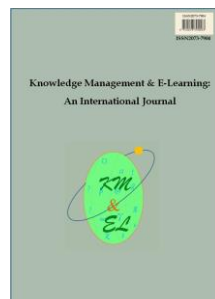


Knowledge Management & E-Learning, Vol.11, No.1, Mar 2019

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M. Punniyamoorthy
J. Antonette Asumptha
National Institute of Technology, Tiruchirappalli, India



Knowledge Management & E-Learning: An International Journal (KM&EL)
ISSN 2073-7904

Recommended citation:

Punniyamoorthy, M., & Asumptha, J. A. (2019). A study on knowledge sharing behavior among academicians in India. *Knowledge Management & E-Learning*, 11(1), 95–113.
<https://doi.org/10.34105/j.kmel.2019.11.006>

A study on knowledge sharing behavior among academicians in India

M. Punniyamoorthy*

Department of Management Studies
National Institute of Technology, Tiruchirappalli, India
E-mail: punniya@nitt.edu

J. Antonette Asumptha 

Department of Management Studies
National Institute of Technology, Tiruchirappalli, India
E-mail: antonetterayan@gmail.com

*Corresponding author

Abstract: The intention of this paper is to present the concept of knowledge sharing practices among faculty members in academic institutions through the theory of planned behavior (TPB). This paper examines survey results collected on academicians's knowledge sharing. A theory of planned behavior is used as a source model to develop two models: one with the causal path from subjective norms to attitude and the other with a causal path from subjective norms to perceived behavioral control. From the results of the significance of the subjective norms to the attitude path, it is possible to conclude that there is a similarity in faculty attitude toward knowledge sharing and what they feel about knowledge sharing due to social pressure. Similarly, the casual path created from subjective norms to perceived behavioral control reveals that the academicians's behavior in knowledge sharing depends upon his/her feelings about the views of others. Further analysis of the three models resulted in the emergence of a new model.

Keywords: Knowledge acquisition; Knowledge dissemination; Knowledge sharing; Knowledge transfer; Knowledge transmission

Biographical notes: Dr. M. Punniyamoorthy joined DOMS, NIT Tiruchirappalli (then REC), in 1987 as a Research Associate on completion of his M. Tech (IIT, Kharagpur) in Industrial Engineering and Operations Research. He completed his Ph.D. in Management from the Bharathidasan University, Tiruchirappalli. His specific areas of interest in teaching include operations management, project management and costing, applied statistics & data analysis, logistics and supply chain management, operations research & decision sciences and materials management and his research interests include Supply Chain performance, Supplier Selection, Technology Selection, Data Analysis, Performance Measurement and Balanced Scorecard. He teaches Data Analytics, Supply Chain Management, Logistics, Production and Operation Management, Project Management among others. He has taught courses in these areas as visiting professor to several leading management institutes in India including the DOMS IIT-M and has also conducted executive training programmes. He has authored over 60 papers/articles that have been published / presented at national and international journals and conferences and a book on production management for Anna University Distance Learning programme,

with his second book on Data Analytics getting ready for publication. Recently, three of his books have been published by Springer. He has also been on the editorial board of several journals and has been a reviewer for many others.

J. Antonette Asumptha is MBA from BIM, NITT PHD pursuing, 8 years experience as HR in different sectors. Worked with IOB, Sebco, Vagus Technologies.

1. Introduction

Knowledge is a key economic resource and the only source of comparative advantage (Ruggles, 1998). According to Davenport and Prusak (1998), knowledge is defined as “a fluid mix of framed experience, values, contextual information, and expert insights.” The term “knowledge management” has become a part of scholastic terminology since 1970. It is the process through which organizations extract value from their intellectual assets. Knowledge management addresses these issues as organizational adaptation, survival and competence at a time of unpredictable environmental changes. It is the integration of the faculty (ability) of human beings, their capacity to respond creatively, and the ability of information technology to process information and data.

Knowledge can be subdivided into two types (Lee, 2001):

1. Implicit knowledge
2. Explicit knowledge

Implicit or tacit knowledge stays in the minds of people, for example, ideas, skills, values and mental models. The way to make use of an employee’s explicit knowledge is by preserving it in forms of technical or academic data that are presented in forms such as journals, manuals, documents and patents. Explicit knowledge is easy to communicate, accumulate, and disseminate and it is the knowledge found in text books, on the web, and other visual and oral means. It is the opposite of tacit knowledge. An employer can preserve the knowledge and skills of the employee without getting outdated and even in a situation when they are leaving the organization through knowledge sharing (KS). In Al-Hawamdeh’s opinion, knowledge sharing is akin to wealth sharing.

In developing countries like India, higher education is facing challenges because it is becoming increasingly global. Knowledge Sharing is a vital instrument of knowledge management and is critical for an academic institution. Thus, KS is given importance in this study.

This study focuses on knowledge sharing behavior. The paper has been structured as follows: Section 1, Introduction; Section 2, Review of the Literature; Section 3, Present Study; Section 4, Methods; Section 5, Results; Section 6, Discussion; and Section 7, Conclusions.

