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IS THERE ANY DIFFERENCE IN THE STUDENTS' MINDSET? RESEARCH FINDINGS FROM URBAN AND RURAL GOVERNMENT SCHOOLS OF PUNJAB, STATE OF INDIA

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Abstract - The present research was conducted for the psychological examination of the students' mindset (growth mindset, mixed mindset and fixed mindset) of an urban and rural government school of Malwa region in Punjab. Data were collected from 600 students of class IX studying in 12 government schools by using stratified random sampling technique. Self constructed standardized students' mindset scale (Likert scale) was employed. The results of the research derived from the application of parametric tests displayed statistically significant difference in the belief about transforming their own psychology to make strategy success.

Key Words – Students' mindset, Type of School (Urban & Rural), Gender (Boys and Girls)

I. INTRODUCTION

Good concentration level and effective study for better future wishes a correct type of mindset. The key to start effective study smarter is how students' approach something matters a lot and it depends on their belief about changing their own psychology about anything. The view people embrace for themselves, directly control their life. The mindset of a person plays a great role in allocating all fields of an individual's life, involving how person observe the tasks, make decisions, fix designs, command situations, find out safeguards in their life, and how they undo received criticism from others. It has a deep command over behaviours that uncovered acceptance or withdrawal responses of these assigning roles in their life. Theory of mindset follows a positive psychology viewpoint in which intelligence trait of an individual is judged as a mouldable quality (Zhang, Kuusisto & Tirri, 2017). Different authors have justified the term mindset in their own expressions but Dweck (2006) defined mindsets "profoundly affects the way you lead your life" (p. 6). According to her terms, 'Mindsets are just hard beliefs of an individual's grip about their innate qualities or abilities'.

Klein (2016) viewed a "mindset is a belief that orients the way we handle situation, the way we sort out what is going on and what we should do. These are beliefs that orient our reactions and tendencies".

Dweck (2006) in her book "Mindset: The New Psychology of Success" mentioned that people with fixed mindset try to validate themselves repeatedly, feel impossible to face failure, make friends who celebrate their non malleable ability, always try only those things which are effortless, avoid challenges and failures, possess convergent thinking to achieve success, obsessed about how they will be assessed by other people, disjoint living organisms into weak and strong, victory is about to prove your arrogance, default means lack of competence, feel powerful in front of weak one, efforts are meaningless and it is only for those who have certain deficiency, unable to accept their imperfections, stay away from the examination that expose their weaknesses, success transferred in the genes, they think that downfalls label the person like failure, unintelligent, paralyzed, disable etc. use defence mechanisms technique when face rejection, trying to attract others only, concerned about their position at any cost for personal benefits.

Growth Mindset means to delete weaknesses with the learning purpose, include those friends in life who appreciate their efforts rather than innate talent, becoming divergent thinker, face those situation that wishes much efforts, disjoint the world into learners and non-learners, think that success is about to expand yourself, learn from discomfort zone, appreciate energies of another person and try to learn from them, failure means to make new plans, they see downfall as wakeup sound and beneficial. They have high power to redesign their own psychology for making their plans success for leading positive life and have effective mastery over problems.

Mixed Mindset has both elements of fixed mindset and growth mindset. It means different mindsets in different areas. People try to take-up this mindset when they feel to outshine in one field and stuck in another field. Example: an



individual's artistic expertness is fixed but their intelligence can be refined or their personality is unchangeable but their creativity can be progressed. So, it is notable to scan whatever mindset people have in particular field will instruct or educate them in that section. Hence, operational definition of students' mindset is explained as the psychological test of the mindset of an individual evolving near a three dissimilar states of mind i.e. fixed mindset, growth mindset and mixed mindset.

II. REVIEW OF RELATED LITERATURE

Macnamara&Rupani (2017) and Tucker-Drob, Briley, Engelhardt, Mann, and Harden (2016) showed through research results that no difference exists among girls and boys. In contrast Todor (2014) and Doyal& Thompson (2020) uncovered results to show that difference exists among girls and boys. Kaur, 2014; Lahon, 2015; Talukdar, 2017; Rashmitha and Jasmine, 2018; Rasool, 2018; Maheta, 2019 conducted their research and showed that students from private schools students have good psychological construct of mind than government schools.

