



AFFECT TPB: A MODEL TO PREDICT KNOWLEDGE SHARING BEHAVIOUR BY CONSIDERING AFFECT, SOCIAL COMMUNICATION BEHAVIOUR AND SOCIAL COLLABORATION BEHAVIOUR

Ng Chuee Leng, Angela Siew-Hoong Lee and Tong-Ming Lim
Sunway University, Jalan Universiti, Bandar Sunway, Petaling Jaya, Selangor, Malaysia
E-Mail: ngcleng@gmail.com

ABSTRACT

Many Web 2.0 interactive online sites have grown at an alarming rate and they have changed the communication and collaboration behaviour of knowledge workers in knowledge driven organizations. Social networking sites are online platforms that allow people to collaborate and communicate through a variety of services. These social networking sites drive new forms of social interaction, allowing users to intermingle and cooperate with each other by exchanging ideas by posting updates and comments. It is crucial to comprehend how social relationships affect the content shared among knowledge workers in virtual worlds. Lately many social network features were introduced based on some feedbacks found by researchers in the area of affective computing. Since affect is a thorny and cryptic area of research in psychology field, it is unidentified whether the knowledge sharing activity and the affect are closely related in the Information Systems research. Hence this research investigates the relationships of positive and negative affect and knowledge sharing attitude among knowledge workers in organization. Furthermore, the influence of social communication and social collaboration behaviour on knowledge sharing behaviour will also be analyzed in the proposed Affect TPB Model.

Keywords: virtual community of practice, affect, social communication behaviour, social collaboration behaviour, knowledge sharing, knowledge workers.

INTRODUCTION

It is the desire of many organizations to develop knowledge sharing culture where knowledge workers collaborate to share their knowledge effectively. Organizational knowledge sharing is the fundamental and vital process for organizations to be more successful in the current business eco-system. Knowledge Management (KM) is the formal gathering process that organizes, distributes, and effectively use of knowledge in the forms of resources and people skills. This helps to develop the competence of the people resources in the organizations by improving the sharing of what they know and making the knowledge easily obtainable or accessible by those who need it. Peariasamy & Mansor (2008) pointed out that one of the objectives of knowledge management projects is to encourage the sharing of knowledge among employees.

More than ever, the success of many organizations have increasingly hinged on their ability to create and share knowledge efficiently. Their success depends on effective knowledge management and organizational learning. Knowledge sharing is about synergistic alliance of individuals who bear a common goal or ambition by reciprocally exchanging knowledge and creating new knowledge in cooperation. Transitive memory, people, and content are the three key elements in knowledge sharing: knowing who knows what and where the information is, with who the sharing activities occur and what sort of information is being shared. It is important to comprehend the implications of how affective states impact beyond individual cognitions but also the interpersonal communications and collaborations that built in business contexts within rich information environment

(Forgas & George, 2001). The behaviour of employees determine the successfulness of knowledge sharing practices in a company. Hence one should be enthusiastic to share knowledge and treat it as valuable asset since it is important to achieve a set of objectives both for at the personal as well as organizational levels. Lately, knowledge management researchers have moved their attention to human factors instead of organizational and technological factors, since social and human factors tend to be the fundamental of individuals' willingness to share their knowledge. The stouter the involvement or identification of an individual within specific social organization, the higher the willingness for him to share knowledge. Many related works highlighted on the importance of role of affect in knowledge sharing activity. Researchers stated that the significance of affect will either directly or adversely impact sharing outcomes. Plutchik (2001) mentioned that the study of emotion in the affective domain is one of the most complicated areas in psychology field. Considering emotion is the essential act of affective domain which influences behaviour of individuals, leading elements of emotional experience like Positive Affect (PA) and Negative Affect (NA) have caught the attentions of researchers nowadays. The Positive Affect and Negative Affect Scheme (PANAS) comprised of two 10-item scales for Positive and Negative Affect (Watson, Clark and Tellegen, 1988) to measure the different type of affects. Recently there has been an upwelling of studies which attempted to consider affect and emotion into social science theories. This clearly indicates that cognitive psychology is shifting from a limited focal point on perceptive and insights towards the rediscovery of affective processes. A broad pallet of



