SELF EFFICACY IN RELATION TO MULTIPLE INTELLIGENCE AMONG ADOLESCENTS

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ABSTRACT

The present research aims at studying the relationship between the self-efficacy and multiple intelligence among adolescents of government and private schools. The study consisted of data from 200 students of four different schools of Chandigarh. The data was analyzed statistically by using Pearson's coefficient of correlation (r). The results indicated a positive correlation between students' self-efficacy and naturalistic, kinesthetic, intrapersonal multiple intelligence.

Key Words: Self-efficacy and Multiple Intelligence

INTRODUCTION

Education is considered indispensable for holistic development of personality as well as for the progress of society. Humans have innate potential, capacities, and abilities that must be developed through education. Of all the human traits, aptitudes, and potentials, intelligence is crucial to how a person interacts with the world, makes decisions, and adapts to it. Intelligence is a key factor in today's education that affects success in all spheres of life, and self-efficacy beliefs serve as the cornerstone of human motivation, well-being, and personal achievement. Self-efficacy is a person's belief about his or her chances of successfully accomplishing a specific task. It is the belief in one's ability to do a task. Self-efficacy arises from the gradual acquisition of complex, cognitive, social, linguistic, and /or physical skills through experience (Bandura, 1977). Wood and Bandura (1989) stated that "Self-efficacy refers to beliefs in one's capabilities to mobilize the motivations, cognitive resources and courses of action needed to meet given situational demands." Self-efficacy, a foundational concept in social cognitive theory, is thought to be a significant factor since it influences students' motivation and learning. It is the conviction that one can achieve a result or accomplish a goal. This belief, which is particular to a

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task, a body of knowledge, or a performance, shapes the actions and tactics that aid someone in achieving their objective (Bandura, 1977). Lot of difficulties that people experience throughout their lives is closely related with their beliefs about themselves. Students' failures in academics, as well as the misdirected motivation and lack of commitment is largely because of the beliefs those students develop about themselves and about their ability to exercise a measure of control over their environments. Education system must aim for the development of academic competence. It is the responsibility of schools and colleges to prepare self-assured and fully-functioning individuals who are capable of pursuing their hopes and their ambitions. According to Albert Bandura, "Educational practices should be gauged not only by the skills and knowledge they impart for present use but also by what they do to students' beliefs about their capabilities, which affects how they approach the future. Students who develop a strong sense of self-efficacy are well equipped to educate themselves when they have to rely on their own initiative". Self-efficacy motivates people to invest more effort into tasks and to persist longer (Lent, Brown, & Larkin, 1986). Self-efficacy is influenced not only by actual performance but also by social information (Bandura, 1977). When observing that others successfully perform a certain behavior or achieve a goal, individuals tend to believe that they have a chance to do it successfully. By contrast, people also infer that they are unlikely to do it if others fail to do the same task (Brown & Inouye, 1978). Thus, when observing that increasingly more people like themselves succeed in making a change, individuals may increase their self-efficacy about making the same change. In addition, information about others'changes is conducive to forming a growth mindset that motivates individuals to overcome challenges (Dweck& Leggett, 1988). For example, compared with those who believe that intelligence is fixed, students who believe that intelligence can increase via hard work are more likely to overcome difficulties regarding their studies (Blackwell, Trzesniewski, &Dweck, 2007). Multiple intelligence refers to a theory describing the different ways students learn and acquire information. Thesemultiple intelligences range from the use of words, numbers, pictures and music, to the importance of social interactions, introspection, physical movement and being in tune with nature. The theory posits that an understanding of which type of intelligence a student may possess can help teachers adjust learning styles, and suggest certain career paths for learners. The theory has come under criticism from both psychologists and educators, where many believe that the eight

"intelligences" represent innate talents and abilities. Gardner (1983) initially proposed that there were seven intelligences: Linguistic, Spatial, Logical/Mathematical, Interpersonal, Intrapersonal, Bodily-Kinesthetic, and Musical. He has more recently added Naturalistic intelligence and has suggested that an Existential intelligence might exist, but that a hypothesized Spiritual intelligence does not (Gardner H. , 1999). The Multiple Intelligence Theory (Gardner,1999,2004) has significant implications for education in general, and can help students' achievement in particular (Barrington, 2004; Christion & Kennedy, 2004; Ozdemir, Guneysu, &Tekkaya, 2006).