III. OBJECTIVES

1. To find out the statistical significant difference between the mean gain scores of boys and girls about mindset.
2. To find out the statistical significant difference between the mean gain scores of urban government co-educational and rural government co-educational schools about mindset.

IV. HYPOTHESES

The following null hypotheses were formulated for the present study.

1. There exists no statistical significant difference between the mean gain scores of boys and girls with regard to students' mindset.
2. There exists no statistical significant difference between the mean gain scores of urban government co-educational and rural government co-educational schools at secondary level with regard to students' mindset.

V. RATIONALE OF THE STUDY

Variations were found in the academic achievement of the students at secondary level in Punjab state after reviewing the Punjab School Education Board (PSEB - 2014- 2017, official site) Matriculation Examination Result Statistics of March 2014, 2015, 2016, 2017. Maximum number of toppers of matriculation examination from 2014 - 2017 were belonged to private schools as compared to government schools in Punjab. Malwa region represents Punjab state maximum in board exams due to coverage of 60-70% of

area and having huge population as compare to Majha and Doaba Region population of Punjab. This region is divided into urban and rural area with maximum number of government schools. There are number of factors responsible for these variations but many studies revealed that Private schools have good psychological construct of mind than government schools to achieve their goals (Kaur, 2014; Lahon, 2015; Talukdar, 2017; Rashmitha and Jasmine, 2018; Rasool, 2018; Maheta, 2019). Further, students' mindset related studies were mostly conducted in foreign countries (literature evidences found in studies conducted by Mangles, Butterfields, Lamb, Good and Dweck, 2006; Ahmavaara and Houston, 2007; Blackwell, Trzesniewski and Dweck, 2007; Delavar, Ahadi and Barzigar, 2011; Corpus and Lepper, 2007; Droë, 2012; Gundreson, Dweck, Gripshover, Meadow, Levine and Sorhegen, 2018; Park, Gunderson, Tsukayama, Levine and Beilock, 2016; Delavar, Ahadi and Barzigar, 2011). So, on the basis of the reviewed literature, research has been carried out in urban and rural government schools of Punjab state for psychological examination of different states of students' mindset.

VI. SAMPLE OF THE STUDY

The investigator used stratified random sampling technique for selecting the sample. The sample consists of 600 students (300 boys and 300 girls) of IX standard studying in 12 government schools (6 urban government schools and 6 rural government schools) in Malwa region of Punjab.

VII. DESIGN AND STATISTICAL METHODS USED FOR THE STUDY

Descriptive survey method was employed to collect the data from the sample. For drawing out the results of the study, parametric statistical methods were applied. An inferential statistic i.e.t-test was used to find out the significant difference between the means of two independent groups and descriptive statistics for mean and std. deviation.

VIII. MEASUREMENT

A self constructed standardised students' mindset scale was used for tracing the direction of the mindset (growth, fixed and mixed) of the students. This scale consists of 25 items with Cronbach's Alpha value .777. Item analysis was ended with item-whole correlation method. The nature of scale was considered as an interval scale and validation was done with the experts' judgement method.

IX. STATISTICAL HYPOTHESES TESTING

A) Testing of hypothesis -1

Hypothesis-1 states, "There exists no statistical significant difference between the mean gain scores of boys and girls with regard to students' mindset."



A) Testing of hypothesis-1

Table 1: Showing Mean, Standard deviation, T- value and P-value of Mindset of adolescent boys and girls studying in Urban and Rural Government Co-educational Schools.

Variable		Gender	N	Mean	Std. Deviation	t-value	p-value
Students' Mindset							
Dimension	Belief about personal ability for strategy success	Boys	300	91.560	13.606	1.664	.097
		Girls	300	93.380	13.096		

