EMPLOYEE PARTICIPATION IN CREATIVE-RELEVANT PROCESS TOWARDS CREATIVE THINKING SKILLS

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ABSTRACT

The success of many businesses relies on their employees' creativity. In fact, many organizations considered creative employee as their greatest assets. To produce a highly creative thinker among employees, require their participation in creative-relevant process. However, nowadays forms of employee's participation may beneficial the organization differently. Mainly, researchers agreed on the three forms of participation namely as full-autonomous or discretion over individual work tasks, semi-autonomous team-work and consultative participation in organizational decisions. Thus, this study expect that the different forms of employee participation may engage differently in the creative-relevant process and contribute to the different levels of creativity. Although a number of studies have revealed that employee's participation is positively effects organization practices and performance but noticeably missing from research attention in examining the different forms of employee participation in creative-relevant process. Therefore, the main objective of this study is to test the different forms of employee participation in creative-relevant process towards creative thinking. The output of this study will assist management in organizations to identify the best form of employee participation that will extent the level of their employee creativity.

Key Words: Employee Participation, Creative-relevant Process, Creative Thinking

INTRODUCTION

Given a very competitive and uncertain dynamic environment, service sectors need to be more flexible to acquire and adapt new knowledge, new technologies and to introduce new services. Management teams are coming to realize that organization's performance is depending on the employee creativity (Zhang & Bartol 2010). Thus, employee creativity

is necessary for organization to gain the flexibility and competitive advantage. The process of thinking creatively can only be done with the participation of employees in their daily operation. Researchers have pointed out that employee participation can improve the performance of the organization in some way and may also lead to creative thinking that triggers innovation in organizations (Zhou, Hirst & Shipton 2012).

Employee participation is the process in which an employee are allow to exercise some control over their work and involved in the decision making process (Strauss 2006), rather than just acting on orders. In other words, employee participation is part of the process of empowerment in the workplace. Employees are central to idea generation, therefore, they should be encouraged to participate in decision making (Zubair, Bashir, Abrar, Baig, & Hassan 2015). Participation can increase social interactions, discussions and support innovation; hence, employee's participation in decision making will have positive relationship with their creativity. It is agreed by previous researchers that participation in decision making will affecting not only worker productivity, job satisfaction, motivation and commitment (Bhatti 2013) but also creativity (Zubair et al. 2015).

To produce a highly creative thinker among the employees, require them to engage in the creative-relevant process. The creative-relevant process includes (1) problem identification, (2) information searching and encoding, and (3) ideas and alternative generation (Zhang & Bartol, 2010). When employees put effort to fully identify the problem, obtain as much information as possible, and generates numerous ideas and alternatives, will leading to produce the novel and useful solutions. Thus, the level of their creativity thinking is expanded.

Previous research mainly focused on the participation of employees in general Bhatti 2013; Julien & Tjahjono 2009; Zubair et al. 2015). Still fewer studies that look at the different forms of employee participation which can be categorized as (1) full-autonomous or personal involvement, (2) semi-autonomous participation through group work, and (3) involvement through consultation or consultative participation. Although there are a significant relationship between employee participation as whole with organizational practices and performance, but the different forms of employee participation have given a different outcome (Gallie 2013; Kalleberg, Nesheim & Olsen 2009). We believed that

these forms of employee participation may engage differently in creative-relevant process and producing a multi-level of employee creativity. Therefore, the purpose of this paper is to determine the forms of employee participation namely full-autonomous, semi-autonomous and consultative participation that engage most in the creative-relevant process and producing a multi-level of creative thinking.

LITERATURE REVIEWS

Forms of Employee Participation

Japanese often consider employees as assets of the organization as they are the one who execute the process every day, know the weaknesses and improvement opportunities at first hand. According to George (2003), "…. no one knows the job better than those who do it"

which means that employees who are experienced in their work have a better understanding of their work compared to others (Julien & Tjahjono 2009). Thus, organizations should encourage their employees to participate in the process of making decisions, which have a direct impact on the success of the organizational practices (Dombrowski, Mielke & Schulze 2011).

