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The Effect of Knowledge Leadership toward Organizational Culture, Individual Learning, and Collective Learning and Its Implication toward Individual Creativity: a Study on State-Owned Plantation Enterprises of Indonesia

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Abstract

The aim of this study is to describe the effect of Knowledge Leadership in the context of learning and creativity, using the model of Knowledge Leadership proposed by Viitala (2004) as the basis. Testing the model was performed on fourteen (14) State-Owned Plantation Enterprises throughout Indonesia. The study sample consisted of 245 middle managers and data was analyzed using GSCA (Generalized Structured Component Analysis) approach. The research results confirm a significant effect of Knowledge Leadership on Organizational Culture and Collective Learning. Indirect influence of Knowledge Leadership on Organizational Culture through Individual Learning and Individual Creativity has also been revealed. Organizational culture has a significant effect on Individual Learning, Collective Learning, and Individual Creativity. The study also confirms the non-significant effect of Individual Learning on Collective Learning, and Collective Learning has no significant effect on Individual Creativity. The results show the importance of organizational culture as a key in the implementation of Knowledge Leadership in an organization. In addition, the research also approves the importance of the conversion process of individual learning to collective learning in order to produce effective use of knowledge as a source of long-term competitive advantage in an organization.

Keywords: Knowledge leadership, learning, creativity, State-Owned Plantation Enterprises.

1. Introduction

The study departs from the model proposed by Viitala (2004), called asthe model of Knowledge Leadership. The model of Knowledge Leadership is an attempt to unify thinking from the schools of Learning and the schools of Knowledge in their application to organizations. The model was developed through a mix-method study, which involved 36 organizations in Finland, in which four dimensions of Knowledge Leadership were obtained through the study, namely (1) Learning Climate, consisting of 12 items; (2) Learning Orientation, consisting of 6 items; (3) Learning Support, consisting of 8 items; and (4) Role Models, consisting of 3 items.

There is enough literature supporting Knowledge Leadership. From the perspective of the schools of Learning, leadership has been acknowledged as one of the factors predicting the success of organizational learning; both through the development of learning visions (Francis and Mazany, 1996; Marquardt, 2000; Senge, 1990), the creation of learning imperatives which encourage learners to keep learning (Appelbaum and Gorannson, 1997; Johnson, 2002), the elimination of learning barriers (Marquardt and Reynolds, 1994), as well as the creation of conducive learning climate by emphasizing on innovations and knowledge inventions in such a sustainable manner (Goh, 1998; McGill and Slocum, 1993). Studies on organizational learning confirm some important roles of leaders in learning, including as a coach, facilitator, teacher, leader of learning, and developer (Viitala, 2004). In summary, empirical studies as well as theoretical framework in the schools of Learning have comprehensively stated the roles of leadership in organizational learning (Senge, 1990, 2000; Popper and Lipshitz, 2000; Macneil, 2001; Viitala, 2004; Smith, et al., 2007); and aslo the functions and tasks a leader must take in organizational learning (Bartlett and Ghoshal, 1997; Ellinger et al., 1997; Weaver and Farrel, 1997; Macneil, 2001; Argyris, 1993; Boydell and Leary, 1994).

The importance of learning and knowledge creation at State-Owned Plantation Enterprises can be observed from several perspectives. First, it deals with the big potential of business activities owned by Plantation SEOs. The total area of plantation managed by State-Owned Plantation Enterprises is now reaching

more than one million hectares (1,024,393 Ha); with the main commodities of palm oil (58%), sugarcane (3%), rubber (15%), and tea (4%). The total assets of State-Owned Plantation Enterprises reach IDR 69.36 trillion, number 9 among all state-owned enterprises in the country, and number 3 among global enterprises running the plantation business. Second, it is related with the low capacity of State-Owned Plantation Enterprises in exploiting business potential they come to. Along 2008 to 2013, these State-Owned Plantation Enterprises relatively did not gain such good growth seen from the total area they manage, total production, and productivity levels. From the perspective of financial performance indicators, in the last ten years, the financial performance of the State-Owned Plantation Enterprises has not shown any satisfying remarks. Profit growth (5.14%) is still too low and is not harmonious with the relatively good sales growth (10.55%). In addition, the State-Owned Plantation Enterprises have not been managed efficiently, as indicated by the NPM average, which is only 7.31%. The average value of ROA is 5.90% and ROE is 16.63 %, indicating that the State-Owned Plantation Enterprises have yet to provide optimum added value for shareholders. The State-Owned Plantation Enterprises' ability to settle liabilities decrease, as shown by the DAR and DER value that continue to increase. Third, the competitiveness of the State-Owned Plantation Enterprises still needs to be improved. From the perspective of their total assets, number three in rank, it appears that the net profit margin achieved by the State-Owned Plantation Enterprises is still less attractive than other plantation companies in the world, number five globally, which is equal to 3.44%.

The topic of this present study possesses a strong relevance to the plantation business run by the State-Owned Plantation Enterprises, because it accounts for leadership, organizational culture, learning, and individual creativity (employees) as a foundation in creating new sources of competitive advantages in the field of plantation business in the future.

