

Innovative Work Behaviour in Research Oriented Private Universities in Vietnam

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Innovative work behaviour plays a central role in the long-term survival of knowledge intensive business services such as research oriented private universities in Vietnam. Even though innovation and creativity and their influences on the Vietnamese economy and its future growth are important, research on this area is still inadequate notably in the context of private Universities in Vietnam. Underpinned by the Social Exchange Theory, this empirical study attempts to determine the relationship that may exist between pro-innovation climate, leader-member exchange (LMX), and social capital with the innovative work behaviour (IWB) among knowledge workers in research oriented private Universities in Vietnam. A quantitative, descriptive research methodology was chosen, and the survey data was collected using a systematic sampling method. Partial Least Squares – Structural Equation Modelling (PLS-SEM) technique was adopted in the data analysis that involved 147 samples from 380 questionnaires distributed. The results reveal that there were significant relationships between pro-innovation climate and social capital through the innovative work behaviour of knowledge workers in research oriented private universities in Vietnam. However, leader-member exchange is not supported. In addition, among three independent variables, pro-innovation climate has been found to be the most significant predictor of innovative work behaviour.

Key words: *Innovative work behaviour, knowledge worker, social exchange theory, pro-innovation climate, leader-member exchange, social capital, knowledge-intensive business services, research oriented private University, Vietnam.*

Introduction

Innovation has long been embraced by Organisations seeking to remain viable, effective and competitive in a dynamic business environment (Peters & Waterman, 1982). An Organisation cannot remain viable if it keeps producing products or services in the same way over time (Amabile, 1997) as such repetitive behaviour would lead to the decline or demise of the Organisation (Drucker, 1989). Innovation has long been described based on Schumpeterian concepts in which it is placed in research and development (R&D) labs in order to discover knowledge (Romer, 1990). However, Kanter (1988) maintains that innovations can be in the form of products, services, market strategies, processes, and work methods which are all considered more a product of the human mind and its creativity, where tacit knowledge resides. In other words, innovation may or may not be routed through R&D labs and thus no longer associated with those organisations and workers completing technological/scientific work (Smith, 2002).

Theoretical Background

Social Exchange Theory (SET) was developed in order to understand human behaviour in view of the dynamic of the relationship cycle (Homans, 1958). In this regard, social exchange was seen as a form of activity in which two or more persons engage in a tangible or intangible activity that can be either be rewarding or costly (Blau, 1964). With regard to using the reciprocal approach in rewarding, Blau (1964) suggests that there should not be a direct reward for employee performance but rather on offering resources in the form of developmental and social benefits. These resources are given to employees in advance as gifts without subjecting them to perform (Schulte, Hauser & Kirsch, 2009). The act of giving on a voluntarily basis and its effects on performance behaviour are thoroughly discussed in Social Exchange Theory (SET) and the principles of the gift economy (Marcoux, 2009) as well as reciprocity principles (Gouldner, 1960). These theories imply that employees will increase their loyalty, engagement, and work performance as they are obliged to return the act of kindness that they receive (Aselage & Eisenberger, 2003).

Innovative Work Behaviour (IWB)

There is still no universally accepted definition for innovation. This is shown by a number of past research in which diverse definitions can be found ranging from highly specific to very broad (Cummings & Oldham, 1997). West and Farr (1990) define innovation as the intentional introduction and application (within an individual, group or organisation) of ideas, processes, products or procedures which are relevant to the new unit of adoption, designed to significantly benefit the individual, group, Organisation or wider society. On the other hand, innovation is regarded as a social process in view of the interaction between those who

innovate and those who are affected by innovation (Jain, 2010). Based on the work of West and Farr (1989), this study defines IWB as an employee's action directed at the generation, application and implementation of novelty ideas, products, processes, and methods towards his or her position, departmental unit or organisation.

