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The Interplay Between Culture and Creativity

L'INTERACTION ENTRE LA CULTURE ET DE LA CREATIVITE

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Abstract
Creativity per se is a convoluted phenomenon. With regard to distinct manifestations, the impact of culture on creativity is discussed. The belief system is embedded in the creative productions across different cultures. The exertion of culture on creativity is presented within a reciprocal process that, alongside culture, also weaves historical, societal, and individual factors. Further suggestions for cross-cultural studies of creativity are also discussed.

Key words: Creativity; Culture; Cross-cultural studies

Résumé
La créativité en soi est un phénomène compliqué. En ce qui concerne les manifestations distinctes, l'impact de la culture sur la créativité est discutée. Le système de croyance est ancrée dans les productions créatives à travers différentes cultures. L'effort de la culture sur la créativité est présentée dans un processus réciproque qui, aux côtés de la culture, tisse également des facteurs historiques, sociaux et individuels. D'autres suggestions pour les études transculturelles de la créativité sont également discutés.

Mots clés: La créativité; La culture; Les études transculturelles

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INTRODUCTION

The study of creativity is pitfall, since creativity per se is a convoluted phenomenon. Indeed, universal theory of creativity does not exist (Craft, 2003; Ludwig, 1992; Treffinger, 2004). Through a great deal of efforts and works, creativity researchers now understand some features of creativity (Treffinger, 2004). A number of variables are identified to improve or impair creative performance, which include personality, cognition, knowledge, brain function, family background, motivation, environment, and social context (Runco, 2004). Perhaps most of the contribution is that the extent of ownership of creativity, which not only is limited to a select few but also laypeople have that property; it exists within the mundane life and beyond specific domains (e.g., science, art, and literature) (Lubart & Sternberg, 1998; Simonton, 2000). "We all harbor within us creative seeds that are capable of flourishing" (Edelson, 1999, p.7). The interest in the research of creativity gained grounds in North America since 1950 Guilford speech and shed light on systematic empirical research of creativity. The merits of Guilford early creativity research not only provided the foundation of subsequent research on the nature and assessment of creative thinking, but also introduced key components of divergent thinking which includes fluency, feasibility, and originality. Since then the wave of research becomes an exciting research topic for creativity researchers to explore different theoretical or methodological framework and cross-disciplinary methods (Feldman & Benjamin, 2006; Mumford, 2000; Simonton, 2000; Torrance, 1977).

The present review specifically focuses on the profound effects of cultural milieu on creativity. From the lens of culture, the universality of creativity is distinct, but the manifestation of creativity is diverse (Craft, 2008; Simonton & Shing-Shiang, 2010). Different cultures have different perceptions of creativity. Throughout this review the conceptions of creativity, especially the similarityand

difference between East and West, will be examined. Here, Chinese perception of creativity will be represented as the major sample of East. The main reason is that the Confucianism and Taoism have a great influence on Asian countries (Cannon, 2010). Different culture values attached to creativity also manifest on various creativity outlets. Some concrete examples will be given. Then, some theories related to social environment on creativity will be briefly discussed. Following this line, some cross-cultural studies will also be presented. Finally, possible directions and further suggestions concerning the cross-cultural researches on creativity will be outlined.

