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FACTORS CONTRIBUTING STUDENTS' CREATIVITY

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ABSTRACT

The purpose of this study was to determine the factors which could foster and enhance students' creativity in three research universities in Malaysia. The data collected from 520 postgraduate students. Correlation analysis was employed to analyze data. Findings of this study indicated that three factors such as intrinsic motivation, psychological empowerment, and support for innovation contribute significantly to the development of students' creativity. It is suggested that universities should create a supportive environment, assist students' psychological empowerment and develop an innovative culture in order to enhance students' creative thinking.

Field of Research: *Intrinsic motivation, psychological empowerment, support for innovation, research university, students' creativity*

1. INTRODUCTION

Creativity has defined by Sternberg and Lubart (1995) as 'producing new and original idea' which is critical factor for organization's development (Amabile 1996). Nowadays, many organizations face competitive environment in their production processes, however, to keep organizational growth and survive, organizations should have to be more creative and innovative (Jung et al., 2003). As Colinger (2002) has emphasized that being creative in work place can enhance individual's creativity and motivate them work creatively. Many researchers believed that intrinsic motivation (Amabile, 1996; Amabile et al., 1996; McCullagh, 2005; Shin & Zhou, 2003), psychological empowerment ((Deci et al., 1989; Spreitzer 1995; Gumusluoglu & Ilsev, 2009), and support for innovations (Scott & Bruce, 1994; Elkins & Keller, 2003) are significant factors to foster creativity among individuals in organizations including educational institutions.

It is widely believed that creativity can be enhanced and cultivated if the conditions and contributing factors provided respectively. The previous literatures has showed that there are researches have been done regarding the factors which could contribute to enhance creativity among students, but the correlation among those factors and determinant level is have not examined yet. This paper is seeks to examine the correlation between variables of psychological empowerment, intrinsic motivation and support for innovation.

2. CREATIVITY

Creativity is the capacity to generate new and useful ideas (Csikszentmihalyi, 1996; Amabile, 1998). New means unusual, unique, new point of view, varied, original, breaking from existing patterns and contributing something to the field which was not there before. In business sectors produce valuable products or services indicate that the product meets a need or solves a problem; it is useful, effective and efficient, serves a purpose and contributes to society and creates values. Some scholars (Razeghi, 2008) stated that there are no new ideas, only reconfigurations of existing ideas. This definition reveals that creativity is still very subjective. Organizational creativity is a fairly recent field in recent literatures. Its objective is to study what makes certain organizations come up with more creative solutions that are often translated into innovations and value creation. Enhancing creativity involves motivation, psychological empowerment, and support for innovation techniques and this technique are helpful in generating a large number of ideas in students learning. Few researchers has suggested that creativity can be promoted by creating an open, fun, trusting and caring environment where new understanding is valued (McAllister, Mumford et al., 2002).

3. INTRINSIC MOTIVATION AND CREATIVITY

In recent social psychology perspective study, task motivation drives the person to engage and express creative actions (Amabile, 1996). Amabile (1996) highlights the role that intrinsic motivation plays in enhancing task motivation. Intrinsic motivation is associated with aspects such as intrinsic engagement, autonomy, goal orientation, and self-regulatory mechanisms. Intrinsic motivation can be defined as the motivation or desire to do something based on the enjoyment of the behavior itself rather than relying on or requiring external reinforcement. Motivation enables a creative worker to combine working with a passionate interest in work. Motivation knows a distinction between intrinsic and extrinsic motivation. Intrinsic comes from within the person: somebody likes the job because it is engaging, satisfying or challenging. Extrinsic motivation is triggered from the environment for example the person does the job as well as possible because there is an external award, such as prize to win or a bonus to earn. A physical work environment that is perceived as attractive can be inspirational and motivational to people and can symbolize innovation and signal creativity (Haner, 2005).

The intrinsic motivation perspective dominates the creativity literature. This perspective argues that people are most creative primarily via intrinsic motivation (e.g., Amabile, , 1998). Amabile et al. (1996) further suggest that an individual's perception of the work environment is a key determinant of his or her creativity. According to their model, the perceived work environment influences the creative work carried out in organizations; that is, the psychological meaning employees attach to events in their organizations affect their motivation to generate new ideas.

4. PSYCHOLOGICAL EMPOWERMENT AND CREATIVITY

There are two aspects of empowerment: "empowerment as "behavior of a supervisor" who's empowers his/her subordinates and the other is the "psychological state of a subordinate" resulting from his/her supervisor's empowering" as suggested by Lee and Koh (2001). On the other hand Brymer (1991) defined empowerment as the process of decentralizing decision-making in an organization, by means of

which managers give more discretion and autonomy specific employees. However, most researchers agree that the core element of empowerment involves giving employee discretion over certain task related activities without neglecting the responsibilities that come along with it (Bowen and Lawler, 1992; Schlessinger and Heskett, 1991). Spreitzer (1992) focused on the psychological empowerment construct and validation of empowerment and according to Spreitzer (1995) empowerment is a continuous variable; people can be viewed as more or less empowered, rather than empowered or not empowered. Researches prove employees view themselves as more effective in their work and are evaluated as more effective by their co-workers (Quinn and Spreitzer, 1997). It is shown that power of empowerment is to increase organizational effectiveness and employee well being (Byham and Cox, 1990).