2. Literature review

Knowledge sharing is the process through which organizations extract value from their intellectual assets. Knowledge Sharing entails a synergistic collaboration of individuals in an organization who work toward a common goal (Boland & Tenkasi, 1995). In addition, Zaei and Kapil (2016) depicted the impacts of the components of Intellectual Capital,

namely Structural Capital, Human Capital, Customer Capital on the process of Knowledge Management and that is acquisition, retention, transfer and dissemination. According to Nonaka and Takeuchi (1995), knowledge is a vibrant process of justifying personal belief toward the “truth.”

When talking about knowledge sharing, Hansen, Nohria, and Tierney (1999) reported that technical support is as important as the human resource. While the human angle is important, technological characteristics also deserve contemplation. Hendriks (1999) also proposed that information and communication technology (ICT) play an important role in improving the effectiveness of knowledge sharing.

Generally, people are unwilling to share their knowledge. However, we should consider why and under what conditions people are unwilling to share their knowledge within an organization. In our study, academicians are at times unwilling to share knowledge as they consider it their unique selling proposition (these views were obtained in the open-ended questions). Knowledge dwells within the mind of a human being and it is tough to transmit it to others. An unwillingness to share knowledge is one of the hindrances of Knowledge Sharing. Particularly in a university scenario, this situation could be more startling as universities are knowledge-centric organizations.

Attitudes and intentions toward knowledge sharing have been considered by UK academics (Fullwood & Rowley, 2017), in an intrinsic reward and leadership style of knowledge sharing behavior among academicians in Iran (Jahani, Ramayah, & Effendi, 2011), in creation, acquisition and the application of knowledge (Cheng, Yeh, & Tu, 2008), and in the Relationship Between Organizational Antecedent And Knowledge Sharing Practices Among Academicians at Malaysia Research Universities (Abdullah et al., 2015).

2.1. Theory of reasoned action (TRA) and theory of planned behavior (TPB)

The TRA model is widely used as a model for the prediction of behavioral intentions. It has been used in a variety of research studies such as psychology, tourism, horticulture, marketing, healthcare, management and academics (Chang, 1998). Ajzen and Fishbein (1980) divided beliefs into conceptually strong and distinctive groups such as behavioral (Attitude) and normative (Subjective Norms). Here, the information affects intentions either through attitudes and/or through subjective norms. Knowledge sharing behavior is the extent to which an owner of knowledge actually shares their knowledge with other members of their organization, whereas intention studies an employee’s willingness to connect with knowledge sharing. Sheppard, Hartwick, and Warshaw (1988) proposed that if the behavior is not under full decisive control, the predictive power of the TRA model will not be valid. Therefore, the theory of planned behavior was formulated and differs from the theory of reasoned action through its addition of a constructed perceived behavioral control (Madden, Ellen, & Ajzen, 1992). There is a need for a perceived behavioral control such as when an individual does not have extensive control over the targeted behavior (Madden, Ellen, & Ajzen, 1992).

“Taking the Theory of Planned Behavior” into consideration, the intention is influenced by three predictors, namely, attitude, subjective norm, and perceived behavioral control. Attitude reflects an individual’s positive or negative assessment of performing the behavior. For example, if one shares his knowledge with other faculty members then he/she feels pleasant or unpleasant. A subjective norm is the apparent social stress (pressure) to perform or not perform the behavior such as the expectation of a person (by others) to share knowledge among faculty members and a perceived

behavioral control (the extent to which a person feels the need to enact the behavior and it has two aspects: how much a person has control over the behavior and how confident a person feels about being able to perform or not perform the behavior). PBC is the perceived ease or difficulty that the individual faces in performing the behavior (Pelling & White, 2009; Ramsay et al., 2010; Chen & Chen, 2011). This well-established theory acts as the basis for a well-fitted theoretical background for examining how academicians share knowledge. In this study, the Theory of Planned Behavior model suggests that the intention of academicians to share knowledge is resolved by their attitudes, subjective norms and the perceived behavioral control.

This could be represented by a simple equation (Goh & Sandhu, 2013).

$$\text{Behavioral Intention} = \text{Attitude} + \text{Subjective Norms} + \text{Perceived Behavioral Control}$$

2.2. Model with the causal path extending from subjective norms to attitude

Potential relationships existed between attitudes, subjective norms and the perceived behavioral control. Of particular note is the association between attitudes and subjective norms, which suggests subjective norms influence attitudes. When people form their attitudes, they consider the expectations of others. A large number of studies (Chang, 1998; Ryu, Ho, & Han, 2003; Shimp & Kavas, 1984; Vallerand et al., 1992) have shown that the subjective norm was found to influence attitude and thus modify the theory of planned behavior with a causal path from subjective norms to attitude.

2.3. Model with causal path from subjective norm to perceived behavioral control

In the third model, the subjective norm determines the perceived behavioral control. That is to say that the social pressure from those people who are important to us also facilitate or inhibit how individuals act (López-Mosquera, García, & Barrena, 2014). This is perceived, in addition to subjective norms, to influence attitude (Quintal, Lee, & Soutar, 2010).

It is quite evident from what has been discussed above that the evolved model shows the feasibility of a causal path from SN to PBC.

