Specific Domains of Creativity and Their Relationship with Intelligence: A Study in Selected Universities of Shaanxi Province of China

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Abstract: In order to find the connection between emotional intelligence and cognitive creativity and emotional creativity through research on some colleges and universities in Shaanxi Province, this paper adopts a quantitative method, and conducts a questionnaire survey on the personality characteristics of college students, and finds that emotional intelligence and cognitive creativity are related. There is a positive correlation between cognitive creativity and emotional creativity, and can play a positive role in emotional creativity. Therefore, this study found that when cultivating individual emotional creativity, it is necessary to cultivate creativity and emotional intelligence synchronously, and organically combined to achieve the best educational effect.

Keywords: Research Methodology, Study in selected universities of Shaanxi province of China

1. Research Methodology

Research methodology is the process of setting up conditions for data collection and analysis in such a way that they are both relevant to the study's goal and cost-effective. This research methodology serves as an outline, plan, or strategy for the investigation of problem including research objectives, research questions, sampling, instrumentation, data collection and data analysis of the study rather than simply providing a framework for the investigation of a problem.

2. Research Design

A quantitative approach will be used in this research study. For quantitative research, the findings can be generalized, and the data can be obtained objectively. These are considered main advantages of quantitative research as compared to qualitative research. This research study will use a non-experimental and cross-sectional survey design. This research design entails researchers selecting a random sample of people, assessing one or more variables using assessments, and drawing conclusions about the population based on their findings. This research approach will be chosen because of its simplicity, speed, and affordability. The questionnaire used to collect the data is a self-reported survey built primarily from preexisting instruments. The constructs will be measured only once at a specific point in time to establish the relationship between these two variables (Spector, 2019).

Man is a social person, who belongs to a certain group and is influenced by a specific culture. Human creativity can only be shown in social activities, and it must also be evaluated and influenced by society. However, creative activities can't be separated from intellectual activities. Therefore, this paper holds that a person's creativity should be a manifestation of intellectual activities. It is the ability of a person to form the image of a new product in his mind through certain intellectual activities, on the basis of existing knowledge and experience, through certain recombination and unique processing, and through certain actions, make it a new product. It is influenced by one's environment and largely depends on one's personality. In essence, it consists of creative attitude, creative behavior and creative products, as well as other influencing factors. Creativity is the core, which includes creative thinking, creative habits and creative activities. The final form of creativity is creative products. This kind of product is bound to be evaluated by the society, and the positive or negative evaluation from the society will promote or hinder the further development of one's creativity.

In the literature review, descriptive research will be used to describe the conceptual characteristics and relationship between emotional intelligence and creativity and their difference with respect to

demographic variables. Descriptive and correlational analyses will be used to investigate the empirical relationship between the two constructs. Correlational studies can be used to build theories about constructs by determining the extent and direction of their relationship with other constructs, as well as the components of those relationships. Correlational studies cannot establish cause and effect, so inferential statistics will be used to analyze and generalize from the data (Hunziker & Blankenagel, 2021).

3. Sampling

The population contains all the necessary characteristics and features for generalization of a research study. The study's population consists of 4200 students studying in a university of Shaanxi province of China. TOverall, the sample of this research study will consist of 500 students. The researcher will use sample selection formula proposed by Curry, Anderson, Zitlin and Guise (1987). They asserted that 10% of sample selection from overall population was enough to make generalization in quantitative research.