human behaviour in social psychology can be forecasted by adopting existing theories like Theory of Reasoned Action and Theory of Planned Behaviour. These evidences imply there is stronger need to further research on the combination of psychology theory alongside with down-to-earth aspects in information system; particularly on the research gap between affect of knowledge workers and knowledge sharing attitude and behaviour in virtual Community of Practice within organization.

Over the past ten years, the enormous growth of social media related activities and social professional networks have created new opportunities as well as new challenges for organizations that want to embrace the dynamic world of social interaction and fluid knowledge flows. For example, social networking media tools such as Twitter and Facebook were utilized by employees to promote networking in workplaces. These social tools augment information exchange and knowledge sharing among employees in small-to-large organizations facilitating building of common ground and maintaining a feeling of connectedness among individuals across the organizational hierarchy. Besides, social media can also facilitate the development of employees in terms of connections maintenance with a large group of colleagues in a more efficient way (Huy & Shipilov, 2012). Another benefit of using social media in organizations is that social network allows employees to feel that they are being recognized and appreciated by their own organizations while involving in information sharing or other online activities. This can rectify the shortcomings or deficiency of a company's culture indirectly via information exchanged on social networks. Another benefit of social networking tools is their ability to construct bonding between employees, allowing them to put forth to unfamiliar colleagues and to discover experts in the company.

Social network analysis is a study that derives from the concept of paths or chains of individuals communicate to exchange information in a social network. Otte & Rousseau (2002) stated that many organizations use informal networks as the primary means by which employees find information, solve complex problems, and learn how to do their work. In Abrams *et al.* (2003) pointed out that to communicate in a social network effectively, two forms of interpersonal trust are required - trust in a person's competence and in a person's benevolence - to enable effective knowledge creation and sharing in these networks. There is a great numbers of research works focused either on the factor that caused the success or failure of knowledge sharing, however research effort on exploring the relationship between affect and knowledge sharing behaviour via virtual Community of Practice were not found in the review of related works. As a result, this paper aims to predict knowledge sharing behaviour by investigating the influence of positive and negative affect among knowledge workers as they collaborate and communicate socially to share knowledge in social network sites. Questionnaire is used to collect responses from knowledge workers and findings will be obtained from analysis produced by structural equation

modelling technique. Text miner software is used to generate knowledge and topics discussed from comments posted. Sentiment analysis software is used to mine the positive and negative properties of the comments. Outcomes of text and sentiment analysis are used to answer questions that questionnaire findings can't answer. This research uses secondary data source (social media data) instead of data of focus group study to clarify remaining queries from questionnaire outcomes.

LITERATURE REVIEW

Emotion, feeling, affect, mood, sentiment and related studies

Emotion is an intricate mental reaction experience of an individual as it meshes with internal and external influences. It unites mood and behaviour, carrying out the deepen feeling that associated with an individual's expression, thoughts, and personality. Emotion is additionally a positive or negative practical knowledge that links a certain norm of physiological activity which influence individual's idea and comportment naturally. As such, emotions in charge of the thoughts, behaviour and activity of an individual; at the same time affects physical bodies to the extent that the body affects sentiments and believes. Feeling influences mood and behaviour of an individual, is the state of mind or response that portrays the physical sensation of touch as a consequence of experience or insight. In another word, feeling is a verbal noun that signifying the operation of the verb to feel and also work as the awareness of emotions. Describing in the same way, the difference between a feeling and emotion is that: emotion is a noun while feeling is a verb. Feelings are the outcomes of emotions, and emotions give out to be a kind of "sentiments manufactory". Whenever feelings are formed, they often feed back into emotions to produce the proper consequences to assure continuity.

