

# DOES ORGANIZATIONAL IDENTIFICATION LEAD TO USER INVOLVEMENT?

Sheida Soltani, Faculty of Computing, Universiti Teknologi Malaysia, Malaysia,  
sheidasoltani.utm@gmail.com

Naeimeh Elkhani, Faculty of Computing, Universiti Teknologi Malaysia, Malaysia,  
naeimeh.elkhani@gmail.com

Hritik Gupta, Department of Accounting and Information Systems, University of Canterbury,  
Christchurch, New Zealand, hritik.gupta@canterbury.ac.nz

Stephen Wingreen, Department of Accounting and Information Systems, University of  
Canterbury, Christchurch, New Zealand, stephen.wingreen@canterbury.ac.nz

## Abstract

*User involvement in information system development has long received research attention due to its significant effects on information system success. Prior studies have tended to focus on the consequences of user involvement, and in contrast, this research focuses on the factors that influence user involvement. The factors deserving more attention are organizational identification (OI) and organizational citizenship behaviours (OCBs). Although OI and OCBs have long received research attention, little is known of the effects of OI and OCBs in the context of information system development, specifically in the context of user involvement. In this study, we integrate three research streams—OI, OCBs, and user involvement into one model in order to investigate whether OI and OCBs: altruism and courtesy affect user involvement.*

*Keywords:* *Organizational Identification, Organizational Citizenship Behaviours, User Involvement, Information System Development.*

## **1 INTRODUCTION**

The explosive spread of Information Systems (ISs) and the growth of IS technology has led organizations to engage in the Information System Development (ISD) process. One major subject in ISD that has long received IS researchers' attention (due to its significant effects on IS success) is user involvement (Chen et al. 2011), including two components, namely, situational involvement and intrinsic involvement. These refer to sets of behaviours or activities during the ISD process and subjective perception of IS, respectively (Hartwick & Barki 1994; Jackson et al. 1997).

IS scholars have shown that user involvement components positively influences IS success indicators, including: perceived system usefulness, perceived system quality and individual impact, user satisfaction, behavioural intention to use IS, and system usage (Amoako-Gyampah 2007; De Waal & Batenburg 2009; Hartwick & Barki 1994; Jackson et al. 1997; Lin & Shao 2000; McGill & Klobas 2004). Given the importance of user involvement in relation to IS success, the current study attempts to understand the factors that influence users to actively engage in situational involvement, and form intrinsic involvements. Such understanding is essential because: (1) normally, it is not possible for all users to be involved in ISD and involvement should be restricted to potential users who could contribute actively to the progress of ISD (Soltani et al. 2013); (2) Management needs to ascertain who is suitable for situational involvement, since IS project teams only benefit from the selection of appropriate user participants (Kirsch & Beath 1996).

This study considered Organizational Citizenship Behaviours (OCBs) as the factors deserving more attention in this area of research. OCBs are discretionary and extra-role behaviours of employees, which go above and beyond their formal role descriptions (Organ 1988). Yen et al. (2008) stated that a number of organizational theorists (e.g., Katz 1964) consider employees' voluntary behaviours (OCBs), suggesting ways to improve the product, and promoting a positive climate, to be the glue that holds the organization together. Such behaviours, which are manifested by the activities directed toward other individuals in the workplace or the organization, support the social and psychological environment in which task performance takes place (Organ 1997). Hence, OCBs can create a workplace friendship which shows the characteristics of a personal friendship which is a close relationship among individuals that is characterized by voluntary interactions among the individuals and helping behaviours (Madsen & Matook 2010) - concepts tied to OCBs. Furthermore, Madsen & Matook (2010) showed that workplace friendship positively influences software development outcome. Hence, IS project teams benefit from the selection of user who exhibit OCBs like, helping co-workers, cooperating with colleagues, communicating information, because giving and receiving such helping behaviours can accelerate problem solving and increases the quality of the work. Moreover, such behaviours may in turn help employees to perform daily activities better and faster with the new system's functionalities, to understand the importance of the new IS and how to use IS.

Furthermore, Evidence (Harrison et al. 2006; Lam et al. 2009; MacKenzie et al. 1998; Paille 2013; Paille & Grima 2011) shows that OCBs significantly influence employee retention (e.g., intention to leave). Moreover, OCBs enhances either directly or indirectly behavioural reaction of IS users (Yoon, 2009). Thus, it is reasonable to assume that OCBs can contribute to effective user involvement and ignoring performance of OCBs from users can have disastrous consequences for their retention during system development. To date, no consideration has been devoted to exploring the effects of these behaviours in user involvement context. Hence, this study endeavour to fill this gap by taking a step forward in exploring the consequences of OCBs (i.e., user involvement) and its precursors (organizational identification).

