# THE INFLUENCE OF ORGANIZATIONAL CREATIVE CLIMATE ON PROBLEM SOLVING BEHAVIOUR AMONG LIBRARY EMPLOYEES

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#### **ABSTRACT**

Creativity is one of the dominant elements that significantly affect all type of human needs especially in organizational architecture which spans across working behaviour, technological change, innovative products and performance in service delivery. Problem solving as part of being creative also indirectly contributes crucial directions in solving the demands and issues from customers or the public. This cognitive skill has become essential for many organizations hiring demand and it has grown dramatically at all levels and across different types of job including in the library perspective. However acquiring such creative people into an organization will be a complete waste if the organization itself pauses to adapt the values of creative climate in their environment. On such background, this paper examines the relationship between the problem solving skill with creative climate values such as challenge/motivation, freedom, idea support, trust/openness, dynamism/liveliness, playfulness/humour, debates, conflicts, risk taking and idea time among the library employees. It is also important to understand the impact on employee's behaviour in delivering services. Using a quantitative and descriptive approach, the data was analysed using parametric method and tools which enabled confirmation on the significant correlation between such values with the creative problem solving process. It has also mustered the library employee's behaviour in decision making, communication, coordination, controlling, innovation, motivation and commitment enthusiasms. Simultaneously, it showed a critical point to the importance of building a climate that triggers or maintains an individual creative skill which affected library services in response to the accelerate rate of information evolution.

**KEYWORDS:** creativity, problem solving, organizational creative climate, cognitive skill, library climate

#### INTRODUCTION

Fuelled by the demand for innovative products and the drive to hold or increase market share, the world of organization has always had a strong and vested interest in creativity. Research and development departments have constantly sought to replace the old and the slightly worn with the new and improved. Entrepreneurial endeavours, innovative strategies and the ever-present need for a competitive edge all speak of the long-standing relationship between organization and creative thinking. Given the accelerated rate of technological change and pressures, it has been emphasized that the need for creativity in organization is critical (Moukwa, 1995). The quickening pace of global change and the ever-increasing degree of international competition makes creativity essential (James, Clark & Cropanzano, 1999) and making the need for improving innovative skills also increases (Gundry & Kickull, 1996).

This phenomenon affected all form of organizational structure including library. The library like other organization as described by Walton (2008), have to deal with a diversity of users' behaviour, swift technology change, financial cut on expenditure and the impression of government policy on services. Having to survive and succeed in this conditions, library employees especially library managers or librarian need to depend on creativity to sustain their place in the future. Due to that it is important for the library to adapt their strategic management with creativity as it will help the employees to propose a creative solution within the library domain. Furthermore Walton (2016) also mentioned that for an easier collaboration, innovation and motivation of exploring new ideas, the library leadership needs to adapt creativity as critical attribute in changing their organisational culture and structure.

One of the ideas that emphasized these concerns is adopting creative skill within the scope of problem solving as it is proven to enhance the individual ability to handle issues and increase effectiveness. As mentioned by some scholars as an effective way to improve organizational wellness (Osborn, 1953; Gough, 1979; Mitchell & Kowalik, 1989; McCrae, 1989; Oldham and Cummings, 1996; Zhou, 2003; Isaksen & Aerts, 2011; Isaksen, Dorval & Treffinger, 2011), creative problem solving also changes the cognitive behavior among the employees to be more proactive and deliver creative solutions to a range of operational issues facing an organization. Nevertheless by looking at the importance of creativity in organizational performance and the efforts taken by the library to nurture creativity as one of the main factors to improve delivery service as mentioned,

this study was formed to determine the importance of climates influencing creative problem solving ability among the library employees. Therefore, this paper will highlight the critical correlation that exists between organizational creative climate and the individual behaviour on which the facilitation of creative problem solving in the library environment is achieved.

## **A SYSTEM VIEW**

# Creativity and Problem Solving

In general, creativity can be defined as a process of creating something unusual or out of ordinary and something radically different. It usually relate to the dimensions of art, literature, imagination, and the like. In other words it is often has a great deal of positive power and energy associated with it, within and across cultures. First defined by E. Paul Torrence more than 50 years ago as a process, he believes that all individuals are creative and can be enhanced or blocked in many ways in activities such as teaching methods, motivation and procedures. As the needs and structure of culture evolved rapidly, the definition of creativity also progressed in all aspects of life including organizational perspective.

