Gender Differences in Knowledge Sharing based upon Ajzen's Theory of Planned Behavior (TPB): A Study on Academicians in the Indian Context

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Abstract

Knowledge sharing is an important aspect in academics. In this study, a total of 533 (246 male and 287 female) academicians working in different educational institutions or universities located across Southern India were surveyed for their knowledge sharing activities based on the Ajzen's research model, the Theory of Planned Behavior (TPB). Their intentions towards knowledge sharing, attitude directed to knowledge sharing, subjective norms towards knowledge sharing and perceived behavioural control in the milieu of knowledge sharing were assessed by using a questionnaire and the outcomes were subjected to path analysis. Path analysis revealed that female academicians were more pronounced in their intentions and towards knowledge sharing and their attitudes towards knowledge sharing were more significant predictors of their intentions when compared to their male counterparts. Though subjective norms and perceived behavioral control in the context of knowledge sharing were significant predictors of intention for both male and female academicians, their effects were more pronounced in case of males. Perceived behavioral control by emerged as the most impactful predictor of intention for knowledge sharing in the academic context.

Keywords: Academicians, Knowledge Dissemmination, Theory of Planned Behavior (TPB), Attitude, India.

1. Introduction

1.1. Knowledge Management Cycle and Enterprise Learning

The Knowledge Management Cycle (KMC) depicted below (Figure 1) consists of three constructs: Knowledge Management (KM), people (actors) and application.
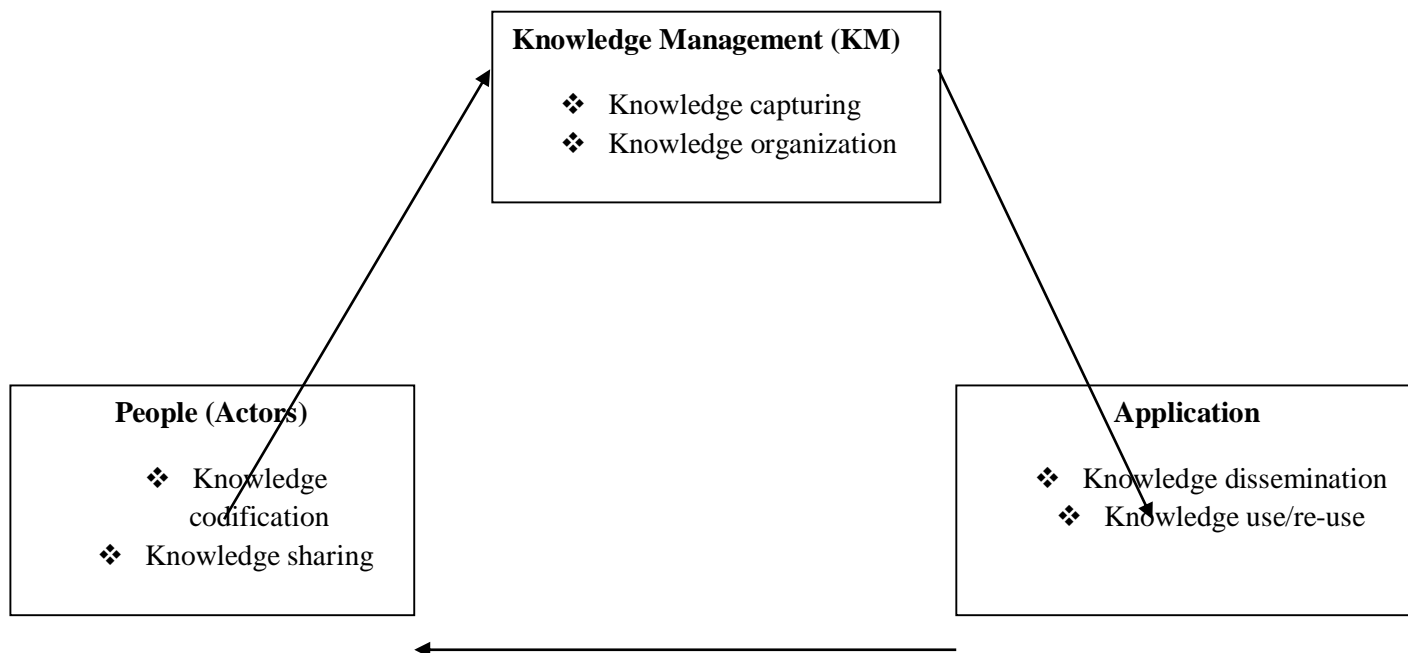
Figure 1: Knowledge Management Cycle (KMC)
Source: *Adapted from McIntyre et al. (2003)*

The KMC consists of an entire gamut of processes, beginning from capturing knowledge from different sources (such as audio, print or any digital media). This is followed by classification of the knowledge and its dissemination and use in the practical context. The use of knowledge among people (actors) over time leads to its refinement, and finally to its codification and sharing.

