Changes in Teacher's Growth Mindset as the Grade Level Increases: A Case Study

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Abstract

Purpose: To create a growth mindset, it is necessary to understand the school mindset. Only then will the administration be able to develop and improve the school's culture. The "What's My School Mindset?" WMSM survey is now frequently utilised in schools to better understand student attitudes and which elements need to be improved. Therefore, it is aimed to carry out this research in my region so that it becomes standard in Asian school culture.

Methodology: Teachers and school officials from a private school in Karachi's District South participated in this study. A total of 125 faculty members were on staff, including sports staff and visiting academics. The 20-item Likert-style measure in the WMSM tool asks participants to assess things on a scale based on their level of agreement. This exploratory study used SPSS to do association analysis using multicultural relevant, organisational learning factors from the literature that were found to influence superior school results to evaluate the content validity of the school growth mindset construct.

Findings: This study discovered that there is no significant variation in fixed mentality teaching levels among groups. However, according to the instruction level, there is a mean difference between the growing and fixed mindsets. The correlation test was used to look at how the variables of instruction level, growth mindset, and fixed mentality interacted. Because the significance value was more than the 0.05 bench mark value, the Pearson correlation demonstrated that there is no statistically significant link between teaching level, growth mindset, and fixed mentality. The hypothesis of this study was rejected based on these findings. The backdrop of school growth mentality, the invention of the What's My School Mindset? Test and the theoretical foundation of learning organisation theory are all discussed in detail.

Keywords: teacher's mindset, growth mindset, fixed mindset, school culture, school community.

Introduction

Psychological rehabilitation alters people's perceptions of their experiences and has improved in many societal and policy-relevant domains. Due to these treatments, people are given new beliefs, which motivate them to take on a problem rather than avoid it and persevere rather than give up. The treatments can enhance results months or even years later, depending on how well people put their ideas into practice (J. Hanson, 2017).

According to mindset theory, individual people have mindsets ranging from fixed, where intellect is perceived as constant and immutable, to development, where intelligence is seen as adaptable (Yeager & Dweck, 2020). The degree to which students' growth (vs fixed) mindsets affect their academic performance and eventual success in money management and job advancement. Fixed mindsets are thought to reduce motivation and, as a result, degrade performance, whereas growth mindsets are thought to increase motivation and resilience in the face of failure (Ng, 2018). Following Dweck's (2006) book, Mindset: The New Psychology of Success, interest in the notion of growth mindset, also known as implicit theories of intelligence, began to develop mindset as an intra-individual characteristic, absent of context (Cook et al., 2017; Dweck, 2015). Within education, students' growth mindsets have been mildly associated with individual outcomes irrespective of where and around the

students interact or how the mindsets themselves developed. For example, Sisk, Burgoyne, Sun, Butler, and McNamara (2018) found in a meta-analysis that implicit theories of intelligence can influence students' academic outcomes (Broda et al., 2018). They argue that students with low socioeconomic status and most academically at-risk students will most likely benefit from mindset interventions (Karaman et al., 2019). Given the dynamic nature of teacher-learner interactions, a natural next step for the field was to inquire into what contextual factors support or inhibit students' development of growth mindsets. Most research on mindset has focused on the student directly, exploring the possible effects that peers or mentors may have on mindset development (Karwowski, 2014).

Mindset is a notion that adds to educational leadership by conceiving a paradigm based on an empirically supported portrayal of belief systems that might affect the achievement of every student enrolled in public schools across Pakistan (Niqab et al., 2019). Government agencies, educational leaders, and researchers, on the other hand, keep on arguing about the factors constituting valid and accurate proof of school and student

improvement. Interestingly, research has found that notes conveyed by teachers affect their students' academic performance, which may be particularly important during transitions, such as from elementary to middle or primary to secondary education. Given this awareness of teachers' potential impact on their pupils and considering the number of times students spend with their teachers, this study seeks to examine the association between teacher mindset and the development of student mindset (J. L. Hanson et al., 2021). Specifically, we ask: is teacher mindset associated with developing students' mindsets in emergent to early adolescence (Dosi et al., 2018).