DIFFERENT CONCEPTUAL MAPS OF CREATIVITY BETWEEN EAST AND WEST

The similarity of concept of creativity across East and West is both valuing the positive side of creativity and praising creative individuals. For example, in India, God Vishvakarna, is worshiped by the spirit and power of the creative process (Lubart, 1990). It is said that perspectives of creativity stem from cultural creation myths (Craft, 2008; Lubart, 1990). For instance, the Oriental common theme of creativity includes development and ongoing process toward the cosmic creation. In light of Chinese belief systems, the world was created by the interaction of yin-yang movement (yin means negative force; yang means positive force), which in turn differentiates this world and its being; namely yin-yang is the ultimate creative source of everything (Niu & Sternberg, 2006). The phenomenon of yin and yang manifests everywhere; all events (including creativity) consist of opposites or polarities (Moeller, 2006). On the other hand, Judaic and Greek view this phenomenon as unexpected incident by outsiders to bring the order (Lubart, 1990). Traditionally, creativity was viewed as the divine force between East and West (Craft, Gardner, & Claxton, 2008; Niu& Sternberg, 2006). With this view, the human beings cannot create and only mimic the glory of God or are inspired by the Muses (Ludwig, 1992; Niu & Sternberg, 2003; Simonton, 2000). In sum, “human do not create; God does” (Niu & Sternberg, 2006, p.22).

The notion of creativity under the umbrella of the divine entity was dominant in the history of Western mindset for a long period of time (Craft *et al.*, 2008).After Enlightenment, the concept of creativity had shifted from divine to individual, followed by achievement of science and technology (Niu & Sternberg, 2006). In Western view, currently the general consensus of creativity is defined as the individuals (creators), processes (creating), and products (creations) with the features of usefulness, appropriateness, and novelty (DiLiello & Houghton, 2006; Ford, 1996; Hennessey &Amabile, 1988;Taylor, 1988; Walberg, 1988). The definition of Western creativity is product-oriented, which focuses on tangible, observable, and measurable manifestation (Lubart, 1990). This utility-orientated attribution is a good fit for the Western process model of cognitive problem-solving orientation (Lubart& Sternberg, 1998). Additionally, the popular Torrrance Tests of Creative Thinking lends support to the important feature of observable product-oriented definition in the West (Torrance, 1988).

In contrast, the Eastern conception of creativity portrays a different picture. The “novelty” is not a protagonist around the plot of creativity (Niu & Sternberg, 2006; Rudowicz, 2003). The focus is more inner development and inner state of fulfilment. It is the journey of self-discovery and intuitive approach rather than the manifest of wordily product (Rudowicz, 2003). In doing so individual could achieve a high level of creativity. This value-based viewpoint also exhibits on social and moral realm (Lubart & Sternberg, 1998; Niu & Sternberg, 2003, 2006). For example, in lights of ancient Chinese perspective, mostly reflected by Taoism, creativity is not isolated but conceptualized in a comprehensive universal power within and without a person. Further, there are two approaches to develop creativity: mediation (Taoist method) and self-cultivation (Confucian method) (Niu & Sternberg, 2003; Shi, Qu & Lin, 2007). In Indian philosophy, the conceptualization of creativity is embedded in the “state of personal fulfillment or bliss”(Lubart, 1990, p.42). In other words, creativity is viewed as the process of self-actualization or enlightenment to some extent. The study of Indian artists (Maduro, 1976; as cited in Lubart, 1990), for example, further illustrates this contention that the creation journey in some sense is integrating with self-unconsciousness.

THE EFFECT OF CULTURE ON CREATIVE PRODUCTION

Cultural features have a catalyzing effect on creative activity. The outlet of creative expression is defined differently across cultures (Lubart & Sternberg, 1998; Ludwig, 1992). Arab culture, for example, encourages creativity on technology and verbal expression but visual arts have been strictly prohibited by canons. However, in India and China, the religious topics and idols are admired and important genre. In Turkey, creativity is strongly welcomed in science and technology but not in traditional social rules and relationships (Rudowicz, 2003). In North America, it is a likelihood of compliment of the creative expression in science and problem solving but condemnation of that in politics or socioeconomic theory (Lubart, 1990). There is a tendency that "the level of creativity permitted on a topic is inversely related to the topic's role in the maintenance of deep cultural patterns"(Lubart, 1990, p.46). Sometimes, those cultural constraints are more implicit. For example, Chinese

novels place more focus on the external behavior, which is parallel with the emphasis of interpersonal relationship within Eastern culture, whereas American novels tend to care about inner states of the characters, which reflects the center of individual *per se* in Western societies (Ludwig, 1992).