In the context of an enterprise, the KMC would mean making use of all the organizational assets for capturing, organizing, disseminating, application codification and use of knowledge. Schwandtand Marquardt (1994) describes *organizational learning* as "a system of actions, actors, symbols and processes that enable an organization to transform information into valued knowledge" (p. 58). An organization would no doubt have a valuable combination of assets – both human and material – that can be used in the different stages of the KMC. Over time, there has been a change in perspective, from that of *organizational learning* to the *learning organization*. The aggregate assets of an organization can be used to learn and re-learn for organizational betterment. In his treatise on the learning organization, Senge (2006) has highlighted the integrative concept of *systems thinking*. Systems thinking is a key dimension which along with the other four dimensions of: *constructing shared vision*, *psychological models*, *individual mastery* and *team learning helps* in the conversion of a simple company into a learning organization. In this study, we have examined how knowledge sharing could differ based on gender in the context of an academic institution by using constructs from the Theory of Reasoned Action and the Theory of Planned Behavior (TPB). These are further explained in the next section.

2. Review of Literature

2.1. Theory of Reasoned Action (TRA)

The Theory of Reasoned Action (TRA) was proposed by Fishbein and Ajzen (1975; 1980). It consists of an *individual component* (attitude) and a *social component* (subjective norms), which would influence a person's behavioral intentions at a point in time. TRA focused primarily on the volitional behaviors and does not include behaviors that can be classified as impulsive, those based on cravings, or mindless (Bentler&Speckart, 1989; Hale et al, 2002). The social component of *subjective norm* can be understood as how normative influences impact the nature or decision of an individual to act in a particular manner. These can be understood as how an individual would assess the views of referent individuals on his/her performing the behavior (Montano &Kaspryzk, 2015). An individual's attitude acts as a filter, in that the individual assesses his or beliefs towards that behaviorand its outcomes before actually performing the action (Fishbein&Ajzen, 1975; Montano &Kaspryzk, 2015). The model is shown in Figure 2 below.
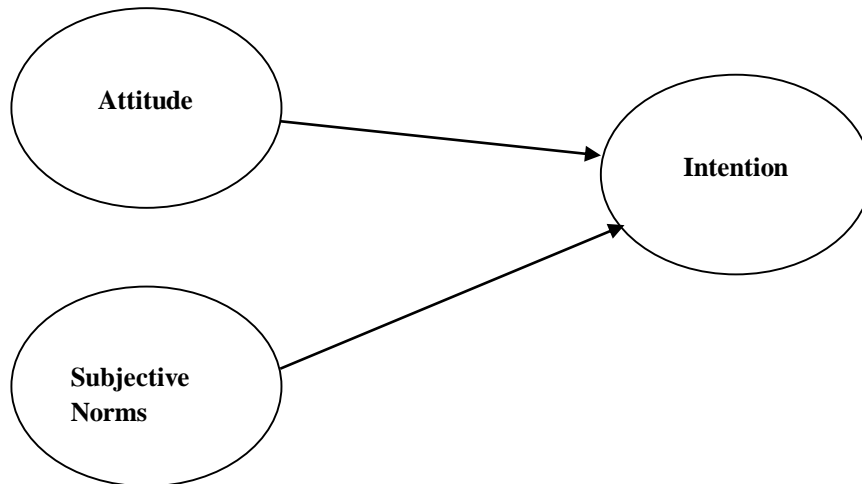
Figure 2: Theory of Reasoned Action (TRA) Model
Source:*Adapted from Ajzen and Fishbein (1975) and Hale et al. (2002)*

