

# Intrinsic Motivation, Knowledge Sharing, And Employee Creativity: A Self-Determination Perspective

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**Abstract:** This study examines the effect of intrinsic motivation on knowledge sharing and employee creativity. Data is collected through a survey of 67 cultural and public organization, information technology, and education employees. Partial least squares structural equation modeling (PLS-SEM) is used to test the proposed hypotheses. The results show that intrinsic motivation significantly affects knowledge sharing and employee creativity. Knowledge sharing further significantly increases employee creativity.

**Keywords:** Intrinsic motivation, knowledge sharing, employee creativity, self-determination theory

## 1. INTRODUCTION

Various studies have shown that employee creativity is the main determinant in terms of innovation and organizational success (Zhou & Hoever, 2014). Given the importance of employee creativity, there are many scholars have tested the antecedents, such as employee learning orientation (Gong, Huang, & Farh, 2009), high performance work system (G. Tang, Yu, Cooke, & Chen, 2017), intrinsic motivation (Coelho, Augusto, & Lages, 2011), meaning of work (Akgunduz, Alkan, & Gök, 2018), and knowledge management (Marianna Sigala & Chalkiti, 2015). However, the existing studies are very limited in examining the effect of intrinsic motivation on employee creativity, specifically the mediation mechanism that underlies these relationships, such as knowledge sharing. Kremer, Villamor, and Aguinis (2019) emphasize there are two factors that encourage employee creativity, namely voice and knowledge sharing. Knowledge sharing is a means by which employees get maximum results from accumulated knowledge in the organization. Knowledge collecting contributes to employee creativity, which involves culture and organizational identity, policies, systems, and other employees (Cabrera & Cabrera, 2005). Through the use of accumulated knowledge, knowledge sharing is positively related to ideas, for example, how to improve team and organizational performance (Mesmer-Magnus & DeChurch, 2009). Based on the description, this study is very important to be explored, which aims to describe a research framework model related to the relationship between intrinsic motivation, knowledge sharing, and employee creativity in the perspective of self-determination.

## 2. REVIEW OF LITERATURE

### 2.1 Self-Determination Theory

Self-determination theory (SDT) is a motivational theory postulates that people are motivated to fulfill three basic psychological needs related to physical needs. SDT states that need for autonomy, need for competence, and need for social attachment are very important to promote psychological well-being. Need for autonomy is the need to feel independent and have feelings that are free and without coercion from others. Need for competence is the need for influences that have an impact on surrounding environment and get meaningful results (Deci & Ryan, 2000). Need for social attachment is the need to feel a

sense of belonging, loved and cared for (Broeck, Vansteenkiste, Witte, Soenens, & Lens, 2010). Lewis, Trief, and LaGuardia (2016) found that SDT focusing on mentoring had a significant effect on satisfaction of overall psychological needs. In addition, mentoring designed to increase autonomy effectively helping employees to increase their autonomy. SDT provides a theoretical lens to explain basic mechanisms that can encourage employees to engage in knowledge sharing behavior with their coworkers (Coun, Peters, & Blomme, 2018). Achieving effective knowledge sharing practices is highly dependent on the willingness of individuals to make significant efforts in their social processes (Chang & Chuang, 2011). In addition, personal behavior, especially those motivated by personal interests, are more likely to do their best to maximize personal utility. This implies that if an employee has certain knowledge that is valuable to him/her, he/she will not share it with others to maximize personal benefits, such as increasing job security and having a unique position in the organization (Yang & Wu, 2008).

### 2.2 Employee Creativity

Creativity is generally related to the creation of new and useful ideas about products, practices, services or procedures that are beneficial to the organization (S. E. Shalley, Zhou, & Oldham, 2004). To be creative, ideas have to prioritize business values, for example by creating new products and services, utilizing business opportunities, and increasing organizational effectiveness. Sundbo (2012) identifies two types of creativity that can provide business value and enhance organizational innovation, namely radical new ideas and defensive problem-solving behavior. Creativity, which is usually manifested in the overall organizational strategy, is a source of competitive advantage, which is related to employee efficiency and performance (Gong et al., 2009). Employee creativity is explained in a framework where creativity is a function of personal characteristics (e.g personality, skills, experience, motivation), characteristics of the organizational context (e.g leadership, management style, organizational culture), and interactions between these characteristics (C. E. Shalley & Gilson, 2004). Recent studies provide significant evidence that to maximize the efficiency of employee creativity, organizations have to maintain and support collective thinking rather than individual cognitive processes (Baer, 2010; Hargadon & Bechky, 2006). Creativity involves