If OCBs are indeed important factors with regard to user involvement, then the antecedents of OCBs needed to be examined as well. In this study, we regard Organizational Identification (OI) as an important antecedent variable (e.g., Ge et al. 2010; Kane et al. 2012). OI has long received research attention due to its contributions to organizational effectiveness and success (Millward et al. 2010; Reade 2001; Umphress et al. 2010). OI is defined as the individual notion of becoming integrated with the organization by assimilating organizational values and goals into one's own identity (Hall et al. 1970). In most IS projects, stakeholders must work together effectively to maximize the

achievement of shared organizational goals (Chen et al. 2011). This point highlights the importance of OI in the context of ISD projects, as individuals representing OI act in the best interest of their organization and share the organization's goals (Ashforth & Mael 1989; Kane et al. 2012) and therefore work with greater intensity to accomplish these goals (Dutton et al. 1994; Kane et al. 2012). Furthermore, adoption of goals and values of the project characterize user commitment which positively influences project performance (Chang et al. 2010). Hence, users who adopt the goal of project or organization (e.g., successful ISD) as own one, are more likely to enhance the performance of ISD project. Furthermore, OI has been shown to engender positive employee attitude, working behaviours, and citizenship behaviours (e.g., Kane et al. 2012; Kreiner & Ashforth 2004; O'Reilly & Chatman 1986; Sluss & Ashforth 2007; Umphress et al. 2010). However, the relationships between OI and employees reactions have not been addressed in IS-related research. Since the basic concept underlying the user involvement places significant focuses on individuals' reactions and perceptions, and OI is an important factor in explaining behavioural reaction of employees, research is needed to delineate relationships between OI and situational/intrinsic involvement. Hence, the current research addresses this research gap and begins to explore the role of OI in user involvement context with regard its associations with users' citizenship behaviours.

To the best of our knowledge, no empirical study has verified the relationships among OI, OCBs, user involvement. Consequently, this research presents the integration of theories of OI and OCBs into user involvement research and aims to explore the relationship among OI, OCBs, and user involvement. More specifically, the purposes of this study are to: (1) examine the relationship of OCBs –through helping behaviours- to situational/ intrinsic involvement, (2) investigate the relationship of users' OI to their situational and intrinsic involvements.

## **2 THEORETICAL BACKGROUND AND RESEARCH MODEL**

### **2.1 User Involvement**

Prior research (Hartwick & Barki 1994; Jackson et al. 1997) argued that user involvement includes two components, namely, situational involvement and intrinsic involvement. Hartwick & Barki (1994) refer to situational involvement as behaviours and activities (e.g., overall responsibility, user-IS relationship, and hands-on activity) that users perform during the ISD process, and intrinsic involvement as being a user's subjective perception of IS, thereby defining the extent to which the user perceives a new system is important and personally relevant. This conceptualization for user involvement components has been widely accepted, and is adopted by this study.

The positive outcomes associated with user involvement components are well demonstrated. For example, Chen et al. (2011) found a positive impact of situational involvement on IS project performance. Amoako-Gyampah (2007) found a positive relationship between intrinsic involvement and users' perceptions (i.e. perceived usefulness)/ users' intentions to use the system. Hartwick & Barki (1994) discovered that the influence of situational involvement on intentions concerning use and IS use was mediated by intrinsic involvement, attitudes toward the system and concerning use, and subjective norms concerning use. Lin & Shao (2000) found that a positive relationship exist between situational involvement and system success. McGill & Klobas (2004) showed that situational involvement positively influenced intrinsic involvement. This then directly impacted upon perceived system quality in a positive manner and indirectly influenced user satisfaction, individual impact, and perceived individual impact. In addition, De Waal & Batenburg (2009) showed that situational and intrinsic involvement was strongly related to perceived system quality, which significantly correlates with intention to use and user satisfaction.

The positive impact of user involvement on IS success indicators has been well established, while there is less research concerning the factors that influence user involvement components. The present study considered OI and OCBs as important factors and aims to explore relationships among OI, OCBs, and user involvement components. We believe such investigation is important because it enrich our knowledge regarding individual mechanism of users that lead to their involvements. More specifically, it provides understanding of how adoption of organizational goals or values (or goals of

projects) influence on user involvement either directly or indirectly (via OCBs). Such understanding would be valuable for managers, at it helps them to develop better ideas about how to create active user participation and increase intrinsic involvement.