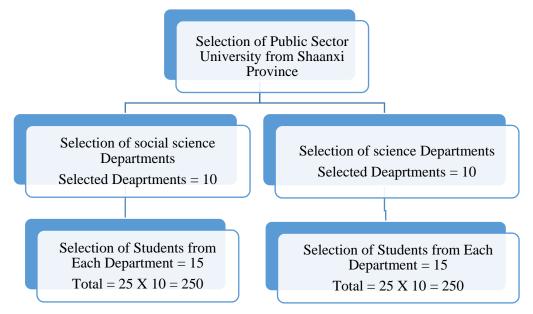


Figure 1: Description of Sampling procedure

4. Instrumentation

The second instrument is called Creative Personality Scale (Gough, 1979). This instrument will be used to measure creativity of students. These measurement instruments will be selected based on their reliability and validity, affordability, accessibility, and ease of administration. There is a positive correlation between creativity and knowledge. This view holds that creation is actually the recombination of knowledge at a deeper level. Without knowledge or lack of knowledge, it is difficult for people to form correct views, and it is impossible to create inventions. Because strictly speaking, creation is not from scratch, but from the old to the new. Man's creation is not without foundation and evidence, but based on a certain rich knowledge and experience. A creative person, even if he has not received special education and training, must acquire certain knowledge through his own research and exploration in practice. There is a negative correlation with knowledge. People who hold this view believe that divergent thinking process is not generated in a certain track, but only based on the minimum information obtained. Only under the premise of the minimum information, the creator can be completely and thoroughly informed of the information. It has large-capacity procedural rather than factual knowledge. Factual knowledge is often practical, while procedural knowledge only requires clear conditions and clues. Therefore, relatively speaking, it is more practical, more migratory and more conducive to creation. Thus, the more reasonable the knowledge structure, the higher the quality of knowledge, the easier it is to create and the higher the creativity.

Emotional intelligence is defined using trait perspective as "all personality traits that are specifically related to affect". This definition will be used in present research study.

| Sr. No. | Name of Factor | Number of Statement |
|---------|----------------|---------------------|
| 1 | Well-Being | 6 |
| 2 | Self-Control | 6 |
| 3 | Emotionality | 8 |
| 4 | Sociability | 6 |
| | Overall | 26 |

Table 1: Description of emotional intelligence questionnaire

Gough and Heilbrun (1965) developed a questionnaire based on personality trait. This questionnaire is used to identify creative people. It measures creativity as a personality trait. Gough (1979) conducted a large-scale study of 1701 people from a wide range of occupations and ages at the Institute of Personality Assessment and Research. Gough (1979) scored all adjectives the same although some adjectives may be more indicative of creativity than others.

On average, the self-report assessment takes between 10 and 15 minutes to complete. The Creative Personality Scale (CPS) is comprised of 30 trait adjectives, 18 of which are associated with creativity (e.g., individualistic, and inventive). The rest of the adjectives are incompatible with creativity (e.g., cautious, and conservative).

The Creative Personality Scale (CPS) will be chosen for this investigation because it is widely accepted as a valid scale to gauge a person's creativity. This instrument is valid to measure a person's creative personality. In present research study, the emotional intelligence will be used based on personality trait. Therefore, the researcher selected The Creative Personality Scale (CPS) because it measured creativity using personality trait. Therefore, a personality-based measure of creativity was also deemed necessary. In addition, The Creative Personality Scale (CPS) is free online and easy to administer.

5. Data Collection

Both the questionnaires will be printed. These questionnaires will be distributed among participants personally. The researcher will explain the purpose, objectives, possible findings, and risks associated with current research study. The researcher will attach a cover letter with the questionnaire. This cover letter will explain the purpose of the study and to give instructions on how to fill out the questionnaires. An informed consent form, ethical considerations, and the researcher's contact information will also be included along with the cover letter and questionnaires.

6. Data Analysis

Descriptive statistics will be used to examine data distribution and the degree to which variables are equally distributed in the sample. The average, median, standard deviation, skewness, and kurtosis are statistical measures used to calculate descriptive statistics. All instruments' reliability and validity are assessed using the Cronbach alpha based on 0.05 level of statistical significance. In practice, the threshold for practical significance is 0.10 for a small effect; 0.30 for a moderate effect; and 0.50 for a large effect to measure correlation between various variables.

Mayer and Salovey think that emotional intelligence can be divided into four dimensions. The first dimension is emotional perception and emotional recognition. The second dimension is the promotion of emotion to thinking; the third dimension is the understanding and reasoning of emotion; The fourth dimension is emotional management. These four dimensions are gradually developed, and the levels are from low to high. Perception, evaluation and expression of emotions are regarded as the most basic process, and comprehensive adjustment of emotions requires the most complicated processing. And each branch is related to its stage or ability level, and the individual grasps it in a continuous order. The first-level ability is the most basic and first developed, while the fourth-level ability is relatively mature, and it can't be developed until the later stage. In addition, according to this theoretical model, they developed the first competency-based emotional intelligence scale.

