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REVIEW ON MOTIVATIONAL AND SELF-REGULATED LEARNING OF CREATIVE STUDENTS BELONGING TO SENIOR SECONDARY LEVEL

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SOURCES OF REVIEW OF RELATED LITERATURE

The researcher collect the review of related literature on self-regulated learning and creativity research paper posted in website, professional association newsletters, drafts, conference papers, dissertations, thesis, professional association papers, college and university publications, articles based on international, national, regional, state level, books, research studies, encyclopedias, research surveys, research reviews, and abstracts.

Recognizing the advantages of related studies, the investigator tried to examine the related literature on the topic. From all the sources available, the investigator was able to have a few related studies, which need to be mentioned here. The present review by no means is complete. A few studies conducted in this area of research, which are directly or indirectly related with present study, are detailed here below:

STUDIES RELATED TO CREATIVITY

Choudhry (Abstract: 1085, III Survey Report, 1983) studied 'A Study of the Relationship between the Creative Thinking Abilities of Student-Teachers and their Classroom Verbal Behaviour'. The objectives of the study were: (1) to study the current classroom practices of teacher-trainees and to compare them with established norms; (2) to study the relationship between verbal creative thinking abilities and figural creative thinking abilities; (3) to study the relationship between verbal creative thinking abilities of teacher-trainees and their verbal classroom behavior; (4) to study the relationship between figural creative thinking abilities of teacher-trainees and their verbal classroom behavior, and (5) to predict classroom behavior on the basis of creative thinking abilities, both verbal and figural together.

Brar, S.S. (1987) conducted a study on the development of creativity in relation to intelligence among the school children of 13 to 18 years age. Analysis revealed that there was a considerable increase in the growth of all the four components of figural creativity, viz, fluency, flexibility, originality and elaboration in the eighth grade. Results shows that there was more recovery in the figural creativity components after pairing to average intelligent group and the low intelligent group

formed on the basis of fluid intelligence test. It was also found that there was a significant positive correlation between creativity, intelligence and achievement of students.

Shair, Bilquies (1988) carried out a study of creative thinking among boys and girls in relation to socio – economic status. The analysis strongly confirm the hypotheses that creativity and socio – economic status were positively correlated and no gender differences were found to exist in creativity. Analysis indicate that boys and girls belonging to the same level of socio – economic status did not differ significantly on the three components of creativity viz. fluency, flexibility and originality. Boys with high socio – economic status and low socio – economic status were found to be different on fluency and flexibility, however in the originality scores, the difference fail to reach any level of significance.

Gautam, Shashi Bala (1993) conducted a study of creative thinking among Navodya Vidalayas students of Himachal Pradesh in relation to sex and socio – economic status. Finding of the study were – (i) there are no significant sex – differences in development of creative thinking of Navodya Vidalaya students from grade VI to VIII, though girls tend to be more creative than boys. Result also shows that high socio – economic status group of students tends to more creative than the low socio – economic status group.

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Olaseinde et. Al (1994) studied the relationship of creativity and cognitive style dimension of impulsivity/ reflectivity in secondary schools. The relationship between creativity and cognitive style dimension of impulsivity/ reflectivity was examined with 79 secondary school students (38 girls, mean age 15 years) in Nigeria. Result suggested that the student sample scoring high on reflectivity performed better than impulsive students on the rest of creativity. Most students were more concerned with providing the right answer rather than a creative answer.

Dockal, Vladimir (1995) conducted a study to investigate whether or not creativity is independent of heredity? Research also discusses creativity, which unlike that of intelligence measured by classic tests can to a large extent be enhanced by the environment. The author suggested that the mechanism of the environment and heredity interaction appears to be the same in the development of both kinds of abilities. The observed data document only a different approach of contemporary civilization toward them, while the reproductive abilities are maximally supported by education, in developing creativity. There is a great room for accidental influence as well as influence of stimulating programs.

Aguilar et. Al (1996) studied the correlation between the personality and creativity. Previous research has provided conflicting accounts of the effect of personality on creative behaviour. This study involving 400 student sample, examined the issue by mean of factor analysis and Anova.

Different measures of creative behaviour and cognitive abilities are correlated with personal characteristics, such as psychoticism, extraversion and other measure of personality. The result is consistent with the idea that different forms of creative behaviour are related to distinct characteristics of personality.

Mellou, Eleni (1996) studied that can creativity be nurtured in young children? It was discussed how children's creative behaviour can be influenced by creative school environment, creative thinking programs and creative teachers. Creativity can be nurtured in young children and there is need for a broader and comprehensive pedagogical and curricular framework for creativity specialists or facilitators to apply their work. A suitable environment and appropriate teaching may encourage the development of children's creativity. Interaction with the creative environment seems to be the most powerful possibility of nurturing creative individuals.

