Mental Attitude and Creative Behavior among Indonesian Creative Worker in Design Industry

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Abstract*— *The paper presents a conceptual model of creative behavior among creative workers. This conceptual model is developed as the result of empirical study. Preliminary survey is conducted to identify the elements of mental attitude and creative behavior among creative workers in Indonesia design industry. The study found that a significant correlation between mental attitude and creative behavior. Through the development of mental attitude and creative behavior, their creative performance will be achieved consistently. Therefore, their work quality tends to improve design industry. Consequently, this model would play a role in development of mental attitude and creative behavior among creative workers in Indonesia. The study contributes to develop the existing and future development of humanity among creative workers in Indonesia design industry.

Index Terms*— *creativity; creative worker; mental attitude; creative behavior; design industry.

I. INTRODUCTION

Creative industries are becoming increasingly important components of contemporary organization. Not only are they thought to account for higher than average growth and job creation, they are also vehicles of cultural identity that play an important role in fostering cultural diversity. A number of governments around the world have recognized this fact and started to develop specific policies to promote them. This mainstreaming of what was once considered a sector of marginal interest, which received limited attention from researchers, has led to a growing body of analysis, statistics and mapping exercises on the relationship between culture, creative industries and economic development to give officials in these countries the raw data they need to make policy (UNESCO, 2006).

The creative industries, in DCMS term, is defined as 'those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property' (Higgs, P., Cunningham, S., & Bakhshi, H., 2008). Design industry, as one of the creative industries thirteen fields according to DCMS term, has become a fenomenon in many countries which getting attention along with economic growth. The core process of this field is based on intellectual capital thus it should be mainly supported by human resource. The more competitive people the higher quality of products or creative works resulted by them. In achieving high quality of creative works, creative industry will need a support from its elements such as creative workers. It is critical for Indonesian creative workers to do their best to ensure and realize that creativity is one of the most important elements in order to achieve high performance. To accomplish this aim, it is important to understand Indonesian creative workers motivations and creative behaviors.

Creativity as the prerequisite for innovation is an important competitive factor for contemporary organizations (Santanen et al., 2000). Core processes are often characterized by the existence of creative tasks within these processes. Processes that contain creative tasks differ from conventional business processes in many respects: They have a low level of repeatability, typically are high value add processes, involve creative persons, have an extremely high demand for flexibility and are consequently characterized by particular risks (Seidel et al., 2007).

Psychologists and biologists have proposed a number of definitions for creative behavior in natural systems. In humans, creative behavior may be defined as behavior that results in a product that is unique or valuable to either an individual or a society. Alternatively, from a behavioristic viewpoint, creative behavior may be defined as a unique response or pattern of responses to an internal or external discriminative stimulus (Razik, 1976). As with

the definition of creative behavior, there exists a range of theories regarding the processes that generate creative behavior (Gorney, 2007). In the early 1900s, Freud (1900) explained creativity as a process of reducing the tension between fundamental biological drives, social norms and restrictions. In contrast, Maslow (1968) later believed that creativity was motivated by a cognitive need for self-actualization. He described creative behavior as a process of spontaneous expression by a person whose more basic biological needs have been satisfied.

In this context, mental attitude is defined as a way of someone on thinking and feeling in which he or she decides to act. Mental attitude has several aspects including motivation, orientation, etc. These are the elements which can be influenced by a certain condition such as stimulation whether good or a bad one. This paper will investigate the relationship between mental attitude and creative behavior among Indonesian creative workers. The key finding of this study will contribute to the development of human resources in creative industries that in turn will improve the quality of works resulted by creative workers.

II. LITERATURE REVIEW

Design activities can in fact vary from limited product adaptations to elaborated product design of complex global products. Cai (2001) talks about adaptive, configurable and interface design, as different design strategies for the development of global products. Grinyer (2001) describes global companies as "value exporters" if they use design to emphasize their uniqueness and local values to differentiate in the global markets, or as "value collectors" if they use design to interpret and answer to local markets specificities. In any case design acts as key mediator and interpreter of globalization processes (Morelli & Sangiorgi, 2006). In terms of the context for creative people in organizations, it is important for managers to recognize and reward their employees' creativity. One of the main challenges for managing creativity and innovation in organizations is to manage their employees' attention or their cognitive energy. To the extent that creative behavior of creative people is recognized and rewarded in an organization, creativity will be salient overall objective for them, and their attention will be directed toward creativity.