According to the attitude + supportive context hypothesis, instructors with a growth mindset may explain how errors in their class are learning opportunities rather than indicators of low ability and support this view with assignments and assessments that encourage students to keep improving. This could motivate a student to keep acting on their growth attitudes. Teachers who have a more fixed perspective, on the other hand, may use techniques that render a developing growth mindset inapplicable and locally invalid (Pathan, 2012). They

can remark, for example, that only a few pupils can obtain an A or that not everyone is "a math person." Such statements may lead children to believe that if they had to work hard or asked a question that exposed their bewilderment, their intellect would be adversely assessed, deterring them from engaging in crucial growth mindset actions (J. L. Hanson, 2020). The intervention, according to this theory, is similar to planting a "seed," but one that will not take root and flourish unless the "soil" is rich (a classroom with growth mindset affordances). Perhaps students are more like self-sufficient individuals who can succeed in any educational setting as long as they bring adaptable beliefs and exert efficient effort. As a result, teachers' attitudes may be unrelated to the intervention's success. Research might reveal even bigger benefits in a school guided by teachers who espouse a more fixed attitude. This would suggest that the intervention strengthens students' ability to accomplish (for example, by being less intimidated by challenging tasks, working harder, and enduring longer) even in situations when these behaviours are not explicitly encouraged. In this approach, a student's development mentality can be seen as an advantage that can compensate for the lack of resources in the classroom. A direct test of the attitude + supportive setting hypothesis was required since no study has looked into classroom context modifiers of the growth mindset intervention.

Background of the Study

As a coach, trainer, and mentor, I encountered teachers who were either willing to face challenges and accept changes introduced to them or unwilling to change. Such individuals who are thrown to bring change in the environment struggle to bring about the change around them and within themselves. According to Dweck (2012), such individuals either cope with failure or cannot cope with failure; rarely do you see individuals loving failure or love challenge or change. Many studies explained why school culture fosters such attitudes among colleagues, staff, and students. The five contributing factors, open communication, shared leadership, clear vision and school strategy, professional collaboration, and care towards and trusting that all individuals can produce and absorb, do not represent the fundamental factors presented in the questionnaire, provide the overarching concept of 'What My School Mindset?'. More such research is much needed in this

part of the region, where the upbringing of Asian children is still vastly traditional and old school. Parents are more on the lines of disciplining and taking decisions for their children's rights starting from their childhood (Claro et al., 2016).

This research is adopted from the "What's My School Mindset?" (WMSM) The survey was from a stratified random sample of PK-12 faculty and administrators of a private school in Karachi, Pakistan. The findings of this study can be used to create openings for better communication and feedback to change the teachers' viewpoints. To improve future practice, it will also provide additional genuine ways to apply tools and strategies by using study-based suggestions to test norms and give thorough details to apply in the Asia region currently.

Background of the Tool Used for School Mindset

The website of Mindset Works, Inc. offers many survey tools to detect the school's cultural concept of a growth mindset. In the study by S. Rodriguez (2015), a questionnaire of the 20-item tool was made to evaluate a school's atmosphere. This team consisted of curriculum specialists, researchers, and teachers who have experience in mindset

and how to apply it. Blackwell (2012) develop the WMSM questionnaire claiming to place the five vital categories of the growth mindset of school culture. Many teachers and administrators around the United States reported reports of their school culture in the study of Mindset Works, Inc. (2015). Then using the outcomes of their responses, recommendations are made for faculty training, intervention curriculum, and faculty received directions to develop a culture of growth mindset within schools (Mindset Works, Inc. 2015).

Statement of the Problem

Many types of research have provided a significant change in the student's achievements if the school culture exhibits a growth mindset among the teachers. It is important to know the school mindset to cultivate a growth mindset. Only then can the administration build/improve the school culture. WMSM survey is now widely used in schools to understand the school mindset and which factors need improvement. I want to conduct this study in my region so that it becomes the norm in Asian school culture as well.

Objectives of the Study

- To find out the relationship between

the teaching level, growth mindset and fixed mindset.