Table 1 shows the respective mean scores of boys and girls are 91.560 and 93.380 and respective standard deviation scores are 13.606 and 13.096. The calculated t-value is 1.664 and p-value is .097 which is greater than .05 level of significance which clearly indicates that there is no statistically significant difference in the mindset of boys and girls studying in urban government and rural government schools. Mean scores show that girls have better mindset than boys but there is not much difference. Girls have more belief about transforming their own psychology to achieve their academic goals than boys' belief. Both girls and boys have mixed mindset which displayed that they have both elements and have different mindsets in different zone and circumstances, but girls have fine quality to move more towards growth mindset in different incidents than boys' ability. The point is that whatever mindset students have in particular sphere will educate them in that field. The insignificant difference about students' mindset happened perhaps due to reason which is based on NitiAayog's School Education Quality Index reports, which surveyed the delivery of quality of the Indian school education system and submitted its reports in (SEI, 2019). 30 critical indicators were bisected into two categories namely outcomes and governance processing aiding outcomes out of which outcome category included 4 domains namely learning outcomes, Access Outcomes, Infrastructure & Facilities for Outcomes, Equity Outcomes and in Governance Processes Aiding Outcomes category included student and teacher attendance, teacher availability, administrative adequacy, training, accountability and transparency. Hindustan Times (2019) disclosed that Punjab state was on 18th position in overall performance ranking (Ranking process was completed by grouping states and UTs into large states, small states and Union Territories) with 41.14% score among total 20 states and also fall under the bottom five states category. The index indicated the schools to increase the learning potential of the students that falls under the outcome category. The

index acknowledged that out of large states, Punjab state achieved better on the Governance Processes Aiding Outcomes category adding student and teacher attendance, teacher availability, training, administrative adequacy, transparency and accountability than outcome category. So, inadequacy in imparting of quality education by the Punjab schools to their students could be responsible for developing mixed mindset among students.

The results with reference to the insignificant difference in the mindsets among boys and girls are in consonance Macnamara & Rupani (2017) and Tucker-Drob, Briley, Engelhardt, Mann, and Harden (2016), who found insignificant difference between girls' and boys' mindsets. In reverse, Todor (2014), after completion a study on students aged 14 to 18 years, showed that there is significant difference in the mindset of boys and girls. Boys' focal point is stretching their competence to complete their objectives on the other hand, girls think that innate abilities are static and cannot switch their life. Doyal & Thompson (2020) uncovered results that collected from 452 representative samples, that there is a significant difference in the mindset of male and female students.

Conclusion of Hypothesis-1

Insignificant difference in the mindset of boys and girls studying in urban government and rural government schools depicted that the first null hypothesis; "There exists no statistical significant difference between the mean gain scores of two groups i.e. boys and girls in urban government co-educational and rural government co-educational schools at secondary level with regard to students' mindset" stands accepted.

B) Testing of hypothesis - 2

Hypothesis-2 states, "There exists no statistical significant difference between the mean gain scores of urban government co-educational and rural government co-



educational schools at secondary level with regard to students' mindset.

B) Testing of hypothesis - 2

Table 2: Showing Mean, Standard deviation, T- value and P-value of the Students' Mindset in Urban Government and Rural Government Co-educational Schools

Variable		Gender	N	Mean	Std. Deviation	t-value	p-value
Students' Mindset							
Dimension	Belief about personal ability for strategy success	Rural	300	91.280	13.752	2.179	.030*
		Urban	300	93.660	12.994		

Table 2 shows the respective mean scores of rural students and urban students are 91.280 and 93.660 and respective standard deviation scores are 13.752 and 12.994. The calculated t-value is 2.179 and p-value is .030 which is significant at .05 level. This clearly signalises that there is statistically significant difference in the mindset of adolescent students in urban government and rural government schools. Mean scores reflected that rural students' belief in changing their own psychology for achieving tasks of their life is less than urban school students. Both urban and rural schools students have mixed mindset that reflects different mindsets in different circumstances, but the direction of urban schools students mind is more towards growth mindset than rural school students. Perhaps in rural areas, people are more attached with their culture and care about saving their culture than urban area residents. So, rural areas parents transfer those ethics and beliefs among their children that can support them to avoid any kind of blend with their culture and can pass to keep the Slogan "Old is Gold". In contrast, urban parents somehow want to make their child more competent and professional for superior living.

Conclusion

It was clear that there exists statistically significant difference in the students' mindset in urban government and rural government schools. Thus, the fifth null hypothesis, "There exists no statistical significant difference between the mean gain scores of two groups i.e. urban government co-educational and rural government co-educational schools at secondary level with regard to students' mindset" stands rejected.

