

Knowledge Management in Virtual Teams: From the Perspective of Pluralistic Ignorance

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Abstract: With the ever-accelerating development of the Taiwanese economy and Information and Communication Technologies (ICTs), the formation and cooperation of virtual teams consisting of inter-departments or inter-organisations is even more critical for Taiwanese enterprises. Notwithstanding, knowledge-sharing behaviours among virtual teams' members seem more to be difficult because of the social influence factors of their short-term cooperation and coordination within such dynamic teams. In light of the above-mentioned crucial facts, this study draws on social influence relevant theories but also adds pluralistic ignorance (which stems from social cognitive bias resulting from behaviour that generally adheres to social norms) as a critical inhibitor or motivator to explore factors affecting knowledge-sharing behaviour through knowledge management systems (KMSs) within virtual teams of the Taiwanese society. Consequently, our predicted findings show that knowledge-sharing behaviour results from a complex interplay of individual psychological motivations, social influences, and the Chinese culture rooted within such virtual teams. The study provides significant insight into the theoretical, practical and cultural implications of KMSs strategies and offers valuable advice for knowledge managers or scholars in Taiwanese society.

Keywords: Virtual Teams, Pluralistic Ignorance, Knowledge Management Systems (Kms), Social Influence

1. Introduction

With the advent of the knowledge-based economy and the ever-accelerating development of information and communication technologies (ICTs), an increasing number of Taiwanese enterprises are adopting the concept of virtual teams to cope with rapid innovation and shorter product cycles. Notwithstanding, how individuals have the willingness to cooperate, coordinate and even share knowledge with colleagues still lacks enough research studies, especially within virtual teams (Chung et al., 2022). Pluralistic ignorance, which is one of sociological theories, is a widespread misconception involving two kinds of social cognitive errors. The first is the social comparison error, which is the mistaken belief that other people's behaviours and attitudes are different from our own or that there are deviations from social norms (Prentice & Miller, 1993). The second is accuracy error, which is the false belief that an individual can accurately evaluate the opinions of others (Prentice & Miller, 1993). Halbesleben et al. (2007) pointed out that minority groups may influence pluralistic ignorance or agree with a particular point of view in public to maintain social identity but may hold different opinions in private. Past research shows that pluralistic ignorance can lead to employees' cognition of differences among others in the organisation, suppression of genuine emotions, and change of norms. This, in turn, weakens organisational culture, increases voluntary turnover, or leads to poor group decision-making. Bjerring et al. (2014) pointed out that the critical factors in the formation of multiple ignorances are that the group has an independent view of a specific situation, believes that other group members hold different views, individual behaviour is contrary to personal belief but in line with the view of others, and believes that the behaviour of group members represents personal belief. However, Prentice and Miller (1993) proposed strategies for pluralistic ignorance: agents can adjust private beliefs to approach those supported by group behaviour, promote group beliefs to approach their private beliefs or choose to reject or alienate social groups. In the setting of virtual teams, members composed of different departments or organisations may be unfamiliar with each other, so teams' cooperation and knowledge-sharing behaviours seem more difficult. Finally, this research proposes an integrative model through social influence theory, which combines social norms and critical mass with pluralistic ignorance. We posit that pluralistic ignorance causes changes in social norms and critical mass, affecting the user's knowledge-sharing behaviour within virtual teams in the context of Taiwanese society. This is mainly because, from a socio-cultural perspective, Taiwan is more collectivist than other countries (Sarkar & Huang, 2012). This research aims to improve virtual team members' willingness to share their knowledge within virtual teams in the Taiwanese societal context.

2. Literature Review

2.1 Pluralistic Ignorance

Pluralistic ignorance is a widespread social phenomenon in which a large majority of people in a group privately hold a belief or opinion but mistakenly believe that most others hold the opposite view (Halbesleben & Buckley, 2004). This, in turn, supports ideas or norms that most people may dislike or deny. Research has shown that pluralistic ignorance occurs in a variety of contexts, such as views on race relations (most white Americans support integration, but believe most others support segregation (O'Gorman & Garry, 1976)), drinking norms (college students privately believe that excessive drinking is unwise, but believe that most others support such norms (Prentice & Miller, 1993)) and in the classroom environment (most students are confused about what is being taught, but think that most other students understand it (Miller & McFarland, 1991)). Geiger and Swim (2016) explored the impact of individuals' views on climate change on their willingness to participate in discussions, and the study showed that individuals tend to be hesitant to express their ideas or opinions when they believe that their views or beliefs are in the minority. The phenomenon of pluralistic ignorance can be a barrier to knowledge sharing because people are less willing to share their knowledge or engage in discussions on specific topics if they perceive themselves as in the minority (Prentice & Miller, 1996). Halbesleben et al. (2007) pointed out that multiple ignorances hurt knowledge-sharing behaviour. In an organisational setting, when pluralistic ignorance leads to consistent behaviour among employees or group members, it leads to a decline in the quality of group decision-making. Because employees do not share their genuine opinions in a group decision-making environment, they are more likely to adopt solutions that do not have the support of employees from various groups. For example, Westphal and Bednar (2005) found in their research survey on corporate boards that external board members underestimated other members' concerns about the company's low performance, showing pluralistic ignorance. Specifically, they found that board members tended not to express concerns about the company's poor performance. As a result, minority views supporting the currently ineffective strategy are expressed and treated as majority views. In essence, the minority's views mislead other board members into believing there is more support for the current strategy than there actually is, leading to pluralistic ignorance and ultimately missing opportunities to initiate strategic changes or adjustments. Because Taiwan belongs to a very collective culture (Hofstede, 1997), such behaviour in terms of pluralistic ignorance may play a more critical role in employees' maintaining harmony at work.