THEORIES OF SOCIAL-ENVIRONMENTAL EFFECTS ON CREATIVITY

A battery of creativity researches are anchored to theoretical frameworks addressing the position of societies on creativity. Amabile (1996), for example, proposed *intrinsic motivation principle of creativity* from the perspective of social psychology of creativity. This formulation supported by other colleagues (e.g., Hennessey, 1995) states that the primary driving force to be highly creative is located in the intrinsic motivation such as interest, enjoyment, satisfaction, and the like rather than extrinsic motivation such as expected evaluation, expected reward, competition, and the like. Further Amabile (1998) contended that creativity is the function of intrinsic motivation, domain-relevant skills, and creativity-relevant skills. In sum, the overwhelming evidences demonstrate that the social environment plays a key role on the motivational orientation, which in turn positively or negatively impacts the creativity. Specifically, intrinsic motivation is especially conducive to creative expression, whereas extrinsic motivation is detrimental to creative behavior; nevertheless, to some extent extrinsic motivation might be beneficial for creativity under some conditions (Hennessey, 2003). Most important, a supportive social environment is the *sine qua non* for developing these motivations (Amabile, 1998, 2001).

Another holistic view of creativity was suggested by Csikszentmihalyi (1988, 1996) *systems model of creativity*. He asserted three essential forces underline creative endeavors: (1) a cultural *domain*, which contains rules and norms of creative expression; (2) a social *field*, in which recognition and evaluation of creative ideas; and (3) the *individual*, who brings thoughts and actions to the domain. If a creative person wants to have some contributions to the system, he needs to learn and recognize not only the rules and the content of that domain, but also the criteria and preferences of the field. For instance, Csikszentmihalyi identified three major dimensions which are relevant to creativity: the clarity of structure, the centrality within the culture, and accessibility (p.38). Centrally, this theory denoted that creative achievements are not exclusively located on merits of individuals but on the interaction among those three components. As Csikszentmihalyi (1988) clearly put, "we cannot study creativity by isolating individuals and their works from the social and historical milieu in which their actions are carried out" (p.325).

Sternberg and Lubart (1995) *investment theory of creativity* posited that the creative person should act like a good investor and "buy low and sell high." The creative individual, metaphorically, buys low by rejecting accepted ideas in the society, and then sells high when others realize its value and follow the thread. The notion of selling ideas signifies the social environment as an important variable in creativity (Lubart & Sternberg, 1998). According to the confluence model of creativity (Lubart, 1990; Sternberg & Lubart, 1995), they also recognized six potential resources that help or hinder creativity: intelligence, knowledge, and thinking styles are cognitive resources; personality and motivation are conative resources; and finally the environment. A confluence of those resources is needed for an individual portfolio of creative resources. In essence, "creativity is in part the product of an interaction between a person and his or her context" (Sternberg & Lubart 1995, p.10). The environment that encourages and stimulates creative thoughts and rewards those behaviors is beneficial for creativity. Accordingly, they criticized the society with high demands on standardized tests at the expense of creative power. In his view, Sternberg (2006) maintained that society should play the role to "increase the rewards and decrease the costs" (p.97) for the sake of development of creativity.

CROSS-CULTURAL STUDIES ON CREATIVITY

A review of the literature has shown that Easterners and Westerners hold similar but not identical conceptualizations of creativity (Niu & Sternberg, 2006; Rudowicz, 2003). Oral, Kaufman, and Agars' (2007) research noted that numerous findings in Western contexts on creativity are in line with another culture to some extent. It implied that it is a consistency across culture in terms of creative abilities. For instance, they found that creativity had tendency to increase with age and the importance of intrinsic motivation on creativity, which are consistent with Western studies. Above all, this attribution might be accessible for cross-cultural collaborations and information sharing. In addition, in light of aesthetic judgements, there is a significant consensus of opinion among experts across cultures (Niu & Sternberg, 2001, 2003). One empirical study evidenced this intention. Paletz and Peng (2008) found that both novelty and appropriateness play an important role on ratings of creativity across Chinese, Japanese, and Americans. In particular, appropriateness was more important for the Americans and Japanese than for the Chinese. Also novelty weighed heavily overall for creativity. Their findings confirmed that East Asian cultures are not homogeneous. Moreover, Runco and Johnson(2002)