2.2. Theory of Planned Behavior (TPB)

Ajzen (1991) improved the Theory of Reasoned Action model that had been proposed earlier by taking into consideration past experience or resources available to the actor in performing a particular behavior. When there is a lack of extensive control over targeted behavior, the role of *perceived behavioral control* comes into play. Even if an individual's attitudinal indications and subjective norms are favorable, the perception of a lack of resources required to perform a particular behavior may hinder him/her from performing it (Madden et al., 1992).From another context, perceived behavioral control could also be understood in terms the degree of confidence and control an individual possesses about performing a behavior (Chen & Chen, 2011; Pelling& White, 2009). TRA was modified by adding perceived behavioral control as an additional analyst variable of behavioral intention. In mathematical terms, the relationship can be represented as below (Goh&Sandhu, 2013):

Attitude + Subjective Norms + Perceived Behavioral Control = Behavioral Intention

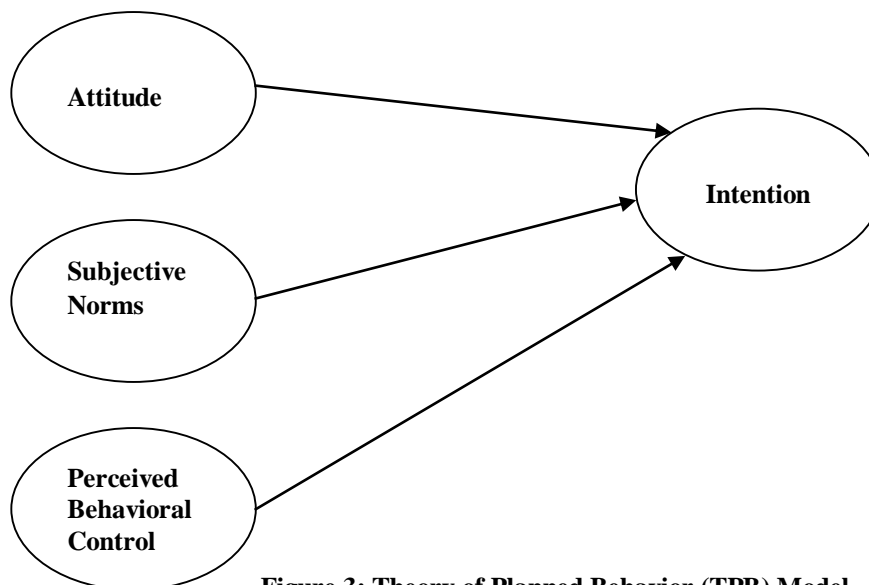Figure 3 below shows the Theory of Planned Behavior (TPB) model:

Figure 3: Theory of Planned Behavior (TPB) Model
Source: *Adapted from Ajzen (1991)*

2.3. TRA and TPB in the Study Context

Academicians often exchange both like and unlike ideas and opinions. Sharing ideas and receiving opposing views may be either a pleasant or unpleasant exercise. Due to prevailing norms, academicians may feel stress in sharing ideas among themselves. This may lead to stress. Theory of Planned Behavior (TPB) has been studied in the context of academics (Goh&Sandhu, 2014), healthcare (Ryu et al., 2003), horticultural programs (Clark-Richardson, 2003), technology adoption (Crespo& del Bosque, 2008) and tourism (Quintal et al, 2010). Studies have also been carried out in the academic context involving TRA (Ramayah et al, 2013; Oye et al, 2014) and TPB (Adenan et al, 2013). In this research, an attempt has been made to study the different constructs of Theory of Planned Behaviour in knowledge sharing among academicians in the Indian context.

3. Methodology Used

This study is exploratory in nature and used stratified sampling. A database of potential academicians working in different academic institutions in Southern India in ranks ranging from lecturer to full Professor was prepared and contacted for their responses. A total of 246 male academicians and 287 female academicians responded to the questionnaire, giving a sample size of 533. A questionnaire was developed on the to assess the four constructs of TPB in the perspective of academic knowledge sharing with Behavioral Intention towards knowledge sharing (IN: 4 items), Attitude towards knowledge sharing (AT: 5 items), Subjective norms towards knowledge sharing (SN: 5 items) and Perceived Behavioral Control in the context of knowledge sharing (PBC: 4 items). Respondents were asked to rate their responses with values ranging from 1 to 5: meaning *strongly disagree* to *strongly agree*. The responses obtained were cleaned and subjected to Structural Equation Modeling (SEM) using AMOS.The data obtained were further analyzed to study the differences in TPB in the context of knowledge sharing in the Indian context based on gender.

4. Findings and Discussion

Table 1 shows the standard indices used to assess the model fit for path analysis for both male and female respondents.

