

Grit and Self-Efficacy on Growth Mindset- A Review Based Analysis

Buvana R. ¹ & Prashanth Talwar ²

¹ Research Scholar, Institute of Social Science, Srinivas University, Mangalore, India,
Orcid ID: 0000-0003-1761-428X; Email: buvanar@hotmail.com

² Professor, Institute of Social Science, Srinivas University, Mangalore, India,
Orcid ID: 0000-0003-0211-9446; Email: typras@gmail.com

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Orcid ID: 0000-0003-0211-9446; Email: typras@gmail.com

ABSTRACT

Purpose: *Grit signifies a student's competence that endures after stumbling academic blocks. The trait Grit is closely identified with mindset. Students who believe that their shortcomings result from their fixed mental models, find no use nor reason to attempt again. Individuals with such rigid attitudes are believed to have a fixed mindset. On the contrary, students with a growth mindset are more likely to be resilient and have more grit. On the contrary, individuals who are mentally tough and strong are likely to be considered to have a growth mindset. According to previous research, grit is a question of nature and nurture. People need to build a growth attitude in order to become grittier.*

Design/Methodology/Approach: *More than 100 research papers, articles, and journals were reviewed systematically to identify gaps, identify conflicts in previous studies, and for the purpose of foundation of knowledge on current topic. A systematic review of literature uses a meticulous and transparent methodology for research synthesis, with the aim of evaluating and, where feasible, diminishing bias in the findings. This review is based on careful and systematic scrutinization of the above-mentioned keywords and their combinations thereof. Electronic databases like Google Scholar, Research gate, Academia, Srinivas Publication and Mendeley/Elsevier with open access journals were perused.*

Results/ Findings: *The relevant reviews indicate that people with a higher level of a growth mindset exhibit an equally high level of self-efficacy than pupils who had a more rigid perspective. Several literatures suggest that grit is associated with improved participation and better performance in a school environment. Students with a fixed mindset have a strong notion that their innate intelligence is limited preventing them from reaching their desired goals. This results in a hopeless 'giving up' attitude with a deep-rooted fear of failure. Whereas a growth mindset person marches forward with confidence. Their thoughts and beliefs are controlled by them. They understand that every person is brilliant in their own way which can be built, changed, and developed over time with the necessary components of will and effort. Few studies highlight different intervention models to improve fixed mindset of students. Few other studies suggest that practitioners could find a difference in the increase of grit with effective and committed goal settings which eventually would lead to an increased level of mindset in the right direction.*

Originality/Value: *This study is a prequel for the original study on grit, self-efficacy, and mindset modification for the professional success of Industrial Training Institute Students. This intervention-based study has been recommended by few previous studies. In all originality, the experimental study would largely impact the young adults, their cognition and non-cognitive behavior with a developed growth mindset.*

Type of Paper: *Systematic Literature Review-Based Analysis.*

Keywords: Growth Mindset, Self-Efficacy, Grit, Mindset Intervention, Fixed Mindset, Vocational Education, ABCD Analysis.

1. INTRODUCTION :

School is a place where people can interact with one another in groups and individually. Learning about social roles and norm limits can be done in groups or individually. A process where educators and students come together interactively with the needed resources in a healthy learning environment is called Learning. As a result, such a learning environment plays a significant part in the educational process. Students are anticipated to thrive in the learning environment in order for them to follow the learning process and grow to their full potential and get the best outcomes. In order for the learning process to be successful, teachers, who are also educators, other students, and all other components are all involved. Based on Allardt's philosophy of wellbeing, school well-being was created. His philosophy describes school well-being as an aspect of a person's life that enables them to satisfy his fundamental needs. These needs are broken down into three categories such as having, loving, and being. This well-being in school creates success when the major components like Grit, Self-efficacy, goals, and motivation exist. This study's findings indicate that a person's degree of grit stands unaffected by differences in one's age, gender or place of education because grit is a personality trait that stems from being motivated intrinsically. This stays consistent with the findings that researchers determined over time with their series of interviews with different schools, which revealed that individual maturity rather than class or age determined a student's persistence. It is also well recognized that gender disparities, rather than factors like age, class rank, or place of origin, affect how well students are doing in school [1]. There are both internal and external elements that influence academic dishonesty, according to certain studies. This research identified the role that grit played when mediated hypothetically between dishonesty in academics and having a growth mindset. Academic dishonesty always declines in the presence of pupils who have high grit. Academic dishonesty was influenced by development mentality and was mediated by students' Grit which was inversely proportional to academic dishonesty [2].