Blisset et. Al (1997) studied the relationship between creativity and interpersonal problem solving skill in adults. Analysis revealed that whether creativity training and inter – personal problem solving training reflect equivalent or complementary skills in adults. 74 old under graduates completed 4 measures of inter personal problem solving, creative performance and creative style. Test used included the means ends problem solving, the Torrence test of creative thinking and the problem solving inventory. Students received interpersonal problem solving training and creative training. Problem solving represents complementary skills, in that each training program specifically affected performance only on related measure of performance. A combination of program affected both abilities.

Maria et al (1998) studied the creativity in students and its relation to intelligence and peer perception. A relationship between creativity and misbehaviour in the classroom has often been presumed by educators. The present study attempted to clarify the relationship among intelligence, creativity and peer perception. 300 students were selected for the test of intelligence, creativity, sociometric choices. Result shows that children from middle high socio – economic status had higher scores on intelligence and creativity tests and those students who were viewed as creative by their peer were the most popular in the group. Girls of higher socio – economic status viewed their creative peers as the most misbehaving.

Cortada de Kohan (1999) studied the achievement in primary education and its relation to general intelligence and the thinking process in problem solving. They examined the relationship between intelligence and achievement at school with thought process involved in problem solving. The research was conducted in a primary school with a sample of 200 students. An achievement test consisted of general knowledge, language; mathematics was constructed and then applies to students. The Raven's progressive matrices were used to study thought process and strategies for problem solving were also administered. Result indicates that this school system did not use the best intellectual potentialities of students.

Allik, Juri et al (1999) conducted a study on intelligence, academic abilities and personality. They investigated how individuals with low and high intellectual abilities use their intellectual resources differently to express their individuality. 405 Estonians were selected for intelligence, subject and foreign language test and personality inventory. Correlation and joint factor analyses demonstrated

that most of the valid variance in academic achievement and intelligence was not related to personality measures. It was found that low intelligence persons use their intellectual abilities for seeking excitement while high intelligence persons use their intellect for regulating and controlling their affective lives.

Brophy et al (2001) compared the attributes, activities and performance of divergent, convergent and combination of thinkers. They examined the relationship between inclination for divergent and convergent thought and creative problem solving (CPS) performance. The research was conducted for 300 university students. Result shows that students' preferences were associated with performance. Task completion required frequent convergent thought as well as divergent thought.

Lubart et al (2001) studied the models of the creative process: past, present and future. They discussed 20th century models of creative process, including the structure of intellect model of J.P. Guilford. The basic 4 stage model of creative process, comprising preparation, incubation, illumination and verification has been prominent since the end of 19th century and many researchers have relied on it. However, research suggests that this model may need to be revised or replaced.

Yadav, Mamta (2003) conducted a study for comprising the creativity of college students with relation to intelligence and socio – economic status.200 undergraduate students were taken for research purpose. Test used include Torrence test of creativity, Jalota's intelligence test S.E.S. questionnaire by S.D. Kapoor and R.N. Singh. Result shows that more intelligent students were more creative, more socio – economically strong a student is more creative he/she will be. Result also shows that high intelligence students differ significantly with low intelligence students on creativity and socio – economic status of the students' effects in a positive way to creativity of students.

STUDIES RELATED TO SELF REGULATED LEARNING

Corno (1989), for example, defines the concept of self-regulated learning as a set of learning strategies which the learner can use to meet the demands of a task in an effective and flexible manner. However, research on the construct of metamemory and the motivational and volitional aspects of learning has revealed that, even when learners are aware of appropriate learning strategies, they do not necessarily put them to use. Thus, when studying self-regulated learning, not only the (meta) cognitive, but the motivational and emotional components of the learning process should be taken into account.

Schunk (1989) points to the numerous possible emotional consequences for learners who are made aware of appropriate strategies: Strategy instruction is an effective means of promoting self-regulated learning and perceived efficacy. Such instruction makes salient to students the rules and steps that improve performance and conveys that they are capable of applying them. The belief that one can apply a strategy to improve learning instills in learners a sense of personal control over achievement outcomes, which can raise self-efficacy.

According to **Zimmerman and Martinez-Pons (1990),** self-regulated learners have the motivational advantage of high levels of self-efficacy and intrinsic motivation. On the behavioral

(strategic) level, self-regulated learners actively select, structure, and create social and material environments which optimize their learning processes.

Pintrich et al. (1991) revealed that since self-regulation is not a personality trait, students can control their behaviors and affect in order to improve their academic learning and performance regulating refers to the fine-tuning and continuous adjustment of one's cognitive activities.