The widespread application of employee-participation practices usually resulted in positive outcome such as in quality improvement (Julien & Tjahjono 2009), workers' well-being and health (Knudsen, Busck & Lind 2011), quality of work (Gallie 2013), organizational commitment (Bhatti, Nawab & Akbar 2011) and others. However, nowadays forms of employees participation may beneficial the organization differently (Litwin & Eaton 2018). For example, a study found that participation through team was positively correlated with stress, whereas other forms of participation, job autonomy and consultation tended to reduce stress (Kalleberg et al. 2009). Mainly, researchers agreed on the three forms of direct participation namely (1) full-autonomous or personal involvement, (2) semi-autonomous participation through group work, and (3) involvement through consultation or consultative participation (Gallie 2013; Kalleberg et al. 2009; Knudsen et al. 2011).

The full-autonomous is a direct participation through individual task discretion and it is the highest degree of autonomy granted to individual employee (Gallie 2013). Employees given this autonomy are responsible for designing and executing their work. As a result they be able to produce a high quality work and possibility of self-development (Gallie 2013). Semi-autonomous refers to the extent to which workers cooperate with other co-workers in a relatively stable group (Osterman 2000). In formal organization, teamwork may expand more capacity for problem solving (Osterman 2000). This is because more ideas could be generatedfrom a group of employee in a team. Meanwhile, consultative participation refers to practices where management encourages employees to share their opinions regarding work-related concerns, yet retains the right to make all final decisions. Examples of consultative participation include regular meetings with supervisors, employee suggestion plans (Bhatti 2011), and problem solving groups or quality circles (Gallie 2013) such as small group activity (SGA), think-tank group and others. Davis and Lansbury (1996) explained that the importance of management-employee consultation at the workplace lies in the opportunity for employees to discover more about workplace issues and to influence their determination.

Creative-relevant Process and Creative Thinking Skills

For a creative response to emerge, employee needs to engage in the process that eventually leads to creative outcome namely, creative-relevant process. Creativity-relevant process is a process which includes (1) problem identification, (2) information searching and encoding, and (3) idea and alternative generation (Amabile 1983; Reiter-Palmon & Illies 2004). Previous researcher believed that when employees are given empowerment to make a decision, they are most likely will dedicate all their effort to the problems they encounter (Gallie 2013). Hence, the employees will engage in a creative-relevant process.

The degree of employee engaging in the process are varies (Zhang & Bartol 2010) and depends to the level of empowerment given. Some employees may pay little attention to a problem, they will minimally engage in solving the problem and as the result, the solutions may not be creative and useful. In contrary, employees may generate a creative solutions if they commit substantial attention to a problem and choose to fully engage in

the creative process (Zhang & Bartol 2010). Furthermore, once employee engaged in the creative-relevant process, they will restructured the existing problem and in turn will help them to generate alternative solutions (Mitchell & Wallinga 2017).

Creativity can be defined as the production of ideas or outcomes that are both novel and appropriate to some goal (Amabile 2012). Employee creativity involves the development of practical and new solutions to workplace challenges, hence providing useful outcomes for the organization (Amabile 1983). Creativity can lead to continuous improvement of the organizations' operations, and critical to sustain a market advantage. From Islamic perspective, human beings can be differentiated with other creation of ALLAH through the mind and intellect. According to Sternberg (2003), the human mind has three main potential that is intelligence, creativity and wisdom. All three have the potential to be shaped, nurtured and stimulated so that man can use his mind properly and think creatively and innovatively.

Creativity at work typically is not just a process of generating new ideas but as importantly involves in problem analyzing and problem solving in order to develop practical solutions to workplace challenges. In addition, given autonomy and authority to the employee to make a decision may also enhance their creative thinking (Jaiswal & Dhar 2017; Saray, Patache & Ceran 2017). Therefore, this study believed that employees that engaged in creative process activities has an influence on individual creative behaviors.

Hypotheses

On the basis of the preceding argument and indirect empirical evidence, this study hypothesize the following:

H1a: There is a positive relationship between full-autonomous and creative-relevant process

H1b: There is a positive relationship between semi-autonomous and creative-relevant process

H1c: There is a positive relationship between consultative participation and creative-relevant process

H2: There is a positive relationship between creative-relevant process and creative thinking skills.

Research Framework

Figure 1 shows the hypothesized relationship among study variables. As shown in the figure, the three forms of employee participation; full-autonomous, semi-autonomous and consultative participation have a direct relationship with creative-relevant process. Then, creative-relevant process is being examine as a predictor to the critical thinking.

