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The Role of Creativity in forming Innovative Behaviours of Creative Industrial Workers

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This quantitative research is aimed on ascertaining the effect of creativity on innovative behaviour in creative industry workers. This research included various workers of several creative sectors around Yogyakarta and its surrounding areas. There were 111 valid respondents from various creative industry sectors. The population of the creative industries was defined by the Indonesian Economy Board of Creative Economy and was collected by accidental sampling. The data was processed by a SmartPLS 2.0.M3 application. The results shows that creativity has positive and significant effect on the innovative behaviour of creative industries workers. The result implies that creativity is the main driver to boost creative industries workers' innovative behaviour in the workplace. Thus, SME (Small and Medium-sized Enterprises) owners and management must first improve workers' creativity in order to build their innovative behaviour. This can be done by motivating workers to keep actively suggesting creative ideas for increasing job performance, quality, and reaching goals and solving problems, encouraging them to constantly search for new technologies, techniques, and product concepts, facilitating them to show their creativity in their jobs, as well as increasing their level of creative ideas.

Key words: *Creativity, innovative behaviour, creative industry.*

Introduction

As the economic structure shifts from agrarian to information age, creative industries has the potential to grow to become one of the sectors for Indonesia's economic development. When non-oil and gas exports declined in 2014-2015 by 9.71%, creative economy exports as part of non-oil and gas categories experienced gains and experienced export increases of 6.60% (Indonesian Board of Creative Economy, 2017). The creative economy is also a new leading sector that has the potential to encourage economic growth as the natural resources become more degraded each year. On the employment side, the number of creative economy sector workers in 2014-2015 increased from 15,167,573 people to be 15,959,590 people. There were 542,003 newcomers or workers who first worked in the creative industries sector in 2015, contributing 21.59% to the total share of national newcomers. It indicates that the creative economy is beginning to become more attractive and has the potential to become one of the promising alternative sources of livelihood for Indonesian people in the future.

The creative industry sector in Indonesia is a relatively new sector to develop especially since the establishment of the Indonesian Board of Creative Economy (Bekraf) in 2015 as a responsible board for the development of Indonesia's creative economy. It assists the President in formulating, establishing, coordinating, and synchronizing the policies in the creative economy. According to the Indonesian Ministry of Trade, creative industries are industries that originate from the utilization of creativity, skills, and individual talents to create prosperity and employment by generating and empowering the individual's creative power. Bekraf defines the creative economy as a transformation of the structure of the world economy where there is a change in economic growth from natural resource-based to human resource-based, from the agricultural era to the era of industry and information. The creative industry sector is unique because it relies heavily on the creativity and innovation power of HR (Human Resource) in its production process. Almost all of the products offered sub-creative industry sector is dependent on the order, the public taste, and the trend. It certainly includes the creativity and innovation of the workers in it to produce good products. The creative industry has a strong climate of innovation, proved through Bekraf's data in 2015 which found that as many as 62.3% of creative industry actors had attempted to innovate, and 80.63% had capacity development plans in the form of product innovation, thus making this sector as one of the most innovation-heedful sectors (Indonesian Board of Creative Economy, 2017).

This fact raises the logic that the creative industries is one of the economic sectors that relies on and produces innovative behaviour. Innovation and innovative behaviour cannot be separated from creativity. Some previous studies have shown that creativity is a significant antecedent and the main capital for innovation in the workplace (Amabile et al., 1996; Baer, 2012). However, most creative industry studies in Indonesia which also examine aspects of

creativity and innovative behaviour tend to focus on entrepreneurial aspects or make the business owners as the object of their research (Lestari, 2013; Farida, 2014; Hermawan & Tripriyo PS, 2014; Porwani, 2016). It is still rare to research and examine the workers or employees in this sector. In fact, the BPS and Bekraf (2017) census found that the majority of creative industry sector businesses in Indonesia continued to employ people even though it was not in large numbers. In 2015, 48.94% of businesses in the creative industry sector employed 1-4 people, 35.02% employed 5-19 people, 13.97% employ 20-99 people, while the remaining 2.07% employed more than 100 people (Indonesian Board of Creative Economy, 2017). The data shows that the majority of creative industrial sector businesses are in the form of MSMEs (Ministry of Micro, Small and Medium Enterprises) and employed fewer than 20 employees. However, the fact that the abundance of workers in these creative industries is rarely realized by HR researchers and creative industry.