earning new and useful ideas (Joo, Yang, & Mclean, 2014). Employees are able to work more creatively and effectively when they experience a positive mood, which increases work productivity and efficiency. Employee creativity in organizations is very dependent on two different factors, namely career satisfaction and perceived self-esteem (Kim, Hon, & Crant, 2009). Creativity is also related to job satisfaction, where creative employees tend to be more satisfied with their job (Tongchaiprasit & Ariyabuddhiphongs, 2016).

### 2.3 Intrinsic Motivation

Intrinsic motivation refers to the extent to which employees are motivated and interested in their assignments and the extent to which they actively participate in their assignments (Deci, 1972). Intrinsic motivation tends to make employees more curious, flexible, and willing to take risks. Amabile (1997) suggests that employees will be more creative when they have high intrinsic motivation so that employees can generate new ideas that are useful for the organization and have enough courage to express their opinions and ideas to others. According to Grant and Berry (2011), when employees are intrinsically motivated, they will feel the stimulation of positive creativity that encourages them to access more information and in turn, encourages them to identify the ideas they have in a flexible way. Employees who are intrinsically motivated have a sense of curiosity and interest in learning that increases flexibility in their way of thinking and ultimately encourages higher risk-taking behavior. SDT shows that intrinsic motivation promotes employee creativity through increasing perseverance because employees with intrinsic motivation will always be diligent and ready to do challenging, complex, and unusual tasks (Gagne & Deci, 2005). Employees who are intrinsically motivated will be involved in action because it is very interesting and fun. Wasko and Faraj (2005) show that employees who are intrinsically motivated share and contribute knowledge to others because they are happy to help others. Employees who are intrinsically motivated to share knowledge find that the activity is very interesting and meets self and organizational interests (Foss, Minbaeva, Pedersen, & Reinholt, 2009; Lin, 2007). Through sharing knowledge, employees can get a pleasure to help others. They also gain satisfaction from valuable knowledge sharing behaviors, which are beneficial to the organization (Kankanhalli, Tan, & Wei, 2005). Thus,

H1: Intrinsic motivation has a positive effect on employee creativity

H2: Intrinsic motivation has a positive effect on knowledge sharing

### 2.4 Knowledge Sharing

Knowledge is an important asset in the organization. Knowledge is defined as information that is processed by individuals, which consists of facts, expertise, ideas, and evaluations that are relevant for individual and group performance (S. Wang, Noe, & Wang, 2014). Ma and Chan (2014) define knowledge sharing as communication of knowledge from various sources in such a way that is learned and applied by the recipient. Knowledge sharing occurs when someone intends to disseminate, communicate, and gain knowledge (Chen, Chang, Tseng, Chen, & Chang, 2013). It includes providing knowledge, both in the form of explicit knowledge and tacit, to help others achieving work goals and to correct problems, or to build new ideas (Nonaka & Takeuchi, 1995; S. Wang et al., 2014). Knowledge sharing between employees in the organization creates opportunities for new learning and knowledge creation, which in turn improves organizational performance and innovation capabilities (Z. Wang & Wang, 2012). There are five main factors needed to knowledge sharing, namely the value of knowledge sources, the willingness of sources to share knowledge, the wealth of media communication channels, the willingness of recipients to absorb knowledge, and the ability of absorptive capability (Wu & Zhu, 2012). Knowledge sharing contributes to the organizational competitive advantage based on the reliability of knowledge that is difficult to imitate and synergistic collaboration between organizational members who build their ability to produce innovative ideas, processes, technology, products, and services (Masa'deh, Obeidat, & Tarhini, 2016). The results of the study conducted by Liao, Chen, and Hu (2018); Tuan (2019) found that knowledge sharing has a significant effect on employee creativity. Therefore,

H3: Knowledge sharing has a positive effect on employee creativity

## 3. RESEARCH METHODS

### 3.1 Population and Sample

The population of this study is all employees who worked in the education sector, information technology industry, cultural and public organizations in Indonesia, Pakistan, Singapore, and California. Based on purposive sampling with the criteria i.e., respondents have an adequate educational level and are at least 19 years old, the specified sample is 67 employees.