3. The present study

3.1. Research gap

Until now, a very limited number of studies have been conducted in the area of knowledge sharing in academic institutions to the extent that the sharing of knowledge is adopted among the academicians themselves. Most of the previous studies are based on the manufacturing industry, the service industry (Ryu, Ho, & Han, 2003), horticulture (Clark-Richardson, 2003), e-commerce (Crespo & del Bosque, 2008), and tourism (Quintal, Lee, & Soutar, 2010). In particular, academics have been given less attention. Generally, literature shows that there is lack of knowledge sharing in universities and a lack of knowledge sharing among academics in universities in most developing countries (Alsuraihi, Yaghi, & Nassuora, 2016). Therefore, we are concentrating on academic institutions with a concentration of faculty sharing knowledge among themselves (which has not been previously adequate) (Abdullah et al., 2015). In this regard, Knowledge-

sharing would be meaningful to academicians in higher education institutions for them to be able to explore any problems pertinent to any issue.

The purpose of this study is to empirically examine academicians' knowledge sharing behavior. The social-psychological model, i.e., the theory of planned behavior, is examined to identify the applicability of the study. The extended analysis has been conducted by including causal paths, which is the subjective norm to attitude and the subjective norm to the perceived behavioral control.

3.2. Objectives of the study

1. To study the influence of attitude, subjective norms and the perceived behavioral control on the intentions to share knowledge.
2. To study the influence of subjective norms on attitude in academicians' knowledge sharing behavior.
3. To study the influence of subjective norms on the perceived behavioral control in academicians' knowledge sharing behavior.

3.3. Research models

These three causal models (see Fig. 1, Fig. 2, and Fig. 3) are more apt for the application of structural equation modeling (SEM).

The evolved model has another causal path from SN to PBC (Ryu, Ho, & Han, 2003) that emphasized Ajzen's theory of latent variables: Attitude, Subjective Norm, and the Perceived Behavioral Control. This objective is also reflected in our study among academicians. The objective of this model is that attitude, SN, and PBC have a positive effect on sharing knowledge.

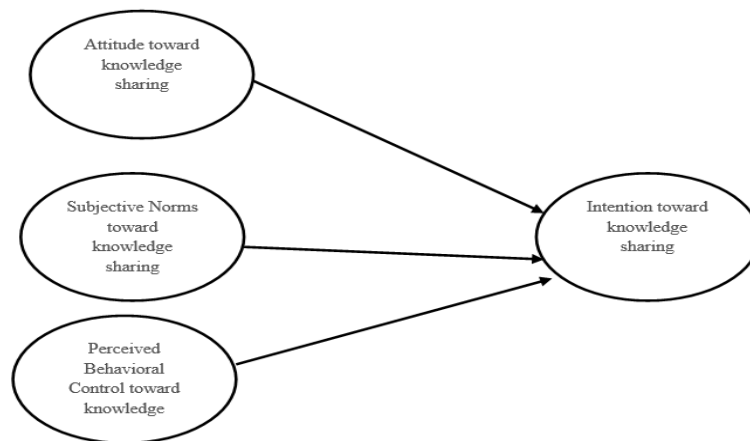


Fig. 1. TPB model: The models resulted from the above objectives

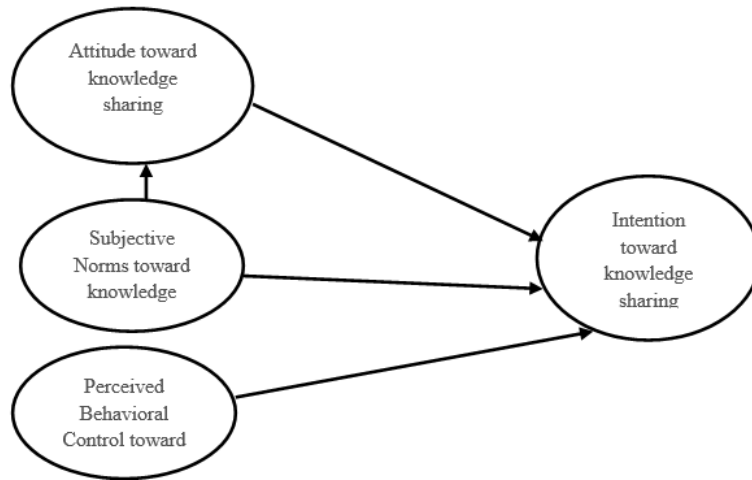


Fig. 2. The causal model from SN to attitude toward knowledge sharing

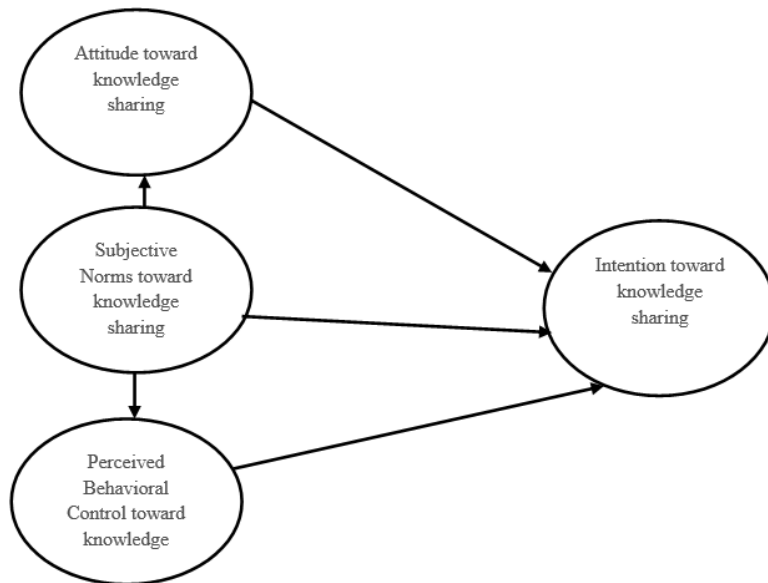


Fig. 3. Causal path model from SN to PBC

3.4. Hypothesis

The proposed hypothesis was:

H1: The attitude of Academicians has a positive effect on the intention to share knowledge

H2: The subjective norms of Academicians have a positive effect on the intention to share knowledge

H3: The perceived behavioral control of Academicians has a positive effect on the intention to share knowledge

H4: The subjective norm to knowledge sharing behavior of Academicians has a positive effect on this attitude toward the sharing of knowledge

H5: The subjective norm to knowledge sharing behavior of Academicians has a positive effect to their PBC toward the sharing of knowledge

4. Methods

4.1. Sample and data collection

The element of investigation for this study was an individual academician in an academic institution. This research focused on the faculty knowledge sharing behavior based on the social-psychological perception. A total of 580 questionnaires were administered and 300 of these were given in person, whereas for educational institutions in faraway places, the questionnaires were sent by post. A pickup date was arranged after a week to collect the respondents’ filled questionnaires. Most of the respondents answered the questionnaires within the agreed stipulated period, and there were even cases where the faculty instantly answered the survey. Some questionnaires had to be collected later as the respondents didn’t answer within the stipulated period. Hence, a total of 533 filled questionnaires were considered. There are 18 observed variables and 36 corresponding parameters. The sample size should be around 540, and therefore, our sample size was justified.

The questionnaires had a cover letter briefing the participant about the aim of this study. The study includes with the demographics of the respondents at the end of the questionnaire. The data collected from the respondents who submitted the forms late were similar to the ones who provided the forms within the stipulated time. Overall, there was sufficient time and it was less expensive in spite of few difficulties in delivering and collecting the questionnaires. The profile of the respondents is shown in Table 1.

Table 1
Profile of respondents

Measure	Item	Frequency
Age	20 to 30 Years	135
	30 to 40 Years	197
	40 and above	202
Highest Qualification	PhD	196
	MPhil, ME, M. Tech, MCom, MBA & Others PG	158
	BE	19
	HOD (Head of Department)	25
Position	Professor	26
	Associate Professor	74
	Assistant Professor	409

4.2. *Why SEM? why would a researcher want to use SEM*

According to Punniyamoorthy, Mathiyalagan, and Parthiban (2011), “SEM is favored more than other methods because of the following reasons: a) SEM does not have a limit on the number of variables; b) SEM enables testing of the significance of the constructs, whereas the relative importance of the indicators obtained through structural equation modeling is more reliable. SEM also takes measurement error into account when statistically analyzing the data; c) Graphical software boosts creativity; d) Both individual parameter and overall tests of model fit are simultaneously tested.”

4.3. *Measurement*

The measures used in the research model were principally espoused from the previous related studies with minor word changes and by adapting to the college faculty knowledge sharing context (by expert opinion). To increase the accuracy of the measurement, we used a multi-item method (Likert scale with five points). The 5-point Likert scale method was as follows: 1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree and 5 = strongly agree.

Nineteen variables were measured reflecting Attitude, Subjective Norms, and PBC. Among the nineteen, an open-ended opinion question was also added.

A multi-item scale should be evaluated for accuracy and this involves an assessment of the reliability and validity of the scale. Approaches to assess the reliability include internal consistency reliability. The validity can be examined by examining the content validity and construct validity.

4.3.1. *Content validity*

Based on the validated research, all of the measurement items were adopted. Characterization of items like attitude, subjective norms, perceived behavioral control, and intention to share the academicians' knowledge were based on the validated original theory of the planned behavior model. The Deans, Heads of the Departments and Faculty validated the questionnaire. The absolute questionnaire items measuring each construct are listed in Appendix I.

4.3.2. *Internal consistency reliability*

The construct reliability was investigated by Cronbach's alpha based on 550 responses from the survey. Thus, the obtained alpha values ranging from 0.697 to 0.82 were above the acceptable threshold (0.70).

4.3.3. *Construct validity*

The construct validity was evaluated by examining the factor loadings within the constructs by confirmatory factor analysis (CFA) and the correlation between constructs.

Convergent validity was checked by the factor loading values. No items were dropped due to the factor analysis. The results of the measurement assessment, such as number of the item, mean, S.D., Cronbach α , and convergent and discriminant validity, are shown in Table 2. The discriminant validity is shown in Table 3.

Convergent validity can be established by the AVE (Average Variance Extracted) and it should be above 0.5. The convergent validity was checked with factor loading values. No items were dropped. Discriminant validity can be established by comparing the square root of AVE with its corresponding construct correlation values. The construct correlation values should be less than the Square root of the AVE values (Fornell & Larcker, 1981).