Table 1: Standard Indices for Path Analysis (Males and Females)

S l. No.	Index	Male (N = 246)	Female (N = 287)
2	NFI	.679	.652
3	TLI	.728	.624
4	CFI	.764	.708
5	RMSEA	.085	.08
6	Chi-Square	368.415	519.422
7	Degrees of Freedom (DF)	133	133
8	CMIN/DF	2.77	3.91

Source:*Authors' analysis*

The indices indicated the path analysis model for both the genders to be a reasonable fit (Carmines & McIver, 1981; Marsh &Hocevar, 1985).Table 2 shows the unstandardized regression coefficients for the measured constructs for both male and female respondents. Figure 4 shows the outcome of the Path Analysis for male respondents and Figure 5 shows the outcome of Path Analysis for female respondents.

Table 2: Unstandardized Regression Coefficients for Constructs

Code	Item	Male (N = 246)	Female (N = 287)
AT1	Sharing knowledge with my students, I feel very harmful – very beneficial	.93***	.60***
AT2	Sharing knowledge with my students, I feel very unpleasant – very pleasant	1.27***	.82***
AT3	Sharing knowledge with my students, I feel very bad – very good	1.16***	.79***
AT4	Sharing knowledge with my students, I feel very worthless – very valuable	1.41***	.93***
AT5	Sharing knowledge with my students, I feel very unenjoyable – very enjoyable	1.00	1.00
SN1	I have been expected to share knowledge with students/academicians who are important to me	.93***	.99***
SN2	I have been expected to think that I should share knowledge with students	.83***	.72***
SN3	I have been expected to share knowledge with students whose opinions I value	1.06***	.83***
SN4	It has been expected that academicians who are important to me would approve of my behavior to share knowledge with students	.97***	.88***
SN5	Expectation is their that most academicians who are important to me share their knowledge with students	1.00	1.00
PBC1	According to me to share my knowledge is possible always	1.31***	1.23***
PBC2	I always could share knowledge if I want it	.92**	.82***
PBC3	It is mostly up to my decision that whether or not I share knowledge	.56**	.70***

Code	Item	Male (N = 246)	Female (N = 287)
PBC4	I suppose that there are a great deal of control I have to contribute my knowledge with students	1.00	1.00
IN1	I at all times plan to share knowledge with my students	1.00	1.00
IN2	I regularly will try to share knowledge with my students	.94***	1.16***
IN3	I consistently will make an effort to share knowledge with my students	.86***	1.12***
IN4	I forever intend to share knowledge with my students if they ask	.68***	.88***

Note: *$p< .10$; **$p< .05$; ***$p< .001$;
Source:*Authors' analysis*

Table 3 gives the details of the paths from the variables attitude (AT), subjective norms (SN) and perceived behavioral control (PBC) to the dependent variable behavioural intention (IN) in the context of knowledge sharing for both male and female academicians.

Table 3: Path Analysis Results for Predictor and Outcome Variables (Males and Females)

Sl. No.	Path	Male (N = 246)	Female (N = 287)
1	AT → IN	.16*	.29***
2	SN → IN	.45***	.32***
3	PBC → IN	1.53***	1.06***

Note: *$p< .10$; **$p< .05$; ***$p< .001$;
Source:*Authors' analysis*

4.1. Attitude towards Knowledge Sharing

From the items assessed for the construct, it could be observed that academicians of both genders seemed to enjoy knowledge sharing. However, males felt it to be more beneficial and valuable. The attitude of male academicians did not significantly impact their intention for knowledge sharing, while the attitude of female academicians did significantly impact it ($p<.001$).

4.2. Subjective Norms towards Knowledge Sharing

From the items assessed for the construct, it could be observed that male academicians were predominantly more conscious than their female colleagues of the norms involved in sharing knowledge with students. However, both males and females equally respected the views of academicians they held in high esteem. Subjective norms were a significant predictor of their intention to share knowledge for both male and female academicians ($p< .001$) with the impact being higher in case of males.

4.3. Perceived Behavioral Control towards Knowledge Sharing

Both categories of respondents agreed that they could control their knowledge sharing. However, the desire and choice to share knowledge was more significant in case of female academicians when compared to their male counterparts. On the whole, however, perceived behavioral control played a major role as a predictor of the intention to share knowledge for both male and female academicians ($p< .001$) with the impact being higher in case of males. Of the three predictor variables, this seemed to have the highest impact on the intention towards knowledge sharing by academicians.

