming a good place for learning activities while give extra added value such as be a



shelter on finishing their assignment. The easiest example that can be seen is from the examination week. Library will be the top place where the student will spend their time to do the revision and study alone or in the group. From the situation it easily can be show that lot of useful space in the library actually are decorating a good value to each student themselves while the library is the platform where the student can release their full potential for their task.

## **2.4 Importance of library space**

Library nowadays that rapidly improving their services and facilities for making the library spaces really been appreciated by their academic users is one of the biggest reason why it must be done. On the previous author finding that has been made, library that gives good impression on the useful space around the library can perfectly fit more than 55.5% users to stay more than 3 hour for their activity time in the library (Seung & Tae, 2015). This indicates why library space is must be get done in right way according to user needs. In broader explanation the library especially academic libraries must bring the responsibilities to carefully design and create the library to be a good physical space that can give more inspiration of resources for the entire user. It will be lot of waste for the printed or non printed material if not be placed on the right space because it will be use minimally by the user and directly will cause make a loss in term of the budget to buy all that resources. For this big reason the academic libraries must make fast action to shift all of the function of spaces to operate more effectively while at the same time can let all the user freely discover all the resources without limit and as for example they can enter it using a better network.

In order to make the user become actively can perform their task more faster and efficiently is by adding the amount of volume of shelf itself in storing and showing all resources that available inside the library (Montgomery, 2013). With a bigger vision to do that way the library can focusing on added lot of material that can give added value to the user while at the same time make use the space in the library fully functional. The library also must always aware with the presence of the recent technology that can make the academic libraries can having their full momentum on providing their services back. Part of the initiatives is by providing technology that can make user on using the circulation system in the library while make the user interest to use any technology that been provided specially for them. Strong Wi-Fi connection is the easiest way to attract user which previous study show about 70% percent respondent also agrees with the statement earlier (Ojennus & Watts, 2015). It also been supported by the research that has been conducted by Ramsden (2011), that 74.8 user will likely visit the library if the internet connection is stable and good at there.

Also been mentioned that once the user can trust to spend their time to conducting their assignment and try to use all the facilities provided at the academic library it is a good sign where the library are in the right way in building their spaces (Brayant, Matthew & Walton, 2009). To show it can be supported with the good research more than 78% of user in academic library are also attract with effective library space than the academic library that are not good to managed it in proper way to let the user spend their time (Onjennus & Watts, 2015). About 83.3% user will consider spending their time at the academic library if they can see the place is providing right space for them to doing their activities while it must be understand that different type of user specifically will also need different library spaces to satisfy all of the needs (Seung & Tae, 2015). This then also be proven that finding show academic library awareness on properly managing the physical space will produce more effective result on fulfill the user needs (Fatt & Su, 2016). Related to that finding, it gives a total description that the library that can

expose the suitable space and resources to their targeted user can lead the user to fully utilize the library. It have been prove that reflection of agility and adaptability can be shown when the excellent library design can be interperate back to the user in good way when they can use and adapt all the space in good manner (Beard & Dale, 2010).

Student learning activities space is the key for academic library to look up when they want to design their academic library. This is very importance because when the academic library can successfully use the various spaces that are be equipped with a lot of equipment for the learning and knowledge discovery, user will have interest to be there to do their activities. The good support on creating the good spaces while equipped it with recent technology like fast computer networking as purpose of learning can be most important need by the user (Saori, Atsushi & Chieko, 2011). Not only that, they also indicates that more than 80% libraries make the right choices to their user when they can provided technology as computer to fulfill their needs. What more importance is the various spaces that created by the academic library can give good advantages to the user as they can choose to do their work on individual or group work space in the library. With lot of choices like that, some academic libraries will be high favorites to be chosen as a place to conduct their activities. The varieties of space also been proven by user that it will be lot of helpful way to support their different type of learning activities (Fatt & Su, 2016). As related to this situation, it can be supported by enhanced the social interaction like can give more opportunities on sharing and exchanging knowledge to support the learning and this mostly can bring most of the user together to encourage them to explore, collaborate and discuss among them in order to get new information with the variety of idea form different people.