2. Literature Review and Hypotheses

2.1 Knowledge Leadership and Organizational Culture

Leadership is one of the elements forming organizational culture (Schein, 1985). Learning in organizations often require a change in culture (West, 1994), so it is important for leaders to understand the culture of their own organization in order to best choose ways of running the organization in accordance with the values it believes (Schein, 1985). Latter, Popper, and Lipshitz (2000) assert that the function of leadership in organizational learning can be summarized under these following three main tasks of (1) incorporating organizational learning agenda as the most important issue; (2) establishing structural foundation needed for individuals to be involved in the process of organizational learning; and (3) creating culture and psychological conditions so that organizational learning can be effectively managed. Therefore, building appropriate organizational culture conducive to learning is one of leaders' tasks. Hana's research (2013) reveals that innovative culture depends on the industry sector and size of the organization; and thus, every organization needs to have its own approach to different cultures. Based on the afore-mentioned explanation, this study proposes the following hypothesis:

H1: Knowledge leadership has a positive influence on organizational culture

2.2 Knowledge Leadership and Organizational Learning

Literature on organizational learning shows that leadership is one of the factors that influence the success of organizational learning, namely, among others, through the development of learning visions (Francis and Mazany, 1996; Marquardt, 2000; Senge, 1990), the creation of learning imperatives which encourage learners to keep learning (Appelbaum and Gorannson, 1997; Johnson, 2002), the elimination of learning barriers (Marquardt and Reynolds, 1994), as well as the creation of conducive learning climate by emphasizing on innovations and knowledge inventions in such a sustainable manner (Goh, 1998; McGill and Slocum, 1993).

Explanation on roles and functions of leadership has been presented in various conceptual and empirical articles. Leadership has specific roles in organizational learning (Senge, 1990, 2000; Popper and Lipshitz, 2000; Macneil, 2001; Viitala, 2004; Smith, et al., 2007); as well as specific functions or tasks in organizational learning (Bartlett and Ghoshal, 1997; Ellinger et al., 1997; Weaver and Farrel, 1997; Macneil, 2001; Argyris, 1993; Boydell and Leary, 1994). Various studies show that leadership plays an important role in organizational learning, for both individual learning (Smith et al., 2007; Lehesvirta, 2004), as well as collective learning (Amy, 2005; Kinghorn et al., 2011; Garcıa-Morales et. al., 2006). However, a study by Bhat et al. (2013) found that transformational leadership has a negative and significant influence toward organizational learning, making it contrary to other research results.

Knowledge leadership is a new concept that complements the knowledge management model as it has received a lot of criticism (Amy, 2005; Blackler, 1995; Burgoyne, 1999). Knowledge leadership explains the role played by leadership in organizational learning (Viitala, 2004). Furthermore, it is understood that organizational learning requires the element of individual learning and collective learning taking place simultaneously to produce learning at the organizational level (Fiol and Lyles, 1985; Senge, 1990; Vaill, 1996). Based on the afore-mentioned explanation, this study proposes the following hypotheses:

H2: Knowledge leadership has a positive influence on individual learning

H3: Knowledge leadership has a positive influence on collective learning

2.3 Knowledge Leadership and Individual Creativity

Leadership effectiveness is important to encourage individual creativity (Carmeli, et. al., 2013). Researchers have examined the impact of various types of leadership on creativity; e.g. transformational leadership (Eisenbeip and Boerner, 2013), abusive supervision (Liu, Liao, & Loi, 2012), and empowering leadership (Zhang & Bartol, 2010). It is explained that leadership can encourage individual creativity, among others, through job structure, positive energy and resources, thus forming psychological conditions, as well as establishing patterns of superior-subordinate relationship quality to stimulate individual creativity (Carmeli et al., 2013).

Leadership may bring a direct or indirect effect toward creativity in organizations. The direct effect of leadership on creativity happens through leadership behaviors (Mumford, et al., 2002) and personal creativity of the leaders (Sternberg and Vroom, 2002). Indirect effect of leadership on creativity happens through its ability to establish or change the context in which employees work (Scott and Bruce, 1994; Kazama et al., 2002; Reiter-Palmon and Illies, 2004; Thamain, 1990, 1996, 2003; McDonough, 1993). Leaders are indirectly instrumental for employees' creativity, one of which is through preparation of employee skills (Marquardt, 1999; Argyris, 1999). The other role of leaders is to encourage employee involvement and participation in participatory decision-making (Cotton et al., 1988), in which high participation will reduce resistance for changes (Wall and Lischeron, 1977).

One of the conditions needed for the development of creativity in organizations is the need for supportive and tolerant attitude from leaders of mistakes that subordinates may make (Chenhall, et al., 2011:103). Moreover, right terms and preconditions are needed to achieve a high level of creativity; among other cooperative climate, flexibility, and adaptability (Parthasarthy and Sethi 1993). A high level of creativity can only be achieved if organization encourages employees to act and behave positively in response to the environment; mainly through efforts of sustainable improvement and changes in variety of products, in learning, and in responding to customer demands (De Wit and Meyer, 1999:145). Employees should be encouraged to discuss ideas and work together to change those ideas into a product, service, or better process work; by eliminating communication barriers, sharing ideas, and getting support from leaders (Chenhall, et al., 2011). Based on the afore-mentioned explanation, this study proposes the following hypothesis:

H4: Knowledge leadership has a positive influence on individual creativity.