Creativity, as expressed through organizations play a critical role in society. Whether the organization is a business that brings creativity to life through innovative products and services that fulfilled customer's needs, create jobs and contribute to the economy, or whether the organization is a public organization using ideas in a creative way to meet the needs of the community, creativity without doubt is a necessity. Many scholars believed (Welsch, 1975; Raudsepp, 1987; Woodman, Sawyer & Griffin, 1993; Isaksen, 1993; Gundry, 1994; Amabile, 1996) creativity is a cognitive process underlying the individual's behaviour to generate creative outcomes or products, personality and motivational variables that facilitate the application of these cognitive processes and contextual variables, such as climate, evaluation, and culture. Accurately it is a production of novel and useful ideas in any domain.

Therefore creativity in organization is the process of creation of valuable ideas such as products, services or procedures which can be seen as critical ability to the organization itself as mentioned by Amabile (1999). While Perry-Smith and Shalley (2003) define creativity at work as an individual-level approach to work that leads to the generation of novel and appropriate ideas, processes, or solutions; it can also be a source of efficiency (Woodman, Sawyer & Griffin, 1993) and competitive advantage

(Leonard & Sensiper, 1998). Furthermore it can be linked to organizational effectiveness and performance as it increases the quality of solutions to organizational problems, helps to stimulate innovation, revitalizes motivation, and promotes team performance (Raudsepp, 1987). By doing so it influences the quality of life, organizational creativity and innovation which play an integral role in serving all of society (McLean, 2005).

Meanwhile problem solving is the thinking and behaviour we engage in to obtain the desired outcome we seek. The outcome could be attaining a certain goal or finding a satisfactory answer to a question. Problem-solving involves affective, cognitive, and behavioural domains as mentioned by Park (2010). Furthermore it consists of presenting the problem, developing a solution, making justifications for the proposed solution, and monitoring and evaluating the problem solving process and the solutions. Linking together the two cognitive behaviour or skills, creative problem solving is the mental process of creating a solution to a problem (Osborn, 1953; Newell, Shaw & Simon, 1962; Rothenberg, 1976; Guilford, 1977; Mitchell & Kowalik, 1989; Isaksen, Dorval, & Treffinger, 1994). It is a methodological framework to assist problem solvers with using creativity to achieve goals, overcome obstacles, and increase the likelihood of enhancing creative performance. Usually the solution is independently created rather than learned with assistance.

Therefore individuals, who are more skilled in creative problem-solving, are able to cope with different types of stress and problems more efficiently, and the ones learning how to solve their problems may cope with such problems better. The higher behaviour of creative problem-solving reduces social and psychological problems and it is a vital skill for living in today's world as it covers all aspects of life including working environment such as the library.

# Organizational Creative Climate (OCC) and Problem Solving

Organizational climate is about the patterns of behaviour, something that is readily observed and easier to change. It refers as a set of shared perceptions regarding the policies, practices, and procedures (Schneider & Reichers, 1983) which an organization rewards, supports, and expects. Dynamically to create a creative behaviour among the staffs, (Pritchard & Karasick, 1973; Lawler, Hall & Oldham, 1974; Schneider & Snyder, 1975; Castro & Martins, 2010; Purohit & Wadhwa 2012) understanding on how the climate should be mould and propagate is crucial in an organizational environment. VanGundy (1987) describes that the climate we need to be creative in are both external

and internal because optimal use of our creative potential requires climate conducive to creative thinking and adequately lead to having a creative problem solving ability. Internal climate is the psychological and mental attributes we possess that help determine our ability to function creatively. While external climate refers to perceptions we have about things in our external environment that affect our ability to perform creatively. Ekvall (1983,1991,1996) realized the decisive role of creative climate in organization and he defined climate as the observed and recurring patterns of behaviour, attitudes, and feelings that characterize life in the organization. Due to that a positive creative climate can create an atmosphere in which creativity and innovation flourish, whereas a negative one can squash such efforts.

