Does University Students Prefer Printed Reference Book Over Online Materials? A Case Study of Private Higher Learning Institution

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ABSTRACT

The sole purpose of a resource center or library in any higher education institution is to enhance a learning environment and support teaching, learning and research activities. Over the years, higher education institutions keep on increasing their possession of reference material in them of reference materials in their libraries for the use of students, academics and staff that include both printed and online materials. Due to this fact, it is a goal of every library to ensure that those materials are fully utilized by its users. However, with the growth of electronic facilities and resources in libraries, it is time to determine the factors that influence users' library materials preference. This study adopts a descriptive research design with survey samples from the Universiti Teknologi PETRONAS. Our study reveals that users' perceived usefulness and perceived ease of use play a crucial role to influence their intention to choose a library resource format where attitude fully mediates the relationship between these variables. This study also identified a partial mediating effect of desire between users' attitudes and intentions. It also found that organizational characteristics have a significant effect on users' perceived usefulness and perceived ease of use. Overall, by focusing on the underlying mechanisms of the theories TAM, TPB, and TSR in library resource format choosing behaviour context this study proposes an integrated model, contributes to both theories, and practices in library management.

Keywords: *Books Utilization Intention, Attitude, Desire, Library Management, Organizational Characteristics*

INTRODUCTION

University's library act as a learning center determined by the conquest of its information and knowledge transfer to the university's community. Changing in trends and technology has challenged the library to survive in these millennial leanings of 21st Century generations. With the technology development, growth of electronic facilities and free resources available, this has brought about to the decline ratios of book utilization in all libraries worldwide. An understanding of the preferences that influence users' behavior regarding library formats, sometimes technological factors also play a

crucial role to influence users' behavior (Moore, 2015; Yuan et al., 2018). Considered to the inherent issues and motivational factors that influence users' behaviors and preferences, this study will support libraries in developing a user-centered approach by acting proactively to influence users' behavior positively (Connaway & Randall, 2013).

PROBLEM STATEMENT

An effective library collection development policy should be prioritized to meet the demand of the local users to ensure the sustainability of a library (Posner, 2019). University's library should understand that while users' preference plays a crucial role in library collection development policy, preferences are not fixed (Moore, 2015). It is possible to change by increasing the convenience of users' (Moore, 2015). Santa Barabara, the librarian of the University of California, stated that 'the main objective for academic libraries, especially in an environment of increasing economic pressure must be aligning themselves with the structure of higher education and the criteria by which those institutions are judged' (Pritchard, 1996).

Library to provide adequate and up-to-date knowledge and resources to cater to the increasing demands of the clientele, which has different levels of information needs either for their research, self-teaching, or multi-learning environment. Library not just demonstrates the low utilization of books (physical & printed) in a library but also the decreasing number of online databases subscription for users' need as part of the library research tools. Resulted by the economic downturn and crisis in the country, libraries worldwide are encountering with a financial crisis. It reflected the financial issues, budget constraint and fall of the ringgit Malaysia currency and exchange rate in the world country.

LITERATURE REVIEW

This study integrates Technology Acceptance Model (TAM) (Davis, 1989), Theory of Planned Behaviour (TPB) (Ajzen, 1991), and Theory of Self-Regulation (TSR) (Bagozzi, 1992) to examine that factors that influence students' intention towards library resources preference behaviour. The technology acceptance model frequently used by researchers to identify the factors that influence users' intention to adopt a technology. According to TAM individual's perceived usefulness and perceived ease of use in using a particular technology influence their attitude; consequently, intention and behaviour to use the products (Davis, 1989). While previous researchers provided evidence that all these factors have a significant influence on individual's intention; they also revealed that the relationship between these variables might vary according to context (He et al., 2018; Weng et al., 2018).

TPB and TSR are two important theories that also researchers used frequently to predict individuals' intention. The theory of planned behaviour argues that human behaviour can be explained by attitude, subjective norm, and perceived behavioural control components (Ajzen, 1991). The perceived usefulness and perceived ease of use in TAM reflect the variable of attitude in TPB (Sun, Wang, Guo, & Peng, 2013). As stated by Riquelme and Al-Lanqawi (2016) that scholars (e.g., Bagozzi, 1992; Bagozzi & Dholakia, 2006) argued that although TPB included attitude and subjective norm as important factors of human behaviour, it did not consider the main motivational factor "desire" that is essential to form individuals' intention. According to TSR, individuals' intentions influenced by their desire and subjective norm, where desire plays the main motivational role between attitude and intention (Bagozzi, 1992). Previous researchers showed how desire plays a crucial role to influence individuals' attitude, and behavioural intention (Riquelme & Al-Lanqawi, 2016).