2.2 Social Influence

Social norms are norms established by collective action, and individuals often feel uncomfortable when they realise that their attitudes differ from the norms of the social group around them. To address this difference, they tend to adjust their attitudes to conform to social norms (Prentice & Miller, 1993). Social norms are divided into descriptive norms and injunctive norms. Descriptive norms are those that describe typical or normal situations, that is, what most people do, by providing evidence to prove effective actions. Prohibitive (prescriptive) norms are those that specify what constitutes morally approved and disapproved behavior, rules, or beliefs (Cialdini et al., 1990). Thompson et al. (1991) argued that social norms are similar to subjective norms in the Theory of Reasoned Action (TRA). Previous studies on the social psychological aspects of "social norms" include gender norms (Van Grootel et al., 2018), healthy and sustainable eating norms (Moojen et al., 2022), and racial norms (O'Gorman, 1975). Li et al. (2016) investigated the resistance of employees to KMSs in a large petrochemical enterprise in China from the perspective of status quo bias. They found that social norms, loss aversion and transformation cost had a positive impact on KMS resistance willingness. In addition, the relationship between loss aversion, transition cost, social norms and KMS resistance intention is positively moderated by inertia. Companies need to consider these factors when promoting new technologies or systems.

3. Propositions and Research Model

3.1 Social Influences and Knowledge-Sharing Behaviours

Social norms stem from the theory of reasoned action and the theory of planned behaviour, and state that "the attitude of the person who is important to him will affect whether the individual makes the decision" (Ajzen & Fishbein, 1975). Individuals may behave certain behaviours or actions if someone they feel is important to them wants them to do so, even if they do not necessarily agree with those behaviours (Venkatesh & Davis, 2000). Some research studies have validated that social norms positively relate to knowledge-sharing behaviour (Wu et al., 2023; Bock et al., 2005). Hence, this leads us to establish the following proposition.

Proposition 1. Social norms positively relate to their knowledge-sharing behaviour within the virtual teams.

Critical mass can be regarded as a basic factor that triggers group behaviour (Oliver et al., 1985). Initial adopters can create enough motivation in specific interactive media systems to publish valuable information that promotes potential adopters' adoption (Oliver et al., 1985). Critical mass theory has been utilised in the social sciences to offer sophisticated theoretical models for generating collective action. Moreover, critical mass theory is used to analyse the collective behaviour of knowledge sharing in online encyclopedia communities (Zhao et al., 2013). Innovation can only diffuse when it receives support from the critical mass (Rogers, 1983). Therefore, this research considers that when adopters use the KMSs to have more friends (social relations), they perceive that it is more practical and, thus, motivated to contribute their knowledge within virtual teams. Consequently, this leads us to establish the following proposition.

Proposition 2. Critical mass positively relates to their knowledge-sharing behaviour within the virtual teams.

3.2 Social Influence and Pluralistic Ignorance

On the other hand, pluralistic ignorance can arise when social norms are influential but misunderstood. In the context of social norms, people may confuse their views with beliefs they believe others hold, leading to misunderstandings about valid social norms (Perkins et al., 2005; Lewis & Neighbors, 2006). In the field of college students' health behaviours, especially regarding issues such as alcoholism, college students generally mistakenly believe that alcoholism is widely accepted by society, even though it is not (Baugh et al., 2022). Social norms can influence people's cognition of a certain behaviour. At the same time, multiple ignorances may lead people to misunderstand this norm and think that others support a certain behaviour, thus affecting their own behaviour choices.

Proposition 3. The degree to which individuals increase pluralistic ignorance positively relates to their social norms.

Pluralistic ignorance is mainly studied in homogeneous groups in a given environment, e.g., students (Miller & McFarland, 1987; Prentice & Miller, 1993; Baugh et al., 2022), community residents (Moojen et al., 2022), colleagues (Halbesleben et al., 2007), etc., due to the wrong ideas of others, even if most people disagree with this social norm, still in the cycle of misunderstanding and conformity (Berkowitz, 2004). Since Taiwan belongs to a very collective culture (Hofstede, 1997), this pluralistic ignorant behaviour may play a more critical role in employees maintaining work harmony.

Proposition 4. The degree to which individuals increase pluralistic ignorance positively relates to critical mass.