investigated how parents and teachers from the U.S. and India perceived creative traits in their children and students. The results displayed the similar pattern, which was creative characteristics as favorable and uncreative characteristics as undesirable. Specifically, U.S. parents and teachers showed significantly more attention on those clusters than their counterparts.

The study of cultural differenceon creativity, Ng (2003) utilized the samples from China and U.S. and found that the society of liberal individualism is more conducive to people engaging in creative behavior than the society of Confucianism. The possible reason is that the psychological bound constrain the collectivistic members to have premium to behave in a creative manner. It is said that Confucian ideology has the tendency toward prizing collectivism and social conformity (Dineen & Niu, 2008). In addition, in Asian classroom, a paradox illustrated that the Confucian tradition of learning reinforces the conformity, which is detrimental to creative performance (Craft, 2008). The emphasis of this peculiar conception of learning is on moral cultivation: teachers as moral exemplar and students as docile sponges. There is a clear-cut hierarchical relationship between teacher and student (Radclyffe-Thomas, 2007).

Ng and Smith(2004) confirmed this assertion by comparing the attitudes of teachers on creativity behaviors between conservative-autocratic teachers and liberal-democratic teachers. The results showed that the latter had a stronger tendency to encourage creativity behaviors in class. They also found that cultural individualism had a positive influence on liberal-democratic teaching attitudes, whereas cultural collectivism had opposite effects. They concluded that the constraint of Confucian tradition might be a closing of the Asian creative mind. Nevertheless, some beneficial evidence provides a promising ground for promoting creativity in a relatively conformist social context. For example, Niu and Sternberg (2001, 2003) found the discrepancy in creative expression between the Chinese and American students, but it is still possible to temporarily enhance Chinese students' creative performance through appropriate instructions. They concluded that the environment has a potential and important impact on individuals' artistic creativity. In line with these findings, Dineen and Niu (2008) utilized a creative pedagogic model developed in the U.K., which showed a considerable effect on perception and production of creativity for Chinese students. The visual arts works produced by Chinese students through teaching intervention demonstrated high quality of creative productions, comparing with traditional Chinese teaching strategy. Further, the qualitative data also exhibited the merits of this approach that boosted learners' intrinsic motivation and confidence, which is a vital component of creative development. Because of the effectiveness and appropriateness of this model, they suggested the possibility of temporally boosting learners' creativity through the provision of a suitable learning environment.

CONCLUSION

The relationship between cultural and creative expression is not only reciprocal but also the conflux of historical, societal, and individual variables. This profound influence evinces perception of creativity and creative expression (Niu & Sternberg, 2001; Rudowicz, 2003). Ludwig (1992) recognized four powerful cultural impacts on the engagement of creativity activities: subject, form of expression, functions of expression serving, and types of individuals selected. In addition, Lubart and Sternberg (1998) underlined that within the framework of social environment; it not only may provide physical or social stimulation but also serves the function of evaluation of creative products and performances. Thus, the importance of taking culture into account while conducting creativity research is identified by Lubart (1990): With the administration of cross-cultural studies, "we begin to discover how deeply creativity is bound to cultural context"(p.55). By doing do, the benefit is that researchers could have a more holistic picture of creativity via incorporating sociocultural milieu in the framework of analysis (Ludwig, 1992; Ng & Smith, 2004).