**Table 1 Respondent Characteristics**

| Gender        | n  | %    | Age                    | n  | %    |
|---------------|----|------|------------------------|----|------|
| Male          | 46 | 68.7 | 19 – 30 years          | 9  | 13.4 |
| Female        | 21 | 31.3 | 31 – 40 years          | 36 | 53.7 |
|               |    |      | 40 years and above     | 22 | 32.9 |
| Education     | n  | %    | Department             | n  | %    |
| Undergraduate | 16 | 23.9 | Public organization    | 22 | 32.9 |
| Postgraduate  | 39 | 58.2 | Information technology | 26 | 38.8 |
| Ph.D          | 12 | 17.9 | Education              | 19 | 28.3 |

The researcher distributed 120 questionnaires through Whatsapp and email, but 67 questionnaires were returned and feasible to analyze. Regarding the respondents (See Table 1), 68.7% are male and 31.3% are female. The majority (58.2%) are postgraduate and 53.7% are between the ages of 31-40 years. Regarding the employment, 38.8% of respondents work in information technology department, 32.9% in public organization, and 28.3 in education.

**3.2 Measurement and Data Analysis**

This study involved 3 main variables, namely intrinsic motivation, knowledge sharing, and employee creativity. Intrinsic motivation is measured using 3 indicators, which adapted from Sujan (1986). Knowledge sharing is measured using 4 indicators, which adapted from M. Sigala and Chalkiti (2014). Employee creativity is measured using

8 indicators, which adapted from Zhou and George (2001). The data collected is analyzed using structural equation modeling (SEM) based on SmartPLS 3. This is done in order to simplify the data processing.

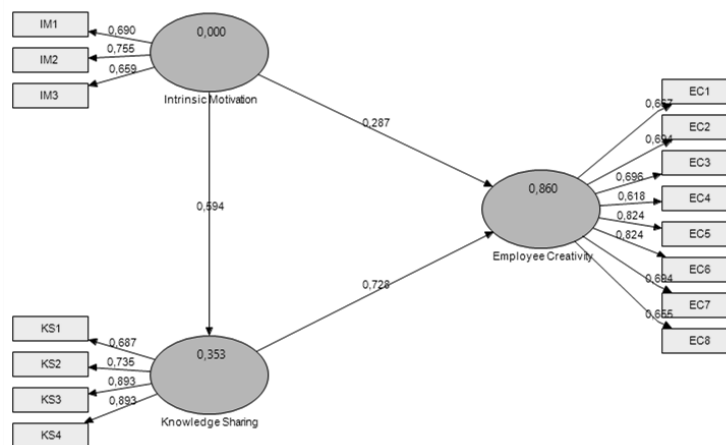
**4. RESULTS AND DISCUSSION**

The results of this study indicate that Table 2 verifies the relationship between indicators and latent constructs. Composite reliability and Cronbach's alpha of all variables exceeds the recommended level of 0.70. Therefore, this model indicates better construct measurements. In addition, all indicators are acceptable because they are above 0.50. The average variance extracted value on all variables also exceeds the recommended cut-off 0.50.