5. SUPPORT FOR INNOVATION AND CREATIVITY

Innovation is often characterized by discontinuous activities (Kanter, 1988). Innovation is viewed as a multistage process with different activities and different individual behaviour necessary at each stage. Therefore, an individual can be expected to involve in any combinations of these behaviours at any particular time (Scott & Bruce, 1994). Innovative behaviour may result from individual reaction toward high work load. Employees try to adapt themselves to the high work load by generating, promoting and implementing ideas to adapt themselves or work environment (Janssen, 2000).

Organizational climate is one of the most important dimensions of creativity (Maimone and Sinclair, 2010). Maimone and Sinclair (2010) found that supportive organizational climate for innovation influence creativity at the workplace. Furthermore, they added that the relationship between support for innovation and the individuals creativity are positively correlated with the level of emphasis on creativity.

6. THE METHOD

This was an exploratory study intended to find the correlation between variables. In fact, an exploratory study can be described as finding out what is happening, and asking questions and assessing phenomena in a new light; also these type of research is most useful when there would be limited research regarding the population of study (Creswell, Plano Clark, Gutmann, & Hanson, 2003). There were 520 postgraduate students (Master and PhD programme) in the Faculty of Education of three selected research universities in Malaysia has participated in the study. For obtaining the required information, thirteen items from creativity scale, nine items from psychological empowerment scale, eight items from intrinsic motivation scale and 16 items from support for innovation scale questionnaire were used to measure the students' creativity. Questionnaires were distributed amongst 550 respondents who are randomly selected postgraduate students of the three research universities in October 2011.

To carry out this study, first consent letter was obtained from the University of Malaya and in the letter researcher was introduced to faculty of education of UPM, UKM, and UM. Researcher attended these universities and a total of 550 questionnaires were distributed among postgraduate students. The purpose and significance of this study was explained for them. They were assured that their responses

are confidential and their responses will be used only for research. Completed questionnaires were gathered by research assistant at the end of these sessions. 520 completed surveys were returned of 550 questionnaires that had been distributed, yielding a 91.4% return rate. Respondents returned a total of 520 questionnaire and all were used in the analysis. Inferential statistics (correlation analysis) were used in this study. Moreover, Pearson correlation coefficient was used to identify the relationship between each dimension of students' creativity.

7. FINDINGS

In this study the Pearson correlation analysis was used to identify relationship between psychological empowerment, support for innovation and intrinsic motivation. Results of this analysis helped researchers to understand the level of correlation among variables. The correlation matrix had shown a number of significant relationships between creativity and dependent variables (Table 1).

Table 1: Summary of the correlation matrix of independent variables and creativity

Variable	Pearson Correlation	Sig. (2-tailed)
Creativity	1	
Psychological Empowerment	.693**	0.000
Intrinsic Motivation	.693**	0.000
Support For Innovation	.584**	0.000

** Correlation is significant at the 0.01 level (2-tailed).

According to Table 1, there was a positive and moderate relationship between each dimensions [n=520, p<0.05] and the Pearson correlation value is moderate and positive. The study results indicated that students who have intrinsically motivated, psychologically empowered by their lecturer shows high tendency of being creative. In fact, supportive supervision is more likely to contribute creativity than a controlling one since it enhances individual motivation. Lecturer should provide a supportive environment which students feel free to explore their ideas. They should study in a conducive environment to generate and implement the novel and new ideas. This can be achieved by giving focus on enhancing the factors which contribute to students creativity.

8. CONCLUSION

This study examined the correlation of the creativity with intrinsic motivation, psychological empowerment and support for innovation in the context of research universities in Malaysia. The correlation analysis shows that intrinsic motivation, psychological empowerment, and support for innovation have significant relationship with students' creativity. However, it is suggested that, universities should create a supportive environment, assist students' psychological empowerment and develop an innovative culture in order to enhance students' creative thinking.

This study was carried out in three research universities in Peninsular Malaysia. Similar study is hoped to be carried out in other universities throughout Malaysia, so that more comprehensive information can be studied and enable generalization to all universities in the country. Future researchers should combine the quantitative and qualitative methods to gather holistic information on certain variable. Innovative behavior can be verified through observation. This can reduce bias in data collecting and findings with higher validity and reliability can be improved.

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