The research model and its hypotheses that reflect current thinking are presented in Figure 1. As shown in Figure 1, we conceptualized user involvement consisting two constructs: situational and intrinsic involvement. Building upon work (e.g., Paille' & Grima 2011; Paille 2013) that supports OCBs as means of significantly influencing employees retention, OCBs consisted of altruism and courtesy behaviours (helping behaviours) are introduced to user involvement. We argue that a user with stronger OCB is more willing to be involved in ISD project and form high level of intrinsic involvement. Further, OI is integrated to the research model, since existing literature argues OI leads to produce positive working behaviours and behavioural reaction (e.g., O'Reilly & Chatman 1986; Umphress et al. 2010). Hence, we serve OI as an operation leading to users' positive outcomes (OCBs and situational/intrinsic involvement). The next sections provide details on the constructs in the model and the proposed relationships among them.

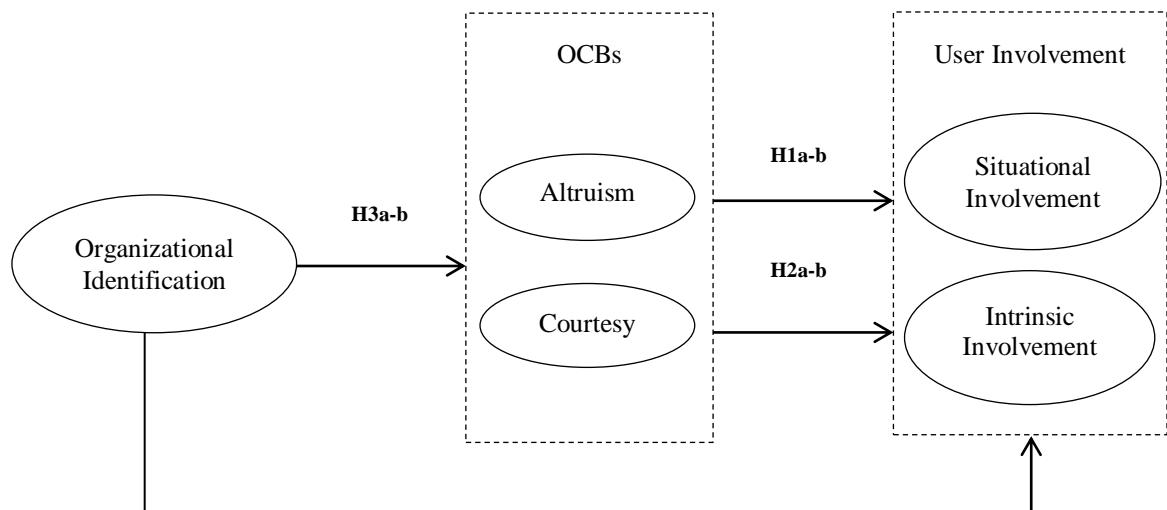


Figure 1. Research Model

## 2.2 Organizational Citizenship Behaviours (OCBs) and User Involvement

OCB is defined as an individual behaviour of a discretionary nature that is not directly recognized by the formal reward system, and totally this behaviour contributes to the effective functioning of an organization (Organ 1988). Consistent findings and empirical support connecting OCBs with user involvement in IS literature is lacking, the rationale for including OCBs in the present research is twofold. The first reason concerns the exploration probable consequences of OCBs in the IS field, and the exploration of the relationship between OCBs and other forms of withdrawal behaviours (Fang & Chiu 2010; Podsakoff et al. 2000), which refers to the behaviours that employees utilize to remove themselves from their jobs or evade work tasks (Fang & Chiu 2010; Koslowsky et al. 1997). According to OCBs literature, OCBs are negatively linked to withdrawal intentions (e.g., Paré et al. 2000). In this study, withdrawal is involvement rejection in ISD. This research emphasizes the behaviour which is opposite to withdrawal, namely situational involvement, and its relationship with OCBs.