Creativity has been discussed in many field of study including psychology, arts, design, etc. Most theorists have defined creativity as the development of ideas about products, practices, services or procedures that are novel and potentially useful to organization (Amabile, 1996; Zhou & Shalley, 2003). Ideas are considered novel if they are unique relative to other ideas currently available in the organization. Ideas are useful if they have potential for direct or indirect value to the organization, in either short or long term. Thus, given this definition, creativity can range from suggestions for incremental adaptations in procedures to the extending of radical changes (Mumford & Gustafson, 1988). The definition makes no assumptions about the relative value of incremental versus radical ideas. Therefore, it may be that in some circumstances management might consider incremental ideas desirable, whereas in other circumstances more radical ideas might be valued. Creativity defined as creating new idea that potentially useful (Amabile, 1988; Woodman, 1993). An idea could determine as a creative idea if it shows something new and useful. Creativity is different with innovation. Creativity is creating new idea and useful, while innovation is successful implementation of creative idea by organization. Base to definition from UK DCMS Task Force (DeNatale & Wassal, 2006), Creative industries define as "Industry that comes from exploration of individual creativity, skills, and talent to create prosperity and job opportunity by creating and exploiting creations skill of creative people".

From this definition, Ministry of Trading of the Republic of Indonesian then try to describe grouping of the sub sector that actually exist in creative industries. There are 14 sub-sector as the result that could shown the level of their contribution in economic increase, there are: (1) Architecture, (2) Design, (3) Fashion, (4) film, Video and photography, (5) handicraft, (6) computer and software service, (7) Music, (8) Art market, (9) Publishing and press, (10) Advertising, (11) Interactive Games, (12) research and Development, (13) Showbiz, (14) Radio and Television. Wiryadi (2008) mentioned that creativity is based from something new that already used. Creativity sent people into sub-conscious, a situation between conscious and unconscious. Creative people are a group of people who have new attitude, new point of view, new concept, and something essential. Creative idea usually is a genuine, authentic, unique, and original idea. The idea is different from the other idea and sometimes out of the box. Due to Emotional Theory, creative art is an art that made by the original emotion expression experienced by the artist. The emotion form must be not too explosive and under control, but it must e shaped, structured, and arrange in a pattern. Leo Tolstoy said "the feeling in art is not an individual feeling of the artist, but a feeling that felt by every man". Due to Genius Theory, a creative artwork is an art unlimited by the rule that made before. The originality becomes the main point in art. Originality is not only individual point, because each artwork not only oriented to the artist but also cross border. Thus, art is not only subjective matter, but also objective one which able to be accepted by common sense. The essence of creativity is to find something new or new relationship from the existing.

Creativity is awakened by the process of idea generation (Amabile, 1983). Through the process of generating ideas, a creative inspiration emerges. Brainstorming sessions are formalized mechanisms for generating idea (Burke & Witt, 2001; Kirton, 1989). Since introduced by Osborn (1953), brainstorming has been widely used in industry and business as a technique for idea generation and problem solving. Evaluating

ideas, verifying feasibility, communicating ideas to others, forecasting future implications, and gaining support are examples of ways in which idea generation takes place. Sometimes it is through the modification process that the truly creative idea emerges. For example, sharing problems and ideas with others can result in different perspectives building off of one another and new and better insights. Other times, creative solutions to vexing problems occur to people when they start describing the problem to others, even if those others are primarily listening and not actively contributing. Through idea modification, people adopt a flexible approach to their concerns that can lead to the awakening of creative ideas.

III. HYPOTHESES DEVELOPMENT

Hypotheses are developed in order to test on the relationships. Next, summarizing of several hypotheses based on those relationships. Individual differences in originality, sophistication in arts, and concern for aesthetics are accounted for by openness to experience. Individuals high on this dimension can also be described as reflective, creative and comfortable with theory (Antonioni, 1998) and they are also characterized as individuals with high intellectual curiosity (Caldwell & Burger, 1998). Those low in this dimension demonstrate a preference for routine (Caldwell & Burger, 1998) and can be described as being practical and conservative in opinions (Antonioni, 1998).

Mental attitude and creativity are able to be linked which is not only theoretical but empirical as well. In a study using NEO-Personality Inventory, and measures of divergent thinking, all relevant facets of mental attitude were significantly positively correlated with measures of creativity and divergent thinking (McCrae, 1987). McCrae (1987) distinguished between mental attitude and creativity by focusing on the roles that each might play in creative activity. McCrae (1987) suggested that divergent thinking might indicate aptitude for creativity, while mental attitude was the catalysts that lead to creative expression and exploration. In our expectation, creative workers would indicate to be creative when they have high level of mental attitude. When they have higher in creative behavior, they will produce a more creativity. This conceptualization indicates that we may expect that:

H1: mental attitude is positively related to creative behavior of creative workers

IV. METHOD

The recent research is conduct to observe and generate of new and useful ideas by individual creative workers in Indonesia. Therefore, unit analysis of the present research is individual, that is, the creative workers. Interviews on pilot study (48 participants) were conducted prior the data collection. The purpose of the pilot study is to ensure that the instructions and content of the questionnaire are clear and understandable. Interview result was used to validate the operational definition of creativity, generate additional creativity rating, and identify archival sources of the workers' creativity assessment.