Affect portrays the proneness of an individual to acquaintance certain moods more often or to be open to respond through particular forms of emotions. Other than that, affect is able to influence something in some way and being used to refer to the altering of feeling or emotion in cognitive psychology term. However, it is not easy to explain the word "affect" in language since this is a subjective experience that how individual thinks as it sometimes might happen out of one's expectation. Affect might be an unchanging characteristic of the behaviour, or could be experienced in specific moments. Furthermore, affect can be a mixture of emotions and moods as it shows the experience of emotion and how a person's emotional state is being noticed by someone else, for example happiness and unhappiness, pressure and relaxation, energy and exhaustion. Tellegen (1988) stated that Positive affect (PA) and Negative Affect (NA) are associated to the condition of mode and characteristic aspects of an individual. Positive affect is often experienced in a pleasurable state, especially when an individual feels excited or actively concentrating in something. On the contrary, negative affect refers to



subjective anxiety and shows disinterested mood, usually in an unpleasant state like annoyance, tenseness, or terror. Mood is an interim state of mind or sentiment by giving rise of a specific feeling that generally out of one's hand. This emotional state that feels precisely normally lasts for a long period and is not triggered by an exact spur or occasion. To put differently, mood is a temporary emotion which acts upon individual's feelings on that certain period resulting and it can be change often by signifying cheerfulness, annoyance, or sometimes nervousness (Clark, 2005). Mood is like the shifting of a sudden impulsive and apparently unmotivated idea or action that cannot be easily seized. This is due to one's subjective perception which is supported by individual references and the judgement depends on the sensitivity of mood in other individuals. Mood deemed as a group of persevere sensations connected with evaluative and conceptualized conditions which influence all the potential evaluations, emotions and actions (Amado, Donnet, Olie, 1993). It is known that mood influences the approach an individual reacts to the stimuli; for instance a gloomy mood brings into a favoritism of negative replies, while a hyper mood prone to cause an individual reacts vigorously. Mood contradicts from emotion since it is slighter explicit or less extreme and usually contains either a positive or negative carriage. Furthermore, mood is more interior and personal nevertheless can be interpreted from attitude or actions. Mood is not bound by an entity. It is a kind of feeling that likely less intensified and short of appropriate incentive compared to emotions. Specifically, emotions can change into moods whilst one loses concentration on the related entity. An individual is not able to show his mood but can reveal his inner secreted emotion. Emotions apt to be more observant and different than moods; at the same time it has a more variety of delicately diverse emotions. However there are only two generalized mood, which are the good one or bad ones. Such as, even as an individual is in a bad mood, it is also probably to feel depressed or annoyed.

Affect shows the experience of emotion and how a person's emotional state is being noticed by someone else. The difference between mood and affect is that it is not essentially to have specific stimuli for mood but emotion does have an obvious root cause. More, affect is the behavioural expression of feelings which resulting from immediate responses while mood is what a person feels and it lasts for a significant of time since causes or reasons are imprecise. Sentiment is a sincere plus refined sensibility and is a proneness to be affected by emotion. It is a delicate opinion or attitude that expressed towards a condition by combining thoughts and feeling at the same time. In another word, sentiment is an opinion or psychological mind-set produced by individual's feeling regarding something. It is a genuine emotional response (for instance thought, view, or attitude) and an affection to be influenced by emotion rather than reason or fact (Toit & Pietermaritzburg, 2012). Sentimental implies an incorporate of feeling while emotional is a revealing one. Sentiments end up working for emotions as emotions are change agents that look forward and make things happen. Sentiments are only driven to action when they are

physically threatened themselves; while emotions are driven by the future they see, and the injustices they encounter.