On the basis of these gaps, the researchers intend to help address the research needs on the topics related to the samples of creative industry workers in the Yogyakarta and its surrounding areas. The reason was that Yogyakarta is now experiencing a rapid social transformation from agrarian to semi-industrial, especially for creative industries (Wicaksono & Nuvriasari, 2012). Yogyakarta also has human capital or the potential of talented human resources and rich in creativity. It is characterized by the establishment of various institutions and colleges of arts and information technology, the reputation of the city as a centre of art, culture and education, and the numbers of MSMEs in the creative industries sub-sectors. The prospect of the creative industry in Yogyakarta is very large due to the conditions that are very conducive to the development of creative industries, especially fashion, crafts, and information technology. In 2013, the Ministry of Tourism and Creative Economy registered four cities in Indonesia to become Creative City to UNESCO. They were Solo, Bandung, Pekalongan, and Yogyakarta. Certainly there must be a long assessment process in the Ministry of Tourism and Creative Economy (Sudarman, 2015), and it shows that Yogyakarta is considered to have fulfilled national requirements as the main actors to develop the creative economy. Through this potential thing, researchers are interested to examine the aspects of the creativity effect on innovative behaviour that are produced in the workplace for employees, not the business owners of the creative industries in Yogyakarta and its surrounding areas.

Literature Review and Hypothesis Formulation

Innovative Behaviour

De Jong and Hartog (2010) defined innovative behaviour as a series of work behaviours related to the exploration of ideas, formulation of ideas, promotions, and implementation of innovative ideas. Exploration and formulation of ideas were the stages that were very synonymous with creative processes as Rank et al. (2004) referred to creativity at both stages,

so that researchers specifically proposed the last two stages. They were promotion and implementation of ideas as the dimensions of innovative behaviour to avoid the occurrence of overlapping constructs between creativity and innovative behaviour. Idea championing described the promotional activities of creative ideas that had been proposed, including obtaining supports, building coalitions with members of the organization, showing enthusiasm and trust that the proposed idea would succeed, and choosing the right people to implement the ideas (Howell et al., 2005). The last stage, the idea implementation, was the application stage of ideas as well as testing and the idea modification, adjusted to the status quo and needs for improvement / change. Innovation played an important role in achieving the organizational effectiveness, long-term success, and in dealing with external environmental turbulence (Muceldili et al., 201 3). The innovative behaviour of HR within the organization was the main capital in realizing innovation at the organizational level.

Creativity

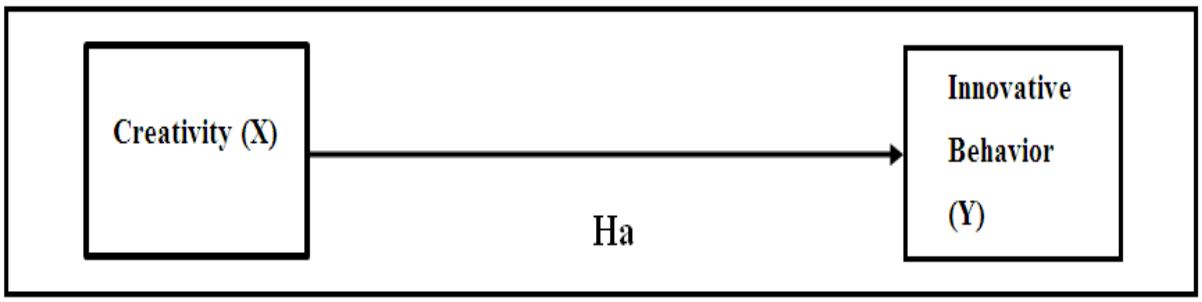
Zhou and Ren (2011) defined creativity as an activity related to the formulation of new and useful ideas associated with products, services, processes, practices, management, business models, or competitive strategies. An idea was said to be creative when the idea was a new idea (novel) for the organization and work, also having a value and usefulness to make improvements or solve problems. Egan (2005) suggested that facilitating creativity was a necessity, not an option, for organizations interested in responding to technological progress, change of environment, changes in organizational structure or strategy, survive with competitors who made improvements to their products, processes or services; changes in consumer tastes; and changes to society due to global and plural issues. Muceldili et al. (2013) said that creativity led organizations towards success, employee satisfaction, economic prospects, and social development.