Collecting data is a part of activities on the recent research. Due to time constraint, convenience sampling was employed. The 258 creative workers from several creative industry firms in Indonesia have participated as samples in this research. Factor analysis and correlation are needed for this type of research (Cohen et al., 2003; Hair et al., 2006; Kim & Mueller, 1978; Saunders, et al., 2003), and thus, efforts were made to encourage the targeted respondents to respond. Questionnaires and rating-forms were distributed through the "put and pick up system" to the potential respondents, and they were instructed to put the completed questionnaire in a return envelope addressed to researcher.

V. RESULTS

A. Participants' profile

This section describes the findings of the respondents' demographic information. From the recent research, it was found that 258 samples are useable to be analyzed. Concerning the individuals who fill up the questionnaires, majority of them were male creative workers with 71.2% (183) and only 28.8% (75 creative workers) were females.

B. Correlation Analysis

The correlations between Descriptive and zero-order are presented in Table 1. As shown, there were positive relationships between mental attitude and Creative Behavior. It is interesting to note that all independent variables were significantly correlated with one another and with Creative Behavior. The positive and significant correlations of these two variables indicated that mental attitude correlate with creative behavior such as predicted in the hypothesis.

Table 1 correlation analysis

Correlations

		O	S
O	Pearson Correlation	1	.198*
	Sig. (2-tailed)		.004
	N	216	216
S	Pearson Correlation	.198*	1
	Sig. (2-tailed)	.004	
	N	216	216

**. Correlation is significant at the 0.01 level

Figure 1 Correlation between mental attitude and Creative Behavior.

Figure 1 shows that the correlation indicating the low value. It was not surprise since most of the measurement usage in personality research indicated the same result. As comparison, when Halim, Derksen and van der Staak (2004) developed the revised NEO personality inventory (NEO-PI-R) for Indonesia showed that the alpha coefficients for each facet of the five dimension personality measurement showed almost all of the alpha coefficients for Indonesian samples to be lower than the United State normative sample. In Halim et al. (2004) preliminary study, the median alpha coefficients of NEO-PI-R at the facet level was .61 for the Indonesian college students and .56 for the Indonesian breast cancer patients. When compared to the alpha coefficients for the US normative group and other two South East Asian countries, Malaysia and the Philippines, the alpha coefficients for the different domains were relatively similar. Although the correlation coefficient between mental attitude and creative behavior showed the low value, we consider that this variable is important factor to determine creativity since this dimension reflect of typically person who has characteristics such as broad-minded, active imagination, aesthetic sensitivity and intellectual curiosity.

VI. DISCUSSION

Design processes generate empirical data and they were obtained from a set of studies of three creative industries (design, advertising, and fashion) that designs were evaluated on overall quality and on a variety of aspects including creativity. From the protocol data we identify aspects of creativity in design related to the formulation of the design problem and to the concept of originality. We also apply our observations to a model of creative design as the co-evolution of problem/solution spaces, and confirm the general validity of the model. We propose refinements to the co-evolution model, and suggest relevant new concepts of 'default' and 'surprise' problem/solution spaces. For this reason, human touch is needed by generating new and useful ideas in design. Most of the researches on creativity have examined how specific personality traits would affect people' creativity, for instant, study by King, Walker and Broyles (1996) that examined the relations among the five-factor model of personality, creative ability, and creative accomplishments.

The findings on the study will now be discussed to throw some light on the research question: "Do mental attitude of creative workers affect creative behavior?" In order to explore the study, we need to identify which one of the personal characteristic that plausible influences creativity. On the whole, through the examining of interaction term, the present research potentially contributes on the development of theoretical framework that is usable to predict creative behavior and applicable in employee placement in organizational context, considering both the strength and the nature of these interaction effects.

The interaction effects that are needed to predict highest level of creative behavior were shown by the strength of enjoyable activities as motivational orientation for creativity tasks experiences with high level of mental attitude. Motivational orientation among Indonesian creative workers have played a role in presenting creative ideas, because creativity would be the highest when the combination of strong motivational orientation for creativity tasks experienced with high mental attitude. These results provide theoretical and practical implications on how interaction effects shape creative behavior in several important respects. In addition, because of unknown findings in the previous research in examining this interaction term, it is highly potentially that this is the first research that identified multiplicative effects among these predictor variables for understanding interaction terms that influence to creativity.

VIII. CONCLUSION

This study results a conclusion that mental attitude and creative behavior have a correlation which able to enhance creativity. A high level of the creative behavior of creative workers was predicted by mental attitude. Based on the samples of the Indonesian creative workers, we found that high level of mental attitude would predict high creative behavior. These two variables have played a role to predict highly creative behavior.

We have attempted to develop and test a model of individual creativity through interactional approach. We have revealed the importance of motivational orientation and personality aspect influence creative behavior among creative workers. Consequently, it is justified to conclude that theories are needed in the investigation of the relationship between personality dimensions and creativity in order to encourage our knowledge. Through the discussion of major theories on creativity, particularly about traits theory that explains the domain of personality and the two-way interaction term to prove the multiplicative effects will make a better understanding of a basic foundation of theories in explaining the relationship in the model of individual creativity for the future study.

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