Table 2
Measurement model fit

Latent Constructs	Item	Factor Loading	Mean	S.D.	Cronbach α
Attitude toward knowledge sharing (ATT)	ATT1	0.62	3.69	1.03	0.82
	ATT2	0.72	3.72	0.91	
	ATT3	0.61	3.9	0.86	
	ATT4	0.78	3.74	0.95	
	ATT5	0.72	3.63	0.95	
Subjective Norm (SN)	SN1	0.58	3.9	0.85	0.764
	SN2	0.54	3.78	0.79	
	SN3	0.64	3.73	0.82	
	SN4	0.72	3.81	0.71	
	SN5	0.69	3.74	0.79	
Perceived Behavioral Control (PBC)	PBC1	0.57	4.00	0.79	0.697
	PBC2	0.7	3.97	0.81	
	PBC3	0.57	3.84	0.77	
	PBC4	0.58	3.68	0.83	
Intention to share knowledge (INT)	INT1	0.71	3.68	0.9	0.812
	INT2	0.78	3.76	0.82	
	INT3	0.84	3.76	0.87	
	INT4	0.58	0.377	0.91	

Table 3
Discriminant validity

	ATT	SN	PBC	INT
ATT	0.693			
SN	0.36	0.638		
PBC	0.352	0.545	0.608	
INT	0.474	0.36	0.383	0.734

5. Results

We evaluated the item-to-total correlation for discriminant validity and the items were higher than 0.5. The confirmatory factor analysis model using AMOS had a good fit. The H1 and H2 hypothesis are accepted but the third hypothesis becomes insignificant. Even though the X² value shows that the model does not fit the data, the other indices listed below accept the model.

The value of these fit indices is provided in Table 4.

The fit of the model was assessed in terms of the measures from three perspectives: the overall fit perspective, comparative fit, and the parsimony perspective. Thus, the model was found to be fit.

Table 4
Overall fit indices of the CFA model

Fit Index	Scores	Recommended cut-off value
Measures of Absolute Fit		
χ^2	453.1	Near to the degree of freedom
d.f	128	The greater the better
$\chi^2/d.f$	3.5	≤ 5
GFI	0.9	≥ 0.90 ;
RMSEA	0.08	≤ 0.08
Incremental Fit Measures		
NFI	0.9	≥ 0.90
AGFI	0.9	≥ 0.90
CFI	0.9	≥ 0.90
Parsimonious Fit Measures		
PGFI	0.7	The higher the better
PNFI	0.7	0.06 to 0.09

Fig. 4 shows the CFA model.

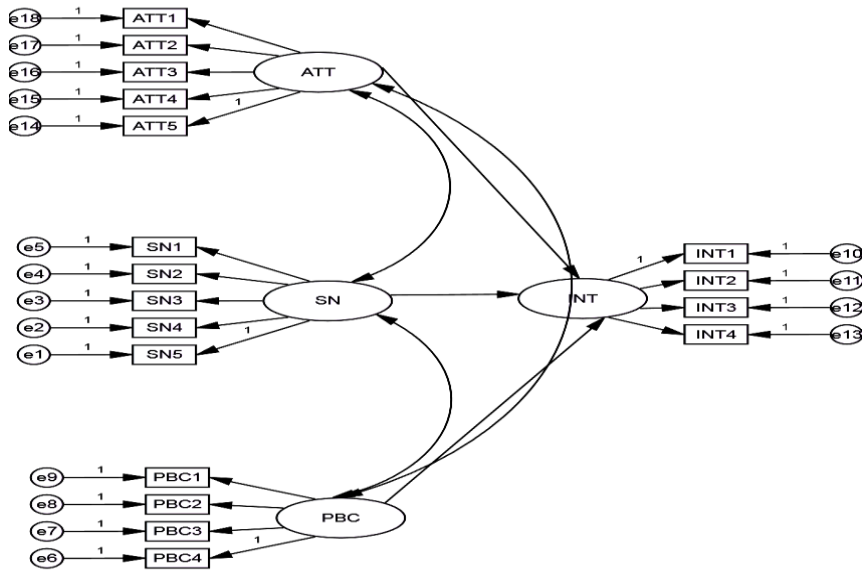


Fig. 4. Confirmatory factor analysis (CFA) model

Ryu, Ho, and Han (2003) discussed another model in which there was a causal path from Subjective Norms to Attitude. This causal path from an academicians subjective norms has an influence on the academicians attitude. The TPB model is shown in Fig. 5.

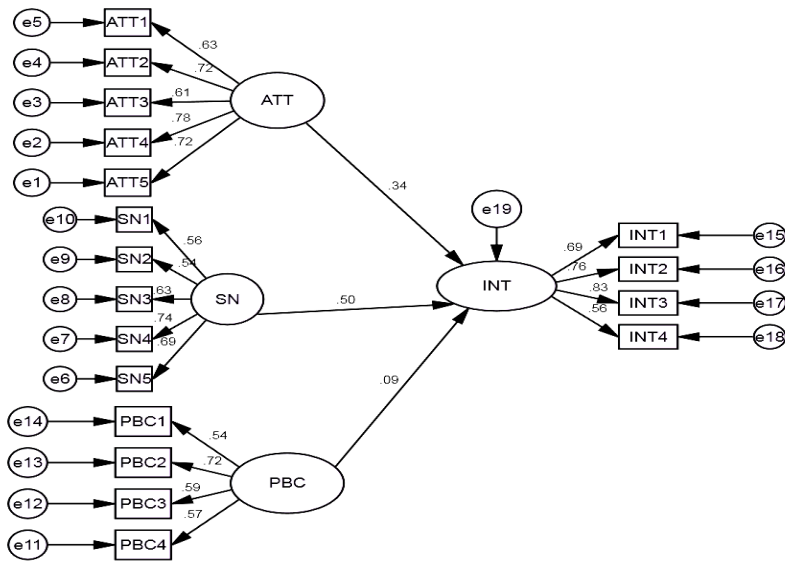


Fig. 5. Theory of planned behavior model

The causal path from attitude to SN is shown Fig. 6.