In a first-year engineering students' study, a favorable correspondence between grit and academic achievement as well as a strong association between the growth mental setup and educational achievement was found. These findings highlight how critical it is for first-year engineering students to develop non-cognitive abilities like grit and a growth mindset because this is a pivotal year that lays the groundwork for one's professional future. Second, the students' better scores on the grit and mindset scales (in the Engineering Exploration course) suggest that the Project Based Learning approach has some bearing on the students' grit and has contributed to their heightened mindset. Results of the interviews show that the course's methodology and approach have influenced students' levels of grit and development attitude [3]. Another research hypothesized that a strategic mindset across three different studies indirectly predicted goal achievement. Participants performed on the task more quickly the more frequently they reported utilizing metacognitive techniques. As one might anticipate, all dependent variables of interest, including reported use of metacognitive methods, performance, and practice, were highly correlated with prior experience. This mindset predicted people's propensity to create and use metacognitive methods as they pursued difficult goals throughout the three-research involving 864 participants. Additionally, the more persons who reported engaging in such strategic conduct when pursuing goals, the greater progress they actually achieved in accomplishing their objectives across various spheres of life [4].

In a study to predict the outcome of undergraduate students, self-efficacy and mindsets were examined in addition to self-compassion and self-esteem. Multiple regression was undertaken to determine the results. General self-control was predicted by both ability mindsets and self-efficacy. The study demonstrated that general self-control was significantly predicted by both attitudes and self-efficacy. The students who control their behavior are those who think they can overcome academic problems and who also think learning comes from effort. There were no significant factors for total GPA; only self-efficacy predicted course grade. It would seem that acting in a way that makes achieving a particular grade in a course easier can be a result of having confidence in one's ability to do so [5].

2. OBJECTIVES OF REVIEW PAPER :

The objectives of this systematic review paper are:

- (1) A preliminary literature analysis on the intervention of a growth mindset module on vocational education students.
- (2) To identify the association between self-efficacy, grit, and growth mindset based on a literature review.

- (3) To analyze the proposed study using ABCD analysis.
- (4) To recognize other variables used in various kinds of literature related to this study.
- (5) To identify other research agendas related to the keywords such as “Mindset Intervention”, “Self-Efficacy”, “Grit”, “Vocational Training” and “Vocational education”.

3. MATERIAL AND METHOD :

A systematic literature review was performed on the theories of Dweck’s mindset theory, Bandura’s Self-Efficacy Theory, and Angela Duckworth’s Grit theory. An intervention that combined these variables were rigorously searched. It has been found that various studies and research were carried out primarily on academic achievement and other predictors for various outcomes by using the keywords listed above. This review is hence a cohesion of all such related articles to determine the research gaps in order to intervene the ITI children on their mindsets.

4. REVIEW OF LITERATURE/ RELATED WORKS :

Diverse literature is found to be available for the keywords such as “Growth Mindset”, “Self-Efficacy”, “Grit”, “Mindset Intervention”, “ABCD Analysis”, and “vocational education”. Search engines like Google Scholar, Shodhganga were primarily looked into for relevant studies for the period of 2015-2022 (present). Pubmed, Elsevier/Mendeley, Srinivas Publication, Science Direct were also explored. One particular relevant study from 2011 was also taken into consideration. However, the majority of the studies cited in this paper, range in the recent three years.