2.4 Organizational Culture and Organizational Learning

Various studies show that the influence of organizational learning on performance can be direct or indirect, as there is the mediating factor of organizational culture, in which the creation of an innovative culture allows companies to achieve better competitive position and above average performance (Baker and Sinkula, 1999; Bates & Khasawneh, 2005; Huber, 1991). Fiol and Lyles (1985) state that literature on organizational learning and learning organization have, at least, a consensus on three things, namely (1) the compatibility need with environment; (2) the importance of individual learning and transfer to the level of organization; and (3) the presence of contextual factors that should be maximized such as strategies, structures, and culture of the organization. In this case, organizational culture is one of the contextual factors needing to be taken into organizational learning, in addition to strategies and organizational structure. Auernhammer and Hall (2013) confirm that an environment conducive to the creation of knowledge, creativity, and innovation requires the organization to: (1) be open to changes; (2) encourage and appreciate the freedom of communication and / or unique ideas; (3) be tolerant to mistakes; and (4) develop motivation of staff and employees. These requirements reflect certain values of organizational culture to support organizational learning. Given that organizational learning involves individual learning and collective learning, this study proposes the following hypotheses:

H5: Organizational culture has a positive influence on individual learning.

H6: Organizational culture has a positive influence on collective learning.

2.5 Organizational Culture and Individual Creativity

Creativity in an organization is essentially contextual (Mumford et al., 2002), in which success depends on capability, pressure, resources, and socio-technical system under which employees work (Csikszentmihalyi, 1999), and organizational culture is one of the factors that influence it. Organizational culture can affect creativity; both as part of the influence of organizational factors (Shalley and Gilson, 2004) as well as a stand-alone or single factor (Mayfield, 2008; Skyrme and Amidon, 1997; Hasanali, 2002; Wong, 2005). Creativity must be supported by adaptive and responsive culture, open communication and free information flow, and employee involvement in developing new ideas (Burns and Stalker 1961; Mintzberg and Waters 1985; Quinn, 1980). Relationships and social interaction among employees is fundamental to the effectiveness of communication in an organizational context (Kelly and Jones, 2001), as a precondition for the development of individual creativity. Based on the afore-mentioned explanation, this study proposes the following hypothesis:

H7: Organizational culture has a positive influence on individual creativity.

2.6 Individual Learning and Collective Learning

The existence of individual learners is one of the requirements for building a learning organization (Senge, 1990). Similarly, in the creation of knowledge, most of the activities re performed by the employees individually, although leadership is still needed to help to maintain focus and ease of the process (Bennis and Nanus, 1985). Individual learning can be changed into organizational learning when employees' knowledge is stored in the memory system of the organization and translated into routine practices of the organization (Argyris and Schon, 1996; Hedberg, 1981; Lundberg, 1995; Stata, 1989). This means that individual learning should be first instituted in the system, organizational structures, and organizational procedures, before members of the organization can use it as a whole (Crossan et al., 1995). Correspondingly, Song and Chermak (2008) find a correlation between individual learning and continous knowledge creation at the level of organization; in which the incremental benefits are not only about realizing the existing knowledge, but also on creation of new knowledge (Antal and Sobczak, 2004).

Previous studies show the relationship of individual learning and collective learning. Antonacopoulou (2006) finds that the results of individual learning can be raised to the level of organizational learning, by looking at the context, organizational politics, and institutional identity. Lehesvirta (2004) reveals that individual learning may or may not be transformed into collective learning, and this depends on (1) the significance of such knowledge in the perspective of individuals and group; and (2) the opportunity, willingness, and ability of individuals to share their experience. Winch and Ingram (2002) find that (1) the relationship of individual learning and organizational learning is not linear, but rather individuals as its center through personalization of meanings placed in the context of the organization through a process of negotiation of individuals (learners) with their identity, social context, and participants of that organization; and (2) learning through action learning as a more powerful device than the system of formal training or competency models imposed on employees. Based on the afore-mentioned explanation, this study proposes the following hypothesis:

H8: Individual learning has a positive influence on collective learning.

2.7 Individual Learning and Individual Creativity

There have not been many studies examining the relationship of learning and creativity. Recently, however, there are several studies on the influence of learning toward individual creativity of employees (Bramwell, et. al., 2011; Yoon et al., 2010). More research is revealing the relationship of learning and innovation; on which researchers generally starts with the postulation that new knowledge and skills acquired through learning will strengthen innovation capabilities of companies, and in turn will improve the competitiveness and performance of organizations (Baker and Sinkula, 1999; Huber, 1991; Keiser and Koch, 2008; Nonaka, 1994). Various studies show that innovations are associated with creativity (creation, acceptance, and implementation of ideas) into new products, processes, and services (Damanpour, 1991; Drucker, 2002), and are determined by the orientation of learning (Baker and Sinkula, 1999; Calantone, et al. 2002). A number of other studies indicate that the relationship of learning and innovations is more complex and non-linear (Therin, 2002; Calantone et al., 2002; Tran, 2008; Jansen et al., 2006; Knight and Cavusgil, 2004). These studies conclude that each type of innovation (incremental innovation, radical innovation, explorative innovation) basically requires a different type of learning. Based on the afore-mentioned explanation, this study proposes the following hypotheses:

H9: Individual learning has a positive influence on individual creativity.