- To find out the differences between the different teaching levels of groups about fixed mindset and if there is a mean difference between the comparison of a growth mindset and a fixed mind according to the teaching level.

Research Aim

This study aims to examine the factors highlighted in this WMSM survey and analyse the interconnection between the items on the scale. This study will provide insight into the variables that affect school culture and can guide administrators to assist teachers in believing in helping students learn and grow.

Hypothesis

H01: There is no significant correlation between the teaching level, growth mindset and fixed mindset.

Examining whether teachers' growth mindset decreases as grade level increases. The researcher will be testing whether the growth mindset decreases as the grade progresses. Depending on the grade level, the growth mindset increases or decreases. The independent variable is grade level, and the dependent variable is

the growth mindset.

The primary research question is; "What is the underlying factor structure of the WMSM scale?". According to Blackwell (2012), the five factors, open communication, shared leadership, clear vision and school strategy, professional collaboration, and care towards and trust that all individuals can produce and absorb, do not represent the fundamental factors presented in the questionnaire.

Scope of the Study

More such research is much needed in this part of the region, where the upbringing of Asian children is still vastly traditional and old school. Parents are more on the lines of disciplining and take decisions for their children right from their childhood (Mansoor, 2015). This research is adopted from the "What's My School Mindset?' (WMSM). The survey is from a stratified random example of PK-12 teachers and administrators of a remote school in Karachi, Pakistan. Early research looked at whether students had fixed or developed mindsets and their reactions to failure to see how these mindsets affect accomplishment over time. Students who reported having a fixed attitude were more likely to have a powerless reaction to failure, viewing failure as an unchanging

lack of competence. They were also more disposed to show signs of depression. When given the option of choosing their activity, this set of pupils picked easier activities to demonstrate competence and rebuild self-esteem. Students with a growth mindset, on the other hand, saw failure as evidence of an ineffective method or approach, and they were able to maintain a positive effect, try new tactics, and stay interested in challenging work. These mentality variations are more likely to matter when pupils struggle or fail. Extending the notion of growth mindsets to social and health dimensions might help teenagers achieve goals other than academic accomplishment. Adolescents who believe that social adversity is caused by fixed traits—such as being a bully or a loser—are more likely to respond to peer conflicts with aggression, and they also experience more stress and negative health outcomes over time than peers who presume social traits are mutable, according to Yeager and coworkers. Beliefs that body weight is largely fixed or that being a smoker is essentially fixed influence health actions and motivations linked to dieting and smoking in health decision-making (Yeager & Dweck, 2020). The findings of this study can be used to

create openings for better communication and feedback to change teachers' viewpoints. To improve future practice, it will also provide additional genuine ways to apply tools and strategies by using study-based suggestions to test norms and give thorough details to apply in the Asia region currently.

Literature Review

The advancements and developments in theoretical learning models have offered a solid ground for the study as well as the formulation of mindset theory. The models that the researchers have developed and proposed for explaining individual learning procedures include the work of Watson, Skinner, and Pavlov's work in Behaviorism, Vygotsky's cognitive, sociocultural learning model and zone of proximal development, Piaget's theory of cognitive development, and Bandura's cognitive, social theory (Furedy, 2003; Mahn, 1999; Watson, 1980). The conventional outlooks regarding the mind were used to be conceptualised at the individual level. For instance, Kant (1787/1999) professed that the mind has constructed the individual's reality, commencing the idea of the constructivist school of thought (Clark, 2018). On the

other hand, Hegel studied and explored the phenomenon of the impacts of social groups on individual thoughts. In a similar vein, Marx took a step forward and made advances to the theory, including the societal paradigms and related it to the inception of individual thoughts. By further stretching the concept of social involvement from diverse aspects, the educationalists like Vygotsky and Dewey familiarised the notion of the trade-off of the social environment on individual learning. Likewise, Hong et al. (2000) implied "ways of knowing" that ensue from cultural differences, "individualistic as opposed to collectivist value orientations" (p.709). One of the most effective and proper distinctions between body and mind was proposed by René Descartes. However, still, the present organisation theories depict an organic model as against a mechanistic or reductionist model.