4.1 Grit, Mindset and Education:

Kim, K. T. (2020) [6], used a correlational study of 573 high school students (17yr old) in Korea to investigate how academic grit mediates the ramifications of growth mindset on educational exhaustion. Self-Report measures of grit, growth mindset and burnout scales were used. Data was analyzed through the structural model which showed that having a development mindset acted as a predictor in an elevated level of grit in a classroom environment, which in turn lowers academic exhaustion. When the students employ their mental state for growth, instructional grit acts as a mediator in lessening the pedagogical and intellectual weariness.

Larberg, J. L. (2021) [7], this correlational study of N=75 school counselors, This study reviewed and studied the growth outlook and mental strength of the educational mentors by themselves or as a group displayed a recurrence of Programmatic Service Delivery (PSD) activities. Consequently, the perseverance and growth perspective of school counsellors may be helpful in improving their capacity to carry out a Impact of Comprehensive School Counselling Program (CSCP) on academic and emotional well-being of students expansion in the educational environment.

Min-Kyu Cho (2020) [8], 815 primary school pupils in grades 5 and 6 from the Korean office of education participated in the survey. Multi-group analysis and latent mean were utilized in the analysis. According to childhood attachment style, the results showed substantial differences in mentality, grit, and self-directed learning ability.

Kannangara, C. S., Allen (2018) [9], this mixed method approach was conducted with 440 University students and determined three different study results. Grit, self-control, and mental health were all measured, as well as resilience and mindsets. Previous studies' understanding of the connection between grit and resilience is constrained since they do not treat the two concepts as distinct measurements. However, studies that take grit and resilience into account separately have discovered a negative association between the two traits.

Polirstok, S. (2017) [10], this review of literature studied how for students of any age, the notions of grit and mentality are crucial. However, having a growth mentality and being tenacious can have a big impact on a teen's future. Secondary school teachers must be able to use some of the wide arrays of tactics suggested in the study in order to accommodate an enhancement of the student’s performance in class and to show interest in risk-taking.

Kaya, S., & Karakoc, D. (2022) [11], 225 fourth grade students from Turkey were studied in a cross sectional causal model for math mindsets and its relation to academic grit. Structural Modelling Equation Modelling Analysis was used to determine the direct relation to academic grit to math mindset and the ancillary impacts of the two different mindsets in fulfilling math requirements. Academic grit

served as a significant and beneficial intermediary between the growth math mentality and math achievement, while the fixed math mindset had no such intermediary effect.

Yazon, A. D., et al (2021) [12], this descriptive-correlational research design studied 155 teacher trainees from a couple of Asian countries out of which 111 had a growth mindset and 44 had fixed mindset. The grit and adversity quotients of children with a growth mentality were assessed to be more than children with a rigid mindset. This study came to the conclusion that mindset and the adversity quotient are significantly linked.

Muhibbin, M. A. (2021) [13], this reviewed the literature for a five year period from 2016-2020 in Indonesian academic setting demonstrated a positive association among grit and mindset of growth in addition to other variables. Google Scholar and Science Direct majorly contributed to this study.

Berga, L. (2021) [14], had an organizational study with 338 employees of various cadre out of which 88% were females. This resulted in Grit predictive of subjective job performance through regression analysis while other traits like growth mindset, self-efficacy, and goal orientation were potential predictors for job performance.

Ciaccio, J. B. (2019) [15], this mixed method approach was explanatory in nature and followed a sequential pattern. This consisted of methods being subjective and quantifiable. Standard descriptive data analyzed correlational and parametric statistics. Equal number of male and female from a total of 366 undergraduate students partook in the program. Only 10 students were involved in the qualitative study. The impetus of this research was to explore the connections between self-reported exercise behavior among college students and the non-cognitive character traits of resilience, positive mental attitude and being self-efficacious. The result showed that there was poor but positive correspondence between resilience, mindset and activeness.