H10: Collective learning has a positive influence on individual creativity

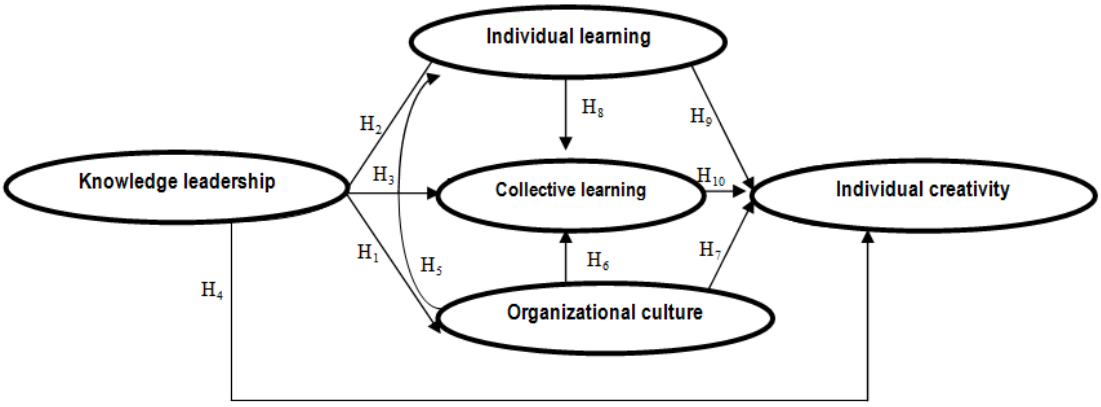

Figure 1. The Research Model

Based on the afore-mentioned explanation, then a model of research hypothesis can be developed as in Figure 1, in which there are ten (10) relationships in the model.

3. Research Method

3.1 Measuring Variable

Knowledge Leadership. Measurement on the construct of knowledge leadership adapts the model proposed by Viitala (2004) through the four indicators as follows. (1) Learning orientation, i.e. activities where leaders guide learning and help others to understand the purpose of learning, and this indicator is measured through 12 items. (2) Learning climate, i.e. activities in which leaders seek to develop a conducive social climate in their work unit, including encouraging confidence (trust) in the group, showing proactive and positive attitude towards mistakes and failures, including a willingness to accept criticism / input or feedback from subordinates, and this indicator is measured through 6 items. (3) Learning support, i.e. activities in which leaders analyze, plan, and build a portfolio of competencies required in the unit, and make sure that all employees in the work unit develop themselves effectively through the learning process, individually or collectively, and this indicator is measured through 8 items. (4) Role model, i.e. activities in which leaders act as a role model, and this indicator is measured through 3 items.

Organizational culture. Measurement of organizational culture is done through 13 items including values of organizational culture that support and influence the creation of knowledge, creativity, and innovation, as proposed by Auernhammer and Hall (2013).

Individual learning. Measurement on individual learning is carried out in a way proposed by Cheung (2011), which is based on two indicators of (1) exploitative learning and (2) exploratory learning. Exploitative learning is defined as “activities carried out by employees in order to gain knowledge and skills in doing their job at the present time”. Exploratory learning is defined as “activities carried out by employees in order to gain knowledge and skills outside of work at the present time”. Each indicator is measured with six (6) items.

Collective learning. Measurement on collective learning is carried on four dimensions on DOLQ (Dimensions of a Learning Organisation Questionnaire) instrument proposed by Marsick & Watkins (2003), namely (1) learning opportunities, (2) asking and dialogue, (3) collaboration, and (4) sharing of learning outcomes. The original seven (7) items are developed into twelve (12) items.

Individual Creativity. Measurement on individual creativity is carried out in a way proposed by De Graf (2002), in which each type of creativity is measured using three (3) items.

3.2 Data Collection

Data was collected using survey of a closed instrument distributed to respondents, and was treated as primary data in this study. The population of the study was all middle managers on the enterprises studied, by referring to the argument of Nonaka and Takeuchi (1997) stating that knowledge creation especially happens at middle manager level. Middle managers referred to in this study were based on the context of State-Owned Plantation Enterprises, consisting of (1) farm managers, (2) area managers, and (3) chiefs of a division. Overall, there were 14 (fourteen) State-Owned Plantation Enterprises, each with different products, locations, areas, and

number of employees. Therefore, proportional random sampling was conducted. From a total of 627 middle managers, 245 people were taken a sample.

3.3 Data Analysis

The analysis in this study was done employing Generalized Structured Component Analysis (GSCA) as developed by Hwang and Takane (2004). GSCA was selected for several reasons, among others as it is simpler and allows for formative and reflective constructs to be performed simultaneously in the specification of the model. GSCA starts with designing a structural model representing relationship among variables based on the theory, designing a reflective or formative measurement model, preparing the path diagram, converting the path diagram into the equation system, estimating weight, loading, and path coefficient, evaluating the goodness of fit through FIT, Afit, NPAR, GFI, and SRMR.