The idea of learning as a socially constructed and dependent process of knowing and comprehending was termed as "new ways of learning" and "new ways of thinking" by Collinson and Cooke (2007) in terms of both explicit and implicit and explicit procedure (Weegar & Pacis, 2012). This description later became a basis for understanding and expanding the social

cognitive theory of Bandura as well as its triadic model of "reciprocal influence" of human cognition, environment, and impact of social modelling on learner's behaviour. One of the most influential and renowned works concerning social cognitive theory was done by Bandura, which was a collection of 21 experiments also regarded as the "bobo doll experiment". Bandura conducted an observational study where the subject was found to be acting aggressively toward a doll after witnessing an adult model involuntarily performing the same behavioural pattern. The primary outcomes of this work implied that individual learning is considerably impacted by social influence and through self-monitoring and imitation (Kompa, 2015). The concept of mindset presented by Dweck (1986) is also intensely entrenched in the social theory's frameworks and history. In the same way, organisational learning theories, i.e., those proposed by Hawthorne Experiments, continue to convey and inform concerning the reciprocal influence of individuals and social groups that substantially influence the behaviours, choices, as well as individual and group beliefs.

Definitions

Social Cognitive Theory (SCT): this framework explains how people absorb and

perform through a give-and-take influence from spotting the performance of others, social environment effects, and internal physiological and cognitive factors (Bandura, 2001).

"...The core of humanness" is one's own agency to work within a set of societal influences, according to Bandura (2001). He defined "agentic" as the ability to "make things happen by one's own acts" in his cognitive social theory. Individual agency and personal growth are explained in great part by self-efficacy and collective efficacy. Rather than reacting automatically to stimuli, Bandura emphasised that how one responds is impacted by one's own beliefs, feelings, and biology. He recounted how the person built an unusual mental picture of his experiences. Agentic action was defined by its ability to plan (intentionality), establish goals (forethought), motivate and self-monitor (self-reactiveness) and effectiveness (self-reflectiveness). The ability to handle fortunate occurrences, or socially mediated events that happen by chance, is a key component of human agency. According to Bandura, an individual's beliefs, traits, interests, and competencies determine how they behave and the choices they make in the face of

adversity. Personal, proxy and communal human agency are the three categories of human agency defined by Bandura.

Individual Mindset: Dweck (1986) constructed the individual personality theory. In this theory, Dweck (1986) defines that individual attitudes, or beliefs, result from individual mindsets and how the world works around these individuals' behaviour and decisions. Individuals use social behaviour to achieve their goals. The human agency also includes acting on behalf of others or collectively (Lee et al., 2010). The ability of people to act collectively or on behalf of others relieves the weight of individual responsibility and widens the concept of human agency to collective agency (Masters, 2014). An "emergent" idea of collective effectiveness evolves as people engage transactional within a social structure. Collective efficacy is a distinct collective concept that is not equal to total individual self-efficacy (Yin, 2021). The group's conviction in its collective efficacy functions in the same way that self-efficacy works for an individual. The readiness of a group's collective efficacy to set greater objectives, endure in the face of failures, and have improved drive, according to research on team effectiveness. Individual and group

efficacy beliefs play a significant role in the literature that explains the mindset and organisational learning theories. The next part explains how the person and the social system are intertwined. They were not considered separable by Bandura (Andresen & Bergdolt, 2021).

These models stressed learner agency, but they lacked construct development in the area of the impact of social interactions on a learner's decision to engage in new information. Weiner's (1986) information processing model advanced a mechanical model of the brain as the computer became more complicated. However, his model disregarded concerns about the human effect. Bandura's (2001) cognitive social theory included affecting as a key component. Recent research has focused on the psychosocial aspects of learning that lead to knowledge acquisition. Knowledge Vee was inextricably linked to Novak's work, which was based on Ausubel's model. Mind maps, which have been demonstrated to facilitate adjustments in individual hierarchal propositions, have been suggested as a valuable tool for measuring an individual's cognitive progress(Ausubel, 2012). Bruner's approach included the notion of distinctive cognitive structures and three stages of

cognitive capacity that were not based on age, similar to Piaget's developmental stages. Bruner's concept comprised three components: enactive, or the capacity to manipulate objects; iconic, or the ability to recognise pictures; and symbolic, or the ability to employ abstract language and reasoning. The notion of organisational learning and its relevance to the group mentality construct are discussed in the next section.