Pro-Innovation Organisational Climate (PIC) & Innovative Work Behaviour

Yukl (2006) describes organisational climate as the assumptions, beliefs, and values which are shared by members of a group. Innovation scholars have focused on co-workers' climate perceptions. Organisations with an innovative work climate are said to have better innovation results. A co-worker's perception of climate affects the extent to which creative solutions are encouraged, supported and implemented. It encourages innovative ways of representing problems and finding solutions (Martins & Terblanche, 2003). Research reveals that innovative organisations seem to demonstrate good organisational climate (Hartmann, 2006). An innovative organisational climate is one that has comprehensive rewards, allows autonomous work, focuses on training and provides immediate feedback (Hartman, 2006). Given that innovation is also a social process; Axtell et al. (2000) found that the climate is equally important for IWB which can affect the implementation of ideas through the involvement of others in the implementation stage. Thus, this study hypothesises that:

Hypothesis 1: Pro-innovation organisational climate is significantly related to the IWB of knowledge workers in research oriented private universities in Vietnam

Leader-Member Exchange (LMX) & Innovative Work Behaviour

Employee IWB has found to be affected by LMX (Scott & Bruce, 1994; Basu & Green, 1997). LMX is described as the interactions that exist between a leader and a subordinate characterised by mutual influence and interdependencies (Yulk, 1998). When employees perceive that they have been fairly rewarded by their leader, they tend to react more innovatively in a higher level of job demand situation (Janssen, 2000). This is due to the fact that employees view the existence of distribution equity with regards to the rewards thus encouraging them to engage more extensively in IWB (Sanders, et. al. , 2010). In organisations, supervisors are viewed as direct agent (Sanders et al., 2010) and any actions of the supervisor are viewed as the actions of the Organisation (Eisenberger, et. al. , 1986). Thus, favourable actions by supervisors will encourage employees to engage in expected behaviour such as innovativeness (Sanders et al., 2010). Given that the above literature has resulted in positive findings between LMX and IWB, it is hypothesised that:

Hypothesis 2: Leader member exchange has a significant relationship with IWB of knowledge workers in research oriented private universities in Vietnam.

Social Capital (SC) & Innovative Work Behaviour

Organisational knowledge requires the existence of knowledge shared amongst members of Organisations and which requires socialisation. Socialisation is a process of face-to-face interaction and communication, engagement and mutual understanding that ultimately causes generalized trust and norms of reciprocity among family members, Organization, community and society (Oh, Myung-Ho & Labianca, 2004). Thus, socialization leads to the formation of social capital (Albrecht & Hall, 1992). Through the process of socialisation amongst knowledge workers, tacit knowledge can be converted to explicit knowledge and this sharing is vital for knowledge workers (Tovstiga, 1999). It is inevitable to maintain external contacts to adequately produce a service and be informed about new trends and developments (Kline & Rosenberg, 1986). Therefore, in KIBS, it is essential for knowledge workers such as lecturers to participate in conferences, training and education to stay updated with the latest developments in their field of work. It was found that workers who are in regular contact with external entities tend to engage in IWB. Hence, drawing on prior theories and evidence, it is hypothesised that:

Hypothesis 3: Social capital is significantly related to IWB of knowledge workers in research oriented private universities in Vietnam.