4. Research Findings and Discussion

4.1 Evaluating the Measurement Model

The measurement model is evaluated using these criteria: convergent validity, discriminant validity, and consistency reliability. It aims to determine whether the measurement model has met the minimum standards, as to be employed for further analysis (hypothesis testing). Convergent validity is a measure on the validity of each item, with a cut-off value used is the loading value of > 0.50. Discriminant validity is a measure on the validity of each indicator, with a cut-off value used is the AVE value of > 0.50. It can also be examined using the root of AVE > correlation between variables. Consistency reliability is a measure on the reliability of each variable, with a cut-off value used is the value of Alpha > 0.60. Based on the results of data analysis, through on-line software of GeSCA, it shows that the model is valid and reliable, so it can be used on the next stage of the study.

4.2 Evaluating the Measure of Fit

The results of GeSCA show the value of 0.609 for FIT and 0.605 for AFIT, and this means that the variance proportion of variables explained by the model is equal to 60.9%. Obtained NPAR value is 198, indicating the number of free parameters in this study that includes loading coefficients (c), weight coefficients (w), and path coefficients in the model. Test on measure of fit for the overall model in GSCA is represented by the value of GFI and SRMR. Obtained GFI value is 0.989, which shows that the model achieves a good fit, and SRMR value of 0.089, which shows that the model reaches the marginal fit.

4.3 Hypothesis Testing

The criterion for hypothesis testing is a significance level of 5%, or the value of CR (critical ratio) of > 1.98. Each hypothesis that has a CR value < 1.98 shows a limit indicating that the hypothesis does not prove a significant influence, or in other words, it must be rejected. Conversely, any hypothesis that has a CR value > 1.98 shows a limit indicating that the hypothesis proves a significant influence, so it must be accepted.

Table 1. The Results of Hypotheses Testing

Hypotheses	Relationship	Coefficient	SE	CR	Decision
H_1	Knowledge leadership → Organizational culture	0.782	0.033	23.66*	H_1 is accepted
H_2	Knowledge leadership → Individual Learning	0.101	0.098	1.04	H_2 is rejected
H_3	Knowledge leadership → Collective learning	0.234	0.068	3.43*	H_3 is accepted
H_4	Knowledge leadership → Individual creativity	0.106	0.125	0.85	H_4 is rejected
H_5	Organizational culture → Individual Learning	0.420	0.086	4.89*	H_5 is accepted
H_6	Organizational culture → Collective learning	0.623	0.073	8.55*	H_6 is accepted
H_7	Organizational culture → Individual creativity	0.316	0.140	2.26*	H_7 is accepted
H_8	Individual Learning → Collective learning	0.078	0.043	1.83	H_8 is rejected
H_9	Individual Learning → Individual creativity	0.220	0.090	2.43*	H_9 is accepted
H_{10}	Collective learning → Individual creativity	0.089	0.148	0.6	H_{10} is rejected

Note: * significant at 5%

The results of hypotheses testing show some interesting points to discuss.

4.3.1 Knowledge Leadership and Organizational Culture

The hypothesis testing on H1 about the influence of Knowledge Leadership on Organizational Culture resulted in an estimate value of 0.782 and a critical ratio (CR) of 23.66, showing statistically significant influence. This result is consistent with theories that explain the influence of leadership on organizational culture, namely, among others (1) the theory of organizational culture formation, saying that leadership is one of the elements forming organizational culture (Schein, 1985); (2) the theory of organizational culture, arguing that organizational learning often requires a change in culture (West, 1994), and therefore it is very important for leaders to understand organizational culture in implementing organizational changes (Schein, 1985) ; (3) the theory of the role of leaders, stating that one task of the leader is to create culture and psychological conditions so that organizational learning can take place more effectively (Latter, Popper and Lipshitz, 2000).

H1 hypothesis testing result indirectly strengthens research findings by Hana (2013), that innovative culture depends on industry sector and organization size; so every organization needs to have different approaches to organizational culture. As explained by Nystrom and Starbuck (1984), learning ability enables organizations to get rid of dependence and bad habits that may hinder success, in which these habits are generally rooted in the culture of the organization.

4.3.2 Knowledge Leadership and Individual Learning

The hypothesis testing on H2 about the influence of Knowledge Leadership on Individual Learning resulted in an estimate value of 0.101 and a critical ratio (CR) of 1.04, showing statistically non-significant influence. A number of studies have suggested a significant role of leaders on individual learning (Smith et al., 2007; Lehesvirta, 2004), which is different from the result of our H2. Smith et al. (2007) examine the role leaders in facilitating learning at individual level (self-directed learning) in 12 companies in Australia. Meanwhile, Lehesvirta (2004) conducts ethnographic research for 4 years in a metal industry company in Finland to describe the interaction between individual learning and collective learning. The results of these studies show that individual learning particularly takes place during a crisis or conflict, which implicitly necessitates a leadership role.