Yazdanimoghaddam and Khoshroodi (2010) studied the possible relationship between English Language Teachers teaching efficacy and their multiple intelligences were examined. Based on the results, it was concluded that the linguistic and musical intelligences were the two main predictors of teachers teaching efficacy whereas the other domains of intelligences, although intercorrelated, did not significantly contribute to the concept of teachers teaching efficacy.

Beichner (2011) studied relationship between multiple intelligences and students' academic self-efficacy. A higher self-efficacy was reported for students in classrooms where teachers used two of their 3 dominant Multiple intelligence than the other two groups: classrooms where the teacher used one of their three dominant multiple intelligence and the group in which none of students' dominant multiple intelligence were highlighted.

Irani et al. (2012) discovered a strong correlation between overall self-efficacy and multiple intelligences. It also observed a significant association between general self-efficacy and each dimension of multiple intelligences. Mahasneh (2013) investigated the connection between self-efficacy and multiple intelligences. 576 students, both male and female, were randomly chosen from several Hashemite University faculties to participate in the study. The findings reveal a noteworthy affirmative association between self-regulation and the many intelligences of bodily-kinesthetic, intrapersonal, logical, interpersonal, visual, musical, existential, and verbal-linguistic. The various intelligences of bodily-kinesthetic, intrapersonal, interpersonal, visual, musical, existential, naturalist, and verbal-linguistic are favorably correlated with self-confidence. Additionally, there is a favorable correlation between the liking for task difficulty and the multiple intelligences of verbal-linguistic, visual, intrapersonal, logical, and existential.

Koura and Hebaish (2014) aimed to investigate and describe the multiple intelligences (MIs) and self-efficacy profiles that characterize Saudi female (gifted / regular) third intermediate students

and their relationship to the achievement of EFL language skills and aspects. The findings of the study revealed Interpersonal Intelligence as the most preferred intelligence types among gifted and regular participants and Musical intelligence was the least preferred intelligence. The study also revealed significant correlation between Multiple Intelligences and achievement in specific language skills and language aspects.

Singh (2015) studied the relationship between emotional intelligence and well-being, self-efficacy and well-being, how emotional intelligence and self-efficacy affect the well-being of students on a sample of 200 students of 11^{th} class (100 boys and 100 girls) of Ludhiana District of Punjab. He found that there exists positive relationship between emotional intelligence and well-being, and between self-efficacy and well-being.

Muqodas et al (2020) examined the significance of multiple intelligence and self-efficacy for primary school students. The results of earlier studies indicated that multiple intelligence and self-efficacy of students were below average. The study intended for developing multiple intelligence and self-efficacy of primary school students. The research employed a descriptive approach including 27 first-grade students at one of the schools in Purwakarta Regency. The findings indicated that multiple intelligence and self-efficacy of students were still in sufficient category; therefore, a particular strategy was required to develop multiple intelligence and self-efficacy.

Yavich and Rotnitsky (2020) investigated the connection between academic achievement of middle school children and dominant intelligences as defined by Gardener's multiple intellect theory. A case study with 158 seventh-graders was carried out in a middle school in Israel. Results showed that 80.9% of students in good classrooms demonstrated logical intelligence at least in one dominance level. The degree of dominating intelligences among students in all classes—excellent and ordinary—was also investigated. The number of pupils with two or three dominating intelligences was higher in exceptional classrooms than in ordinary schools, according to the findings.