Second, high levels of OCB signal one's high organizational involvement (Chen et al. 1998; Fang & Chiu 2010). Since the practice of OCB is optional, good citizens can be considered as all-around contributors and active behavioural participants when they manifest high levels of OCBs (conscientiousness or altruistic behaviours) (Fang & Chiu 2010; Khalid et al. 2009). Hence, good citizens can be active behavioural participants during ISD project. Moreover, a significant amount of

research in diverse fields has provided empirical evidence that OCBs have significant effects on employee retention (e.g., Lam et al. 2009; Paille 2013; Paille & Grima 2011). Furthermore, researchers began to link OCBs with IS (or IT) related behaviours. For example, Fang & Chiu (2010) explored that knowledge-sharing continuance intention is a consequence of exhibiting OCBs. Moreover, Yoon (2009) found that OCBs positively influence intention of IT innovation of ERP users either directly or indirectly (via affecting information quality and work efficiency). Since OCBs dimensions relate to IS (or IT)-related behaviours, this has allowed us to examine how the OCBs relate to ISD behaviours (situational involvement) and IS-related perceptions (intrinsic involvement). In what follows we discuss the relationship between user involvement components and two dimensions of OCBs, namely: altruism and courtesy.

Altruism and courtesy, as helping behaviours, involve all voluntary forms of assistance that employees provide each other to facilitate the accomplishment of tasks and solve work related problems (e.g., instructing a new hire how to use equipment), and helping someone prevent problems from occurring (Organ 1988; Podsakoff et al. 2000; Podsakoff & MacKenzie 1997). Altruism helps to build supportive, satisfactory and trustful working relationships which give an employee a confidence to explore new technologies (Krogh 1998; Yan & Yan 2013). For instance, by helping to solve or prevent the occurrence of the system related problems or by teaching system operations, employees are more likely to perceive interacting with the system does not require a lot of mental effort, and using the system improves performance in job, using the system in job increases productivity and effectiveness. Moreover, Podsakoff & Mackenzie (1997) noted that helping behaviours have a positive impact on productivity by helping co-workers “learn the ropes” to become more productive employees faster- concept ties to intrinsic involvement. Hence, it is expected that helping behaviours would enhance users’ frame of mind toward a new system, which can result in forming positive perceptions toward the new IS. In addition, Social exchange theory (SET) (Adam 1963) provides theoretical support for the relationship between OCBs and intrinsic involvement, since the OCBs have roots in social exchange (Organ 1988). SET suggests people feel obligated to reciprocate when they benefit from the actions of some entity (Fang & Chiu 2010). With regard to SET, we contend that those users who receive high levels of helping behaviours (OCBs) of their colleagues may perceive importance and personal relevance of a new system because they feel obligated to reciprocate their colleagues support. Hence, intrinsic involvement can be a form of reciprocations that users provide to return their colleagues attention.

We also expect that users who exhibit altruistic or courtesy behaviours are more likely to form positive perceptions toward the new system, and to find it important and significant to improve on their functional tasks. Such expectation is based on the idea that doing good leads to feeling good (Glomb et al. 2011). Glomb et al. (2011) confirmed that individuals have more positive mood reactions after engaging in altruistic or courtesy behaviours because helping others provide gratification. Positive mood enhances perceptions of confidence (Forgas 1991), perceptions of a given task and satisfaction (Brief et al. 1995; Kraiger et al. 1989) resulting in increased intrinsic motivation (George & Brief 1996; Venkatesh & Speier 1999). Moreover, Venkatesh & Speier (1999) verified that individuals with positive mood forms intrinsic motivation to use a new computer technology as well as intention to use a technology. In addition, Venkatesh et al. (2002) found that intrinsic motivation predicted perceived ease of use, which in turn predicted perceived usefulness, which is similar belief to perceived importance and personal relevance. Hence, it may be true to state that users, who engage in altruism or courtesy behaviours, are more likely to form more positive mood. With such sensation, they are more likely to hold positive perception of the new system in terms of its importance and personal relevance. Therefore, we expect that users who exhibit helping behaviours toward their colleagues, they are more likely to perceive importance and personal relevance of the new system.

Courtesy and Altruism as helping behaviours represents the tendency to be sympathetic, cooperative, helpful and trusting. Research (Chiang & Hsieh 2012; Yoon & Suh 2003) showed that OCB positively influenced employee job performance. In addition, researchers (Chiang & Hsieh 2012; Yoon 2009) noted that employees’ OCB corresponded with increased cooperation among employees, coordinating of effort among team members, proactive assistance in resolving problems for others,

and willingness to attend and participate in organizational activities and meetings. These changed the overall state of mind and social atmosphere of the organization, further enhancing the overall employee job performance (Chiang & Hsieh 2012). Hence, helping behaviours can significantly influence on performing tasks involving interpersonal interaction and teamwork, particularly when the interaction involves helping and cooperating with others. Therefore, users who exhibit Courtesy and Altruism behaviours are more willing to become involved in ISD projects and to have responsibilities which enable them through cooperative, helping behaviours, to work effectively with other parties as a team during system development. In the other words, users with more OCB are more likely to effectively accomplish their tasks during ISD project; thus, it is expected Courtesy and Altruism is strongly related to situational involvement involving assisting, collaborating, and cooperating behaviours in order to achieve a successful information system development. Thus, we hypothesis:

H1: Altruism positively influences: a) situational involvement, b) intrinsic involvement.