As a final point, emotion is action while sentiment is talk (Toit & Pietermaritzburg, 2012). Affect is the practice of sensing an emotion that serves as an umbrella concept which covers both emotions and moods, along with positive and negative sentiments which influences the approach on decision making; whereas mood is a state of emotion or the feelings that likely to be less strong than emotions and usually short of related stimulus. The mood of organization workers do impact on knowledge sharing via social network sites since their sentimental appearances might affect other workers. Positive sentiment workers is more willing to share appropriate information unselfishly compared to workers that has negative sentiment or feelings towards other workers.

Knowledge sharing related works

Knowledge sharing is an activity that commonly supported by knowledge management systems that nonetheless which knowledge like information, skills or expertise is exchanged between individuals or organizations to endorse evidence-based practise and assessment making. Sharing knowledge is not about providing an individual something or gaining something from them, it take places when individuals are authentically fascinated in giving out a hand on one another to build up new abilities for action and about shaping learning procedures. It is important to ensure that knowledge sharing is being practised as organizations have distinguished that knowledge makes up a valuable or beneficial insubstantial asset for forming and preserving competing advantages. There are numbers of aspects that influence the sharing of knowledge in organizations; for instance technology, organizational culture, trust, and incentives.

Every successful enterprise or organization constantly enhances work efficiency by exchanging knowledge. The process that people obtain knowledge and being educated on others' experience can be exchanged via the intranet, extranet or Internet. It is very important for employees to share knowledge efficiently or unselfishly within an organization, since knowledge is the power for a company. In addition, companies will gain more benefits and improvements especially when their employees are willing to share or exchange their knowledge with other colleagues. Knowledge sharing is vital for constructing a new knowledge with the purpose of attaining competitive advantage and of the raining number of staff turnover, as well as the endurance of nearly all business relies upon the creation and operation of fresh knowledge and it is consequently foreseeable that knowledge requires sharing. Prior to form a knowledge sharing culture, one should inspirit others to work together and cooperate more efficiently and to contribute to facilitate the productivity of organizational knowledge. According to Gurteen (1999), the sharing of knowledge is essential in business for the reason that new knowledge



leads to continuous competitive advantage in the structure of competitive aptitude, at the same time the tacit knowledge inhabits in the minds of employees will be gone when they leave the organization.

The basis of organizational knowledge creation is the conversion of tacit knowledge into explicit knowledge and back again. Explicit knowledge is knowledge that “can be expressed in words and numbers, and easily communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles”. Examples of explicit knowledge include chemical formulae, market forecasts, operations procedures, product specifications, software code, and technical standards. Do not view tacit knowledge and explicit knowledge as mutually exclusive but as complementary entities. Over time, human knowledge shifts between the tacit and the explicit through a process of social interaction between individuals that also produces new knowledge and expands its use. However, there are some barriers that influence employees on knowledge sharing although it is being recognized as an essential asset in companies nowadays. An example is that employees that work in traditional companies treat their learned knowledge as the source of power and will not share their knowledge with other colleagues easily since they are afraid that it will influence their current status in the company. Another aspect is the lack of trust and also different organizational culture background of each employee does affect the efficiency of knowledge sharing process. Employees that come from different organizational culture background often causes misunderstandings during discussions begin; and employees that do not trust outsiders will not have the willingness to share knowledge easily as well.

Collaboration and communication in knowledge sharing activities

The Internet upsurges the knowledge sharing activity in virtual communities with the objective of facilitating the communication and collaboration among individuals by providing an environment for them to perform reciprocal sharing or interaction. Communication is the behaviour of transmitting information from one place to another for the purpose of forming a shared understanding, in which participants not only exchange information, thoughts and sentiments but also generate and share meaning (Jiang *et al.*, 2011). It serves as a connection between sender and receiver (particularly people or place for this research study) by passing messages through mediums like phone or email. First of all, it is required for the sender and receiver to share a common means of understanding to each other for successful communication. Effective communication is essential within organization as it perks up business competence and helps a business to be successful. One of the effective communications is that, sender must encode the information to a proper structure which is able to pass through the communication channel for receiver's understanding.