Therefore, by integrating these three theories, this study proposes the research model which shows how organizational factors, perceived usefulness, perceived ease of use, attitude, subjective norm, and desire are essential factors that could influence users' library resources format utilization intention.
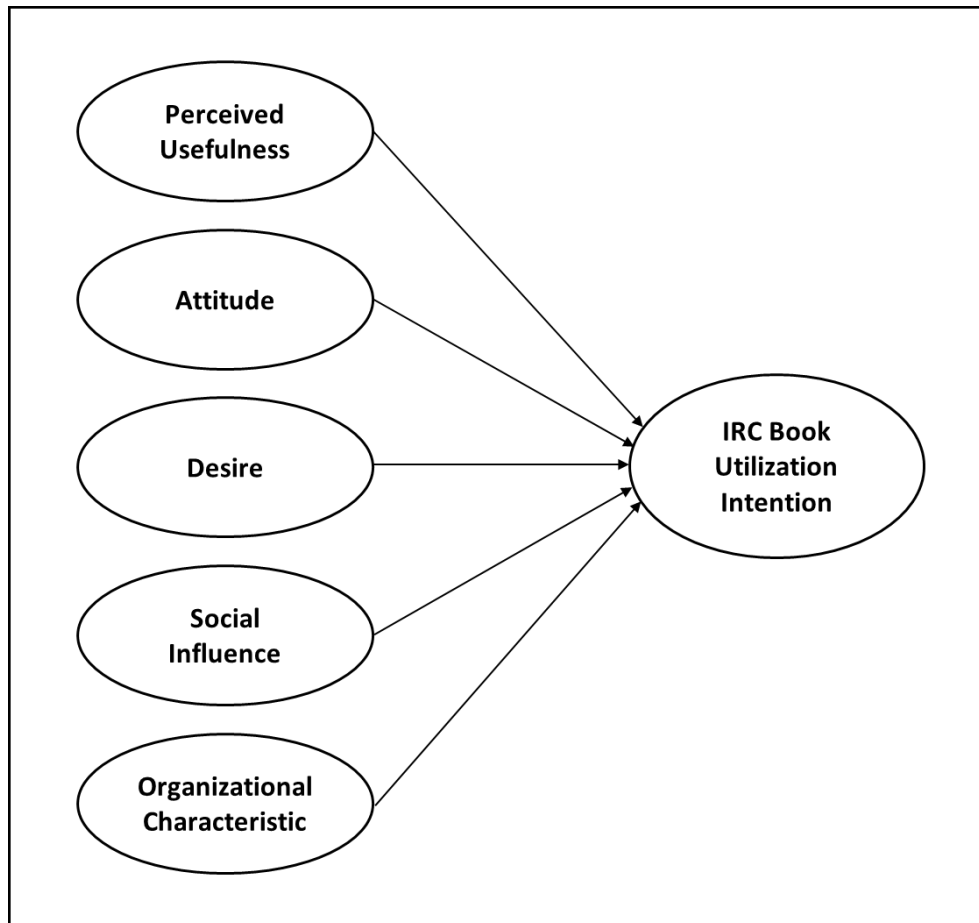

Figure 1: Research Framework

Perceived Usefulness

According to Davis (1989), perceived usefulness is the extent to which a person believes that utilizing a particular method or technique would enhance his or her job performance or routine responsibility. This perception is anchored on the consideration that the capacity acquired will strengthen performance. Davis et al. (1992), Venkatesh and Davis (2000) and Venkatesh et al. (2011) shows that perceived usefulness has a stronger influence than the other variables in the TAM model. In this study, perceived usefulness explained the student's preferences in using which kind of medium that gives more advantage value to their study needs either by using books (printed version) or electronic resources (online version).

Attitude

Attitude is a degree to which a person has positive or negative feelings of the behavior of interest McLeod (2018). Ajzen and Fishbein (1980) argued that attitudes towards an object influence intention, which, in turn, influence behavior with respect to the object, that is, its use. A study by Baker, Al-Gahtani and Hubona (2007) mentioned the use of technology or non-technology

information resources shows that attitude found to be significant and positive determinants indicator to the intention to use either technology or non-technology information resources among the users.

Desire

Desire can be identified as a sense of longing or hoping for a person, object, or outcome. The same sense is expressed by emotions such as "craving". The association of attitudes to behavior and desire, these variables have led the path to intention and action. A study by Leone, Perugini and Ercolani (1999) shows desire has a strong predictor of intention in our daily life actions.

Social Influence

Social influence is one of the contents from the subjective norm in the TPB model. Subjective norm can be identified as the perceived social pressure to perform or not to perform the behavior (Ajzen, 1991). It is also can be identified as the influence of peers and/or other social groups such as friends, parent, and colleagues on an individual's behavior (Chanchai, 2015). This will affect other people's opinion like as family or friends, among others, which has on the consumer's behavior. An adoption factor, which looks at the influence, exerted by the social environment of the adopter for example other people, which the adopter may perceive as important.

Organizational Characteristic

Organization characteristic is considered as a very crucial element in the study as it will explain in detail how the students feel and experience with the library services and facilities that been provided to them and understand their perceptions and demands in a library for their future academic study. Sheldon (2003) described an organization as a process combining the work which individuals or group must perform with the facilities necessary for its execution, that the duties so performed provide the best channels for the efficient, systematic, positive, and coordinated application effort. In simple word, it can describe as the organization helps in efficient utilization of resource by distributing the duties for the various person.