Table 1: Studies on Grit and Self-Efficacy on Growth Mindset

S. No.	Focus	Contribution	References
1	Identifies grit and goal development among high schoolers.	Combination of grit and goal influenced academic achievement but grit level was weak	Tang et al., (2021). [16]
2	Impact of self-regard on middle schoolers	Self-esteem on Grit significant; grit and enthusiasm associated with achievement significant	Kim et al., (2021). [17]
3	Influence of grit and determination on mental anguish	Grit-consistency of interest- negative relation (more grit-less distress) with mental anguish-negatively significant (grittier- less depression)	Zhang et al., (2018). [18]
4	Impact of grit on career flexibility	Resilience is a positive predictor for career adaptability. Self-efficacy and goals mediate the effects of Grit on adaptability.	Li et al., (2021). [19]
5	Examine grit, temperament and job engagement as a mediator	An unswerving increase of Grit and personality cause direct increase in the job performance of OCB.	Puteriet et al., (2020). [20]
6	Grit and academic attainment among graduates	Healthy learning environments help build newer learning strategies with resilience, and self-efficacy	Alhadabi et al., (2020). [21]
7	Conviction and mindset towards exercise among adults	A positive relationship was found between and among the variables.	De La Cruz et al., (2021). [22]

8	Examine the concepts of goal attainment and grit	Non cognitive variables like Grit and Self-efficacy must be given its due attention.	Han et al., (2021). [23]
9	Association between grit and convenient e-learning usage.	Increase in Self-confidence increases Grit which indirectly increases self-efficacy.	Malureanu et al., (2021).[24]
10	Relationship among grit and second language speakers	Significant association between Grit and beliefs about studying and related execution was found.	Shehzad et al., (2022). [25]
11	Connection between demography and achievement	Educational self-efficacy and anticipation were significant predictors but not grit.	Dixson et al., (2016). [26]
12	The role of academic achievement and grit	Both are strongly interrelated. Confirmatory factor analysis, multi group analysis were calculated using SEM	Oriol et al., (2017). [27]
13	Association between public recognition and accommodation among schoolers	Grit is negatively linked to parental control and social competence.	Ma et al., (2020). [28]
14	Alumni's sharing success of language proficiency	Goal-oriented and long-term commitment pointed to Grit in addition to other traits.	Andrade et al., (2021). [29]
15	Welfare of students with grits mediating effect	Many reviews quoted have pointed Grit as a distinctive feature.	Han et al., (2021). [30]
16	Motivation mediating between grit and mindset	Provides insights into the topic. Only moderate mediation between motivation and grit.	Zhao et al., (2018). [31]
17	Brain activity and the belief of	Resemblance and association between grit and mindset were likely due to sample size being small. Only 20 healthy native American speakers were studied.	Myers et al., (2016). [32]
18	Neuro-development intervention on the mindset of teachers.	Beliefs significantly increased after the sessions on neuroscience.	Gutshal et al., (2020). [33]

4.3 Self-Efficacy, Mindset and Education:

Edokpolor, J. E. (2017) [34], this quantitative survey research investigates the role of vocational education teachers in career development in a lifelong leaning self-efficacy.

Güdel, K. (2019) [35], this resulted in services for career information can significantly contribute to students' self-efficacy in lifelong learning.

This empirical study analyzed the data of 480 students from Switzerland about their desire and curiosity in the technical design field. The study resulted in boys being more interested in the technical field than girls. Fida, R., et al., (2018) [36], in this longitudinal study, moral disengagement and self-efficacy were studied for students' behaviour to cheat in exams. Regulatory self-assuredness pertains to perceptions of people's capacity to fend against peer and internal pressure. There is moderate association