H2: courtesy positively influences: a) situational involvement, b) intrinsic involvement.

### **2.3      Organizational identification (OI), Organizational Citizenship Behaviours (OCBs) and User Involvement**

Organizational identification (OI) is the perception of oneness with or belongingness to an organization (Ashforth & Mael 1989), and the experience of the organization's successes and failures as one's own (Mael & Ashforth 1992). Drawing from OI literature, it has been shown that OI positively influences various work outcomes (Edwards & Peccei 2010; Kreiner & Ashforth 2004). More specifically, OI positively influences performance, job attitudes, satisfaction, and perceptions of their work environment, and negatively related to turnover (Bhattacharya et al. 1995; Kreiner & Ashforth 2004; Sluss & Ashforth 2007). In sum, Current literature denotes that employees' perception of OI is significantly related to their working related behaviours and perceptions. Thus, we expect that potential links exist between OI and OCBs/situational and intrinsic involvement.

Prior research (e.g., Bergami & Bagozzi 2000; Dukerich et al. 2002; Riketta 2005) demonstrated OI is positively related to OCB. Strong identification with the organization helps the individual form his or her sense of self as an organizational member (Ge et al. 2010). When people strongly identify with their work organization, their sense of survival is tied to the organization's survival (Ge et al. 2010). Therefore, employees are likely to focus on tasks that benefit the whole organization (Ge et al. 2010). This is OCB (Dutton et al. 1994). Members with strong OI are more likely to exhibit OCB (Dutton et al., 1994). The earlier OCBs related hypotheses (H1, H2) suggested that OCBs will enhance situational and intrinsic involvement. Hence, we contend that those users who perceive a high degree of OI may exhibit increased OCBs including helping behaviours, thereby prompting their situational and intrinsic involvement. Thus, we hypothesis:

H3: Organizational identification positively influences OCBs, including: a) altruism, b) courtesy.

When users accept the defining characteristics of the organization as defining characteristics for themselves, OI as a form of psychological attachment occurs. OI enables members to contribute more frequently and more freely to the organization and members' efforts to benefit the organization result in behaviours that are acts of obedience, loyalty, and participation (Ge et al. 2010). Moreover, Individuals representing OI act in the best interest of their organization and share the organization's goals (Ashforth & Mael 1989; Kane et al. 2012) and therefore work with greater intensity to accomplish these goals (Dutton et al. 1994; Kane et al. 2012). Hence, we contend that users who perceive high degree of OI may engage and put more effort in performing ISD activities because they adopt the interests and goals of the organization as their own interest. Such adoption also would enhance users' frame of mind toward a new IS, which can result in forming positive perception toward a new IS. Therefore, when users with high OI adopt the interests and goals of the organization as their own interest, they tend to contribute to the wellbeing of the organization by perceived system importance and relevance- contributing IS usage- and effective participation in ISD. Thus, we hypothesis:

H4: Organizational identification positively influences: a) situational involvement, b) intrinsic involvement.

### **3 CURRENT RESEARCH DIRECTION**

This research-in-progress is carried out in a study of companies that recently developed new ISs. We apply a quantitative approach and survey to collect data from the samples. The questionnaires used for data collection involves five sections: OI, OCBs, situational involvement, intrinsic involvement, and basic respondent demographic data. The partial least squares (PLS) technique which is a structural equation modelling technique is applied to data processing. Data analysis is conducted in two phases. First, validity of the measurements is tested using confirmatory factor analysis. Second, an analysis of the structural equation model is conducted to test our hypotheses.