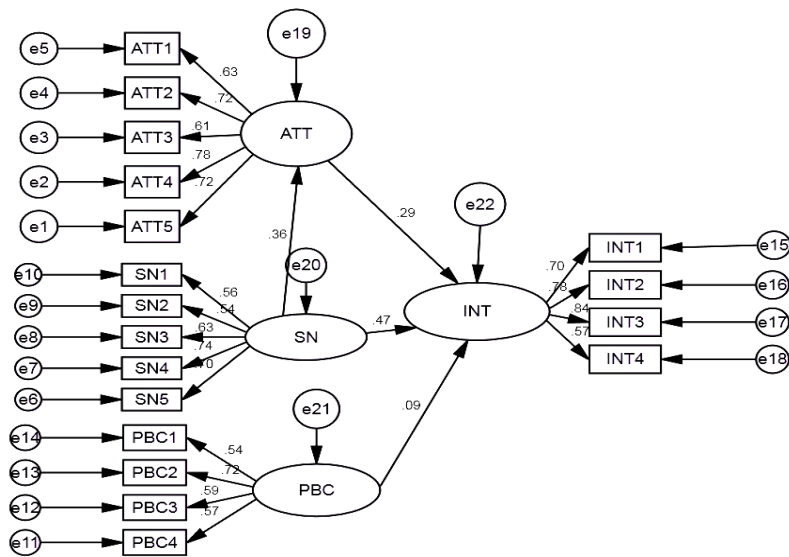


Fig. 6. The causal path from attitude to SN

Chang (1998) also re-iterated and substantiated the model with a causal path from subjective norms to attitude and this concept was also adopted in our study on knowledge sharing among academicians.

The models and findings are shown in Fig. 7.

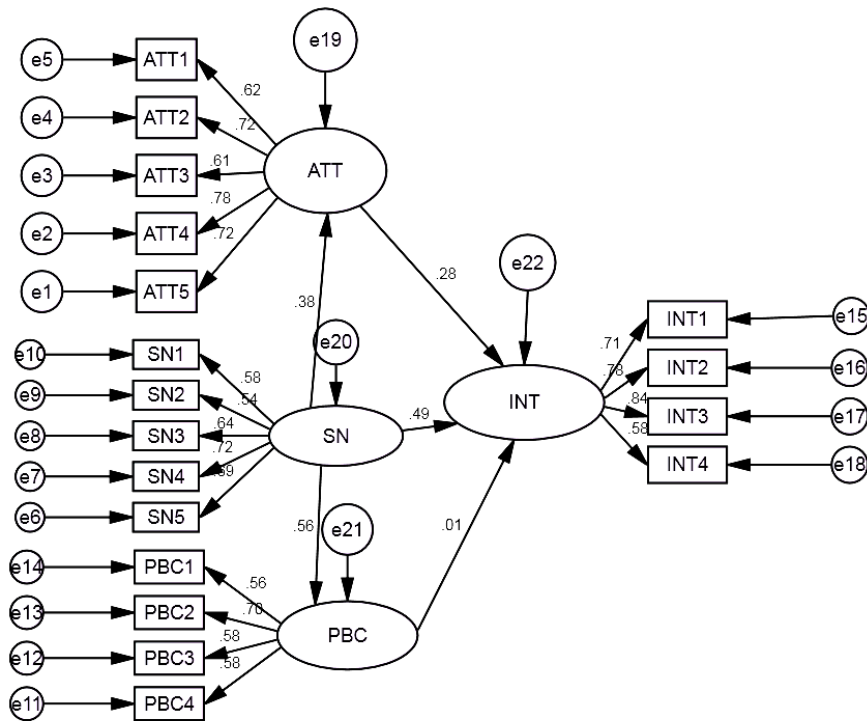


Fig. 7. The causal path from perceived behavioral control to subjective norms

The evolved model includes another causal path from subjective norm to perceived behavioral control. The model anchored and reflected here (among academicians) was the extended model of the Theory of Planned Behavior.

The H5 findings revealed that the third model proposes that Subjective norms have the most active effect on the behavioral intentions to share knowledge among academicians. The concept of an academicians’ subjective norms toward knowledge sharing behavior has a positive impact on the PBC toward the sharing of knowledge is supported here.

5.1. Testing and comparing the research models

After the measurement assessment, examination and comparison of the investigated models was conducted by Structural Equation Modelling. The three models exhibited reasonable levels of overall fit in all of the three fit indices such as 1) Absolute fit indices 2) incremental fit indices 3) parsimonious fit indices (Abdullah et al., 2015). The amended model 3 exhibited goodness-of-fit indices such as $\chi^2/d.f.$, NFI, PGFI and PNFI.