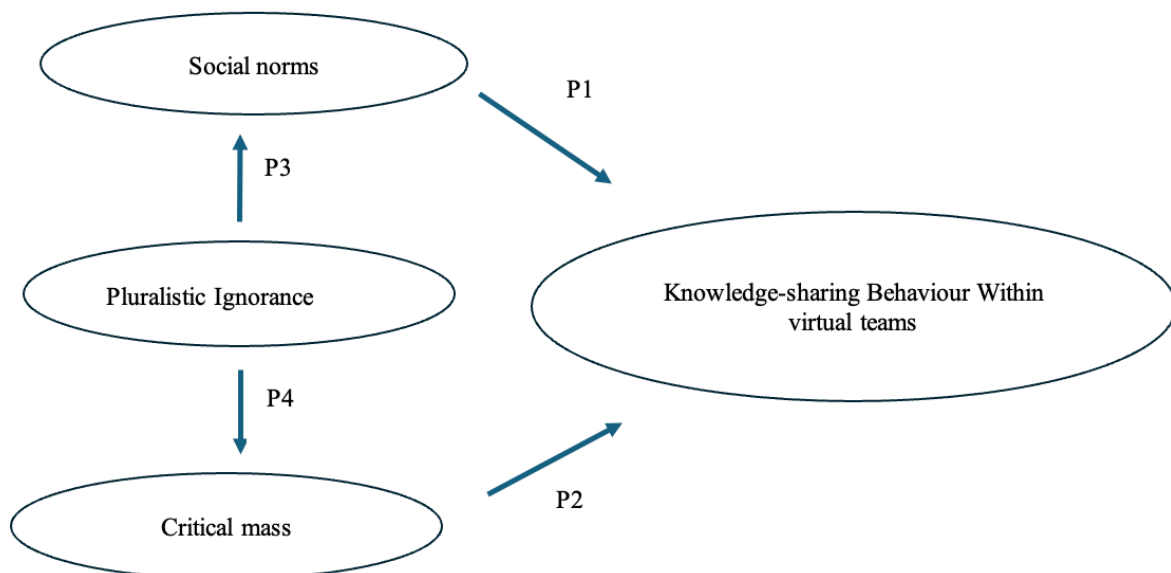


Figure 1: Theoretical model

4. Methodology

In our theoretical model, we have chosen to focus on the behaviour construct rather than intention. While intention is a central component in theories such as the Theory of Reasoned Action (TRA), our decision to emphasise behaviour directly aligns with the specific objectives and context of our study on virtual teams in Taiwanese companies. By focusing on behaviour, we aim to capture observable actions and outcomes within virtual team dynamics, which are particularly relevant for understanding performance, collaboration, and effectiveness in this context. Furthermore, behaviour provides a more concrete and measurable construct, allowing for clearer operationalisation and analysis within our research framework. While the intention may still play a role in shaping behaviour, our model prioritises the direct examination of behaviours exhibited by virtual team members in response to various factors and stimuli. Through this approach, we seek to offer actionable insights applicable to the challenges and opportunities Taiwanese organisations face in managing virtual teams effectively. Having considered the complex and multiple social influences, individual psychology and the context of virtual teams rooted in Taiwanese society may be insufficient to permit a comprehensive understanding of all the complex and abstruse factors affecting knowledge-sharing behaviour within Taiwanese virtual teams; this research will then utilise quantitative equally to analyse the data. Based on the above research model, this study uses a survey method to analyse the behavioural patterns related to knowledge-sharing behaviour within virtual teams of the context of the Taiwanese society. The relevant constructs and items are adapted from prior research, initially developed in English and then translated into Chinese. The translation was validated through a reverse translation process (Brislin, 1980). The questionnaire items were adjusted according to validated scales used in prior literature, with some wording changes. Questions about pluralistic ignorance are sourced from Chung et al. (2020). Questions about critical mass are drawn from Shen et al. (2013). The social norm is referenced from Shen et al. (2013). Items related to knowledge-sharing behaviour are based on the works of Chung et al. (2016).

5. Conclusion

These three types of social influences are important antecedents of knowledge-sharing behavior within virtual teams in the context of the Taiwanese society. In this regard, virtual teams' members who in order to maintain the harmony of the team and strengthen the recognition of other members are more likely to develop "common identity" for sharing knowledge within virtual teams. As mentioned above, our predicted results show that critical mass, social norms and pluralistic ignorance affects members' behaviour in terms of knowledge sharing. In this sense, our findings provide additional empirical support for the impact of pluralistic ignorance on knowledge-sharing behaviour particularly within the context of virtual teams in Taiwanese society. This article also explores the potential cultural aspect within the theoretical model, particularly in the context of Taiwanese society. Referencing Hofstede's six dimensions of culture or other relevant cultural frameworks can provide a theoretical basis for understanding cultural influences on virtual team dynamics (Hofstede, 1997). We will also discuss how cultural factors, such as power distance, individualism vs. collectivism, or uncertainty avoidance, may manifest in the behaviour and interactions of virtual team members in Taiwan and highlight any specific Taiwanese cultural aspects that are particularly salient or influential within the context of virtual teams.

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