Adolescence is a critical period of development marked by significant cognitive, emotional, and social changes. During this phase, individuals are actively shaping their identities and preparing for the challenges of adulthood. One crucial aspect of adolescent development is the exploration and understanding of their own abilities and potential. This research aims to explore the

relationship between self-efficacy and multiple intelligences among adolescents, recognizing the importance of these factors in shaping their educational experiences and future aspirations.

OBJECTIVE OF THE STUDY

1. To study the relationship between self-efficacy and different types of multiple intelligences among the adolescents of government and private schools of Chandigarh.
2. To study the difference in self-efficacy among the adolescent boys and girls

HYPOTHESES OF THE STUDY

1. There exists no significant correlation between self-efficacy and different types of multiple intelligences of adolescents.
2. There exists no significant difference in self-efficacy among the adolescent boys and girls

SAMPLE OF THE STUDY

The sample of the study comprised of 200 senior secondary school students studying in government and private schools of U.T., Chandigarh. 100 students were selected from government schools and 100 from private schools out of which 50 males and 50 females were taken from each type of schools-government and private. The sample was selected by employing Quota Sampling Technique.

TOOLS EMPLOYED

1. General Self Efficacy Scale (GSES) by Schwarzer, R., & Jerusalem, M. (1995)
2. The Multiple Intelligence Inventory (MII) by McKenzie (1990)

RESULTS AND DISCUSSIONS

The first hypothesis of the study was, "There exists no significant correlation between self-efficacy and different types of multiple intelligences of adolescents". Pearson's Coefficient of correlation was computed to test this hypothesis. Table 1 shows the results.

Table 1 Coefficient of Correlation between self-efficacy and different components of multiple intelligences of adolescents.

Multiple Intelligences	**Self-Efficacy**	**Level of Significance**
Naturalistic	0.14*	0.05

Musical	0.11	Not Significant
Logical	0.12	Not Significant
Existential	0.11	Not Significant
Interpersonal	0.08	Not Significant
Kinesthetic	0.18**	0.05
Verbal	0.09	Not Significant
Intrapersonal	0.17*	0.05
Visual	0.09	Not Significant

From the Table 4.2.3, it is evident that components of Multiple Intelligences, Naturalistic Intelligence, Kinesthetic Intelligence and Intrapersonal Intelligence got substantiate correlation with Self-Efficacy. The obtainedcorrelationcoefficientofSelf-EfficacywithNaturalistic Intelligence, Kinesthetic Intelligence and Intrapersonal Intelligence are 14,.18 and .17 respectively which are significant at the 0.05 level. This implies that there exists significant positive correlationofself-efficacy of adolescents with their Naturalistic Intelligence, Kinesthetic Intelligence and Intrapersonal Intelligence. For other types of intelligences, although the correlation is positive but not significant.In this concern, one of the previous study related to Self-Efficacy and Multiple Intelligence (Anjana, B Nair 2016) confirmed that there is significant correlation between Self Efficacy and various components of Multiple Intelligence.

The second hypothesis of the study was, "There is no significant difference of self-efficacy among adolescents with regard to their gender."In order to test the first hypothesis, t test was employed and results are entered in Table 2

Table 2 Mean, S.D and t-ratio and level of significance of Self Efficacy of adolescentboys and girls.

	Gender	**N**	**MEAN**	**S.D**	**t- Ratio**	**Level of Significance**
Self Efficacy	**Boys**	100	30.90	4.07	1.89	Not Significant
	Girls	100	31.96	3.87		

DISCUSSION OF RESULT

From table 2.it is evident that the calculated t-ratio was not found to be significant.Hence, Hypothesis 2 stating "There is no significant difference of self-efficacy among adolescents with regard to their gender" stands accepted. It is concluded that the mean scores of Self-Efficacy of adolescent boys and girls do not differ significantly. This means that the Self-Efficacy of adolescent boysissimilarto that of Self-Efficacy of adolescent girls.