School Growth Mindset Culture: Collaborative planning, shared leadership, open communication, and peer support are among the criteria identified by WMSM in this study (Hanson 2016). As a result of these variables, the school development mentality emerges, with shared beliefs, values, and a shared vision (Blackwell, 2013). He defined a system's structure as "a dynamic interaction between people and those who preside over the institutionalised activities of social systems," as well as a model of reciprocal causality (J. Hanson et al., 2016). As a result, his study revealed that the system's structure and an individual's psychological attributes are not segregated into discrete and distinct components. "People attain the maximum personal efficacy and production when their psychological orientation is consistent

with the social program's structure," says the author. Bandura argued that fast technology improvements erode collective efficacy by altering how people and nations interact with their environment. The external world has altered our social future, which is impacted by media, mobility, and transnational economic and political interdependencies. He said that we must appreciate the importance of personal and group action in altering the group's environment for the greater good (Guidera, 2014).

Academic Mindset: According to Hanson (2015), the Project for Educational Research's Scales (PERTS) instrument identified four unique academic mindsets: belonging, progress through effort, success at classroom activities, and the classroom work required has worth. Some critics of the cognitive social theory paradigm argue that it can't be proven. The abstract aspect of cognition, which is inherently a creation of the mind, is emphasised by behaviourists and modern social psychology theory advancements in the fast-growing biotechnological sciences. Though numerous studies look at the practical results of cognitive theories, there has been little study done to examine the theory itself. According to Ogden (2003), survey

tools, questionnaires, or written replies from participants might influence or produce cognitions in the participants. When researchers ask a person during an interview, for example, they see it as a way to gather relevant data to test a theory. In another experiment, the same type of asking was proven to "prime" or impact the individual's cognition, which then influenced the subject's decisions and behaviour. Individual cognition, or one's intentions, has been used in recent psychological treatments in schools to modify behaviour. The subject's future conduct was found to alter when the researcher encouraged the individual participant to write his comprehension in a positive, deliberate manner. Alternative theories to cognitive and social theory are discussed in the next section. Seminal scholars such as Pavlov, Watson, and Skinner tried to uncover variables that may be exploited to influence animal behaviour under the behaviourism hypothesis. Although the stimulus-response technique lacked learner agency, it was eventually used in human psychology research. In classroom contexts, these models guided student behaviour in rote-learning activities. External control of the learner was fostered by the theories. Human

cognition becomes increasingly important in progressive models. Bandura's social psychology study was more focused on human information processing models than Piaget's prior cognitive theories. Cognitive meaning-making advocated classroom interventions that focused on an individual's internal knowledge production and mental map. His findings indicated that people be reevaluated to see how they feel about a topic before being taught new knowledge. In order to increase learning, Bandura stressed self-efficacy, agency, and modelling. Though the independent variables were visible beamtime, the human agency became crucial to the study of social theory.

Growth Mindset: someone with a growth mindset will believe in continuous learning and developing their skills and abilities. Such people believe that hard work and persistence can improve the mind and a person's talents (Dweck, 2015). A growth mindset has become the proper thing to have, the appropriate way to think, in many corners. It was as though educators had to make a choice: Are you an enlightened person who promotes the well-being of students? Or are you a closed-minded, uneducated someone who undermines them? As a result, many people

claim to have a development mindset. The way to a development mentality, on the other hand, is a journey, not a declaration. Consider what happens when instructors or parents declare a development attitude but fail to implement it. Kathy Liu Sun discovered in recent research that many math teachers accepted a growth mindset and even stated the words "growth mindset" in their middle school math lectures but did not implement it. Their students tended to have a more fixed mentality regarding their arithmetic competence in these circumstances. My study colleague and advisee Kyla Haimovitz and I have discovered that many parents support a development attitude yet react to their children's errors as if they are problematic or harmful rather than beneficial. Their youngsters develop a fixed view regarding their intellect in these situations.