Simons (1992) formulates similar prerequisites, i.e., requirements to be met by self regulated learners. According to Simons, (1) learning must be prepared (e.g., prior knowledge activated, goals defined, the relevance of goals made clear), (2) learning related actions must be executed (e.g., the cognitive strategies and processes necessary for understanding, retention, and transfer activated), (3) the learning process must be regulated by means of control and intervention strategies, (4) outcomes must be assessed (e.g., by self-evaluation of achievement) and (5) motivation and concentration must be maintained. Self-regulated learning can be investigated against the background of several different research approaches and traditions. Research in the areas of learning strategies/learning styles and metacognition has proved to be of particular value.

Garcia and Pintrich (1994) in Pintrich and his colleagues' model, there were essentially two important aspects of self-regulated learning, namely, motivational strategies and learning strategies. The motivational strategies were those strategies students used to cope with stress and emotions that are sometimes generated when they tried to overcome failures and become good learners, while the learning strategies were methods that students used to improve their understanding, integration, and retention of new information in the learning process.

Zimmerman & Paulsen (1995) found that self-monitoring is essential in enhancing learning. It helps students focus their attention on and discriminate between effective and ineffective performance and reveals inadequate learning strategies. It improves time management as well. Planning involves setting educational goals and outcomes as well as task analysis. Self-regulated learners set specific learning or performance outcomes, and then monitor the effectiveness of their learning methods or strategies and respond to their evaluations.

Pintrich, (1995) self-regulation is neither a measure of mental intelligence that is unchangeable after a certain point in life nor a personal characteristic that is genetically based or formed early in life. Students learn self-regulation through experience and self-reflection.

Coppola & McCombs (1995) found teachers can teach in ways that help students become self regulating learners

In his study **Schiefele and Pekrun (1996)** the metacognitive activities of self-regulated learners are characterized by extensive planning, organizing, and evaluating and define self-regulated learning along similar lines: Self-regulated learning is a form of learning in which individuals, depending on the type of their motivation to learn, autonomously deploy one or more self-regulatory measures (of a cognitive, metacognitive, volitional or behavioral nature) and monitor the progress of their own learning. Whereas the above approaches identify metacognitive, motivational and strategic processes as the constitutive elements of self-regulated learning,

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Weinert (1996) sees 1) motivational preferences, 2) volitional approaches, strategies and regulatory techniques, 3) metacognitive competence, and 4) the availability of learning and problem-solving strategies as the prerequisites for self-regulated learning. The order in which these elements are listed makes it clear that it is not sufficient to dispose of appropriate cognitive skills and acquire metacognitive competencies: Self-regulated learning is heavily dependent on the readiness of individuals to be proactive, to interpret success and failure appropriately, to translate wishes into intentions and plans, and to shield learning from competing intentions.

In **Boekaerts' (1997)** model of self-regulated learning, equal status is given to the cognitive and motivational components of learning. Boekaerts defines self-regulated learning as a complex, interactive process involving motivational as well as cognitive self-regulation. Her six-component model of self-regulated learning can be seen as a framework describing these two types of self-regulation on three levels, namely the levels of goals, strategies, and domain-specific knowledge. Each of the six components represents a type of prior knowledge which must be available to a learner in order for self-regulated learning to occur.

According to **Boekaerts (1999)**, however, this has resulted in a relative overemphasis of the cognitive aspects of self-regulated learning. In some cognitive models, self-regulated learning is more or less equated with the use of learning strategies.

Koenlom, B. et al (2005) conducted a study on Determinations of Teacher's Recognitions of Self-regulated Learning Practices in Elementary Education and the findings of the study indicated that the recognition of SRL is mostly linked to personal teacher characteristics. Although personal factors appear to be more important than contextual factors, the authors argue that researchers should not neglect the latter variables.

Perry et al (2006) states self-regulated learners believe that opportunities to take on challenging tasks, to practice their learning, to develop a deep understanding of subject matter, and to exert efforts, will give rise to academic success.

Cleary J.T. (2006) conducted a study on the development and validation of the self-regulation stagey inventory –self-report. The primary purpose of this study was to develop and gather initial psychometric information regarding the self-Regulation strategy Inventory-Self-Report (SRSI-SR), a self-report measure of students' use of specific self-regulation strategies. Information regarding the scales' factor structure, convergent and discriminate validity, differential validity, and internal consistency was gathered using simple of 12 ninth and tenth grade students in an urban high school. Principal component analysis of the SRSI-SR yielded a three-factor structure: (a) Seeking and Learning Information, (b) Managing Environmental /Behavior, and (c) Maladaptive Regulatory Behaviors. Internal consistency for the overall SRSI-SR was high (alpha=.92), with the subscales ranging from .72 to .88 A second principal component analysis indicated that the three subscale of the SRSI-SR converged onto one higher-order factor but discriminated from two motivation lies, task interest, perceived instrumentality). In addition, ANOVA procedures revealed that the SRSI-SR reliability differentiated high and low achievers.

Schunk and Zimmerman (2008) defined SRL as the process by which learners personally activate and sustain cognitions, affects, and behaviors that are systematically oriented towards attainment of learning goals.

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