The Pearson correlation will be used to calculate the correlations between emotional intelligence and creativity (Field, 2009). The researcher will use parametric statistics in this research study. This parametric statistics technique will be selected based on sample size and distribution of data. If one variable increases, the other increases by the same amount, the correlation coefficient is +1, which indicates that two variables are perfectly, positively correlated. If one variable rises, the other will decrease by the same amount, then a correlation coefficient of -1 indicates a perfect negative relationship.

It is calculated at 0.10 for a small effect, 0.30 for medium effect, and 0.50 for large effect for practical significance.

The correlation between emotional intelligence and creativity will be analyzed using regression analysis. As an independent variable, emotional intelligence will be treated in a stepwise multiple regression and creativity will be treated as dependent variable.

7. Conclusion

This study found that both emotional intelligence and cognitive creativity have certain influence on emotional creativity, among which cognitive creativity has a direct effect on emotional creativity, and at the same time emotional intelligence plays a certain role in emotional creativity, that is, emotional intelligence plays a partial intermediary role between cognitive creativity and emotional creativity. In the investigation of all dimensions of emotional intelligence, it is found that only regulating the emotions of others has a significant effect on emotional creativity. Therefore, this paper holds that in the actual education process, we should pay attention to the relationship among the three, develop the individual's emotional creativity, and at the same time, don't neglect the cultivation of the individual's cognitive creativity and emotional intelligence. It's best to consciously connect the three in the education process, which can get twice the result with half the effort.

This research methodology serves as an outline, plan, or strategy for the investigation of problem including research objectives, research questions, sampling, instrumentation, data collection and data analysis of the study rather than simply providing a framework for the investigation of a problem

References

[1] Ackley, D. (2016). Emotional intelligence: A practical review of models, measures, and applications. Consulting Psychology Journal: Practice and Research, 68(4), 269.

[2] Akinola, M., Kapadia, C., Lu, J. G., & Mason, M. F. (2019). Incorporating physiology into creativity research and practice: The effects of bodily stress responses on creativity in organizations. Academy of Management Perspectives, 33(2), 163-184.

[3] Carmeli, A., McKay, A. S., & Kaufman, J. C. (2014). Emotional intelligence and creativity: The mediating role of generosity and vigor. The Journal of Creative Behavior, 48(4), 290-309.

[4] Carson, K. D., Carson, P. P., & Birkenmeier, B. J. (2016). Measuring emotional intelligence: Development and validation of an instrument. Journal of Behavioral and applied Management, 2(1), 810. [5] Cohendet, P., & Simon, L. (2015). Introduction to the special issue on creativity in innovation. Technology Innovation Management Review, 5(7).

[6] Cooke, F. L., Cooper, B., Bartram, T., Wang, J., & Mei, H. (2019). Mapping the relationships between high-performance work systems, employee resilience and engagement: A study of the banking industry in China. The International Journal of Human Resource Management, 30(8), 1239-1260.

[7] Curry, J. F., Anderson, D. R., Zitlin, M., & Guise, G. (1987). Validity of academic achievement measures with emotionally handicapped children. Journal of Clinical Child Psychology, 16(1), 51-56.

[8] Di Fabio, A., & Kenny, M. E. (2016). Promoting well-being: The contribution of emotional intelligence. Frontiers in psychology, 7, 1182.

[9] Furnham, A., & Petrides, K. V. (2003). Trait emotional intelligence and happiness. Social Behavior and Personality: an international journal, 31(8), 815-823.

[10] Glavas, A. (2016). Corporate social responsibility and organizational psychology: An integrative review. Frontiers in psychology, 7, 144.

[11] Goleman, D., & Boyatzis, R. (2017). Emotional intelligence has 12 elements. Which do you need to work on. Harvard Business Review, 84(2), 1-5.