Fixed mindset: when someone thinks they don't have a capability because they don't have what it requires, they are considered a fixed mindset. According to Dweck (2015), such people spend most of their spending proving their smartness rather than growing them. According to research, one's thinking has an impact on pattern recognition. Individuals with a

fixed mentality made more quick judgements and predictions about others than those with a development mindset, according to a landmark study, and they were prepared to do so with scant data from only one activity. Individuals with a fixed mentality may be faster (from the proposed learning agility standpoint) by making rapid judgements with fewer data, but they also risk generating less accurate pattern recognitions of the data viewed. When acquiring a new ability, pattern identification tends to be a struggle for those with a fixed perspective. Kray and Haselhuhn (2007), for example, looked at how students learned to bargain in a semester-long curriculum. They discovered that individuals with a development mentality were more effective over the semester at learning course contents, identifying effective methods, and obtaining greater outcomes than those with a fixed perspective regarding bargaining abilities.

School Cultural Mindset

Mattos (2016), in his research, that the beliefs, moral values, backgrounds, and practices are the one that rules, build norms, and work ethics emerges from them in any institute, especially in educational places. In her study, Tahira (2021) pointed out that Barth (1990) proclaims that principals should be considered cultural leaders in a school setting. The beliefs and values of any institute come from the governing heads, and these beliefs and moral values change with them. According to Hanson (2016), the review in literature expands the idea that social cognitive theory and learning organisation theory lend their hands to improve school learning culture. Current research reports that educational institutes' beliefs and values significantly affect their individuals, as seen in students' success (Dweck, 2021). In recent studies, many reported that if the investment is given in the professional development setup towards the growth mindset, then the difference in teachers' beliefs and values is observed, which has a long-lasting impact on the student and the overall culture of the school.

Pakistani Education

The awakening of educating the leaders and training them is progressing very slowly. After so many years now, there is a growing concern that if heads of running education departments in various institutes are not properly supported or have not been trained in their field, then the result of the schools are not effective. Because there is a drop in the quality of the

education that Pakistan offers compared to other countries, it is more important to look into the leaders' skills and how they contribute. In 2014 a survey was conducted by Pakistan Social and Living Standards Measurement (PSLM) that declared that the literacy rate for men and women is the lowest. For the man, it is 70%, and for females, it is 49% (Memon, 2007). Qureshi 2012, in her research, concluded that incomes consistently increase from primary school to secondary school. This also includes the shows difference in the increase in gender as well. She pointed out the percentage of females is higher than male teachers. In her research, she briefed on investing in tertiary education to improve most households' economic state. Investing in the training of females increases the minimal incomes compared to males (Jamal, 2015). In 2018, the worldwide cost spent on education was 4.8% globally. However, it's not more than 2.8% for Pakistan in terms of GDP.

On the other hand, the GDP of other countries like Bangladesh is at 4.6%, as the most recent year reported in 2016. In 2017 Afghanistan was 3.9% and 3.8% of the GDP of India, which the World Bank Data Sheet reported in 2019 para.1. Memon (2007) identifies the factors in Pakistani

institutes that fall behind and show poor performance: outdated syllabus, multi-languages, poorly trained teachers and corruption in examinations, and the high number of students in a class.

Policies in Pakistan

Pakistan policies have been focusing on different areas for the past 60 years, namely, providing free education to preprimary students, increasing the participation of students to 100%, catering to the need of female students in rural areas, etc. Policies keep evolving to improve the quality of public schools compared to private schools (Niqab, 2019). Up till now, Pakistan kept its focus on making the private sector participate in the public education sector and improving literacy. Still, Pakistan is heading fast to build teachers' capabilities through proper training and giving additional facilities to all developing areas of the education department, whether technical or vocational (Pakistan Bureau of Statistics, 2017).

School as Learning Institute

Schools are institutes that are constantly evolving and changing with the time needs and trends. Such schools are learning places where their capacity

increases, and teachers work independently and in groups (Senge, 1990). If the school's culture is on the learning side, the teachers are facilitated, and their performance and achievement increase. Therefore, student performance improves. (Usman, 2011). A good learning culture also encourages consistency in teachers' teaching, communication, and work performance, empowering them (Iqbal, 2021).