The influence of social interaction and communication along with the psychosocial mechanisms like beliefs affect and action has been much discussed over the Internet (Carey, 1989). These technology-mediated communication allow individuals to interrelate and alter the way how they relate to another individual over social media in a more convenient method. For instance, few studies that have been conducted to inspect the way of social media usage and other technology-mediated communication on the influence of communication skills. Social networking site is a convenient knowledge sharing tool that provides the aptitude to get individuals stay connected and manage the interactions in reading or responding other individuals with their own pace and time. Rheingold (1993) mentioned that online communities form when discussion contributors developed social relationships upon discussing certain topic online.

The understanding on the properties of collaboration and communication among knowledge workers as ties in a social network is of high importance. Using social network as a platform to share knowledge among knowledge workers in a virtual Community of Practice (CoP) is also a challenge where actors as ties that are usually not known to each other due to distance and lack of face-to-face interaction. The following examine characteristics, factors, challenges and unsolved issues carried out by researchers. Social network research presupposes that trust is linked by positive ties between two network actors. Chua, Ingram & Morris (2005) tried to bring out the amount of trust ego that has in alter, in a more detail way by studying on manager's ego-centric professional networks: trust can be built on either a socio-emotional basis (affect-based trust) or an instrumental basis (cognition-based trust). These two types of trust lead to diverse results in both laboratory or field settings, as they influenced in or hold back knowledge creation and transfer among workers via Social Network Analysis. This is attributable to different manners by various factors like kind of exchange relationships that exist between them.

RESEARCH CHALLENGES AND QUESTIONS

In a nutshell, the problem statements can be summarized as the following:

- 1) It is also found that very limited works are focused on PA and NA on knowledge sharing behaviour and most of the works only focus on specific emotional elements but not on a spectrum of affective states.
- 2) Organizations failed to build knowledge sharing culture due to poor communication and collaboration among knowledge workers on social networking systems

Extend on Ajzen's (1988) Theory of Planned Behaviour as the base theory to predict knowledge sharing behaviour with PA, NA, social communication and collaboration behaviour; the following is a set of research questions that will be answered:



(1) Would positive affect positively influence knowledge sharing attitude of knowledge workers on virtual Community of Practice (vCoP)?

(2) Would negative affect positively influence knowledge sharing attitude of knowledge workers on vCoP?

(3) Would social communication behaviour influence the attitude towards knowledge sharing among knowledge workers on vCoP?

(4) Would social collaboration behaviour influence the attitude towards knowledge sharing among knowledge workers on vCoP?

(5) Would attitude towards knowledge sharing, subjective norm, and perceived behavioural control among knowledge workers influence knowledge sharing intention and knowledge sharing behaviour on vCoP?

RESEARCH HYPOTHESES

In this research, hypothesis for the research questions will be described and rationalized. Hypothesis for research question #1 is defined as follow:

H(1): Positive affect will positively influence knowledge worker's attitude toward knowledge sharing on vCoP.

The affect within knowledge workers do influence the attitude of how knowledge being shared on virtual Community of Practices. According to Positive and Negative Affect developed by Watson and Clark (1988), most of the individuals attempt to preserve affective steadiness and form affiliations that balance out their likes and dislikes, as the attitude of an individual is determined by connotation differential level of assessment within himself. Individuals who are in excited state or condition typically inclined to focus on the potential positive results of forthcoming happenings and suppose that they can attain more positive endings. Hence, this hypothesis tests if a knowledge worker who is in positive affect will be more willing and happy to share knowledge with another knowledge worker on virtual Community of Practices. Hypothesis for research question #2 is defined as follow:-

H(2): Negative affect will positively influence knowledge worker's attitude toward knowledge sharing on vCoP.