Methodology

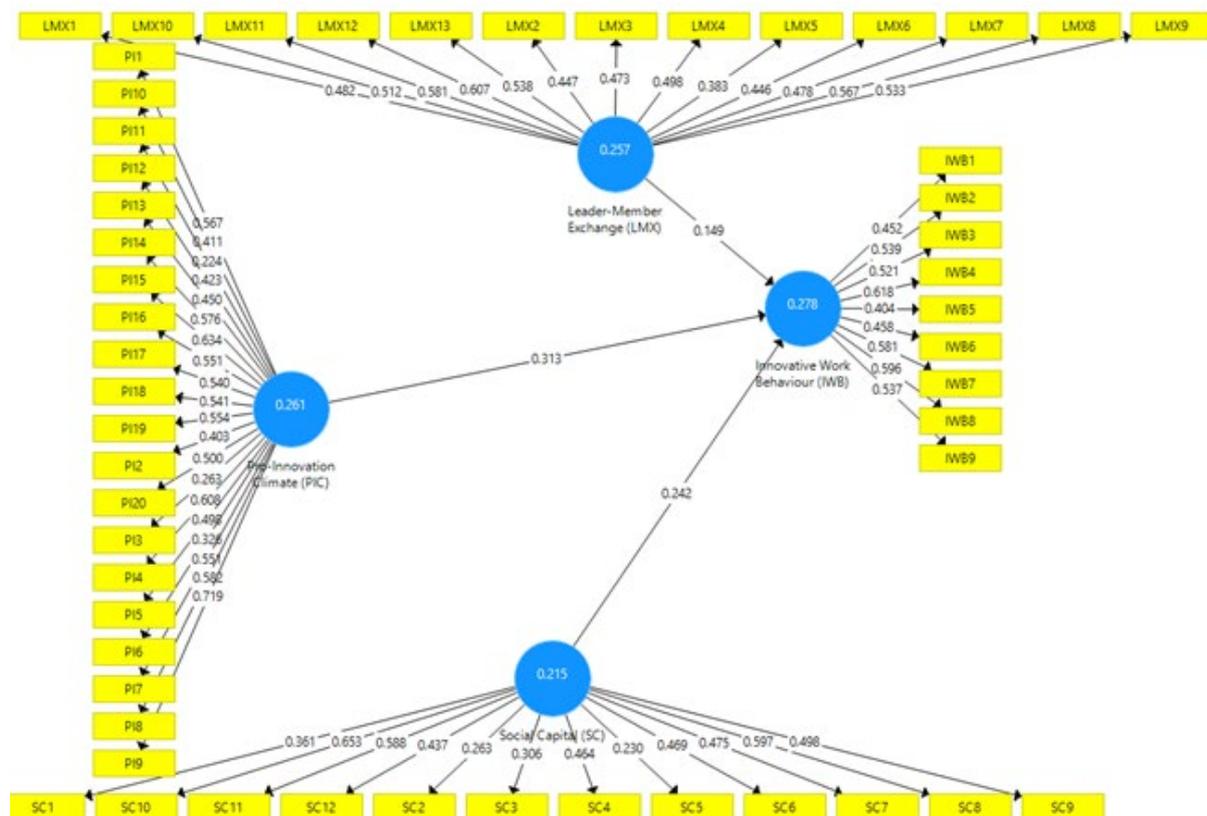
The measurements in this study originate from several sources. A measurement adapted from Janssen (2000) was used to measure the IWB of employees from the KIBS sector with a reported reliability statistic of .89. For LMX, measurement was adapted from Liden and Maslyn's (1998) multi-dimensional model of LMX (LMX-MDM) scale. This scale comprises of thirteen items which measure the quality of relationship between respondents and their superiors. The reliability statistic of this scale is .90. The measurement of pro-innovation organisational climate was adapted from Siegel and Kaemmerer (1978) consisting of twenty items with a www.ccsenet.org/ass Asian Social Science Vol. 9, No. 15; 2013 Cronbach's alpha value of .92. Finally, in order to measure social capital, an adaptation from the measurement of Heydebreck (1997) was carried out. The reported Cronbach's alpha value of this measurement was .85. Sampling Data was collected using questionnaires through a personal-administered questionnaire survey from lecturers who work in research oriented private Universities including RMIT, FPT University, HUTECH and Dai Nam University, which act as the sampling frame for this study. A systematic random sampling technique was used to select samples in which each sample was selected randomly at a starting point and then every Kth element picked in the series from the sampling frame (Hair, et. al., 2006).

Thus, the appropriate sample size as suggested by Krejcie & Morgan (1970) for a population of 40,000 was 380 knowledge workers .

Results

In this study, the research model is assessed as a reflective model. Based on the assumption of Hair et al. (2006), research variables are assessed as reflective constructs if the indicators are explained by the constructs and also, the same indicators are the consequences of constructs. This also implies that items are interchangeable and the causal priority goes directly from constructs to indicators. Based on this assumption, the study adopted a reflective model operationalization using PLS-SEM technique. Hence, this technique is robust in determining reliability and validity of research instruments (assessment of measurement model) and the testing of cause-and-effect relationships (assessment of structural model), as well as evaluation of predictive relevance. The research model is shown in Figure 4.1.