In his research, Iqbal (2021) highlighted that good learning places increase the confidence and motivation of teachers in any institute. He added that the skills are also constantly increasing in these teachers who work in a learning organisation, which produces the desired results. In his research, Garvin (2003) indicated that if the school's culture is not towards learning, the institute and people repeatedly keep repeating the same mistakes. They carry the same faulty methods forward year after year. Wartkins (1996) added that such organisations suffer, and fresh knowledge does not add to the learning.

Student Achievement as a Result

Watkins (1996) and Wood (2007) both brought the attention that questioning and communication allow the institutes to form a good satisfying workplace and encourage teachers' hard work. According to Akram (2018), having a concise attitude toward solving problems and improving teaching and teaching ability come mostly from the institute where discussions are open and shared.

The main plan to learn and teach is to see an increase in students' performance. This also lends its hand towards the accountability for the teachers to further the student skills. Many researchers have been interested in looking into school culture and the dependency of student results on it. Furthermore, if the school principal or a lead head successfully builds the learning culture, these teachers bring higher value and add quality to the standards. Akram (2018), in his study, presented a positive impact on teachers' independence in their class students' achievement. However, the relationship between school culture and student results needs to be explored in Pakistan. This study targets a small fraction of school culture in Pakistan through the WMSM survey.

Viewing School Leadership as the Foundation

In practice, it isn't easy to lay out the competencies of a leader due to the stark contrast between culture, human differences, and individual variations.

However, the impact of a school principal or school head is directly on the student's success. Many types of research have been conducted to give theoretical guidance, which looked into the evaluation of a leader, selection of a leader and its process and highlighting their competencies (Northouse, 2004). these studies are now coming quickly as the world understands the importance of a school leader and its impact on overall school growth (Tahira, 2021).

According to Northouse (2016), many diverse ideas of various leadership are defined by many, which is a challenge in itself. But denying the fact that leadership has a role in contributing to student achievement is undeniable. If leaders of the school and the rest of the public are all aligned with one goal under one umbrella, the results are phenomenal. Otherwise, the scattered and dispersed people running here and there reach nowhere.

School administrators and those whose everyday labour takes place in classrooms are all held accountable for their actions. With the current standard for women reform policies requiring standards, assessments, and public reporting, educational authorities – particularly principals – are facing a practical shift away from evaluating individual teachers as a measure of the school's productivity and toward evaluating themselves based on the assessed academic productivity of their students and, by extension, their teachers as a whole. School leaders who can swiftly connect their teachers' curriculum to the annual assessments are more likely to be considered successful, contributing to a new kind of school leadership. Under these extremely specific, high-stakes expectations, school leaders must bind classroom activities to state standards and exams rather than to the curriculum.

Improving the Quality of Education

Research has proven that the culture of any environment has a significant impact on an individual. The theory of Socio-culture by Lev Vygotsky (1896-1934) emphasises the interactions and what kind of interactions impact the learner's mind directly. This powerful influence comes from the environment, whether internal or external and sets the cultural norms. Bandura (2001) highlighted in his study that 'the well-being of the single person depends on their aim and the organisation's goals. The faculty's belief in working with the entire staff toward the student's progress depended on the school's culture

and collective values. The survey WMSM scale monitors this concept closely, in its 20 items defining school growth mindset. The study conducted on Leader's organisational citizenship behaviour in schools reported development in the school's culture (DiPaola& Hoy, 2005). According to Blackwell (2012), these social behaviour supports provided by the school are constant with the five categories of growth mindset within the school's culture.

Studies and theories on fixed or incremental mindsets indicate self-awareness processes of setting individual goals, similar to developing social support in an organisation (Baumeister, 2011). Using mindset interventions, a school leader can understand the importance of aligning individual goals with the institute's goals (Burnette, 2013).