The difference in findings of this study with previous studies may be explained by the mediating variables, namely Organizational Culture. Although Knowledge Leadership does not significantly affect Individual Learning, through Cultural Organization indirect significant influence exists. In other words, leaders can influence individual learning indirectly through organizational culture factors. In addition, empirical explanation is also related to the type of enterprises studies, the state-owned enterprises in this case, in which one of the problems faced is the organizational structure emphasizing bureaucratic hierarchy. Failure leaders experience in affecting individual learning may depart from this hierarchical - bureaucratic characteristic, in which individual learning is hindered by rules and long procedural mechanisms, so it cannot provide a quick response to learning needs at individual level.

4.3.3 Knowledge Leadership and Collective Learning

The hypothesis testing on H3 about the influence of Knowledge Leadership on Collective Learning resulted in an estimate value of 0.234 and a critical ratio (CR) of 3.43, showing statistically significant influence. This result is consistent with the theory of the role of leadership that explain the roles of leaders, among others through the development of learning visions (Francis and Mazany, 1996; Marquardt, 2000; Senge, 1990), the creation of learning imperatives which encourage learners to keep learning (Appelbaum and Gorannson, 1997; Johnson, 2002), the elimination of learning barriers (Marquardt and Reynolds, 1994), as well as the creation of conducive learning climate by emphasizing on innovations and knowledge inventions in such a sustainable manner (Goh, 1998; McGill and Slocum, 1993). The influence of leadership on learning is focused more on dimensions of collective learning that are general in nature and applied to all organization members.

Some scholars have done studies on the role of leaders in collective learning (Amy, 2005; Kinghorn et al., 2011; Garcıa-Morales et. al., 2006), in which these studies confirm the result of H3 testing. The study by Amy (2005) is qualitative which examines how leaders contribute (or even hinder) learning process in organizations. The study by Kinghorn et al. (2011) combines the model of Competing Values Framework (Quin, 1998) and Context-for-Learning (Ghoshel and Bartlett, 1994), in which it finds that dimensions of leaders' roles (mentoring, facilitating, monitoring, coordinating, directing, producing, and innovating) correlate with dimensions of collective learning environment (support, trust, disciplined, expansion). Garcıa-Morales et. al., 2006 state the importance of leadership to improve innovations and learning in organizations through a model consisting of strategic factors (personal mastery, transformational leadership, shared vision, proactivity, and environment), entrepreneurship (organisational innovation and organisational learning), and organizational

performance. To sum up, previous studies emphasize the importance of leadership to create the right context for collective learning in organizations, which is in line with the result of the present study on the significant influence of Knowledge Leadership on Collective Learning.

4.3.4 Knowledge Leadership and Individual Creativity

The hypothesis testing on H4 about the influence of Knowledge Leadership on Individual Creativity resulted in an estimate value of 0.106 and a critical ratio (CR) of 0.85, showing statistically non-significant influence. Theories on how leadership influences creativity are divided into two branches: (1) theory of direct effect, in which leadership directly affects creativity through leadership behavior (Mumford, et al., 2002) and personal creativity of leaders (Sternberg and Vroom, 2002); (2) theory of indirect effect, in which leadership indirectly affects creativity through leadership ability in shaping or changing contexts where employees work (Scott and Bruce, 1994; Kazama et al., 2002; Reiter-Palmon and Illies, 2004; Thamain, 1990, 1996, 2003; McDonough, 1993); and creation of cooperative, flexible, and adaptive climate (Parthasarthy and Sethi 1993).

This result is consistent with the theory of indirect effect, in which Knowledge Leadership does not directly affect Individual Creativity, yet it indirectly affects Individual Creativity through Organizational Culture. This means that orientation and values of organizational culture that are effectively able to support Individual Creativity is one of the factors on which leader can indirectly affect creativity. Influence of Organizational Culture on Individual Creativity was significant (coefficient of 0.316 and CR of 2.26), so the indirect relationship is possible to occur in the model proposed in this study.

Another explanation is the constraints on creativity due to the existence of too restrictive organizational structure. Similar with the explanation for H2 that the existence of bureaucratic organizational structure can be an obstacle, making the influence of leadership on individual creativity becomes weak and insignificant. That is, individual creativity cannot develop due to regulations and long procedural mechanisms—creative ideas do not get appropriate appreciation and follow-up as to produce innovations useful for the organization. Bureaucratic barriers can weaken employee participation, including in delivering creative ideas (Brown, 1979), whereas ability to participate in decision-making is a key in encouraging creativity (West and Anderson, 1996). Therefore, to support creativity decentralist decision-making mechanism and high participation rate is necessary (Bahrami and Evans, 1987).

4.3.5 Organizational Culture and Individual Learning

The hypothesis testing on H5 about the influence of Organizational Culture on Individual Learning resulted in an estimate value of 0.420 and a critical ratio (CR) of 4.89, showing statistically significant influence. This result is consistent with the theories on the effect of organizational culture, in which it mainly consists of two theories, namely (1) theory of culture mediation, stating that organizational culture is one of the mediating factors in which through creation of innovative culture makes it possible for companies to gain better competitive position and performance above average (Baker and Sinkula, 1999; Bates & Khasawneh, 2005; Huber, 1991); and (2) theory of contextual factors, stating that organizational culture is one of the contextual factors supporting organizational learning (Fiol and Lyles, 1985). The result of the hypothesis testing supports both theories, in which Organizational Culture significantly influences Individual Learning. Suitable orientation and values of organizational culture are necessary to support learning at individual level.