Figure 4.1. Measurement Model



In assessing the path coefficient, the value of beta (standardised and unstandardised), as well as, t-value and p-value were employed. Based on the outcome of the data analysis, 2

out of the 3 hypotheses (i.e., H₁ and H₃) were supported. On the other hand, H₂ was not supported. The result of the path coefficient assessment is shown in Figure 4.2 and Table 4.1.

Figure 4.2. *Structural Model (Direct Effect)*

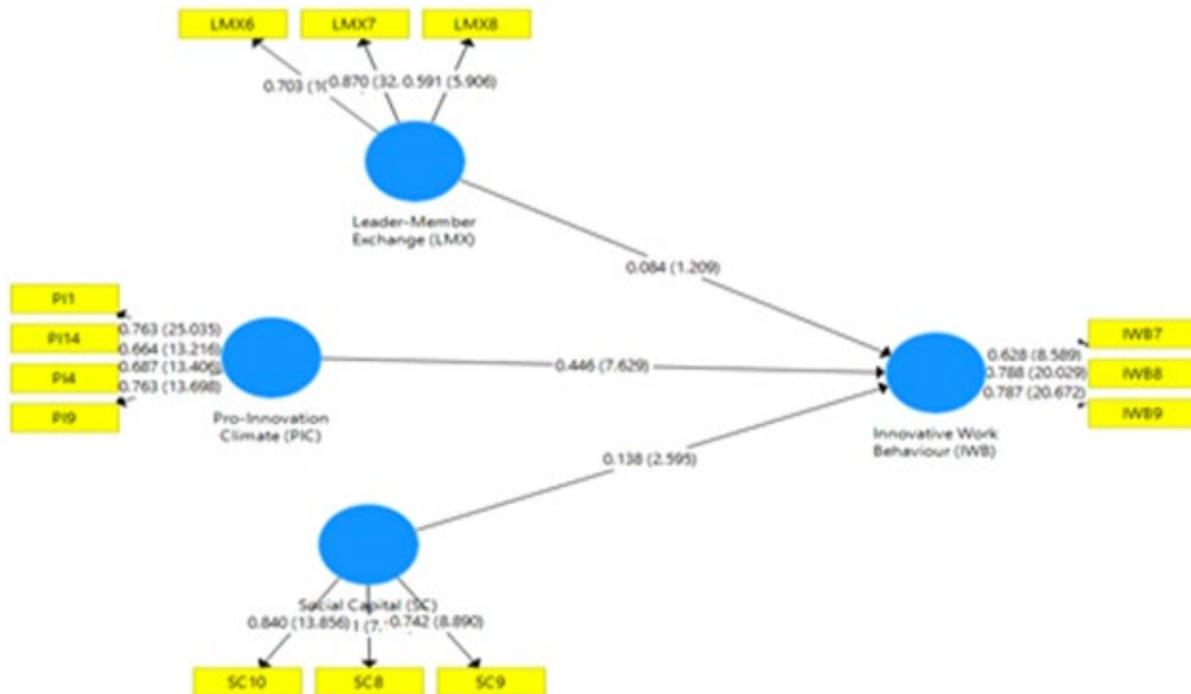


Table 4.1: Assessment of Path Coefficient

	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Pro-Innovation Climate (PIC) -> Innovative Work Behaviour (IWB)	0.453	0.059	7.629	0.000
Leader-Member Exchange (LMX) -> Innovative Work Behaviour (IWB)	0.083	0.069	1.209	0.114
Social Capital (SC) -> Innovative Work Behaviour (IWB)	0.142	0.053	2.595	0.005

As shown in table 4.2, the R² value of the research model is 0.712 (substantial), as the value is above 0.6. Therefore, this implies that the 3 exogenous constructs (pro-innovation climate, leader-member exchange & social capital) have explained 71.2% variance of the endogenous construct (innovative work behaviour).

Table 4.2: Assessment Coefficient of Determination - R Square (R²)

	R Square	R Square Adjusted
Innovative Work behaviour	0.712	0.704

Accordingly, Hair et al. (2014) assert that the predictive relevance (Q²) of a research model can be small, medium or large. Hence, Q² value of 0.02 is labelled as small, 0.15 is labelled as medium and 0.35 is labelled as large. Therefore, in this study, the predictive relevance of the overall model is assessed based on the value of Q², using the Blindfolding technique. The result of this analysis is shown in Table 4.3. According to the results, the predictive relevance of the overall model is substantial. Hence, the Q² value is 0.326, meaning that the research model is worth testing and the predictive power of pro-innovation climate, leader-member exchange & social capital on innovative work behaviour is high.

