The Constructive Learning Environment, Overexcitability Patterns and Cognitive Ambiguity Tolerance as Predictiors of Creative Self-Efficacy among Secondary Students of STEM Schools

Abstract:

The current study aimed at identifying the correlation between constructive learning environment (critical voice, student negotiation, shared control, personal relevance, uncertainity), overexcitability patterns(sensual, psychomotor, intellectual, emotional ,imaginative), ambiguity tolerance its, factors and creative cognitive efficacy(creative thinking and creative performance) among secondary students of STEM schools. Besides, It aimed at knowing the relative contribution of constructive learning environment, overexcitability patterns, cognitive ambiguity tolerance in predicting creative selfefficacy of the participants. The researcher prepared and administered four scales of constructive learning environment, overexcitability patterns, cognitive ambiguity tolerance and creative self-efficacy. The psychometric properties of the tools was checked using explaratory factor analysis, confirmatory factor analysis, convergent and discriminant validity and composite reliability. The participants consisted of (94) students at the schools of STEM. The researcher employed many statistical techniques such as, "pearson" correlation, and stepwise regression analysis.

The study results indicated that there is a statistically significant positive correlation between creative thinking and (critical voice, student negotiation, shared control, constructive learning environment as a whole). Moreover, there is a statistically significant positive correlation between creative performance and (critical voice, student negotiation, constructive learning environment as a whole). But, there is no a statistically significant correlation between creative thinking, creative performance, and personal relevance of constructive learning. The study also found that there is no a statistically significant correlation between creative self-efficacy and personal relevance.

The study results also indicated that there is a statistically significant positive correlation between creative thinking, psychomotor and emotional overexcitability, a statistically significant positive correlation between creative performance, psychomotor, intellectual, and imaginative overexcitability. In addition, there is a statistically significant positive correlation between creative self-efficacy and cognitive ambiguity tolerance. The study also found that constructive learning environment and cognitive ambiguity tolerance attributed in predicting creative self-efficacy of the participants, but overexcitability patterns didn't attribute in predicting creative self-efficacy. The model explained (34.4%) of the total variance of creative self-efficacy.

Key Words: Constructive Learning Environment, Overexcitability Patterns, Cognitive Ambiguity Tolerance, Creative Self Efficacy, STEM.