X. EDUCATIONAL IMPLICATIONS

- Teachers should make groups of the students on the basis of their planned strategies and efforts to crack the

exams instead of labelling them as average, above average or below average. This type of step can divert students' focus toward fixed mindset. Students are already careful about the ability categorisation practices at whatever age they happen and they interpret a very understandable message from such applications.

- False person praise like innate intelligence etc. should be ignored, because students convert these received person praise messages in negative direction that can decline achievements. So, efforts praise i.e. stretching yourself, learning from mistakes etc. is recommended for developing growth mindset among students.
- Quality education related reports should be precisely reviewed by the Government for the better future of their students.

XI. CONCLUSION

From the above results and discussions it can be concluded that mindsets plays an important role in fulfilling goals. Results shows that girls and urban schools have good tendency to move towards growth mindset in any situation for success but boys and rural schools need to work on this area for find out the true potential to achieve good status in academics and non academics.

REFERENCES

[1]. Ahmavaara, A. & Houston, D.M. (2007). The effects of selective schooling and self-concept on adolescents' academic aspiration: an examination of Dweck's self-theory. *British Journal of Educational Psychology*, 77(3), 613-632. <https://www.researchgate.net/publication/5937397> The effects of selective schooling and selfconcept on adolescents' academic aspiration An examination of Dweck's self-theory.



- [2]. Blackwell, L.S., Trzesniewski, K.H., and Dweck, C.S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development (journal of the Society for Research in Child Development)* 78(1), 246-263. <http://mtoliveboe.org/cmsAdmin/uploads/blackwell-theories-of-intelligence-child-dev-2007.pdf>.
- [3]. Corpus, J. H., & Lepper, M. (2007). The Effects of Person Versus Performance Praise on Children's Motivation: Gender and age as moderating factors. *Educational Psychology*, 27 (4), 487-508. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.498.8158&rep=rep1&type=pdf>.
- [4]. Delavar, A., Ahad, H., & Barzigar, M. (2011). Relationship between implicit theory of intelligence, 2*2 achievement goals framework, self-regulating learning with academic achievement. *2nd International Conference on Education and Management Technology*, 13, 200-204. <http://www.ipedr.com/vol13/39-T00068.pdf>.
- [5]. Droe, K.L. (2012) Effect of Verbal Praise on Achievement Goal Orientation, Motivation, and Performance Attribution. *Journal of Music Teacher Education* 23(1), 63-78. file:///C:/Users/kc%20computers/Downloads/Effect_of_Verbal_Praise_on_Achievement_Goal_Orient.pdf.
- [6]. Doyley, R., A., and Thompson, A.E. (2020). The Influence of Stereotype Threat and Implicit Theories of Emotion on Gender Differences in Emotional Intelligence. *The Journal of Men's study*, 28(2), doi.org/10.1177/1060826520920878. <https://journals.sagepub.com/doi/10.1177/1060826520920878#>.
- [7]. Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.
- [8]. Gunderson, E.A., Dweck, C., Gripshover, S.J., Meadow, S.G., Levine, S.C., and Sorhegen, S.G. (2018). Parent Praise to Toddlers Predicts Fourth Grade Academic Achievement via Children's Incremental Mindsets. *Developmental Psychology*, 54(3), 397-409. https://www.researchgate.net/publication/321324956_Parent_Praise_to_Toddlers_Predicts_Fourth_Grade_Academic_Achievement_via_Children's_Incremental_Mindsets.
- [9]. Hindustan Times (2019). NitiAayog's School Education Quality Index: Rank wise list of states and UTs. Hindustan Times, Updated: Oct 01, 2019 14:37 IST. <https://www.hindustantimes.com/education/niti-aayog-s-school-e>.
- [10]. Kaur, S. (2014). A Study of Problem Solving Ability of Adolescents in Relation to their Emotional Stability and Personality Types. A Dissertation, DevSamaj College of Education, P.U, Chandigarh.
- [11]. Klein, G. (2016). Mindsets, what they are and why they matter. *Psychology Today*. <https://www.psychologytoday.com/blog/seeing-what-others-dont/201605/mindsets>.
- [12]. Lahon, S. (2015). A Study of Infrastructure Facilities in Secondary Schools of Assam State with special Reference to Sivasagar District. *Abhinav National Monthly Refereed Journal of Research In Arts & Education*, 4(8), 1-10. <https://abhinavjournal.com/journal/index.php/ISSN-2277-1182/article/.../pdf8>.
- [13]. Macnamara, B.N., & Rupani, N.S. (2017). Intelligence. *Elsevier*, 64, 52-59. <https://artscimedia.case.edu/wp-content/uploads/sites/141/2017/07/28125407/Macnamara-Rupani-2017.pdf>
- [14]. Maheta, P (2019) "A comparative study report on working condition of school teachers in private and government schools". Comprehensive Project Report, Masters of Business Administration, Gujarat Technological University, Ahmedabad. https://www.academia.edu/39767199/A_.
- [15]. Mangles, J.A., Butterfields, B., Lamb, J., Good, C., & Dweck, C.S. (2006). Why do beliefs about intelligence influence learning success? A social cognitive neuroscience model. *Social Cognitive and Affective Neuroscience*, 1(2), p. 75-86. <http://www.mangelslab.org/publications>.
- [16]. Park, D., Gunderson, E.A., Tsukayama, E., Levine, S.C., & Beilock, S.L. (2016). Young Children's Motivational Frameworks and Math Achievement: Relation to Teacher-Reported Instructional Practices, but Not Teacher Theory of Intelligence. *Journal of Educational Psychology*, 108(3), p. 300-313. <https://pdfs.semanticscholar.org/102b/7752d5fd0ff10957910b957d0cbe8fff07a6.pdf>.
- [17]. PSEB (2014-2017). Punjab School Education Matriculation Result Statistics. Academic Results Dashboard. <http://www.pseb.ac.in>.
- [18]. Rashmitha, K & Jasmine, K.S.S. (2018). A comparative study on public and private funded schools in Chennai. *International Journal of Pure and Applied Mathematics*, Volume 120 No. 5, 245-254. <https://acadpubl.eu/hub/2018-120-5/1/40.pdf>.
- [19]. Rasool, R. (2018). Academic Achievement of Government and Private Secondary School