### **3.0 ANALYSIS OF REVIEW**

In contrast, consideration on the library space for the academic library is really needed. This is because having a balance space inside the library can make the user will fully used the library in doing the process or learning, teaching or knowledge discovery. Having the balance in the various type of space with the support by suitable equipment can make individual or group to perform their task in such a meaningful ways. In order to really know what the users want the librarian should play their roles in identifying the need of their library users by knowing all aspect of required space and equipment. Looking to the advance technology the academic library nowadays also need to have knowledge in creating the space with the latest technology equipment which indirectly can help the users in retrieving the needed information in the easiest ways and providing meaningful equipment or facilities that can give benefit to the users in performing their task or work. Furthermore, having suitable interior and exterior design can indirectly attract the user's attention on the use of space available inside the library. This is because from the previous study it have been indicate that the user are not attracted to come to the library because of the appearance of academic library that is dull and gloomy. So, if the initiative in improving the interior and exterior design will be been done this can attract the user's attention on the library which indirectly can make them feel interest to use the library in doing their individual or group activities in just comfortable ways.

Table 1: Summary of selected previous studies

Author	Aim of the study	Research Method	Main finding
Saori, Atsushi &Chieko (2011)	Examine the present condition learning space	Quantitative	Factor that contribute to the creation of space in the library and also importance of space that equipped with the equipment which can support the learning activities.
Houlihan (2005)	Provide theoretical and practical perspective on the "library space".	Qualitative	The need and importance of providing a comfortable and inspiring environment for students.
Ojennus& Kathy (2015)	Knowing the current library use and determine the possible area for improvement based on the need of users.	Quantitative	Understanding of the changes on the users use the library and need for the space for both individual or group work
Ramsden (2011)	Analyze the impact of learning space and learning behavior to support the learning activities	Mixed method	Measuring student engagement with space and impact of use.
Seung & Tae (2015)	Explore the factor that influence student choice of space in academic library	Quantitative	Space which influence the student choice in various activities.
Beard & Dale (2010)	Know how library design contribute to the complex and evolving range of academic illiteracies	Qualitative	Importance of library design space
Fatt& Su (2016)	Provide guidance to library planning	Qualitative	Varieties of space that fulfill the needs of student in different activities
Montgomery (2014)	Determine the renovation of library change the users perception on their learning behavior in the library space	Qualitative	The learning needs of users are preferred to the specific space in the library building
Applegate (2009)	Observation on non-computer seating area in library and non-library space	Quantitative	Importance student need for the space as well as service and resources.

Stewart (2011)	Know the decline number of usage on academic libraries and need of space for tackle the issue on decrease number on the use of library	Qualitative	Factor that contribute to the creation library space and the need of library space
Bryant, Matthews & Walton (2009)	Evaluate the use of large open learning and social space in library	Qualitative	Need of library space for social and communal
Gayton (2008)	Determine the changes that need to be made by the academic library	Qualitative	Factor that contribute to the creation library space
Web, Schaller & Hunley (2008)	To understand student choice in the library	Mix method	Understanding the student need
Hunter & Cox (2014)	To explore student's use of informal learning space for their studies.	Mix method	Knowing the type of space that the users need which contribute to learning activities
Young & Schootenfeld (2014)	Examine college students' collaborative activities	Quantitative	he various of space to support learning activities

#### 4.0 CONCLUSION

The purpose of the library space basically to make the academic library thinking about the various needs of the users. In the traditional function, library just been focus as a place for receiving, storing and providing information to its user as to support teaching and learning activities. Less concern on the need of the users for the academic library have kill the function and roles of academic library itself when in climax the library have face the issues regarding the decline number of gate count and circulation activities. Furthermore, with the ever rapid technology make library not become the place for the users to searching information. Besides that, as been stated before traditional library more focus on collecting printed material which this indirectly affected the library space because the need of expanding the place in shelving all the printed information that have been acquire. By this problem users become more uncomfortable because they do not get sufficient space in doing their individual or group activities. For that reason the existing literature have discuss on the initiative to redesign the library by providing the various space that supported by the technology equipment in order increasing back the number of user use the library. Having the various spaces can also support and promote the teaching, learning and also research activities in the academic institution (Fat & Su, 2015). About 93.3% of user's use the library after the changes of space have been made by the library (Gayton, 2008).

The availability of various space like individual or collaboration space indirectly make the user came to the library in order to use the space for making revision on the individual space and also having the sharing information activities at the collaboration space. Existence of this space really help the individual or group more focus on what they want to do as they have suitable and

comfortable space which they can do their work effectively. Individual become more focus to their work when the space provided are free from the noise and make them become more comfort to focus on their study or reading (Webb, Schaller & Hunley (2008). Not only that, previous authors have found out with the relaxing atmosphere can create better productivity in the work either individual or group task (Hunter & Cox, 2014). With the initiative of redesign the various spaces for the library this can contribute to express the academic library learning mission which traditionally more focus on the printed material for the reference purpose but with the existence of various space will connect the users to the various medium in receiving information whether using the electronic information or from the knowledge sharing activities in the groups. In addition, availability of space also can create the environment of “learning users” in the academic institution.

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