In terms of problem solving, Services & Boockholdt (1998) and Sarminah (2004) revealed that organizational creative climate has a major impact on psychological processes particularly in learning organization. Consequently, these components exert a direct influence on the performance and outcome in individuals, and working groups within organization. As a result it affects organizational and psychological processes which include group problem solving, decision-making, communication and coordination. Meanwhile, psychological processes include learning in the organization, individual problem solving, creating, motivating and committing (Ekvall and Britz, 2001).

#### **METHODOLOGY**

This study uses a quantitative method which focused on gaining an understanding from the academic library employee's point of view, experience and interpretation. The data collection was based on a structured questionnaire and focused on organizational creative climate dimensions which consist of ten dimensions: challenge, freedom, trust/openness, dynamism/liveliness, idea time, playfulness/humour, conflict, idea support, debate and risk taking. All measures of organizational creative climate are based on a 4-point Likert scale ranging from (1) "strongly disagree" to (4) "strongly agree". These independent variables were measured using 5 items adopted from Ekvall, Arvonen & Waldenstorm (1983). The dependent variable is problem solving ability measured using eight items and a similar four-point response format was used. All instruments were reliable based on the Cronbach Alpha value. Thirteen hypotheses were tested using One-way variance (ANOVA), Independent T-test and Pearson Correlation analysis. Questionnaires were distributed to a total of 132 respondents in Sultanah Bahiyah Library, Universiti Utara Malaysia where 123 (93%) were returned and consequently analysed.

#### **RESULT AND ANALYSIS**

# The Correlation between OCC and Problem Solving

TABLE 1 : Mean, Standard Deviations (SD) & Pearson Correlation

	Mean	SD	Pearson
Challenge /Motivation	2.9951	0.40	0.38**
Freedom	2.6976	0.56	0.47**
Dynamism /Liveliness	2.8293	0.44	0.55**
Truth /Openness	2.6163	0.59	0.46**
Idea Time	2.6976	0.55	0.70**
Playfulness /Humour	2.7317	0.43	0.58**
Conflicts	2.2081	0.48	0.11**
Idea Support	2.5512	0.61	0.49**
Debates	2.8000	0.40	0.56**
Risk Taking	2.8065	0.47	0.62**
Problem Solving Ability	3.0116	0.41	

Note: \*p < 0.05, \*\*p < 0.01

Based on Table 1 above, it is evident that problem solving ability among the library employees are high and significantly use in their daily working activities as it scored a mean of 3.011 with SD of 0.41. Meanwhile among the OCC dimensions, challenge/motivation factor scored the highest mean of 2.995 with standard deviation of 0.40, followed by dynamism/liveliness (2.829), risk taking (2.806), debates (2.800), playfulness/humour (2.731), freedom (2.697), idea time (2.697), truth/openness (2.616), idea support (2.551) and conflicts (2.208). It showed that the dimensions were fully adopted into the library climate and affected the employee's cognitive ability including problem solving. On the other hand, in view of the Pearson correlation between the dimensions of organizational creative climate and problem solving ability the statistical results revealed that relationship between both dimensions were significantly supported. Even though the dimensions of conflict and challenge/motivation scores a bit weak (0.11, 038) which indicates a possibility of conflict circumstances in the organization and motivation which is not very well practiced, all of the dimensions showed a very significant correlation. A score above 0.40 indicate that the dimensions have a strong influence on problem solving ability with idea time (0.70) gets the highest correlation.

Overall these findings are consistent with past studies (Ekvall, 1996; Hunter, 2007; Oldham, 1996) where organizational creative climate is considered as a significant contributor in enhancing creativity in working environment. Furthermore it is also revealed that people will be reactive to climate variables if they were stimulated to be creative and based on Basadur (1997), Schneider, Gunnarson, Niles-Jolly (1994) and Aizzat (2014), organizational climate is a useful basis in motivating cognitive behaviour

such as creativity, problem solving and innovation among workers. It is also consistent with the contextual theory (Ekvall, 1999; Oldham, 1996) that organizational climate mediate the processes and operations of organization such as creating, motivation, coordination, controlling, communication, decision making and problem solving between organizations' resources and the organizational outcomes such as service performance or product innovation.

# Creative Problem Solving in the Library: A Significant View

This study has shown a very important result: the library employees like in any organizations depend on the organization climate to influence their cognitive skills and behaviour. This phenomenon is not new as many scholars without doubt confirmed that problem solving skill as part of being creative depends on the climate to succeed. This result however does not cater on how the employees mastered the problem solving skill in the first place or how the library administrators decide to adopt the creative climate into their environment. Based on that, this view intends to fill in the gap and connects the significant link between creative problem solving and the library structure in today's perspective.