significance between emotional reasoning and efficacy in business. When emotional reasoning was less, the efficacy variable was more among 529 Chinese Vocational education students [37]. In a sample of 1434 Austrian students, their perception of five different subjects acted as a mediator in two different outcomes, goals and self-efficacy. For all five subjects, self-efficacy seemed to have the highest trait that the students perceived as a problem solver [38]. Another study used Augmented Reality to study the efficacy of the students themselves in learning the Hardware concepts for motherboard assembly. Mann Whitney U test found that there was a significant difference in the intervention between two groups. The help sought from the instructor and the time taken to complete the learning was much lesser after the intervention showed the impact of the role of self-efficacy [39]. A survey research method in a Vocational school in Malaysia measured the entrepreneurial self-efficacy and attitude of the teachers. Teachers from such schools found to have high competency and high entrepreneurial self-efficacy [40]. 195 VET students from Netherlands were studied for their motivated profiles. External regulation showed significant negative association with Self-efficacy [41]. Teachers content knowledge, Competence, Self-Efficacy acts as a major contributor to teacher’s excellence [42]. Entrepreneurship Ownership Scale was developed to study the psycho-social properties to Self-efficacy [43]. This experimental study aimed to restructure the Chemistry curriculum for teachers in a vocational setting. Their self-efficacy considerably improved after the intervention [44]. Self-Efficacy levels on Obesity and eating habits were studied among 220 healthy University Students. Normal women group were found to have higher self-efficacy than obese women group [45]. The comparison of the effect of the number of anatomy class’s self-efficacy beliefs between students from vocational schools and rehabilitation department were studied. There was significant difference when the questions were separated leading us to believe that the physiotherapy students had more classes in anatomy [46]. About 351 Croatian High School Students participated in the Self-Efficacy beliefs towards their professional domain choices. A stronger correlation was found between achievement outlook and elusive goals. Data was statistically analyzed for multivariate and determined the above usage of variables as predictors. This could help in designing better intervention programs for student’s career guidance, etc. [47]. Self-efficacy has been tested and validated in a questionnaire in the culinary field. This study analyzed the Occupational Self-efficacy questionnaire on the cooking abilities on the 16 items scale was found to be valid [48]. The primary class students for communication and technology literacy against mediators like self-efficacy, gender, income level of the family. The literacy was found to be greater among girls more than boys. It significantly increased based on the sample size and the income levels [49]. Career decision-making Self-efficacy for better career outcomes had a significant career sustenance career success criteria clarity on low socio-economic status [50].

Table 2: Growth Mindset and Previous Intervention Studies

S. No.	Focus	Contribution	References
1	Longitudinal Empathic intervention study	49 teachers and 4915 students in a longitudinal study mitigated the middle schoolers’ suspension rate	Okonofua et al., (2022). [51]
2	Intervention study in developing 6 non cognitive skills among University Students	Divided into three groups. 174 male and female students from different majors. Semi experimental approach. None of the groups were found significant in changes.	Gheith et al., (2017). [52]
3	Intervention program on middle schoolers showing no effect	130 7 th grade students, 80 minutes session in 14 weeks. Behaviour alone seemed to have changes.	Balan, et al., (2022). [53]
4	Change in grit and gratitude after intervention program among therapists	Used mixed methods with 24 Occupational therapy students for once a week for 10 weeks intervention program. Growth mindset was not effective. However, Grit showed increases resilience, self-awareness, etc.	Mattila et al., (2020). [54]

5	Self-efficacy and other factors	Two hundred and odd adolescent girls participated. Their overall physical activity was mediated by self-efficacy.	Verloigne et al., (2016). [55]
6	Growth Mindset as an independent variable	126 students with learning disability. Found no significance in self-efficacy between two groups. Significant increase in the growth mental state.	Rhew et al., (2018). [56]
7	Growth mindset outdid fixed mindset in a quick intervention study	Experimental research showed 3-9% increase in fixed to growth mindset showing sustainability.	Bostwick et al., (2018). [57]
8	Intervention on mindsets of special education students	“Growth factory” intervention was effective with borderline intellectual disability	Verberg et al., (2018). [58]
9	Cultivate Growth mindset	Qualitative study of 875 chemistry students showed positive association between academic achievement and mindset	Limeri et al., (2020). [59]
10	Growth mindset, grit and self-efficacy crucial for social projects	Intervention helped in lowering the bias on gender stereotyping and significant association was found between the experimental and control group.	Schleider et al., (2018). [60]