Given the literature review available at this juncture, some further suggestions for the cross-cultural study on creativity might be helpful to uncover the nature of creativity. First, the majority of studies are based on comparison cultural groups (e.g., East and West); the analysis within cultural groups might provide valuable insights (e.g., Japan and Taiwan). The main reason is that even under the heritage of Confucianism, East Asian nations are not homogeneous; within-group differences do exist (Radclyffe-Thomas, 2007). Furthermore, different level of cultural variations is also important subjects to be examined, such as subcultural unites or specific contexts at the individual level (Lubart & Sternberg, 1998). In brief, the research of place-related influences on creativity provides a promising ground to decrease blind spots when researchers try to understand creativity.

With regard to assessing creative performance, Lubart (1990) underscored that although Torrance tests are widely popular in the cross-cultural creativity research, the results are questionable as regards actual perceptions of creativity embodied in the specific culture. Further, as Amabile (1996) pointed out, the problem of a battery of creativity tests is validity. Namely, the nature of those assessments developed by the Western psychologists only limits to narrow ranges of abilities that inappropriately captures the general creative behaviors as well as good indicators. Additionally, that is why sometimes the poor performance of creativity tests developed by American on people in different countries thanks to cultural bias in the understanding of creativity (Paletz & Peng, 2008). As

a result, Amabile (1996) concluded that eventually the creativity test should take social, cultural, and historical factors into consideration. Although it is a big challenge for social psychologist and other creativity researchers, it is a necessary process for further research and to develop alternative context-suitable tests in order to authentically reflect the creative performance in a specific context.

For the purpose of pedagogy, intercultural communication, especially in the education context, might be also an important role to bridge to the cultural gap (Radclyffe-Thomas, 2007). For example, if East educators who want to promote creativity in their classrooms, what strategies could they use? What pitfalls might they face? How to overcome some limits of their educational systems? Here, an action research conducted by Dineen and Niu (2008) could serve as a good example.On the one hand, Eastern educators could take advantage of research findings (e.g., Scott, Leritz, & Mumford, 2004) form the West perspective as examples and grounds; on the other hand, they also should take context and culture into consideration. For example, a number of creativity activities and workbooks for adult and children were developed by Western (Davis, 2006). As a result, Asian teachers could utilize those resources as a reference when applying in their classroom. But they might change the content and format to fit the context.The chances are what work for their counterparts do not necessarily work for their own situations. Taken together,more successful creativity promoting in classroom across all subject areas and cultures should be observed and documented. For instance, the study from Dineen and Niu (2008) provides a good example for implementation of U.K. model on Chinese classroom.It would be useful to follower researchers and practitioners at various points in their journeys of teaching creativity in order to highlight effective pedagogy for moving forward (Edelson, 1999).

In sum, creativity scholars are recognizing that sociocultural values do play a key role in conceptualization and actualization of creativity (Rudowicz, 2003). Under the umbrella of globalization, nevertheless, to what extent each society could resist this phenomenon in order for preserve of its unique value and simultaneously leaves some room for creative development.

REFERENCES

Amabile, T. M. (1996). *Creativity in Context: Update to the Social Psychology of Creativity*. Boulder, Colorado: Westview Press.

Amabile, T. M. (1998). How to Kill Creativity. *Harvard Business Review, 76*(5), 76-87.

Amabile, T. M. (2001). Beyond Talent. *American Psychologist, 56*(4), 333.

Cannon M. J. (2010). *Understanding Global Cultures: Metaphorical Journeys Through 29 Nations, Clusters of Nations, Continents, and Diversity.* Thousand Oaks, CA: Sage Publications.

Craft, A. (2003). The Limits to Creativity in Education: Dilemmas for the Educator. *British Journal of Educational Studies, 51*(2), 113-127. DOI:10.1111/1467-8527.t01-1-00229

Craft, A. (2008). Tensions in Creativity and Education: Enter Wisdom and Trusteeship?. In A. Craft, H. Gardner & G. Claxton (Eds.), *Creativity, Wisdom, and Trusteeship* (p.16-34). Thousand Oaks, CA: Corwin Press.