Negative affect within an individual does have the potential to hinder the knowledge sharing activity and influence the knowledge sharing attitude on virtual Community of Practices. Watson and Clark (1988) stated that negative affect usually causes individuals to have unpleasant feeling or negative affect at that particular period and perhaps will cause negative consequences on his or her own attitude (Watson and Clark, 1988). Hence, this hypothesis tests if an individual who has negative affect will not be willing and reluctant to share knowledge with another individual on virtual Community of Practices. Hypothesis for research question #3 is defined as follow:-

H(3): Social communication behaviour will positively influence the attitude towards knowledge sharing among knowledge workers on vCoP.

The social communication behaviour among knowledge workers do influence the attitude of how knowledge being shared on social network sites. This is due to the self-esteem of an individual that deeply influence the decision making and communication behaviour when he shares knowledge on social networking sites. Ferguson and Perse (2000) mentioned that the Uses and Gratifications Theory is used to examine the attitude of individuals behind online communications; the more individuals are socially connected, the more intensely they are probable to communicate using different media which are easily accessible to them. Therefore, a positive connotation between social communication behaviour and knowledge sharing attitude may be expected. Hence, this hypothesis tests if the more positive social communication behaviour a knowledge worker has, his or her attitude will turn out to be good during knowledge sharing activity on virtual Community of Practices. Hypothesis for research question #4 is defined as follow:-

H(4): Social collaboration behaviour will positively influence the attitude towards knowledge sharing among knowledge workers on vCoP.

The Social Network Theory proposed by White and Houseman (2002) brings out the relationship between knowledge sharing activity and knowledge workers as in the more individual collaborates with another person by using virtual Community of Practices, the attitude of knowledge workers will be better during knowledge sharing activity. This hypothesis tests if the social collaboration behaviour of a knowledge worker is good or positive, his or her knowledge sharing attitude will be good as well. Hypothesis for research question #5 is defined as follow:-

H(5.1): Attitude towards knowledge sharing and knowledge sharing intention among knowledge workers is significant and positively related.

Theory of Planned Behaviour shows that attitude is the main factor which influences behavioural intention and can be used to predict intention (Ajzen, 1988). According to the paper written by He and Wei (2009), they confirmed that trust strongly influence individual's attitude and intentions as trust is the foundation for building effective relationships. The openness in accepting opinions from others serves as one of the factors that facilitate problems solving and determined by the level of trust in oneself. Hence, this hypothesis tests if positive attitude towards knowledge sharing positively correlates with the knowledge worker's intention to share knowledge on virtual Community of Practices.

H(5.2): Subjective norm and knowledge sharing intention among knowledge workers is significant and positively related.

According to the Theory of Reasoned Action, subjective norm is the perception of an individual about



how people perceive vital to him or her to evaluate the behaviour (Ajzen, 1991). Hereafter, Ajzen (1991) suggests that as individual's attitude becomes more positive when there is greater positive provision received from other individuals who is really important to them. The studies conducted by Kuo and Young (2008) also proved that high subjective norm does lead to high intention toward knowledge sharing. Hence, this hypothesis tests if subjective norm positively influences knowledge sharing intention among knowledge workers on virtual Community of Practices.

H(5.3): Perceived behavioural control and knowledge sharing intention among knowledge workers is significant and positively related.

H(5.4): Perceived behavioural control and knowledge sharing behaviour among knowledge workers is significant and positively related.

Perceived behavioural control in Theory of Planned Behaviour proposed by Ajzen (1988) refers to the perceived ease or difficulty of performing the behaviour by indicating former experience accompanied by anticipated difficulties. The theory assumes that perceived behavioural control has motivational consequences on behavioural intentions, thus there is a prospect of direct association between them. Results of the research conducted by So and Bolloju (2005) shown that positive behaviour and intention of knowledge sharing would be higher if an individual's perceived of having strong competence and greater control over sharing his or her knowledge. Hence, these hypotheses test if there is significant and positive relationship between perceived behavioural control along with knowledge sharing intention and knowledge sharing behaviour among knowledge workers on virtual Community of Practice.