The concept of creativity often overlapped with innovative behaviour. Some previous studies treated creativity as part of innovative behaviour (De Jong & Hartog, 2010; Scott & Bruce, 1994; Yuan & Woodman, 2010). In fact, there were different concepts between them. Creativity required ideas that were completely new (novelty), and they were inter-individual cognitive processes. On the other hand, innovative behaviour allowed idea proposals that had existed first, but they had never been implemented in organizations. They were social processes that were primarily inter-individual. Introversion became dominant antecedent for creativity (Feist, 1999), and the opposite was actually beneficial for extraversion to support innovative behaviour in the workplace (Rank et al., 2004; Ping, 2017). West (2002) proposed that the team and organizations would be more likely to innovate when the environmental conditions were full of uncertainties and threats. However, it was the opposite for creativity that required a pressure-free situation.

The constructed difference between creativity and innovation was proven by the results of the previous studies. Amabile (1996) suggested that creativity was a significant antecedent for the application of innovation at the individual levels. Hsu et al. (2 011) found that employees with a high creative self-efficacy level showed a level of high behaviour innovation in the workplace. Muceldili (2013) found that employee creativity had a positive effect on the innovation level of the employee output. According to the results of these studies, it could be affirmed that creativity was a different construct with innovative behaviour, and gave an effect on innovative behaviour, so researchers formulated an alternative hypothesis as follows:

Ha : Creativity has a positive and significant effect on Employee Innovative Behavior

Figure 1. Research Model



Research Methods

This research was a quantitative research and it used survey methods through primary data by distributing questionnaires to respondents. The subjects of this study were creative industry employees in the city of Yogyakarta and the surrounding areas. The object of this research was innovative behaviour and creativity. The location of the research was spread in some creative industry sector businesses in Yogyakarta and the surrounding areas. The selection of these businesses referred to the criteria for classification of creative industrial businesses according to Bekraf (2017). They were application and game developers; architecture; interior design; visual communication design; product design; fashion; movies, animations and videos; photography; craft; music; publishing; advertising; and television and radio.

The population of this research was all creative industry employees in the city of Yogyakarta and the surrounding area. Both populations of workers and the creative industries in Yogyakarta region were not known, so the selection of the creative industries was done by using non-probability sampling and the method was an accidental sampling method. The respondents were the creative workers and they were involved entirely, or in other words this research involved the population of each business. The minimum number of respondents was set based on SEM calculations (Hair et al., 1998) and obtained 108 respondents for 2

variables, 4 indicators, and by adding the estimation of sample size to avoid negative impacts obtained invalid and biased samples.

Sampling was conducted in April-May 2018. Researchers distributed 147 questionnaires and regained 130 questionnaires, resulting in a return rate 88.4%. Furthermore, 19 returned questionnaires were not suitable to be used for data processing so there were 111 valid questionnaires obtained, or they received response rates 85.38%. All respondents had a boss who was a criterion to test the research model on the workers and not the business owners, and working in creative industry sector businesses so that they met the criteria of the research sample.