The obtained χ^2 were 611.358, 564.419, and 463.497 for faculty sharing knowledge among other faculties with corresponding degrees of freedom of 132, 131, and 130. In this study, the other comparative fit indices and parsimonious fit indices provided a reasonably good result in the model and proved that the model fits the data. Thus, the test of the model achieved a reasonable fit. The values of the fit indices are depicted in Table 5.

Table 5
Overall fit indices of the investigated model

Fit Index	Model 1: Theory of planned behavior	Model 2: Causal path from SN to ATT	Model 3: Causal path from SN to PBC.	Recommend cut-off value
Measures of Absolute Fit				
χ^2	611.3	564.5	463.5	Near to the degree of freedom
d.f	132	131	130	The greater the better
$\chi^2/d.f$	4.6	4.3	3.6	3 to 5
FI	0.87	0.90	0.912	≥ 0.8
RMSEA	0.08	0.079	0.069	≤ 0.08
Incremental Fit Measures				
PNFI	0.8	0.8	0.8	≥ 0.90
AGFI	0.9	0.9	0.9	≥ 0.8
CFI	0.9	0.9	0.9	≥ 0.90
Parsimonious Fit Measures				
PGFI	0.6	0.7	0.7	The higher the better
PNFI	0.7	0.7	0.7	The higher the better

The academician’s intention to share knowledge is absolutely inclined toward attitude, subjective norm, and perceived behavioral control. The modified theory of planned behavior (model 3) model improved the goodness of fit for the data. We also arrived at an evolved model where we determined that PBC to intention was not significant. This model is midway between the theory of reasoned action (TRA) and the model with the causal path from subjective norms to attitude, and the third model with the causal path extending from the subjective norms to perceived behavioral control. This is further discussed in a later section.

5.2. Path coefficients

Table 6
Significance and strengths of individual paths

Path Coefficient	Model 1: Theory of planned behavior	Model 2: Causal path from SN to ATT	Model 3: Causal path from SN to PBC
ATT → INT	0.3	0.27	0.26
SN → INT	0.54	0.53	0.57
PBC → INT	0.12	0.12	0.02
SN → ATT		0.44	0.48
SN → PBC			0.5

The path coefficients were tested at a significance level of 0.01.

The path coefficients (see Table 6) from attitude to intention and the subjective norms to behavioral intention were noteworthy for all of the models (i.e., the TPB model, model 2 with the causal path from SN to Attitude, and model 3 with the causal path from SN to PBC). The positive relationship that existed between the subjective norms and attitude toward knowledge sharing, which explains that there is a similarity in faculty attitude toward knowledge sharing with what they feel about knowledge sharing due to peer pressure. Similarly, the casual path created from subjective norms to perceived behavioral control reveals that the academician’s behavior in knowledge sharing depends on the feelings of our perception of the view of others.

But in all three models, the path coefficients between PBC and Intention are insignificant and that leads to releasing a new model as mentioned in the Discussion Section.

6. Discussion

In all three models, the paths between PBC and Intention are significant, which results in a new model as shown below Fig. 8.

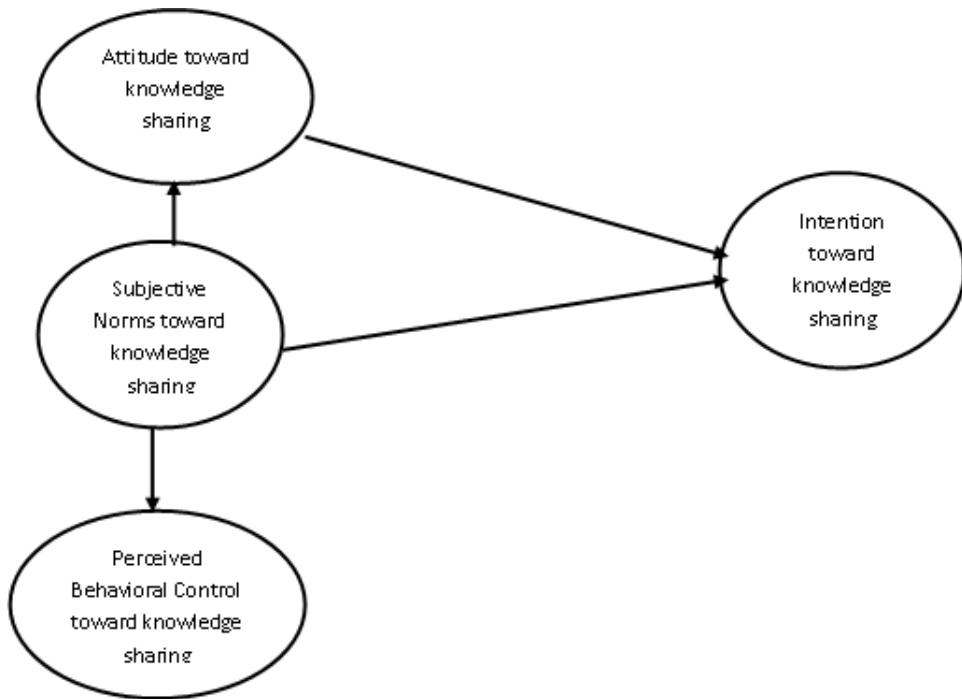


Fig. 8. The new evolved model

This model is similar to the TRA model but with causal paths from SN to ATT and SN to PBC. In our study, we portray that our model can be identified parallel to TRA as PBC doesn’t influence Intention.