### **4 CONTRIBUTION AND CONCLUSION**

We contribute to user involvement literature by presenting a theoretical model to explain the influence of OI and OCBs on user involvement. More specifically, the current research makes three major contributions to the field. First, exploring the relationship between OCBs and situational involvement provides a better understanding on how users who exhibit OCBs (helping behaviours) are more likely to engage in ISD activities and contribute actively to the progress of ISD. Second, our study showed that OI, as an operation, is an important way for users to form high degree of intrinsic involvement and actively perform ISD activities, which lead to increasing the likelihood of ISD success. Thus, current study highlights the importance of users' OI and OCBs in their performance during ISD and suggests management incorporate citizenship behaviours to the criteria employed when users are selected for situational involvement. Since a high degree of OI can lead to increased positive outputs of users (OCBs and user involvement), we suggest that if warning signs appear in the form of low levels of OI, management should insistently take corrective actions and focus on expressing the central values and goals of the organization to the users to create high levels of OI, which leads to effective user involvement. Third, exploring the relationship between OI/OCBs and intrinsic involvement helps to gain knowledge of how intrinsic involvement is formed and how it operates. By knowing this, IS researchers and managers can have a better idea about how to increase users' intrinsic involvements and capture its transient nature by examining its relation with OCBs and OI.

### **References**

- Amoako-Gyampah, K. (2007). Perceived usefulness, user involvement and behavioral intention: An empirical study of ERP implementation. *Computers in Human Behavior*, 23(3), 1232–1248.
- Ashforth, B. E. and Mael, F. (1989). Social identity and the organization. *Academy of Management Review*, 1, 20-39.
- Barki, H. and Hartwick, J. (1994). Measuring user participation, user involvement, and user attitude. *MIS Quarterly*, 18(1), 59-82.
- Bergami, M. and Bagozzi, R. P. (2000). Self-categorization and commitment as distinct aspects of social identity in the organization: conceptualization, measurement, and relation to antecedents and consequences. *British Journal of Social Psychology*, 4, 555-577.
- Bhattacharya, C. B., Rao, H. and Glynn, M. A. (1995). Understanding the bond of identification: An investigation of its correlates among art museum members. *Journal of Marketing*, 59(4), 46-57.
- Brief, A. P., Butcher, A. H. and Roberson, L. (1995). Cookies, disposition, and job attitudes: The effects of positive mood-inducing events on job satisfaction in a field experiment. *Organizational Behavior and Human Decision Processes*, 62, 55–62.
- Burns, M. B. and Collins, R. W. (1995). Organizational citizenship behavior in the IS context: A research agenda. Paper presented at the Proceedings of the 16th Americas Conference on Information Systems, Pittsburgh.
- Carson, T. P. and Adams, H. E. (1980). Activity valence as a function of mood change. *Journal of Abnormal Psychology*, 89, 368–377.

- Chang, K., Sheu, T. S., Klein, G., Jiang, J. J. (2010). User commitment and collaboration: Motivational antecedents and project performance. *Information and Software Technology*, 52, 672–679.
- Chen, C. C., Yu-Chih Liu, J. and Chen, H.-G. (2011). Discriminative effect of user influence and user responsibility on information system development processes and project management. *Information and Software Technology*, 53(2), 149–158.
- Chen, X.-P., Hui, C. and Sego, D. J. (1998). The Role of Organizational Citizenship Behavior in Turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of Applied Psychology*, 83(6), 922–931.
- Chiang, C.-F. and Hsieh, T.-S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International Journal of Hospitality Management*, 31(1), 180–190.
- Chin, W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, 22(1).
- De Waal, B. and Batenburg, R. (2009). Do users go with the new workflow? From user participation to quality of work during WFM deployment. Paper presented at the In Proceedins of the Seventeenth European Conference on Information Systems, Verona, Italy.
- Dukerich, J. M., Golden, B. R. and Shortell, S. M. (2002). Beauty is in the eye of the beholder: the impact of organizational identification, identity, and image on the cooperative behaviors of physicians". *Administrative Science Quarterly*, 3, 507-533.
- Dutton, J. E., Dukerich, J. M. and Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, 39(1), 239-263.
- Edwards, M. R. and Peccei, R. (2010). Perceived organizational support, organizational identification and employee outcomes. *Journal of Personnel Psychology*, 9(1), 17-26.
- Eom, M. T.-I. (2005). Impact of Project Leadership on User Participation and User Involvement :The Consequences for User Satisfaction and Systems Usage. *Journal of Management Systems*, 17(1), 35-43.
- Fang, Y.-H. and Chiu, C.-M. (2010). In justice we trust: Exploring knowledge-sharing continuance intentions in virtual communities of practice. *Computers in Human Behavior*, 26(2), 235–246.
- Forgas, J. P. (1991). Mood effects on partner choice: Role of affect in social decisions. *Journal of Personality and Social Psychology*, 61, 708–720.
- George, J. M. and Brief, A. P. (1996). Motivational agendas in the workplace: The effects of feelings on focus of attention and work motivation. *Research in Organizational Behavior*, 18, 75–109.
- Glomb, T. M., Bhave, D. P., Miner, A. G. and Wall, M. (2011). Doing good, feeling good: Examining the role of organizational citizenship behaviors in changing mood. *Personal Psychology*, 64, 191–223.
- Hall, D. T., Schneider, B. and Nygren, H. T. (1970). Personal factors in organizational identification. *Administrative Science Quarterly*, 15(2), 176.
- Harrison, D. A., Newman, D. A. and Roth, P. L. (2006). How important are job attitudes? Meta-Analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49(2), 305–325.
- Hartwick, J. and Barki, H. (1994). Explaining the role of user participation in information system use. *Management Science*, 40(4), 440-465.
- Isen, A. M. (1984). Toward understanding the role of affect in cognition. In R. S. Wyer & T. K. Srul (Eds.), *Handbook of social cognition*. Hillsdale, NJ: Erlbaum.
- Ge, J., Su, X. and Zhou, Y. (2010). Organizational socialization, organizational identification and organizational citizenship behavior: An empirical research of Chinese high-tech manufacturing enterprises. *Nankai Business Review International*, 1(2), 42-49.
- Jackson, C. M., Chow, S. and bitch, R. A. (1997). Toward an understanding of the behavioral intention to use an information system. *Decision Sciences*, 28(2), 357-389.
- Kane, R. E., Magnusen, M. J. and Perrewé, P. L. (2012). Differential effects of identification on extra-role behavior. *Career Development International*, 17(1), 25-42.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, 9, 131–146.
- Katz, D. and Kahn, R. L. (1978). *The social psychology of organizations*. NY, Wiley.