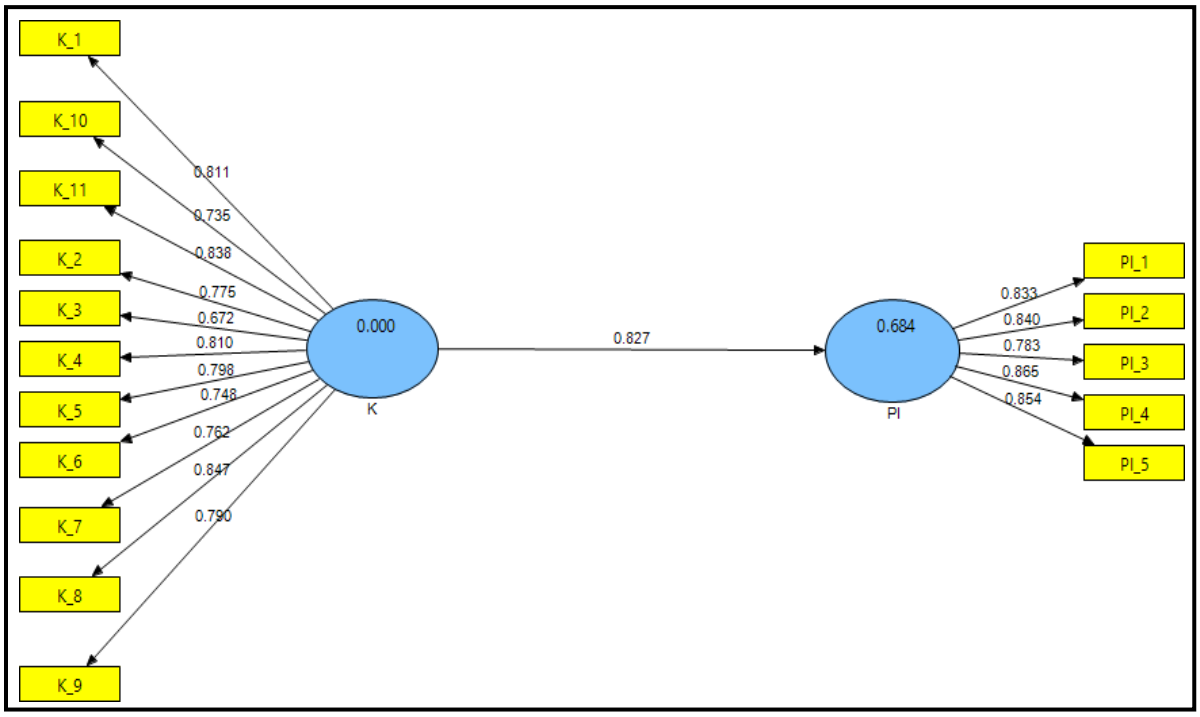
Innovative behaviour variables were measured using the last 2 dimensions of innovative behaviour. They were championing ideas ($\alpha = 0.95$) and idea implementation ($\alpha = 0.93$) adapted from De Jong (2010). The creativity variable was measured using the creativity scale developed by Zhou and George (2001) and the research only took 11 out of 13 items ($\alpha = 0.96$) to prevent overlapping with previous innovative behaviour items. All items were translated into Indonesian and designed as a self-reported so that it could be filled by each employee himself. The data were analysed using the SmartPLS 2.0.M3 application and had testing validity, reliability, collinearity and bootstrapping analysis for testing hypotheses.

Results and Discussion

Testing Validity and Reliability

Validity and reliability testing was done by analysing the outer model. The reliability testing was done by observing the values of outer loadings that were listed in Figure 2, and the composite reliability (CR). The validity test was done by observing the Average Variance Extracted (AVE) value.

Figure 2. Structural Model based on Analysis of PLS Algorithms



In Figure 2, it was found that all items had outer loadings value above 0.5, so that they met the reliability requirements (Ghozali & Latan, 2015). The CR value was observed to strengthen the reliability evidence of the used items. In Table 1, it was found that all CR values were greater than 0.6, so the research model was declared reliable. The validity test was then carried out by observing the AVE value. Furthermore, in Table 1 it was found that all AVE values were greater than 0.5 so that the research model was declared valid (Hair et al., 2014). The results of the outer model analysis were detailed in Table 1.

Table 1: Test Validity and Reliability of Structural Models

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
K	0.6115	0.9452		0.9359	0.6115	
PI	0.6983	0.9204	0.6837	0.8917	0.6983	0.4765

Structural Model Testing

The structural model testing or inner model was then carried out by analysing the value of R2 and path coefficients. In Table 1, it was found that the structural model of this study produced an R2 value 0.6837 on innovative behaviour variables. It meant that creativity variable had moderate effect on innovative behaviour that was produced by research respondents. 68.37% of the variation of changes in innovative behaviour could be explained by creativity. 31.63%

was explained by other non-examined variables. Furthermore, bootstrapping was done on the SmartPLS 2.0.M3 application to find out the path coefficient values. The results of path coefficient analysis through the bootstrapping were listed in Table 2.

Table 2: Results of Path Coefficient Analysis of Structural Models

	Original Sample (O)	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**Standard Error (STERR)**	**t Statistics (| O / STERR |)**
K -> PI	0.8269	0.8282	0.0330	0.0330	25.0332

Hypothesis testing

Hypothesis testing was done by comparing the value of t statistics that had been obtained in Table 2 with the value of t calculated at a significance level 5%. Based on Table 2, the calculated t value was greater than t table for the one-sided test (25.0332> 1.65) and the beta coefficient which was illustrated by the original sample (O) value produced a positive value (+0.8269), so that the alternative hypothesis is accepted.

