Knowledge sharing behaviour among Sri Lankan public University undergraduates: An application and extension of the theory of planned behaviour

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Abstract

This study investigates the antecedents of knowledge sharing behaviour among the undergraduates in an emerging country context, using widely accepted socio-psychological theory. 251 usable responses were collected using questionnaire surveys from one of the State University in Sri Lanka. Multiple regression analysis using SPSS was employed for analyses. The findings showed that attitudes towards knowledge sharing, subjective norms and perceived behavioural control are positively associated with knowledge sharing intention. Further, knowledge sharing intention and level of Information Communication Technology (ICT) usage enhance the knowledge sharing behaviour. This study contributes to the theory of planned behaviour in knowledge sharing context. Practically, this study provides several recommendations to enhance knowledge sharing behaviours.

Keywords: knowledge sharing behaviour, knowledge sharing intention, theory of planned behaviour and undergraduates

Introduction

The concept of Knowledge sharing behaviour plays a vital role in a knowledge-based institution. Knowledge sharing has become a topical issue among researchers (Boateng et al., 2017). Scholars defined the notion of knowledge sharing as the learning process. For example, Connelly and Kelloway (2003) defined knowledge sharing as a set of behaviours that involve exchanging information among the members of an organisation. Ali (2009) defined knowledge sharing as exchanging and gaining knowledge through informal and formal channels by using technical instruments. Accordingly, knowledge sharing is considered the foundation of learning and research at colleges and universities (Kumar, 2005). Today's economy has shown the importance of knowledge and intellectual capital to organizations.

The studies on knowledge sharing behaviour predominantly focused on the Information Technology-related industries (Bartol & Srivastava, 2002;

Bresman et al., 1999; Chatzoglou & Vraimaki, 2009; Davenport & Prusak, 1998; George, 2004; Ipe, 2003; Kim & Lee, 2006; Kim, 2000; Ryu et al., 2003). In the meantime, the Universities are recognised as the knowledge-based institutions where knowledge is created and disseminated. In this regard, knowledge-sharing culture is necessary for undergraduate students in their learning process. (Ma & Yuen, 2011). Despite this, the research on knowledge sharing behaviour among University students is in infancy level. This is the main gap in the emerging countries' context. A lack of understanding of university students' knowledge sharing behaviour is a significant hindrance for higher education institutes and policymakers in designing the most appropriate strategies and policies to serve academics and students effectively. Therefore, the purpose of this study is to do an in-depth investigation into the knowledge sharing behaviour among university students in an emerging country context like Sri Lanka.

Literature Review

This section described the associations between attitude toward knowledge sharing, subjective norms, perceived behavioural control and behavioural intentions to share the knowledge. Further, the section also explained the associations between intentions to share the knowledge, ICT usage and knowledge sharing behaviour.

This study's theoretical foundation is based on the Theory of Planned Behaviour (TPB). The theory postulated that attitudes towards behaviour, subjective norms and perceived behavioural control enhance the behavioural intention, which in turn induce the behaviour (Ajzen, 1991).

Ajzen and Fishbein (1980) believe that attitude influences behavioural intentions. This relationship has received substantial empirical support (Bock et al., 2005; Kolekofski & Heminger, 2003; Kuo & Young, 2008; Pavlou & Fygenson, 2006). It seems that one of the essential aspects of knowledge sharing intention among undergraduates is an attitude toward knowledge sharing. Therefore, the first hypothesis is proposed:

H_1: Attitude toward knowledge sharing influences on knowledge sharing intention among undergraduates

Subjective norm is defined as a person's perception of whether the people who are important to him or her think that the particular behaviour should be performed by him selves or her selves (Ajzen & Fishbein, 1980; Pavlou & Fygenson, 2006). Subjective norm simply reflects participant perceptions of

whether the behaviour is accepted, encouraged, and implemented by the participant's circle of influence. It seems that there is a positive relationship between subjective norm and intention to share knowledge among undergraduates. Therefore, the second hypothesis is proposed:

H_2: Subjective norm toward knowledge sharing influences on knowledge sharing intention among undergraduates.

Previous studies postulated that perceived behavioural control toward knowledge sharing influences on behavioural intentions to share the knowledge (Blue et al., 2001; Lin & Lee, 2004). Further, the lack of perceived behavioural control may negatively affect the intention to share knowledge (Ryu et al., 2003). Based on the above discussion, the following hypothesis is formulated:

H_3: Perceived behavioural control toward knowledge sharing influences on knowledge sharing intention among undergraduates.

People's intention to share knowledge is a determiner of the desired behaviour (Ryu et al., 2003). As a significant element in the TPB framework, the intention to share knowledge can have a significant effect on knowledge sharing behaviour. Accordingly, we formulated the following hypothesis.

H_4: Knowledge sharing intention among undergraduates influences on their knowledge sharing behaviour.