5. CURRENT STATUS & NEW RELATED ISSUES :

Various studies have explored academic success, achievement, and performance from primary to post-graduate education. Self-efficacy, Grit, Mastery of goals and other cognitive and non-cognitive traits were used in quasi-experimental, qualitative, quantitative, exploratory, and explanatory studies. Few longitudinal studies have also yielded significant results. Studies have shed light on multiple-level systems that give South African youth, chances to develop their personality in decision-making that affect them and their communities (Waller, C. 2016) [61]. Teachers have difficulties in addressing the needs of the primary class children in Mathematics given the diversity that exists in Australian schools (Bobis, J., Russo, 2021) [62]. Mental health intervention on academic achievement and subjective well-being was experimented (Venturo-Conerly, K. 2021) [63]. Students exhibit lesser of a growth mentality sentiment and elevated sense of belonging compared to their peers. The reasoning behind being effective mindset interventions which comprised of a belongingness among social circles which were successful despite being at peril population (McPartlan, P. 2020) [64]. These studies and the reviews above indicate that several studies have considered varied issues relevant to the present children’s and youths’ mindset.

6. IDEAL SOLUTION, DESIRED STATUS & IMPROVEMENTS REQUIRED :

Development of non-cognitive competencies is a key component of this intervention program since research shows that doing so fosters leadership, which fosters a predisposition for action and lifelong learning out. Specially designed Intervention program was used to evaluate changes in non-cognitive skills. Interviews found that teachers had a growth perspective for their students' mathematical learning, emphasizing letting pupils experience failure and appreciating difficulty while working to create a community of learners. Results from the Shamiri intervention would be disseminated throughout. Every study has limitations and scope for further research which is observant based on the above reviews of relevant literature.

7. RESEARCH GAP :

The relationships between improvement in the development of non-cognitive competencies, experience learning, and life destination require more study. Small sample size of 10 teachers is not sufficient for

generalizing the study to a larger population. Research in Shamiri growth mindset interventions in character strength could compare its effectiveness to CBT. Further research required to promote additional ways in promoting mental health. Researchers need to have an open approach to designing interventions before assuming or concluding the insignificance of such interventions. Precise hypotheses need to be framed according to the interventions before implementing those designs. Gaps still exist among varied studies in the field of non-cognitive and cognitive behavioral studies.

8. RESEARCH AGENDAS BASED ON RESEARCH GAP :

- Growth mindset is not only about effort but they need to try new strategies and approaches. This will help close the achievement gap [65].
- Bates (2019) [66] and colleagues despite several attempts of trials to replicating Dweck's theories, have not been successful in their experiments. This study aims to bridge the gap by studying the growth mindset in a vocational school setup.
- Yeager and Dweck's (2015) [67] Studies have yielded successful results being mindful of some of the failures. Magazine article confirmed that the test became successful with a large sample size. It is pertinent to be cognizant of other variables and contexts at play. Setting such context to meet the needs of the study will bring about results that may prove to be successful.
- Several research papers indicate grit as a successful predictor (Buzzetto, 2019) [68]. Grit will be perceived as a predictor in this study for an intervention program.
- Ronnel (2021) [69] Decades of studies have resulted in the variables as a cognitive and non-cognitive trait. However, the relevance and association to SES has been frugal in nature. Growth attitude solely predicts success among wealthy students: exploring the relationship between socioeconomic position and mindset. This study aims to see if the results show any difference or lay in line with previous studies.

9. ANALYSIS OF RESEARCH AGENDAS :

- Based on the research agenda, a pilot study was conducted with small sample size.
- Results showed a significant association between the variables.
- The association between Socio economic status and growth mindset was in line with the above mentioned studies.
- Students from the vocational school showed interest in the chosen topics

10. FINAL RESEARCH PROPOSAL/PROBLEM IN CHOSEN TOPIC :

The research topic intends to measure the impact of grit, self-efficacy as an intervention model in the mindset of vocational educational institution students.