Discussion

The test results of the alternative hypothesis indicates that there are positive and significant influences on creativity towards innovative behaviour. Based on the index value analysis of the respondent's answers, all items of the creativity questionnaire obtained a high perception index value, except for the item "A good source for creative ideas". It indicates that the respondents feel that almost all items of the creativity questionnaire are important and relevant to the creativity of each respondent in the workplace. The finding that alternative hypotheses are accepted gives the conclusion that the respondents have a perception that creativity measured by the questionnaire is also relevant to innovative behaviour in the workplace. The more often the respondent proposes ways, ideas, solutions, new approaches to doing work, overcoming problems, increasing performance, and quality; look for current technology, techniques and product ideas; are not afraid to take risks; and given the opportunity to show creativity in work, it is increasingly possible for the respondent to make and trust people to be enthusiastic and support innovative ideas, contributing and give some efforts to the development and application of new ideas, and systematically practice innovative ideas into their work. The creativity item with the highest rating was on the indicator of "creative at work when the opportunity is given". This finding concludes that the creative industry employees in Yogyakarta and the surrounding areas are more likely to show innovative behaviour when they are given more opportunities to show creativity in their work. The item "good source for creative ideas" showed a different perception index than other items because it produced moderate values. It indicates that the research respondents

may or may not consider their role as a good source of creative ideas will encourage them to show innovative behaviour.

The testing results of the first hypothesis supported previous findings (Amabile et al., 1996; Hsu et al., 2011), that creativity is a significant antecedent for the application of innovation at the individual level. The results of this study also supported the findings of Muceldili (2013) that employee creativity has a positive effect on the level of innovation that it produces. The results of this study provide evidence that creativity is the main capital in growing the innovative behaviour of employees in the workplace, including in the creative industry sector. Management and creative industry entrepreneurs, both in Yogyakarta and in Indonesia, must pay attention to the level of creativity each employee has. Management and business people need to always maintain and encourage the increasing creativity of employees so that businesses are able to resist in the competitions and win the increasingly dynamic market demand.

Conclusion

Creativity has a positive and significant effect on innovative behaviour in creative industries workers in the city of Yogyakarta and its surrounding areas. The higher the creativity of a creative industry employee, the higher the innovative behaviour generates in the workplace.

Implications

Practical implications

Innovative behaviour is a very important capital to gain competitive advantage from the competitors in creative industries, both in Yogyakarta and in Indonesia at large. The most important capital in developing innovative behaviour is creativity, so that the entrepreneurs and the management of the creative industry need to maintain the life of employee creativity in the workplace through motivation to continue, propose new ways, approaches, and ideas to achieve goals, improve performance, improve quality, overcome problems, provide stimulation for employees to continue to look for current technology, techniques, and product ideas, and facilitate employees to continue to show their creativity in the workplace. The results of the study showed that creative industry employees were more likely to show their innovative behaviour when they were given more opportunities to show creativity at work. The management and creative industry entrepreneurs need to pay attention to and maintain these aspects of creativity so that the employees can always show their innovative behaviour. In addition, the facts in the field show that some creative industry employees do not consider that they are good sources for creative ideas. The management and creative industry business people need to involve the employees more in proposing creative ideas, and need to motivate

and increase their confidence so that they are more confident that they are good sources for creative ideas.

Theoretical Implications

This research provides a perception into the phenomenon of innovative behaviour and creativity for the creative industry employees in Yogyakarta and its surrounding areas. This research helps to overcome the gaps of the previous researches about the need for creativity and innovative behavioural research in the creative industries sector that focuses on the workers and not the business owners as the research subject. This study also tested the consistency of the previous studies and theories that creativity has a positive and significant effect on innovative behaviour in the workplace.

Limitations and Research Recommendations

This research has completed, of course and there must be various limitations. The scientific limitations of this study are 1) the scope is too narrow for the workers as the subject because it only examines the effect of creativity on the innovative behaviour. The other factors or variables such as personalities and supports from other parties such as superiors have not been included in the study; and 2) the study only obtained 111 respondents valid for the scope of the creative industries sub-sectors in Indonesia. It is not sufficiently strong to be used as a generalization material because the creative industries in Indonesia are very broad and not related to each other. The future research needs to address the problems found in this study by: 1) extending the scope of this proven research model by adding variables that relate to the conditions of the creative industry workers; and 2) conducting research on one of the sub-sectors of the creative industry specifically to confirm the results of this study, or conduct research in various sub-sectors like this research but on more varied geographical areas to improve the generalization capabilities.

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