This result is in line with the findings of the study by Auernhammer and Hall (2013) confirming that an environment conducive to the creation of knowledge, creativity, and innovation requiring the organization to have certain values of organizational culture. It means that continuous learning of individuals need a set of suitable values of organizational culture such that individual can learn effectively and can utilize learning outcomes to improve capacities in handling tasks and responsibilities at work.

4.3.6 Organizational Culture and Collective Learning

The hypothesis testing on H6 about the influence of Organizational Culture on Collective Learning resulted in an estimate value of 0.623 and a critical ratio (CR) of 8.55, showing statistically significant influence. This result is consistent with the theories on the effect of organizational culture on learning, namely theory of culture mediation and theory of contextual factors. Certain values of organizational culture are needed to support learning, both collective and individual learning.

This result is in line with the findings of the study by Auernhammer and Hall (2013) as previously stated, since the requirement of certain values of organizational culture are necessary not only to build such conducive environment for individual learning, as well as for collective learning. An organization has to have right orientation and cultural values to support simultaneous learning process at individual and group level; thus,

learning and knowledge creation can add up competitive advantage of the organization in facing changes and competition.

4.3.7 Organizational Culture and Individual Creativity

The hypothesis testing on H7 about the influence of Organizational Culture on Individual Creativity resulted in an estimate value of 0.316 and a critical ratio (CR) of 2.66, showing statistically significant influence. These results support theories of organizational culture and creativity, which can be distinguished into three groups: (1) the theory of direct effect, stating that organizational culture can directly affect creativity; either as part of the influence of organizational factors (Shalley and Gilson, 2004 as well as a stand-alone factor (Mayfield, 2008; Skyrme and Amidon, 1997; Hasanali, 2002; Wong, 2005); (2) the theory of contextual factors, stating that creativity requires a proper context, in which organizational culture is one of the contextual factors influencing creativity (Mumford et al., 2002; Csikszentmihalyi, 1999); and (3) the theory of social relations, stating that relationship and social interaction among employees is fundamental to the effectiveness of communication within an organization (Kelly and Jones, 2001), as a precondition for the development of Individual Creativity.

The results further support the theory of direct effect, since Organizational Culture is known to have positive and significant effect on Individual Creativity. However, the explanation of the theory of contextual factors can also be taken as the basis to accept the result because organizational culture plays role as a context in which Individual Creativity flourish. Similarly, theoretical explanation of social relations can also complement the understanding that the values of organizational culture must not simply be seen as abstract values, and yet it has to be manifested in "relationships and social interactions" among employees, such that to open wider chance for communication to encourage Individual Creativity at work. It can be concluded that the hypothesis testing results correspond to the three theories and theoretical views in which they are complementary one to another.

4.3.8 Individual Learning and Collective Learning

The hypothesis testing on H8 about the influence of Individual Learning on Collective Learning resulted in an estimate value of 0.078 and a critical ratio (CR) of 1.83, showing statistically non-significant influence. These results support the theory about the relationship of individual learning and collective learning; which can be divided into two groups: (1) the theory of organizational memory, arguing that individual learning can be changed into organizational learning when employees' knowledge is stored in the memory system of the organization and translated into routine practices of the organization (Argyris and Schon, 1996; Hedberg, 1981; Lundberg, 1995; Stata, 1989); and (2) the theory of institutionalization of learning outcomes, arguing that individual learning outcomes should be instituted first in the system, organizational structures and procedures before it can be used by members of the organization (Crossan et al., 1995).

The result of hypothesis testing is in line with the two theoretical views, with some reasons. First, individual learning is a process that occurs in an individual, in which the outcomes are also stored in the memory of that individual as new knowledge. If the process of institutionalization and the effort to save the new knowledge into organizational memory is not done, or is not applied at work, the effect of the new knowledge will not be beneficial to the group. Second, effort to save the new knowledge into organizational memory and translate it into organizational practices is part of the duties and responsibilities of a leader, as well as the institutionalization of the new knowledge into systems, structures, and procedures of the organization. If the organization does not do this procedure of storing the new knowledge, then individual learning outcomes will only be useful for individuals concerned and not to other individuals, so it does not contribute to collective learning.

The findings of previous studies arein line with the result of this study. First, Antonacopoulou (2006) finds that the results of individual learning can be raised to the level of organizational learning, by looking at the context, organizational politics, and institutional identity. This means that individual learning outcomes may not be automatically converted into collective learning, if it does not go through such requirements of context, organizational politics, and institutional identity. Second, Lehesvirta (2004) reveals that individual learning may or may not be transformed into collective learning, and this depends on (1) the significance of such knowledge in the perspective of individuals and group; and (2) the opportunity, willingness, and ability of individuals to share their experience. These findings also support the notion that individual learning may not automatically be developed into collective learning. Third, Winch and Ingram (2002) find that the relationship of individual learning and organizational learning is not linear. That is to say, increased individual learning is not always accompanied by increased organizational learning.