11. ABCD ANALYSIS OF CHOSEN RESEARCH PROPOSAL :

Advantages, Benefits, Constraints, and Disadvantages are abbreviated as ABCD. An orderly list of advantages, benefits, limitations, and disadvantages is produced as a result of applying ABCD analysis. The entire framework is separated into different concerns and areas of attention, and each issue may be used to discover and analyze different deployment aspects that have an impact on the business or concept. Despite being straightforward, this method of analysis provides guidelines for determining and evaluating the viability of any research model and newly produced concepts [70]. This ABCD framework has been applied to study the academic competencies in relation to entrepreneurial mindset. Different issues get dissected in this model for all the gaps in the curriculum and other areas [71]. This study is significant because it offers an integrated perspective on ranking strategy analysis within the context of an organization, academia, student, professor, administration, infrastructure, educational resources, and problems with other stakeholders [72]. This study used a focus group method to analyze the STEAM model (Science, Technology, Engineering, Arts and Maths). The advantages outweigh the constraints and disadvantages [73]. Task Shifting is a policy that is highly efficient which provides quality service supplied at a certain cost to improve the quality of the healthcare services [74]. Research Indices are used to measure the quality and effectiveness. The effectiveness is measured either by the number of research papers or the number of citations [75]. This study shall be analyzed using the ABCD framework as follows:

Table 3: ABCD listing for different determinant issues

Determinant Issues	Advantages	Benefits	Constraints	Disadvantages
Student Issues	Intervention successful on students	9 th graders showed increased interest and control.	Quality of experience in Science classroom	Control group showed decline of interest. [76]
Intervention Issues	Developed Interventions to influence mindset	Large gains in academic achievement	Inadequate Study Design	Reports flaws and bias. [77]
Psychological Issues	Learn statistics with growth mindset	Reduce anxiety	One time mindset intervention	Control group had an increase in anxiety scores. [78]
Medical Mindset	Adopting Strategies to change fixed mindset	Able to face failures	Negative feedback means not tried hard enough	Skills re-evaluation. Able to review feedback about medical errors. [79]
Organization-management issues	To tackle company challenges with global mindset	To observe and interpret the dynamic world	Tackling emerging complexity and ambiguity	Selective absorption and interpretation [80]
Curriculum Issues	Faculty Mindset Cues	Growth mindset resulted in equal gender performances	Stereotyped threat	Undermined women's performance [81]
Educational Context	Incremental theory increased the GPA	IQ and personality beliefs increased	High Grit decreased a motivation.	All positive changes disappeared [82].

12. SUGGESTIONS TO IMPLEMENT RESEARCH ACTIVITIES ACCORDING TO THE PROPOSAL :

- Research can be conducted at educational institutions that are actually in need of changes in the mindsets of students. Interventions can be altered to the needs of the institutions.
- All male and all female-only institutions can be considered as potential options for a comparative study.

13. LIMITATIONS OF THE PROPOSAL :

Based on previous studies, students in vocational education have not been intervened for a growth mindset. Industrial Training Institutes have been the focus of study for varied field of study. The dynamics of such a group of students have limited focus in an Indian context. The intention of the establishment of such institutes could be rethought and reworked based on the research by some authors. The role of socio-economic status also is limited in terms of changing the mindset of students.

14. CONCLUSION :

This Review of literature has covered an array of fields where the intervention of a growth mindset module has experimented with primary, middle, high, and undergraduate students from different vocations have been tried and tested. During this journey, gaps in research have been identified on self-efficacy and growth mindset; also identified a research gap on grit and growth mindset based on a literature review. Other research agendas related to the keywords above have been identified. Can this idea benefit an Indian setting? Interventions to develop growth mindsets in different contexts in an Indian setting can be explored. This is an original, honest attempt at gathering different reviews related to my topic of research. This potentially could add value to the existing literature by providing a working

intervention model that can bring about change in the mindset of vocational education students. This mental and physical empowerment will make them better equipped for job or business opportunities.

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