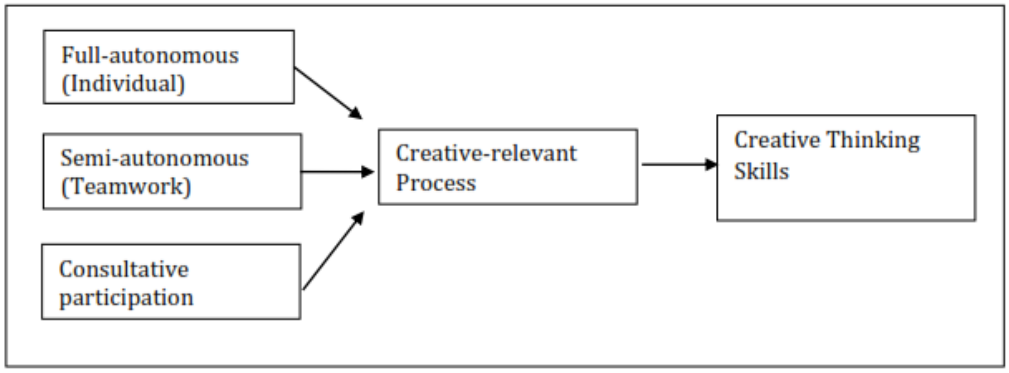


Figure 1. Research framework of the relationship between employee participation, creative-relevant process and creative thinking.

METHODOLOGY

The study was conducted using quantitative study approach and cross-sectional among employees working in a public/private service organization. Convenience sampling was employed in this study because the name list of all employees in the organization were not easily accessible. Self-reported questionnaire were distributed to elicit responses from the participants and it is appropriate and justifiable because the constructs examined are self-referential respondent perceptions. This design is chosen because the current study intends to find out the contribution of different forms of employee participation on the creative-relevant process which require information from employees. Besides those information, this study would like to know how much the employees' engagement in the creative-relevant process will influence the degree of critical thinking. The survey questionnaire was developed by adapting previous validated measurement scales.

The measure for forms of employee participation derived of 14 items adapted from Gallie (2013), Respondents were asked series of questions such as "How much influence doyou personally have on… deciding how you are to do the task?" and "How much you can express your views…in the issues of training and career development". To measure the creative-relevant process, an 11 items scale was used for this study on the basis of the conceptual work of Amabile (1983) and Reiter-Palmon and Illies (2004). Respondents answered on a five-point scale ranging from (1) never to (5) very frequently. "I think about the problem from multiple perspective" and "I generate a significant number of alternatives to the same problem before I choose the final solution" are representative items. The items assessing creative thinking skills reflect employees' experience and perception on their level of skills. Creative thinking skills was measured using three items developed by Amabile (1996) and improved by Hoegl and Parboteeah (2007). Respondents will be asked to indicate the agreeableness to the given statements using a five–point scale ranging from (1) disagreed to (5) agreed. "I had the ability to come out with the original solutions" is a representative item.

FINDINGS

Data analysis

Data were analyzed using 250 cases obtained from the survey. Of these numbers, only 247 cases were usable for further analyses. To test the model and the hypotheses, partial least squares structural equation modeling (PLS-SEM) approach was used with the aid of SmartPLS 3 (Ringle, Wende & Becker, 2015). PLS-SEM involves two stages of assessment, which are measurement model assessment and structural model assessment. Specifically, this study has first examined the indicator reliability by checking the indicator loading. Hair, Hult, Ringle and Sarstedt (2014) suggested an indicator loading of 0.70 or higher as the cut-off value so that a reliability of 0.50 is obtained when the indicator loading is squared. Next, is to identify the internal consistency reliability by examining the composite reliability and the Cronbach's alpha value. The suggested cut-off value for internal consistency reliability is 0.70 for both approaches. To examine the model's convergent validity, this study assessed the average variance extracted (AVE). The suggested cut-off value is 0.50, which indicates that at least 50% of the variance in an

indicator's variance is explained by the construct to which it is assigned (Henseler et al. 2009)

The last criterion used in assessing our reflective measurement model is discriminant validity. This criterion is assessed at two levels. At the indicator level, the cross-loadings were examined. An indicator should load highly on its respective construct to which it is assigned to than on any other constructs in the model; hence, indicating discriminant validity at the item level (Henseler, Ringle & Sinkovics 2009). At the construct level, the Fornell-Larcker criterion was used to compare the square root of a construct's AVE against its correlations with other constructs. Results should indicate that the square root of AVE is higher than the construct's correlations with other constructs in the model; thus, establishing discriminant validity at the construct level (Hair et al. 2014).