H(5.5): Knowledge sharing intention and knowledge sharing behaviour among knowledge workers is significant and positively related.

As stated in Theory of Planned Behaviour, behavioural intentions are motivational factors that capture how hard people are willing to try in order to perform a behaviour (Ajzen, 1991). Thus, the probability that an individual will engage in knowledge sharing activity may be taken as his or her intention to share knowledge. The

study of Pavlou and Fygenson (2006) authenticated the predictive of Theory of Planned Behaviour in online behaviour by having the proof of strong relationships between intention of obtaining information and behaviour. Hence, this hypothesis tests if knowledge sharing intention correlates with the knowledge worker's knowledge sharing behaviour on virtual Community of Practices.

THE PROPOSED MODEL

Through reference to the research model which initiated by Ajzen (1988) with the base of Theory of Planned Behaviour that clarifies on knowledge sharing behaviour among individuals, a proposed integrated Affect TPB Model considering the relationship between positive and negative affect as well as social communication behaviour and social collaboration behaviour of knowledge workers via virtual CoP in an organization were explained as per illustrated below. Furthermore, this study analyzes the data by using Structural Equation Modeling (SEM) method to verify hypotheses. Based on the literature review, this study proposed five hypotheses and a conceptual model as shown in Figure-2. Part of the implementation approach is that, the positive and negative affect of knowledge workers serve as the heart for this research and the proposed model aims at looking into the aspect of social communication and collaboration behaviour that influence the attitude towards knowledge sharing among knowledge workers via virtual CoP. This model will be analysed and verified on IBM Connections by ensuring that there is a notable positive correlation between these factors, understanding how it results in improving behaviour of knowledge workers by sharing knowledge virtually within an organization. The hypothesis on this research will either be accepted or rejected depends on the study from the analysis produced by this proposed model. In short, the TPB model has been well tested and accepted with empirical evidence. However, the extended constructs in the proposed model based on TPB have not been tested. These constructs which include positive affect, negative affect, social communication and social collaboration are newly added to be investigated on the TPB as soon as data is collected in order to predict knowledge sharing intention among knowledge workers in the IBM working environment using Social Networking Site, IBM Connection.