As mentioned by Walton & Webb (2016), the pressure in creating a library that is able to cope with expandable technologies and organizational complexity has made the library leaders to start thinking differently. They have to ensure their library can adapt new technologies in order to display better services and using new tools to fulfil their objectives. This includes changing the culture and organisational structure to allow easier collaboration, provide staffs with motivation to explore, innovate and change and also to allow ideas and information to flow into the library and out again (Lewis, 2004). By doing so, it will also increase their durability in facing diverse issues such as ill-structured problems, time constraint, changing conditions brought about by dynamic events, multiple players, ill-defined goals or existence of competing goals, large amounts of information presented thus requiring processing, and the existence of institutional norms and goals (Klein, Calderwood, & MacGregor, 1989).

However all of these ideal ideas and issues cannot be entertained by the library leaders if their library is still dragging the traditional and bureaucratic hierarchical structure. To be a creative library, the leaders have to invest time, effort and resources especially into maintaining and developing a culture or values which is appropriate. The library and their members have to be able to embrace new dimension, technology and attitude in order to

meet their own necessity and customer satisfaction. Part of the solution is to embrace a comfortable and suitable climate that everyone can participate. Encourage employees to think independently, able to anticipate and adapt to change, express their opinions about problems facing the library, grow professionally, share ideas and experiences among themselves for example, (Castiglione, 2006) are fundamental values in creating this critical culture. Besides changing the style of leadership or identifying better training, creating a creative climate should be the main concern when effort to adopt creativity float in the minds of library leader. It is because creative climate engage and affect the employees value and behaviour which control their ability to do something right, meaningful and proper in sense of organizational structure. Tierney, Farmer & Graen (1999) mentioned that the ability and willingness of leaders to create positive experiences and conducive climate to creativity can provide a powerful and effective means by which organizational creativity may be enhanced.

Undoubtedly it is unrealistic to expect the climate itself can change and affect the employees behaviour without any support from training. A comprehensive training and strategies to develop the right skill in order to face complex organizational and innovation problems is critical especially in library environment. Ongoing support will enable the employees to develop helpful skill in decision making, communication, coordination, controlling, innovation, motivation, problem solving and commitment enthusiasms. As such, problem solving skill needs to be taught continuously and accordingly to maintain the ability of the library employees in facing complex needs from the customers and the diversity of problems surrounding the organization itself. It is important to realise that library nowadays need a new way of thinking and do thing that align with the customers wish; significantly creativity will surely lead the way.

Again the importance of organizational creative climate as proven by the findings is undoubtedly critical to the progress and performance of the employee's positive behaviour in problem solving. As Isaksen (2011) clearly mentioned that all these dimensions which include freedom in deciding what to do or how to accomplish the task, dynamism in sufficient resources, management exhibiting enthusiasm for ideas-creating a generally nonthreatening and open environment, a collaborative atmosphere such as openness and low stress level across levels and divisions, a general sense that creative work will receive appropriate feedback, recognition, and reward, sufficient time, risk taking and challenge due to the intriguing nature of the problem are crucial and important to any organization even though, according to Majaro (1988) at some point noted that

changing the climate to one which is creative, is one of the most difficult task to do for top management.

## CONCLUSION

It can be concluded that for this particular study, the organizational creative climate variable with its ten dimensions have significantly contributed to the creative ability of the employees as described by Ekvall, Arvonen, and Waldenstrom-Lindblad (1983). It also has the power to influence organizational process such as communications, problem solving, decision-making, co-ordination, motivation and commitment. It is important for the organization especially in the library to change their ways of thinking and working as to achieve great achievement, organizations should all be aware of these organizational factors and strategies that influence on how their employees can contribute. This contribution will eventually garner new innovation in service delivery and mark-up the library performance. As described by Robinson (2009), we need to be able to change according to the evolvement of human capacity because the important of nurturing human talent is important. That is why we need to create environments – in our schools, in our workplaces and in our public offices where everyone is inspired to grow creatively. By doing so, we can have a chance to do what we should be doing and discovering new things in our own way.

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