Once a reliable and valid measurement model is established, one should proceed with assessing the structural model. There are four assessment criteria of a structural model, which include determining the size and significance of path coefficients, assessing coefficient of determination (R^2), assessing predictive relevance (Q^2), and identifying f^2 effect size (Henseler et al. 2009). Bootstrapping procedure with 5,000 resamples was used in our study to identify significance of the paths. The blindfolding procedure, on the other hand, was used to determine model's predictive relevance. If the result shows a value above zero, then predictive relevance of the model is established (Hair et al. 2014).

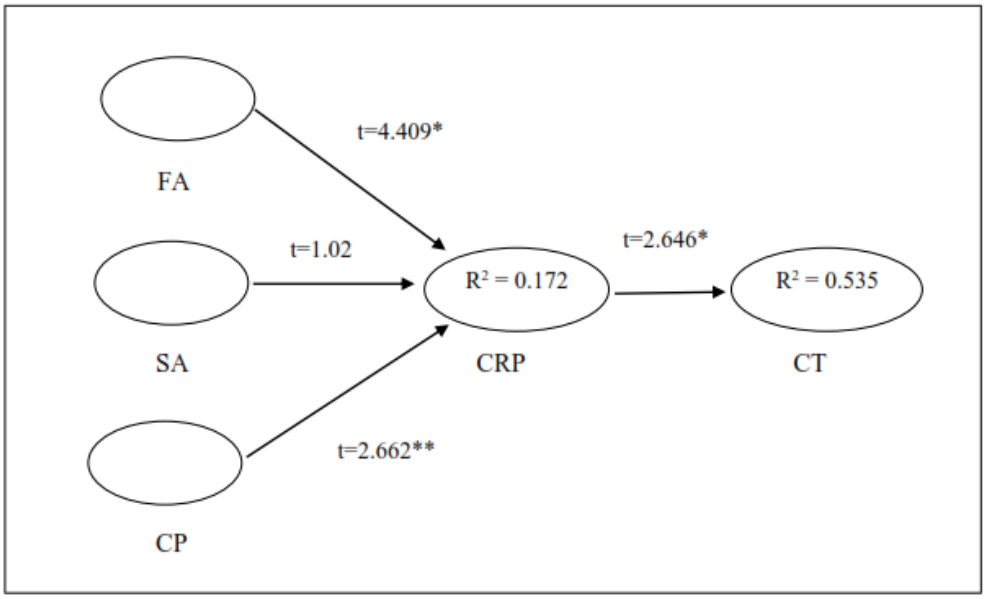
Results

Five constructs were used in this study, which are full-autonomous, semi-autonomous, consultative participation, creative-relevant process, and creative thinking. The indicator reliability of the measurement model was accepted as the indicator loadings for each construct shows 0.70 and above. The summary of internal consistency reliability results is shown in Table 1. The internal consistency reliability of the constructs is well above the cut-off value of 0.70. That is, the highest obtained composite reliability is 0.968 for creative thinking and the lowest obtained composite reliability is 0.839 for full-autonomous. Cronbach's alpha values also show good reliability, ranging from 0.742 to 0.964. All AVE values are above 0.50, with the lowest AVE value of 0.568 for full-autonomous. Therefore, convergent validity is established in this study. Table 1: Constructs, internal consistency reliability, and average variance extracted

Construct	Cronbach's Alpha	Composite Reliability	AVE
Full-autonomous	0.742	0.839	0.568
Semi-autonomous	0.865	0.908	0.712
Consultative	0.892	0.918	0.651
Creative-relevant process	0.936	0.945	0.612
Creative thinking	0.964	0.968	0.701

Having established a valid and reliable measurement model, this study continued with structural model assessment. Three procedures were used to obtain results for structural model assessment, which are the PLS algorithm procedure, the bootstrapping procedure (with 5,000 resamples), and the blindfolding procedure. Figure 2 shows the results of structural model. The coefficient of determination, R^2 for the first direct relationship between the three forms of employee participations and creative-relevant process is 0.172, which indicates that 17.2% of the variance in creative-relevant process construct is explained by the predictors of the model.