CONCLUSIONS

There was a positive correlation between self-efficacy and naturalistic intelligence, self-efficacy and kinesthetic intelligence, self-efficacy and intrapersonal intelligence of adolescents. No gender differences exist among adolescents in respect to Self-Efficacy of adolescents

EDUCATIONAL IMPLICATIONS

This research holds significant implications for educators and educational institutions. Understanding the relationship between self-efficacy and multiple intelligences among adolescents can inform the development of teaching strategies that cater to individual strengths and preferences. By tailoring educational practices to accommodate diverse intelligences and fostering self-efficacy, educators can create a more inclusive and effective learning environment, ultimately enhancing academic outcomes.Ineducational institutions, education should be imparted which focuses on motivating students and increasing their level of self-efficacy. Improving learners Multiple Intelligence will boost their level of self-efficacy and paying attention to learners MI profiles will boost confidence in their abilities.The education system should incorporate a multiple intelligences framework into the curriculum so that students get engaging, hands-on learning opportunities.

REFERENCES

Bandura, A. (1977). Self-Efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review* , 191-215.

Barrington, B. (2004). Teaching to student diversity in higher education: how multiple intelligences theory canhelp.*Teaching in Higher Education, 9(4)*, 422.

Blackwell, L., Trzesniewski, K., &Dweck, C. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: a longitudinal study and an intervention. *Child development, 78(1)*, 246–263.

Carroll, A. H. (2009). Self-efficacy and academic achievement in Australian high school students: The mediating effects of academic aspirations and delinquency. *Journal of Adolescence* , 797-817.

Christion, M., & Kennedy, D. (2004).Multipleintelligences.*TESOL Journal, 6(1)*, 10-14.

Dragoshi, R., & Samuel, E. (2016). Self-Efficacy: multiple intelligences and Canadian students' academic performance. *Am. Int. J. Humanities Soc. Sci, 2(4)*, 76-88.

Dweck, C., & Leggett, E. (1988).A social-cognitive approach to motivation and personality.*Psychological Review, 95(2)*, 256–273.

Gardner, H. (2004). *Changing Minds: The art and science of changing our own and other people's minds.*Harvard Business School Press.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Gardner, H. (1999). *Intelligence reframed: Multiple intelligences for the 21st century.* New York: Basic Books.

Koura, A.&. (2014). The relationship between multiple intelligences, self-efficacy and academic achievement of Saudi gifted and regular intermediate students. *Educational Research International* , 3(1).

Lent, R., Brown, S., & Larkin, K. (1986).Self-efficacy in the prediction of academic performance and perceived career options.*Journal of Counseling Psychology, 33(3)*, 265–269.

Mahasneh, A. (2013). The relationship between Multiple Intelligence and Selfefficacy among sample of Hashemite university students.*InternationalJosurnal of Education and Research* , 1(5).

McKenzie, W. (1999).*Multiple Intelligences Inventory.* Retrieved from http:// Surfaquarium.com/MI/inventory.htm

Muqodas, I., Putri, H., Yuliyanto, A., &Mubiar, A. (2020).The Development of Multiple Intelligence and Self Efficacy in Primary School Students.*2nd International Seminar on Guidance and Counseling 2019.*Yogyakarta.

Ozdemir, P., Guneysu, S., &Tekkaya, C. (2006).Enhancing learning through multiple intelligences.*Journal of Biological Education, 40(2)*, 74-78.

Schwarzer, R., & Jerusalem, M. (1995).Generalized Self-Efficacy scale.*In J. Weinman, S. Wright, & M. Johnston, Measures in Health Psychology: A User's Portfolio. Causal and Control Beliefs* , 35-37.

Wood, R., & Bandura, A. (1989).Social cognitive theory of organizational management.*Academy of Management Review* , 14(3), 362-384.

Yavich, R., &Rotnitsky, I. (2020).Multiple Intelligences and Success in School Studies.*International Journal of Higher Education, 9*, 107.

Yazdanimoghaddam, M., &Khoshroodi, S. (2010).The relationship between teachers teaching efficacy and their multiple intelligences.*Journal of Language and Translation, 1(2)*, 33-39.