4.4. Intention towards Knowledge Sharing

Both male and female academicians planned their intended knowledge sharing with students. This item was possibly related to their class preparations. However, female academicians were more pronounced in their declared intentions and willingness to share knowledge among students, more so in case the students were inquisitive about it.

5. Conclusion

The outcomes of this study on male and female academicians offer interesting findings and contrasts. Female academicians were more pronounced in their intentions towards knowledge sharing and their attitudes towards knowledge sharing too were more significant predictors of their intentions when compared to their male counterparts. Though subjective norms and perceived behavioral control in the context of knowledge sharing were significant predictors of intention for both male and female academicians, their effects were more pronounced in case of males.

Perceived behavioral control by far emerged as the most impactful predictor of intention for both males and females. Given that the sample of the study involved academicians of different ranks in India, the concept of perceived behavioral control assumes significance in academic interactions with students.
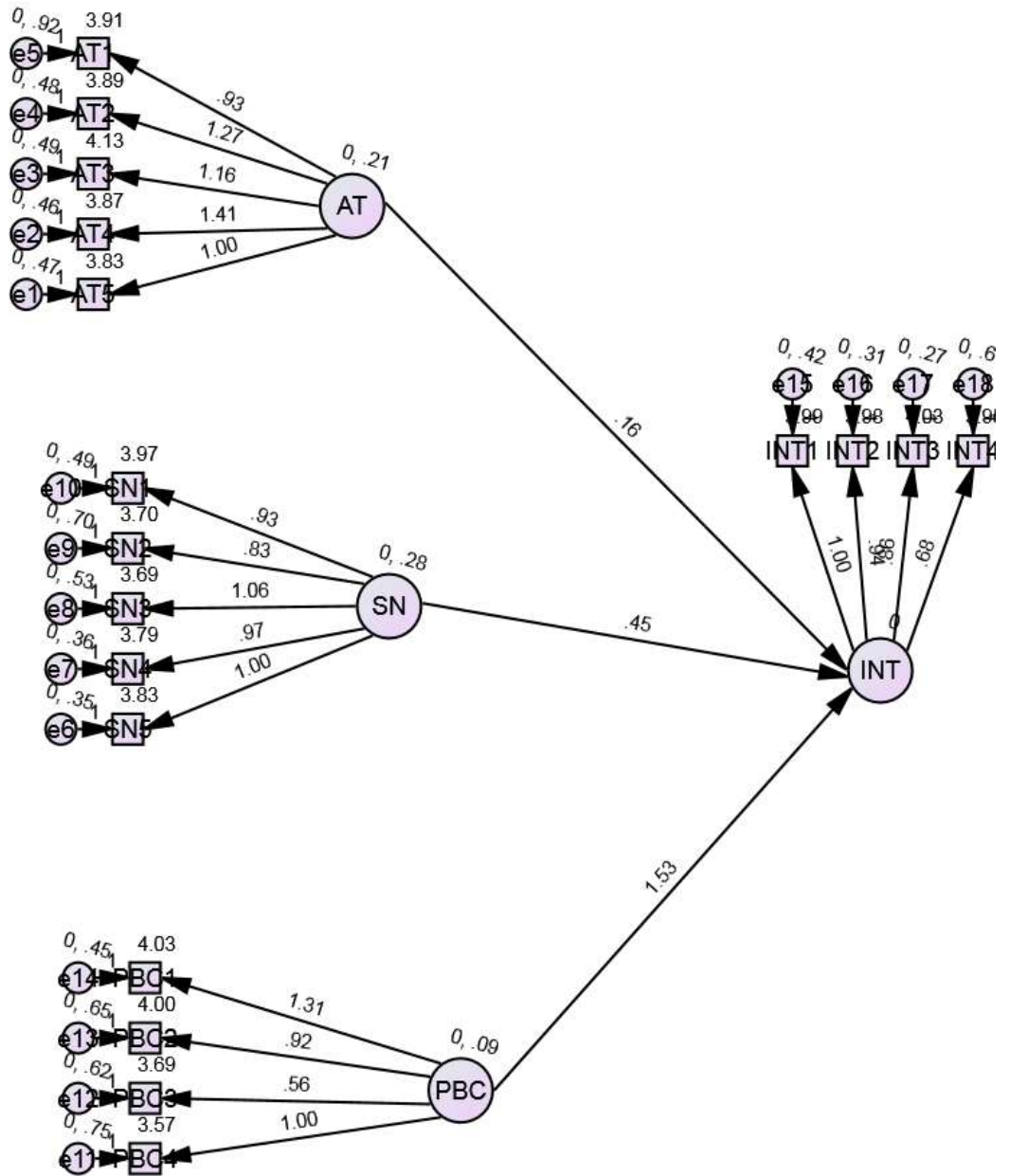
Figure 4: Results of Path Analysis for Knowledge Sharing using TPB for Male Respondents
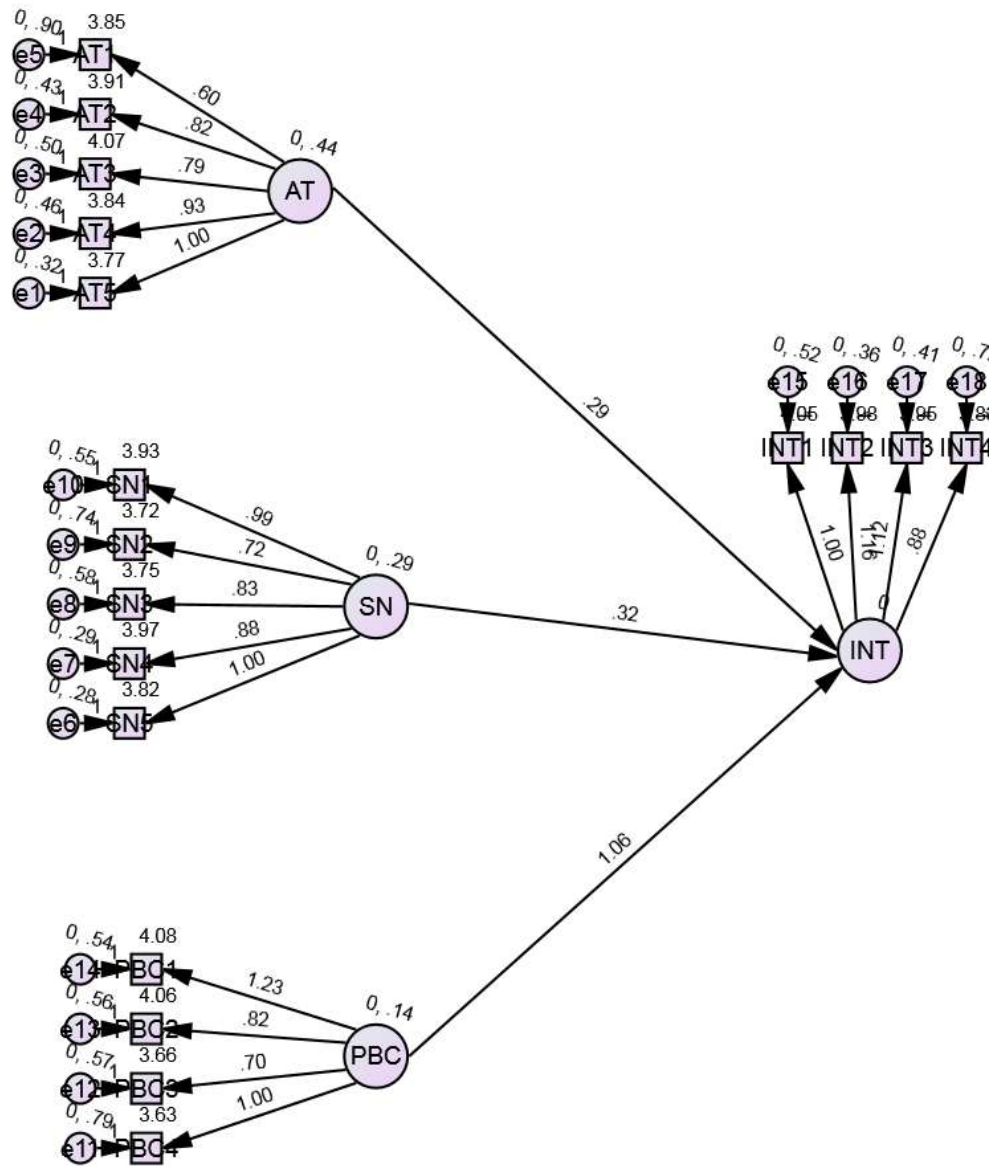**Source:***Authors' analysis*

Figure 5: Results of Path Analysis for Knowledge Sharing using TPB for Female Respondents
Source:*Authors' analysis*

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