Craft, A., Gardner, H. & Claxton, G. (2008). Nurturing Creativity, Wisdom, and Trusteeship in Education. In A. Craft, H. Gardner & G. Claxton (Eds.), *Creativity, Wisdom, and Trusteeship* (pp. 1-13). Thousand Oaks, CA: Corwin Press.

Csikszentmihalyi, M. (1988). Society, Culture, and Person: A Systems View of Creativity. In R. J. Sternberg (Ed.), *The Nature of Creativity: Contemporary Psychology Perspectives* (pp. 325-339). New York: Cambridge University Press.

Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. New York, NY: Harper Collins.

Davis, G. A. (2006). *Gifted Children and Gifted Education: A Handbook for Teachers and Parents*. Scottsdale, AZ: Great Potential Press.

Dineen, R. & Niu, W. (2008). The Effectiveness of Western Creative Teaching Methods in China: An Action Research Project. *Psychology of Aesthetics, Creativity, and the Arts, 2*(1), 42-52. DOI:10.1037/1931-3896.2.1.42

Edelson, P. (1999). Creativity and Adult Education. *New Directions for Adult & Continuing Education*, *81*, 3.

Feldman, D. & Benjamin, A. C. (2006). Creativity and Education: An American Retrospective. *Cambridge Journal of Education, 36*(3), 319-336.

Ford, C. M. (1996). A Theory of Individual Creative Action in Multiple Social Domains. *The Academy of Management Review, 21*(4), 1112.

Hennessey, B. A. (1995). Social, Environmental and Developmental Issues and Creativity. *Educational Psychology Review, 7*(2), 163.

Hennessey, B. A. (2003). The Social Psychology of Creativity. *Scandinavian Journal of Educational Research, 47*(3), 253.

Hennessey, B. A. & Amabile, T. M. (1988). The Conditions of Creativity. In R. J. Sternberg (Ed.), *The Nature of Creativity: Contemporary Psychology Perspectives* (pp. 11-38). New York: Cambridge University Press.

Lubart, T. I. (1990). Creativity and Cross-cultural Variation. *International Journal of Psychology, 25*(1), 39.

Lubart, T. I. & Sternberg, R. J. (1998). Creativity Across Time and Place: Life Span and Cross-cultural Perspectives. *High Ability Studies, 9*(1), 59-59.

Ludwig, A. M. (1992). Culture and Creativity. *American Journal of Psychotherapy, 46*(3), 454.

Moeller, H. G. (2006). *The Philosophy of the Daodejing*. Chichester. NY: Columbia University Press.

Mumford, M. D. (2000). Something Old, Something New: Revisiting Guilford's Conception of Creative Problem Solving. *Creativity Research Journal, 13*(3, 4), 267-276.

Ng, A. K. (2003). A Cultural Model of Creative and Conforming Behavior. *Creativity Research Journal, 15*(2/3), 223.

Ng, A. K. & Smith, I. (2004). The Paradox of Promoting Creativity in the Asian Classroom: An Empirical Investigation. *Genetic, Social & General Psychology Monographs, 130*(4), 307-330.

Niu, W. & Sternberg, R. J. (2001). Cultural Influences on Artistic Creativity and Its Evaluation. *International Journal of Psychology, 36*(4), 225-241. DOI:10.1080/00207590143000036

Niu, W. & Sternberg, R. J. (2003). Societal and School Influences on Student Creativity: The Case of China. *Psychology in the Schools, 40*(1), 103-114. DOI:10.1002/pits.10072

Niu, W. & Sternberg, R. J. (2006). The Philosophical Roots of Western and Eastern Conceptions of Creativity. *Journal of Theoretical and Philosophical Psychology, 26*(1), 18-38. DOI:10.1037/h0091265