**Table 2 Validity and Reliability**

| Items                            | Loadings | AVE   | CR    | CA    |
|----------------------------------|----------|-------|-------|-------|
| <b>Intrinsic Motivation (MI)</b> |          | 0.594 | 0.745 | 0.585 |
| IM1                              | 0.690    |       |       |       |
| IM2                              | 0.755    |       |       |       |
| IM3                              | 0.659    |       |       |       |
| <b>Knowledge Sharing (KS)</b>    |          | 0.752 | 0.881 | 0.816 |
| KS1                              | 0.687    |       |       |       |
| KS2                              | 0.735    |       |       |       |
| KS3                              | 0.893    |       |       |       |
| KS4                              | 0.893    |       |       |       |
| <b>Employee Creativity (EC)</b>  |          | 0.608 | 0.891 | 0.861 |
| EC1                              | 0.677    |       |       |       |
| EC2                              | 0.694    |       |       |       |
| EC3                              | 0.696    |       |       |       |
| EC4                              | 0.618    |       |       |       |
| EC5                              | 0.824    |       |       |       |
| EC6                              | 0.824    |       |       |       |
| EC7                              | 0.694    |       |       |       |
| EC8                              | 0.655    |       |       |       |

Note: AVE = Average Variance Extracted; CR = Composite Reliability; CA = Cronbachs Alpha



**Figure 1 Research Framework**

**Table 3 Path Coefficients**

| Hypothesis                                 | β     | Standard Error | t – value |
|--|-------|----------------|-----------|
| Intrinsic Motivation → Employee Creativity | 0.287 | 0.053          | 5.396     |
| Intrinsic Motivation → Knowledge Sharing   | 0.594 | 0.045          | 13.290    |
| Knowledge Sharing → Employee Creativity    | 0.728 | 0.048          | 15.115    |

The path analysis values are shown in Figure 1 and Table 3. Intrinsic motivation significantly increases employee creativity ( $\beta = 0.287$ ,  $t = 5.396$ ,  $p < 0.05$ ), and knowledge sharing ( $\beta = 0.594$ ,  $t = 13.290$ ,  $p < 0.05$ ), which supports H1 and H2. Furthermore, knowledge sharing also increases employee creativity ( $\beta = 0.728$ ,  $t = 15.115$ ,  $p < 0.05$ ), which supports H3. Intrinsic motivation is the motivation to complete a task because it is interesting, challenging, and satisfying. Intrinsic motivation is one of the most important factors in encouraging and producing employee work creativity (Udin, Handayani, Yuniawan, & Rahardja, 2017; X.-H. Wang, Kim, & Lee, 2016). Most organizations try to increase intrinsic motivation of employees by providing job autonomy and constructive feedback, with emphasizing the importance of work (Kuvaas, Buch, Weibel, Dysvik, & Nerstad, 2017). Employees who are intrinsically motivated express more creativity, tend to last longer on the job, have a lot of knowledge, and show better work performance. According to SDT, when employees are intrinsically motivated, they will have more positive correlations and consequences in terms of the quality of their work, health, and well-being (Deci & Ryan, 2000). They also have positive experiences to control their behavior and are more likely to balance family and work life. Liao and Wu (2009) emphasize that knowledge is a very important resource for preserving and learning new techniques, solving problems, creating core competencies and starting new situations. Diverse knowledge serves as a basis for encouraging creativity in the organization. Knowledge produces, enhances, and facilitates employee creativity. C. Tang (2010) shows that knowledge sharing creates a knowledgeable work environment, which encourages creative ideas and solutions. Therefore, knowledge sharing is important especially when employees need information and the right exchange to create creative ideas (Liao & Chen, 2018; Tan, Luh, & Kung, 2014). The results of this study are in line with the findings of Liao et al. (2018); Sulistiyani, Udin, and Rahardja (2018); Tuan (2019); Wahyudi, Udin, Yuniawan, and Rahardja (2019) that knowledge sharing has a significant effect on employee creativity.

## 5. CONCLUSION

The results of this study conclude that employees who have high intrinsic motivation show a high level of knowledge sharing and employee creativity. Therefore, this study encourages others to expand conceptual and theoretical development in capturing the reality of the work environment in the modern and contemporary era. Practically, managers have to implement work practices that enhance knowledge sharing and employee creativity to achieve their goals. This can be done by choosing participatory management, which can help employees to use vertical and horizontal communication channels effectively and make them feel like part of a solid team in the organization. There are several limitations in this study. First, the findings are difficult to generalize because data collection is only limited to employees who work in cultural and public organizations, information technology, and education. Therefore, future study needs to make comparisons with other sectors. Second, the sample involved only 67 employees so the results might differ from

larger samples. Therefore, future study may involve larger samples from other countries.

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