- Students with respect to their School Environment. *International Journal of Movement Education and Social Science*, 7(2). https://www.researchgate.net/publication/331022111_Academic.
- [20]. SEQI (2019). Niti Aayog's School Education Quality Index: Rank wise list of states and UTs. *Hindustan Times*, Updated: Oct 01, 2019 14:37 IST. <https://www.hindustantimes.com/education/niti-aayog-s-school-e>.
- [21]. Talukdar, P. (2017). A comparative study on the teaching methods of private and Government schools of South Kamrup and its impact on students learning. A Thesis, Department of Social Work Assam Don Bosco University. <http://14.139.209.82:8080/xmlui/bitstream/handle/123456789/92/final%201.pdf?sequence=1&isAllowed=y>.
- [22]. Tucker-Drob, E. M., Briley, D. A., Engelhardt, L. E., Mann, F. D., & Harden, K. P. (2016). Genetically-Mediated Associations between Measures of Childhood Character and Academic Achievement. *Journal of Personality and Social Psychology*. Advance online publication. <http://dx.doi.org/10.1037/pspp0000098>. <https://www.gwern.net/docs/genetics/correlation/2016-tucker-drob.pdf>.
- [23]. Todor, I., (2014). Investigating “The Old Stereotype” about Boys/Girls and Mathematics: Gender Differences in Implicit Theory of Intelligence and Mathematics Self-Efficacy Belief. *Procedia - Social and Behavioral Sciences* 159:319
—
<323.file:///C:/Users/kc%20computers/Downloads/investigating-the-old-stereotype-about-boys-girls-and-mathematic>.
- [24]. Zhang, J., Kuusisto, E., & Tirri, K. (2017). How Teachers' and Students' Mindsets in Learning Have Been Studied: Research Findings on Mindset and Academic Achievement. *Psychology*, 2017, 8, 1363-1377. https://helda.helsinki.fi/bitstream/handle/10138/208864/PSYCH_2017072010534474.pdf?sequence=1.
- [25].

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