Out of the three forms of participation, the path coefficient for full-autonomous and consultative participation are significant with the path linking full-autonomous to creative-relevant process having a larger size and is more significant than the path linking consultative participation to creative-relevant process. Meanwhile, the path coefficient for semi-autonomous is not significant. For the second direct relationship, the coefficient of determination, R^2 is 0.535, which indicates that 53.5% of the variance in creative thinking skills is explained by the creative-relevant process. The path coefficient for creative-relevant process is significant as shown in Figure 2.



Note. FA=full-autonomous, SA=semi-autonomous, CP=consultative participation, CRP=creative-relevant process, CT=creative thinking skills (** z-score > 1.645)

Figure 2. Results of the structural model.

In PLS-SEM, one has to assess a model's predictive relevance using Stone-Geisser's Q^2 (Hair et al., 2014). By using blindfolding procedure, this study evaluated how accurately PLS-SEM model predicts the data points of indicator in a reflective endogenous constructs (i.e., 1st: creative-relevant process and 2nd: critical thinking). Results show that the Q^2 value for the 1st direct relationship is 0.096 and the Q^2 value for the 2nd direct relationship is 0.343. Because these Q^2 values are greater than zero, both models exhibit good predictive relevance.

Other important criteria to be evaluated in PLS-SEM model is the effect sizes, $f^{2.}$ The effect size, f^2, is calculated to assess the relative impact of a predictor on the outcome variable (Hair et al. 2014). According to Hair et al. (2014), results of the effect size could be large (i.e., 0.35), medium (i.e., 0.15) or small (i.e., 0.02). Table 2 shows the results of the effect sizes, f^2 for both direct relationship. The f^2 effect size for all the predictors are ranging between small to medium (i.e. 0.05 to 0.07) except for semi-autonomous which is less than small effect size (< 0.02).

Table 2: Summary of effect sizes results

Latent variables/effect size f^2	Creative-relevant Process	Creative Thinking
Full-autonomous	0.071	
Semi-autonomous	0.006	
Consultative participation	0.036	
Creative-relevant process		0.050

DISCUSSION AND CONCLUSION

Organizations have put their full effort in enhancing creative thinking throughout their employees. Many formal and informal practices are being conducted every day among employees in order to become a creative thinker. This study's essential attempt is to examine the employee creativity through different forms of employee participation and their engagement in creative-relevant process. Even though previous researchers have recognized the importance of employee participation in organization efficiency, lack of empirical evidence that examine the different beneficial of the three forms of participation.

However, the impacts of different forms of employee participation in creative-relevant process on creativity thinking was tested using two direct relationship. The first direct relationship is between the three forms of employee participation; full-autonomous, semi-autonomous and consultative participation with creative-relevant

process. The second direct relationship is between the creative-relevant process and employee creative thinking.

As expected, different form of employee participation has engaged in the creative-relevant process at a different level. The hypotheses on forms of employee participation, H1a and H1c are supported. There are a positive relationship between full-autonomous and consultative participation with creative-relevant process, whereby full-autonomous most strongly associated with creative-relevant process. On the other hand, hypothesis H1b was not supported. The study found that semi-autonomous, that is the employee participation through teamwork was not significantly engaged in creative-relevant process. The findings for hypotheses 1 (H1a, H1b and H1c) is consistent with Gallie (2013) that specifies among the three forms of employee participation, the strongest and significantly associated with quality of work are full autonomous and consultative participation rather than semi-autonomous.

This study also found that there is a significant direct positive relationship between creative-relevant process and employee creative thinking (H2 was supported). According to Zhang and Bartol (2010), creative process engagement is crucial in explaining employee creative outcomes. For a creative response to emerge, employee need to engage in creative process activities such as problem identification, information searching, and idea generation (Amabile 1983; Reiter-Palmon & Illies 2004). These process will explore the employees' cognitive pathways to be more flexible in findings a solution in a creative way. Therefore, the finding of this study support previous research on the importance of creative-relevant process.

Finally, the results of this study suggested that it is worth to investigate the three forms of employee participation (i.e. full-autonomous, semi-autonomous, and consultative participation) that beneficial the creativity differently. Organizations now days are craving for the employees who have the higher level of creative thinking to foster innovation for their organization. Thus, by identifying the different forms of employee participations and their level of engagement in creative-relevant process, we are making a contribution to the understanding of the drivers that need to be emphasized by organizations in order to enhance the creativity of their employee.

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