Table 4.3: Assessment of Predictive Relevance (Q²)

	SSO	SSE	Q ² (=1-SSE/SSO)
Pro-innovation climate	882	882	
Leader-member exchange	588	588	
Social Capital	734.9	734.9	
Innovative Work behaviour	882	594.7	0.326

Discussion and Conclusion

The following section discusses the findings for each hypothesis, which are based on the research questions. All results were discussed and concluded against the previous findings as found in the literature review.

Hypothesis 1: There is a significant relationship between pro-innovative organisational climate and the innovative work behaviours of knowledge workers in KIBS.

The correlation results reveal that this hypothesis is supported. A pro-innovation organisational climate encourages innovative work behaviour as it legitimates experimentation (West & Wallace, 1991), creates psychological safety for trial and error, and reduces the image risk involved in attempts at innovation (Ashford et al., 1998). The

research reviewed reveals that many of the elements of a successful organisational climate are also found in innovative organisations. On the basis of research by Axtell et al. (2000), it was expected that climate is also important for innovative work behaviour in the implementation stage. Since innovation is a social process, the implementation of ideas relies more heavily on the involvement of others. For example, while a co-worker can be creative and generate ideas on his or her own, implementation typically depends on the approval, support and resources of others. This phenomenon also applies to many bottom-up, incremental innovations.

Hypothesis 2: There is a significant relationship between leader-member exchange and innovative work behaviours of knowledge workers in KIBS.

The correlation results reveal that this hypothesis is not supported. Prior research has found that LMX is related to innovative job performance (Basu & Green, 1997). However, not all support the notion that climate correlates with innovative work behaviour. Some conclude that the relationship is rather weak (Klein & Sorra, 1996). Janssen (2000) found evidence that employees responded more innovatively to higher levels of job demands when they perceived that their efforts were rewarded fairly by their leader. Furthermore, the inherent trust in high LMX relationships provides a context in which subordinates are more comfortable to suggest and promote innovative ideas. Albrecht and Hall (1991 & 1992) observe that suggesting new ideas is a risky endeavour in organisations because they represent change to the established order and, equally importantly, they invite evaluation from other organisational members. It is difficult to separate new ideas from the person offering them. Therefore, to propose innovative ideas is to put oneself at risk.

Hypothesis 3: There is a significant relationship between social capital and the innovative work behaviour of knowledge workers in KIBS.

The correlation results reveal that this hypothesis is supported. There is a significant relationship between innovative work behaviour and social capital. Social capital plays a significant positive role in influencing the development of both incremental and radical innovation (Subramaniam & Youndt, 2005). Through socialisation, knowledge workers share their intricate technical experiences and mental models of common interest with each other through observation, practice and imitation. Current literature indicates that having frequent external contacts paves the way for opportunity exploration and a generation of ideas (De Brentani, 2001). To be effective, organisations need to manage their employees' relationship with internal and external members and other groups in order to bring information and other relevant resources into the system (Ancona & Caldwell, 1992). Therefore, it is a challenge for organisations to develop effective social capital throughout the organisation (Reick & Benbasat, 2000).



This study is the first attempt to directly theorise and test major determinants associated with knowledge workers' innovative work behaviour in research intensive private University in Vietnam. Drawing from both social exchange theory and perceived organisational support perspectives on innovation, the model tested here provides a theoretical framework for understanding why employees of private Universities in Vietnam engage in innovative behaviour in relation to pro-innovation climate, leader-member exchange and social capital. Studying individual innovative behaviour in a natural work context is a complex and difficult task because the criteria are often difficult to validate, and often limited to the use of perceptual measures. However, as private Universities in Vietnam increasingly face turbulent environments and innovation becomes part of every lecturer's job description, the need for this kind of research is ever increasing. It is hoped that this study will stimulate more theory building and testing to investigate the processes leading to individual innovation in the context of private Vietnamese Universities .



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