- Khalid, S. A., Jusoff, H. K., Ali, H., Ismail, M., Kassim, K. M. and Rahman, N. A. (2009). Gender as a moderator of the relationship between OCB and turnover intention. *Asian Social Science*, 5, 108–117.
- Kirsch, L. J. and Beath, C. M. (1996). The enactments and consequences of token, shared, and compliant participation in information systems development. *Management & Information Technology* 6(4), 221–254.
- Koslowsky, M., Sagie, A., Krausz, M. and Singer, A. D. (1997). Correlates of employee lateness: Some theoretical considerations. *Journal of Applied Psychology*, 82, 79–88.
- Kraiger, K., Billings, R. S. and Isen, A. M. (1989). The influence of positive affective states on task perception and satisfaction. *Organizational Behavior and Human Decision Processes*, 44, 12–25.
- Kreiner, G. E. and Ashforth, B. E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior*, 25(1), 1-27.
- Krogh, G. (1998). Care in Knowledge Creation. *California Management Review*, 40(3), 133–153.
- Lam, W., Chen, Z. and Takeuchi, N. (2009). Perceived human resource management practices and Intention to Leave of Employees: The mediating role of organizational citizenship behaviour in a Sino-Japanese Joint venture. *The International Journal of Human Resource Management & Information Technology*, 20(11), 2250–2270.
- Lee, T. W., Mitchell, T. R., Sablynski, C. J., Burton, J. P. and Holtom, B. C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. *Academy of Management Journal*, 47(5), 711–722.
- Lin, W. T. and Shao, B. B. M. (2000). The relationship between user participation and system success: A simultaneous contingency approach. *Information & Management*, 37(6), 283-295.
- Lu, Y., Xiang, C., Wang, B. and Wangc, X. (2011). What affects information systems development team performance? An exploratory study from the perspective of combined socio-technical theory and coordination theory. *Computers in Human Behavior*, 27(2), 811-822.
- MacKenzie, S., Podsakoff, P. and Ahearne, M. (1998). Some Possible Antecedents and Consequences of In-Role and Extra-Role Salesperson Performance. *Journal of Marketing*, 62, 87–98.
- Madsen, S. and Matook, s. (2010). Conceptualizing interpersonal relationships in agile is development. *International Conference on Information Systems*.
- Mael, F. and Ashforth, B. E. (1992). Alumni and their alma mater: a partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 2, 103-123.
- McGill, T. and Klobas, J. (2004). An investigation of the role of involvement in user developed application success. Paper presented at the In Proceedings of the Fifteenth Australasian Conference on Information Systems, Hobart, Australia.
- Millward, L., Postmes, M. and Postmes, T. (2010). Who We Are Affects How We Do: The Financial Benefits of Organizational Identification. *British Journal of Management*, 21(2), 327-339.
- O'Reilly, C. A. and Chatman, J. (1986). Organizational commitment and psychological attachment: the effects of compliance, identification and internalization on prosocial behaviour *Journal of Applied Psychology*, 71(3), 492-499.
- Organ, D. W. (1988). Organizational citizenship behavior: The “Good Soldier” syndrome. MA, Lexington Books.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10(2), 85–97.
- Paille, P. (2013). Organizational citizenship behaviour and employee retention: how important are turnover cognitions? *The International Journal of Human Resource Management & Information Technology*, 24(4), 768–790.
- Paille, P. and Grima, F. (2011). Citizenship and withdrawal in the workplace: Relationship between organizational citizenship behaviour, intention to leave current Job and intention to leave the organization. *Journal of Social Psychology*, 151(4), 478-493.
- Paré, G., Tremblay, M. and Lalonde, P. (2000). The measurement and antecedents of turnover intentions among IT-professionals. *Gahier du GReSI*, 00-12, 1-36.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M. and Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122–141.