Level of ICT usage and knowledge sharing behaviour

Information technology infrastructure facilitates people to share information and knowledge. ICT and its ability to spread knowledge across different units of an organisation may better understand the complex organizational environment (Coakes, 2006). In this regard, we formulated the following hypothesis.

H_5: Undergraduates' level of ICT usage influence on their knowledge sharing behaviour.

Research Methodology

Sampling and data collection

This is a cross-sectional study. The target population of this study was undergraduates in an emerging country context like Sri Lanka. Undergraduates following business management-related degree programs in one of the State University in Sri Lanka (i.e., University of Jaffna) were selected as the respondents for this study. We received 251 usable surveys from the respondents and used for analysis. We employed both online and

offline survey methods.

Measures

The measures developed to operationalise the research model's constructs were adopted mainly from past studies on knowledge-sharing behaviour (Bock & Kim, 2002; Lee, 2001; Ryu et al., 2003; Lin & Lee, 2004). All constructs were measured using multiple items, and all items were measured using a five-point Likert-type scale (Lin & Lee, 2004). The survey instrument was made available in English, which is widely used as the medium of instruction in the higher education industry in Sri Lanka. Before the actual survey administration, a pre-test was organised among 12 undergraduates. Slight modifications were made to the survey instrument based on feedback from the pre-test.

Results and Discussions

Two key research models were examined to test the hypotheses of the study. Multiple regression analysis was employed in this regard. The model one aims to investigate attitude, subjective norms and perceived behavioural control towards knowledge sharing on behavioural intentions to share knowledge. The second model aims to examine the influence of knowledge sharing intentions and ICT usage on knowledge sharing behaviour. The two models also used the personal demographic variables (i.e. gender, ethnicity and year of study) as the control variables. As per the Model one, attitude toward knowledge sharing (β=. 15, $p<0.01$), subjective norms toward knowledge sharing (β=. 30, $p<0.01$) and perceived behavioural control toward knowledge sharing (β=. 43, $p<0.01$) have significant influence on behavioural intentions to share the knowledge. The model one involving control variables explained 59.6% ($R^2=0.596$) of the variance (R^2) in knowledge sharing intention. Thus, H1, H2 and H3 were all accepted. As per the Model two, knowledge sharing intention (β=. 38, $p<0.01$) and ICT usage (β=. 48, $p<0.01$) significantly influence on knowledge sharing behaviour. The model two involving control variables

explained 57.6% ($R^2=0.576$) of the variance (R^2) in knowledge sharing behaviour. Hence, H4 and H5 were also accepted.

The findings exposed that attitude toward knowledge sharing, subjective norms toward knowledge sharing and perceived behavioural control toward knowledge sharing enhance the undergraduates' intentions to share the

knowledge. Further, undergraduates' knowledge sharing intentions and ICT usage enhance their knowledge sharing behaviour.

Table 1. Model Summary

Variables	Model 1	Model 2
Attitude	0.154**	
Subjective Norm	0.297**	
Perceived Behavioural Control	0.428**	
Knowledge Sharing Intention		0.378**
Level of ICT Usage		0.479**
Gender	-0.105**	-0.128**
Ethnicity	-0.070ns	-0.052 ns
Year of Study	-0.022ns	-0.031 ns
Adjusted R^2 Value	**.596**	**0.576**
F Value	**62.389**	**170.828**

Notes: **P<0.01, ns: not significant

Theoretical and practical implications

This study has both academic and practical implications. This study has several academic implications. Since universities are viewed as the knowledge-based institutions, the research on undergraduates' knowledge sharing behaviour is still in its infancy. This study filled this knowledge gap by investigating the antecedents of knowledge sharing intentions and behaviour among undergraduates in an emerging country context (i.e. Sri Lanka). It is also significant that we have applied the TPB to investigate the determinants of knowledge sharing intentions and behaviour. Further, our study has incorporated the role of ICT usage in enhancing knowledge sharing behaviour.

The current study has several insightful, practical implications for higher education institutions and governments, particularly for those in Sri Lanka. The findings suggest that attitude, subjective norms and perceived behavioural control towards knowledge sharing trigger knowledge sharing intentions, which drives knowledge sharing behaviour. Further, ICT usage also enhances knowledge sharing behaviour. To enhance the socio-psychological variables like attitude, subjective norms and perceived behavioural control towards knowledge sharing, higher education institutions (i.e., universities) and governments (i.e., ministry of higher education) can

arrange the workshops and seminars to stimulate such socio-psychological factors. Further, universities can design its curriculum based on the notions of 'knowledge sharing' and 'student-oriented teaching', which may help the undergraduates reinforce their attitudes and perceived behavioural control towards knowledge sharing. To this end, universities and government can

invest in information technology infrastructure to stimulate ICT usage among undergraduates. For instance, they can invest in centralised information system, advanced learning management system, and social media platforms.

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