4.3.9 Individual Learning and Individual Creativity

The hypothesis testing on H9 about the influence of Individual Learning on Individual Creativity resulted in an estimate value of 0.220 and a critical ratio (CR) of 2.43, showing statistically significant influence. These results are consistent with theoretical review. Theories on influence of learning on creativity can be divided into two, namely (1) the theory of contextual factors, believing that individual creativity can flourish or even be hindered by a combination of certain contextual and structural factors (Shalley and Gilson, 2004; Hasanali, 2002; Wong, 2005); and (2) the theory of exchange of ideas, believing that employees should be encouraged to discuss ideas and work together to change those ideas into a product, service, or better process work; by eliminating communication barriers, sharing ideas, and getting support from leaders (Chenhall, et al., 2011); and (3) the conceptual proximity theory, believing that creativity and knowledge are conceptually closely linked and inseparable (Amabile, 1997; Lampel et al., 2000; Leonard and Sensiper 1998; Weisberg 1999). The first theory, the theory of contextual factors, is more general and does not specifically describe the effect of learning on creativity; it merely mentions a combination of contextual and structural factors possible to encourage or hinder Individual Creativity. The second theory, the theory of exchange of ideas, more specifically mentions the need for discussion and exchange of ideas among employees to trigger the development of creativity. The last, conceptual proximity theory, gives the basic premise that creativity and learning are intertwined, so there may be effect of learning on creativity.

The result of the hypothesis testing supports the afore-mentioned theories, in which Individual Learning has positive and significant effect on Individual Creativity. That means individuals who are constantly learning tend to be more creative in their work. This is possible because individual learning outcomes in the form of new knowledge and / or skills allow employees to have better and wider insight, that in turn they will have more to contribute to creative ideas. However, these theories are not flawless because they do not specifically distinguish between individual learning and collective learning. Hypothesis testing result on H9 (and related with H10) gives a more specific perspective that individual learning has a significant effect on creativity. As for collective learning, as will be described below, does not significantly affect individual creativity.

A number of researchers have conducted studies on the effect of learning on individual creativity of employees (Bramwell, et. al., 2011; Yoon et al., 2010). In addition, a study by Therin (2002) confirms the effect of organizational learning toward innovation of companies, in which age, strategic positioning, and environmental threats of companies moderate the influence. Although these studies do not directly connect learning and creativity, but learning and innovation, there is a closeness between the concept of “creativity” and “innovation”, in which creativity is considered the first step toward or a prerequisite for innovation (Scott, 1995), and that creativity is one of the elements forming innovative behavior, in addition to other elements, namely risk-taking (Bryd and Bryman, 2003). Therefore, the results of hypothesis testing indirectly strengthens the findings of previous studies, in which Individual Learning is stated to have positive and significant effect on Individual Creativity.

4.3.10 Collective Learning and Individual Creativity

The hypothesis testing on H10 about the influence of Collective Learning on Individual Creativity resulted in an estimate value of 0.089 and a critical ratio (CR) of 0.60, showing statistically non-significant influence. These results add new information to the literature review in this present study. Theories on the effect of learning on creativity do not specifically distinguish the influence of individual learning and collective learning. Hypothesis testing results show that the produced effect is different, in which Individual Learning brings a significant effect, while Collective Learning does not bring a significant effect. H10 hypothesis testing results are in contrast with the third theory presented above (the theory of contextual factors, the theory of exchange of ideas, and the theory of conceptual proximity). These results are also different from the results of other previous studies (Bramwell, et. al., 2011; Yoon et al., 2010; Therin, 2002).

H10 hypothesis testing results show creativity is more a personal process and individual in nature; not a social phenomenon that is collective in nature. Creativity is based on individual characteristics (talent, mindset, habits, experience, etc.) rather than on external factors; thus, the external factors in the form of the phenomenon of groups may not significantly influence the creativity process.

5. Conclusion

Considering the results of the study, we will come to understand the importance to integrate learning and knowledge creation. Schools of Learning and schools of Knowledge are two schools of thought both depart from the context of organizational changes at the end of the 20th century, where knowledge is an important issue in the competition among companies. The results of this study reveal a confirmation to both of the ideas; in a

sense that knowledge and learning are found as a reciprocal process that cannot be separated one from another. Values as contained in the Organizational Culture become important, because not all organizational values are relevantly related to learning and knowledge creation. We have to have such specific understanding of values organizations should own, in order to adopt Knowledge Leadership effectively within the organization.

Empirical issues in the studied companies (State-Owned Plantation Enterprises) reveal the need for organizational transformation, both with regard to culture (organizational culture) or structure (hierarchical - bureaucratic structure). This is important so that knowledge leadership can be well implemented on these State-Owned Plantation Enterprises. Organizational transformation is obviously a long-term project taking years to accomplish; but without awareness on the importance of such changes, it will be more difficult to build learning capability and knowledge creation to improve the competitiveness of companies in the future. Associated with demographic characteristics, human resources management must carefully consider career planning and regeneration process of leaders, in order to allow juniors to achieve the level of middle managers quickly, so as to further accelerate the dynamics of learning and knowledge creation in these State-Owned Plantation Enterprises.

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