Causal path between subjective norms and attitude and subjective norms and perceived behavioral control is shown in Fig. 9.

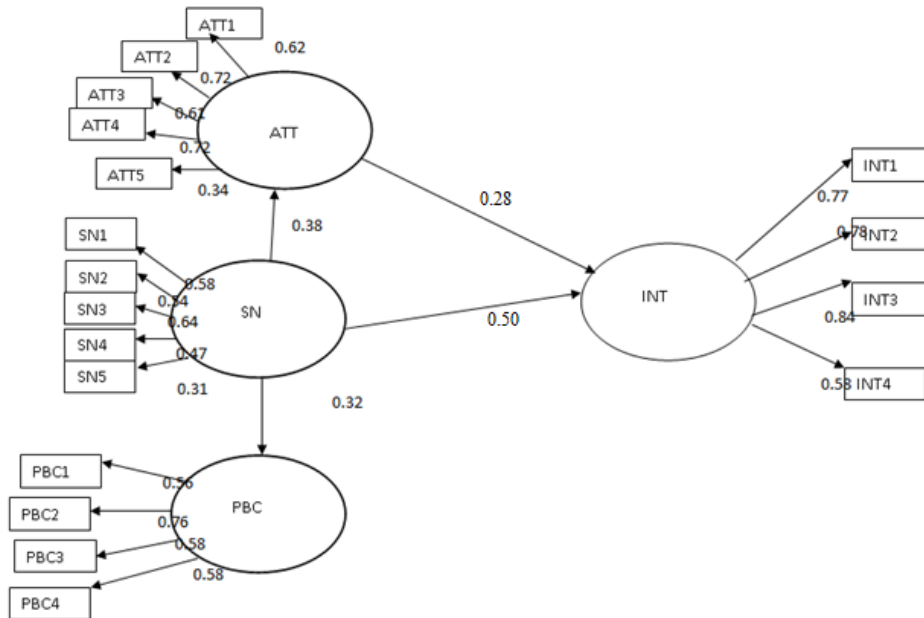


Fig. 9. Causal path between subjective norms and attitude and subjective norms and perceived behavioral control

The derived model is different from model 3, i.e., with paths between perceived behavioral control to intention that are not significant. Values for the newly derived model are shown in Table 7.

Table 7
Values for the newly derived model

Path	Values
ATT → INT	0.28
SN → INT	0.50
SN → ATT	0.38
SN → PBC	0.32

This shows the components of Perceived Behavioral Control as:

- How difficult the behavior is and
- How successful individuals share their knowledge and are not having any influence on the intention.

This implies that in the teaching community, these two components do not influence the intention to share knowledge. This is a very important finding of this study.

The motivation of this study is that from the evolved model, one could conclude that the intention to share the academic knowledge with other faculty members is strengthened by their attitude and the social pressure (i.e., subjective norm to share knowledge). The attitude to share knowledge pretended to be more strengthened by social

pressure. However, the path between PBC to intention to share academic knowledge is insignificant.

7. Conclusions

The main focus of this study was the determination of an academician's knowledge sharing behavior using the existing theory of social psychology like the theory of planned behavior. Also, this study attempted to evaluate the pertinent applicability of the Theory of planned behavior model for the academician's knowledge sharing sphere. It is noteworthy that the outcome of the study drives home the fact on several inferences among academicians.

The most important result shows that the Theory of Planned Behavior model and the new evolved model predicts knowledge sharing among faculty members. We could draw a conclusion from our models that sharing academic knowledge with other faculty members is strengthened by social pressure (i.e., the subjective norm to share knowledge but PBC toward intention does not influence sharing academic knowledge).

The findings of the study prove that the theory of planned behavior can be productively used.

The models portray that the scores of subjective norms through attitude are as significant as a previous physician's study. This emphasizes the fact that authoritative and hierarchy-based culture has been deduced to a social environment of sharing knowledge.

Knowledge management has some pitfalls that could make the knowledge management initiative fade. The limitations of this study are that it didn't cover professionals in other sectors. This study sheds light on only one particular specialized group: academicians. The findings and implications used in this study can be referred to other skilled groups as well. The main aim of the study was to explore the present condition of KS practices among the academicians of India. The purpose of this behavioral research was that findings on knowledge sharing of academicians would contribute to the improvement and long-lasting concepts of knowledge management in universities. Additional work can be done surmounting the limitations of this study. Special attention should be directed toward finding differences in knowledge sharing behaviors of academicians that may stem from the varying task structure and leadership style of different sectors. Generally, academics demonstrated an inspirational approach toward knowledge sharing and there are issues obliging further research. Thus, future exploration ought to be considered with a bigger sampling from diverse universities. Finally, more studies ought to be performed utilizing an alternate philosophy (Alsuraihi et al., 2016). With the central concept of knowledge sharing, further studies, such as private vs. public colleges with knowledge sharing, can be done.

Suggestions to overcome the barriers to knowledge sharing:

- Initiating and establishing a formal knowledge sharing forum
- Laboratory rotation that helps in KS among faculty members
- Creation of knowledge space
- Changing mind-set and working as a team (Islam et al., 2013)

ORCID

J. Antonette Asumptha  <https://orcid.org/0000-0001-9037-5989>

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