RESEARCH METHODOLOGY

This study collected data from the students of foundation, undergraduate, and postgraduate classes who use the books in the library of Universiti Teknologi PETRONAS. A cross-sectional data survey method was used to collect data from the respondents. The anonymity of the students ensured to encourage the participation of the students and motivate them to express their true feeling. A purposive sampling method has been applied in this study to identify the respondents' library resource format preference behavior. The purposive sampling is a good technique for obtaining quick information and getting a feel for the phenomenon of interest (Sekaran & Bougie 2016). The survey questionnaire of this study distributed to the students by using an online-based data collection method. A total of 369 students were requested to participate in this study via e-mail surveys.

Hypotheses of the Study

Based on the literature reviews discussed these hypotheses are developed:

H1: Users who feel that books have more perceived of usefulness compared to electronic resources, prefer to use printed books and they will then utilize the library printed books.

H2: Users who have a positive attitude towards books will utilize the library printed books more often compared to users who prefer reading online articles and journals.

H3: Users who have a desire to use printed materials will utilize the library printed books more often compared to electronic resources in the library.

H4: Users who are highly influenced by others towards reading printed materials will utilize the library printed books more often compared to those who prefer electronic resources.

H5: Organizational characteristic has a direct influence on the library printed books utilization.

RESULT FINDINGS

The final three hypotheses predicted that perceived usefulness, attitude, and desire significant predictors for the dependent variable. Table 1 shows that perceived usefulness and desire are fully significant and highly contribute to the users' preference on the book format using intention. These findings support the hypotheses H1, H2 and H4.

Table 1: Regression Analysis Result

Hypothesis	Relationship	Std Beta	Std Error	T Value	Correlation	Sig Finding	Decision
H1	PU	0.268	0.021	4.789	0.581	0.000	Supported
H2	AT	0.107	0.054	2.000	0.511	0.046	Supported
H3	SI	0.079	0.028	1.508	0.477	0.132	Not Supported
H4	DE	0.290	0.057	5.732	0.576	0.000	Supported
H5	OC	0.085	0.007	1.910	0.344	0.736	Not Supported

RECOMMENDATION & CONCLUSION

Theoretical Implication

This study used the technology acceptance model, the theory of planned behavior, and the theory of self-regulation as a foundation to determine students' library books format choosing behavior. Previously researchers showed how different components of these theories influence individuals' intention to pursue a behavior. By integrating a different component of the theories (TAM, TPB, and TSR) such as organizational characteristics, perceived ease of use, perceived usefulness, social influence, attitude, and desire into a single study, this study provides deeper insight regarding the way all these variables influence students' intention to pursue a particular book format for their study. The model of this study opens the scope of further research in this area; consequently, contributes to the library management research.

This study makes an important contribution to the literature by explaining students' behavioral intention behind choosing a particular library book format. Previously scholars in their field studies in library management identified convenience, quickness, cheaper, easier to access, thoroughly reading facilities, less distraction, love for a particular book format etc. (Moore, 2015; Pfohl, 2018; Silipigni Connaway & Randall, 2013; Yuan et al., 2018) are some of the reasons behind users' intention to choose a particular format of books. This study confirms that students' intention to use a particular book format indirectly influenced by their perception of the ability and importance of a book format to meet up their study needs as well as how convenient it is compared to the alternative format of books.

Practical Implication

This study has several implications for librarians and practitioners. Firstly, while financially pressure and space are two important issues in the library management system, by revealing the role of perceived usefulness, attitude and desire, this study sheds light on how libraries can address the issue by taking appropriate strategies during the library collection system. From a practical point of view, this study suggests that librarians need to provide a more personalized collection of books and services to students if they decide to provide a particular format of books. The information package of a library should consist of complete categorized and specialized information according to different subject experts so that it can support students' needs, improve their quality tasks, and their performance and productivity for study. To develop an effective library management system the librarians should not focus only on the library collection system, they must show a pro-active behavior (Connaway & Randall, 2013) by ensuring convenience of the users as well as making effective communication with the students. Once again, the role of librarianship needs to be not just the information provider but as well as the frontliners. This is because previous studies revealed that inconvenience, complexity, and difficulties are some of the barriers which hinder users to pursue a particular book format or going to the library (Moore, 2015; Connaway & Randall, 2013).

Our study argues that to some extent, the library should not operate to its traditional service models since the role of librarianship has changed over the trends. This transition is considered positive, as it nurtures a heightened sense of community and the librarian profession itself, painting them as neighborly mentors instead of silencing book police. According to Holmquist (2017), a Danish librarian and library advocate, the more we use technology, the more we need meaningful face-to-face interactions. He also suggested that the library should transform from an information provider to a community - social 's hub for learning and knowledge creation.

This study found that although students opined that the library should introduce both print and electronic format of books, most of the students prefer electronic books for their study. To balance the usage of technology and print collections in the library, the library should organize community – social engagements with the university's community especially with academicians, faculties, and students. Through this engagement, the library can build on a real-life connectedness in the university community; build on the people connectedness by creating relationships, real partnerships, and mutual understanding. Through these connection spaces, the library will be a place for people to learn, share, and participate and to come together and work together.

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