Oral, G., Kaufman, J. C. & Agars, M. D. (2007). Examining Creativity in Turkey: Do Western Findings Apply?. *High Ability Studies, 18*(2), 235-246. DOI:10.1080/13598130701709590

Paletz, S. B. F. & Peng, K. (2008). Implicit Theories of Creativity Across Cultures: Novelty and Appropriateness in Two Product Domains. *Journal of Cross-Cultural Psychology, 39*(3), 286-302. DOI: 10.1177/0022022108315112

Radclyffe-Thomas, N. (2007). Intercultural Chameleons or the Chinese Way? Chinese Students in Western Art and design Education. *Art, Design & Communication in Higher Education, 6*(1), 41-55. DOI:10.1386/adch.6.1.41_1

Rudowicz, E. (2003). Creativity and Culture: A Two Way Interaction. *Scandinavian Journal of Educational Research, 47*(3), 273.

Runco, M. A. (2004). Creativity. *Annual Review of Psychology, 55*(1), 657-687. DOI:10.1146/annurev.psych.55.090902.141502

Runco, M. A. & Johnson, D. J. (2002). Parents' and Teachers'Implicit Theories of Children's Creativity: A Cross-cultural Perspective. *Creativity Research Journal, 14*(3-4), 427-438.

Scott, G., Leritz, L. E. & Mumford, M. D. (2004). The Effectiveness of Creativity Training: A Quantitative Review. *Creativity Research Journal, 16*(4), 361-388. DOI:10.1207/s15326934crj1604_1

Shi, J., Qu, X. & Lin, T. (2007). Creativity and Its Cultivation. In A.G. Tan (Ed.), *Creativity: A Handbook for Teachers* (pp. 65-75). Hackensack, NJ: World Scientific Publishing.

Simonton, D. (2000). Creativity: Cognitive, Personal, Developmental, and Social Aspects. *American Psychologist, 55*(1), 151-158. DOI:10.1037/0003-066X.55.1.151

Simonton, D. & Shing-Shiang, T. (2010). Creativity in Eastern and Western Civilizations: The Lessons of Historiometry. *Management & Organization Review, 6*(3), 329-350. DOI:10.1111/j.1740-8784.2010.00188.x

Sternberg, R. J. (2003). Creative Thinking in the Classroom. *Scandinavian Journal of Educational Research, 47*(3), 325.

Sternberg, R. J. (2006). The Nature of Creativity. *Creativity Research Journal, 18*(1), 87-98. DOI:10.1207/s15326934crj1801_10

Sternberg, R. J. & Lubart, T. I. (1995). *Defying the Crowd: Cultivating Creativity in a Culture of Conformity*. New York, NY: The Free Press.

Taylor, C. W. (1988). Various Approaches to and Definitions of Creativity. In R. J. Sternberg (Ed.), *The Nature of Creativity: Contemporary Psychology Perspectives* (pp. 99-121). New York: Cambridge University Press.

Torrance, E. P. (1977). *Creativity in the Classroom: What Research Says to the Teacher*. West Haven, CT: National Education Association.

Torrance, E. P. (1988). The Nature of Creativity as Manifest in IitsTest. In R. J. Sternberg (Ed.), *The Nature of Creativity: Contemporary Psychology Perspectives* (pp. 43-75). New York: Cambridge University Press.

Treffinger, D. J. (2004). Research on Creativity. In D. J. Treffinger (Ed.), *Creativity and Giftedness* (pp. 87-96). Thousand Oaks, CA: Corwin Press.

DiLiello, T. C. & Houghton, J. D. (2006). Maximizing Organizational Leadership Capacity for the Future: Toward a Model of Self-leadership, Innovation and Creativity. *Journal of Managerial Psychology: Self-leadership, 21*(4), 319-337.

Walberg, H. J. (1988). Creativity and Talent as Learning. In R. J. Sternberg (Ed.), *The Nature of Creativity: Contemporary Psychology Perspectives* (pp. 340-361). New York: Cambridge University Press.