- Podsakoff, P. M. and MacKenzie, S. B. (1997). Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance*, 10(2), 133-151.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B. and Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563.
- Reade, C. (2001). Antecedents of organizational identification in multinational corporations: Fostering psychological attachment to the local subsidiary and the global organization. *International Journal of Human Resource Management*, 12(8), 1269-1291.
- Riketta, M. (2005). Organizational identification: a meta-analysis. *Journal of Vocational Behavioral Science*, 2, 358-384.
- Rondeau, P. J., Ragu-Nathan, T. S. and Vonderembse, M. A. (2006). How involvement, IS management effectiveness, and end-user computing impact IS performance in manufacturing firms. *Information & Management*, 43(1), 93-107.
- Schwarz, N. and Bless, H. (1991). Mood congruity and social judgments. In J. P. Forgas (Ed.), *Emotion and social judgment*. Oxford: Pergamon Press.
- Shore, L. M. and Wayne, S. J. (1993). Commitment and employee behavior: comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology* 78(5), 774-780.
- Sluss, D. M. and Ashforth, B. E. (2007). Relational Identity and Identification: Defining Ourselves through Work Relationships. *The Academy of Management Review*, 32(1), 9-32.
- Soltani, S., Elkhani, N., Ahmad, M. N. and Taghia, J. (2004). The effects of perceived organizational support and personality traits on user involvement. Paper presented at the In Proceedings of the 24th Australasian Conference on Information Systems, Melbourne, Australia.
- Starbuck, W. H. and Webster, J. (1991). When is play productive? *Accounting, Management and Information Technology*, 1, 71-90.
- Umphress, E. E., Bingham, J. B. and Mitchell, M. S. (2010a). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *J. Appl. Psychol.*, 95(4), 769-780.
- Umphress, E. E., Bingham, J. B. and Mitchell, M. S. (2010b). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *J. Appl. Psychol.*, 95(4), 769-780.
- Venkatesh, V. and Speier, C. (1999). Computer technology training in the workplace: A longitudinal investigation of the effect of mood. *Organizational Behavior and Human Decision Processes*, 79(1), 1-28.
- Venkatesh, V., Speier, C. and Morris, M. G. (2002). User acceptance enablers in individual decision making about technology: Toward an integrated model. *Decision Sciences*, 33, 297-316.
- Wayne, S. J., Shore, L. M. and Liden, R. C. (1997). Perceived organizational support and leader-member exchange: a social exchange perspective. *The Academy of Management Journal*, 40(1), 82-111.
- Yan, L. and Yan, J. (2013). Leadership, organizational citizenship behavior, and innovation in small business: An empirical study. *Journal of Small Business & Entrepreneurship*, 26(2), 183-199.
- Yen, H. R., Li, E. Y. and Niehoff, B. P. (2008). Do organizational citizenship behaviors lead to information system success? Testing the mediation effects of integration climate and project management. *Information & Management*, 45, 394-402.
- Yoon, C. (2009). The effects of organizational citizenship behaviors on ERP system success. *Computers in Human Behavior*, 25(2), 421-428.
- Yoon, M. H. and Suh, J. (2003). Organizational citizenship behaviors and service quality as external effectiveness of contact employees. *Journal of Business Research*, 56(8), 597-611.