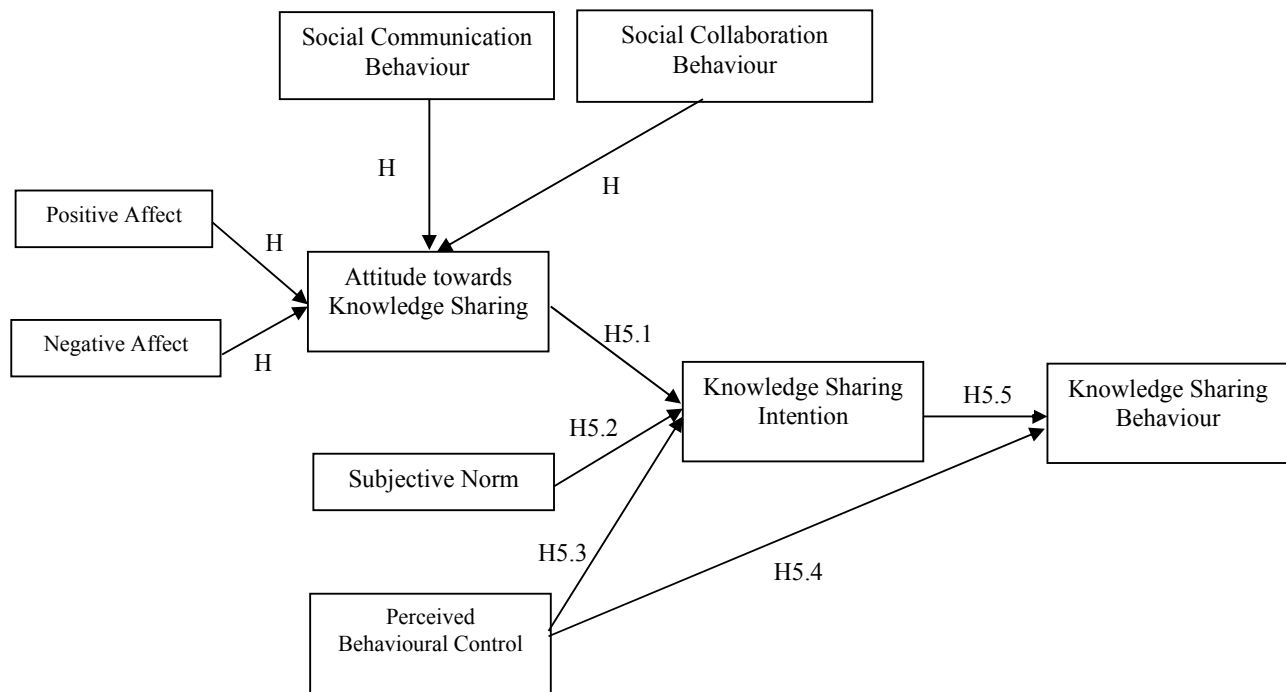


Figure-1. The proposed affect TPB model (Ajzen, 1988).

RESEARCH METHODOLOGY

In this research, a total of more than 2500 IBM employees that has registered as the user for IBM Connections is the population of this research. This research will focus on three of the key communities which consists of most active users. The sample will be 10% of the population or about 250 users. Random sampling method will be used in this research. Questionnaire will be posted online to solicit responses from respondents. This research looks into how IBM Connections supports online knowledge sharing activity by investigating on the significance of positive and negative affect together with the influence of social communication behaviour and social collaboration behaviour towards knowledge sharing attitude among knowledge workers within the organization. For mining of topics of discussion and affect in the posts entered by IBM employees, text mining and sentiment analysis software will be used. The proposed model is at the conceptual stage where the base theory is obtained from Theory of Planned Behavior which predicts knowledge sharing intention extended with PA, NA, Social Communication and Social Collaboration behavior to investigate their impacts on the target variable. Validation of the model will commence once data collection completed and analysis take place.

To analyze responses of the questionnaire survey, structural equation modeling technique using SmartPLS software will be used. This research will compile data posted on IBM Connections, an enterprise social networking sites for internal usage, to extract social posts for the needs of this research. Participants are those registered with IBM Connections.

RESEARCH CONTRIBUTION

This paper contributes to Information Systems domain by helping organizations to better understand the influences of the role of affect on knowledge sharing behaviour while using the online social network sites as the knowledge sharing tools. With the aid of proposed model, it provides a more complete picture on how the role of affect dominates knowledge workers' behaviour. This study is able to provide deeper insight on how positive and negative affect is able to influence the attitude among knowledge workers by sharing knowledge in virtual Community of Practice. Furthermore, this study also aims to find out the significance of social communication behaviour and social collaboration behaviour among knowledge workers on their influence on knowledge sharing attitudes when using IBM social networking site for their day-to-day operational and decision activities.

CONCLUSIONS

Related works reviewed yields several insights on how the role of affect impacts the knowledge workers and their attitude as determinant of knowledge sharing behaviour on contemporary knowledge sharing perspectives through the Theory of Planned Behaviour (TPB). There are a number of research studies which show that individuals have a preference to get constructive information and advice from others via face-to-face communication or collaboration with the availability of advanced technologies that are able to facilitate in knowledge research. By reinforcing the significance of knowledge sharing attitudes in shaping the behavioural of knowledge workers, the model directs the attention of



organizations to start working on various ways to understand the thoughts of their knowledge workers and facilitate the knowledge sharing activity online, for example by using the social network analysis and also user level sentiment analysis to improve knowledge sharing via social network sites. The research model will be tested in the next phase through data collected from questionnaire responses of IBM Connection registered users and analysing comments posted by these users for deeper analysis.

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