[12] Gough, H. G. (1979). A creative personality scale for the adjective check list. Journal of personality and social psychology, 37(8), 1398.

[13] Gough, H. G., & Heilbrun, A. B. (1965). The Adjective Check List Manual. Palo Alto: Consulting Psychologists Press.

[14] Grubor, A., Berber, N., Aleksić, M., & Bjekić, R. (2020). The influence of corporate social responsibility on organizational performance: A research in AP Vojvodina. Anali Ekonomskog fakulteta u Subotici, (43), 3-13.

[15] Huang, Y., Ma, Z., & Meng, Y. (2018). High-performance work systems and employee engagement: empirical evidence from China. Asia Pacific Journal of Human Resources, 56(3), 341-359.

[16] Hunziker, S., & Blankenagel, M. (2021). Cross-Sectional Research Design. In Research Design in

Business and Management (pp. 187-199). Springer Gabler, Wiesbaden.

[17] Ilmudeen, A., Bao, Y., Alharbi, I. M., & Zubair, N. (2020). Revisiting dynamic capability for organizations' innovation types: does it matter for organizational performance in China?. European Journal of Innovation Management.

[18] Kobau, R., Seligman, M. E., Peterson, C., Diener, E., Zack, M. M., Chapman, D., & Thompson, W. (2011). Mental health promotion in public health: Perspectives and strategies from positive psychology. American journal of public health, 101(8), e1-e9.

[19] Kono, T. (2018). Factors affecting the creativity of organizations-an approach from the analysis of new product development. In Innovation and Management (pp. 105-144). de Gruyter.

[20] Kuei, C. H., Madu, C. N., Chow, W. S., & Chen, Y. (2015). Determinants and associated performance improvement of green supply chain management in China. Journal of cleaner production, 95, 163-173.

[21] Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. Emotion review, 8(4), 290-300.

[22] Mayes, B. T., Finney, T. G., Johnson, T. W., Shen, J., & Yi, L. (2017). The effect of human resource practices on perceived organizational support in the People's Republic of China. The International Journal of Human Resource Management, 28(9), 1261-1290.

[23] Miao, C., Humphrey, R. H., & Qian, S. (2017). A meta-analysis of emotional intelligence and work attitudes. Journal of Occupational and Organizational Psychology, 90(2), 177-202.

[24] Nguema, J. N. B. B., Bi, G., Akenroye, T. O., & El Baz, J. (2021). The effects of supply chain finance on organizational performance: a moderated and mediated model. Supply Chain Management: An International Journal.

[25] Pan, Y., Shang, Y., & Malika, R. (2020). Enhancing creativity in organizations: the role of the need for cognition. Management Decision.

[26] Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sanchez-Ruiz, M. J., Furnham, A., & Pérez-González, J. C. (2016). Developments in trait emotional intelligence research. Emotion review, 8(4), 335-341.

[27] Ravichandran, K., Arasu, R., & Kumar, S. A. (2011). The impact of emotional intelligence on employee work engagement behavior: An empirical study. International Journal of Business and Management, 6(11), 157.

[28] Reiter-Palmon, R., Mitchell, K. S., & Royston, R. (2019). Improving creativity in organizational settings: Applying research on creativity to organizations.

[29] Rudolph, C. W., Allan, B., Clark, M., Hertel, G., Hirschi, A., Kunze, F., ... & Zacher, H. (2021). Pandemics: Implications for research and practice in industrial and organizational psychology. Industrial and Organizational Psychology, 14(1-2), 1-35.

[30] Schreuder, D., & Coetzee, M. (2010). An overview of industrial and organisational psychology research in South Africa: A preliminary study. SA Journal of Industrial Psychology, 36(1), 1-11.

[31] Selamat, M. H., & Ran, G. W. (2019). The mediating effect of organizational citizenship behavior on the organizational justice and organizational performance in small and medium-sized enterprise of China. Int. J. Bus. Manag, 14(173), 10-5539.

[32] Zhou, S. S., Zhou, A. J., Feng, J., & Jiang, S. (2019). Dynamic capabilities and organizational performance: The mediating role of innovation. Journal of Management & Organization, 25(5), 731-747.