Organisational Variables as Model of Learning

According to Thomas (1994), three learning occurs at three levels; individuals, clubs, and organisations levels. Figure 1 provides detailed visual key structures of learning group variables acknowledged at the individual, side, and organisation levels founded by Senge's five categories (200) model, Tarter and Hoys's (2004) open System appealing school structures model,

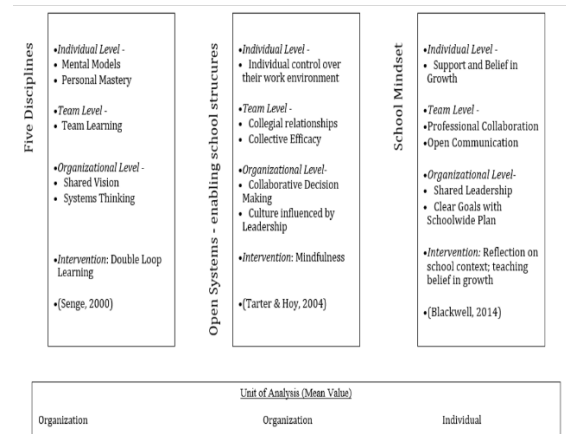and Mindset Works, Inc.'s (2015a-2015c) school growth model of mindset.

Figure 1. Comparable and Contrasting Organisational Learning Variables with School Mindsets

The Five Disciplines

According to Senge (2000), any organisation on a learning spectrum must have a few specific disciplines that include team learning, mental models, personal mastery, system thinking, and shared vision. The Leader's primary responsibility in the Five Discipline model is to provide interventions that promote the institute's progress into a growing association. Senge (1990) quoted:

> "... people are agents, able to act upon the structures and systems they are a part of. All the disciplines are, in this way, 'concerned with a shift of mind from seeing parts to seeing wholes, from seeing people as

helpless reactors to seeing them as active participants in shaping their reality, from reacting to the present to creating the future." (p. 69)

Senge (1999) argued that the traditional way of leaders is obsolete, where one special person takes decisions and sets directions or orders on what to do is outdated. He proposed a mental model similar to Dweck's (2006) mindset model. Both the individual mental models give the concept of a collaborative and collective network of individual and school mindsets within the organisation. His model promotes the process of reflection and inquiry, an important part of learning in all individuals

Open System Model

General System Theory (GST) goes as far as Von Bertalanffy (1950), who explains that the organisation is part of the whole system. An open climate is an organisation where every individual cooperates, respects, and shares between faculty and administrators. The Open System Model explains the factors of a supporting school structure, including principals and faculty working collaboratively towards one vision. Such cultures influence the leadership style of school administrators in their day-to-day

affairs (Tarter & Hoy, 2004). According to Hanson (2016), any school's cultural mindset is linked to an appealing internal school structure and differences in WMSM scores.

Acceptance of Change and Failure

Many coaches, trainers, and mentors encounter their students either willing to face challenges and accept changes introduced to them or unwilling to change. Such individuals who are thrown to bring change in the environment struggle to bring about the change externally and within themselves. According to Dweck (2012), such individuals either cope with failure or cannot cope with failure. Very rarely do you see individuals loving failure or love challenge or change? Many studies explained why school culture fosters such attitudes among colleagues, staff, and students.

Methodology

Study Design and Methods

This is a quantitative research study. The tool is used from the 'What's My School Mindset Scale.' It is a valid scale adopted from Mindset Works, Inc. (2015). The component structure of the WMSM scale was investigated using self-report responses from professors and

administration on a Likert-style survey. The WMSM scale's items were created to operationalise five major underlying latent qualities, or concepts, associated with school culture. The data will be gathered from the teachers and administrators of a private school in District South Karachi, Pakistan. The exploratory analysis will be performed using SPSS software.

Sampling

This study will include teachers and school administrators of a private school in District South Karachi. There are approximately 125 faculty members, including sports staff and visiting staff. On the other hand, the total number of administrators is approximately 20 adults. The overall survey responses gathered from WMSM were fed into the IBM SPSS[1] software program for statistical analyses. Using exploratory factor analysis, a model was proposed that can be tested against an estimated population model via confirmatory factor analysis.

Instrument

The WMSM tool of a 20-article Likert-style measure asks participants to rate items, using a scale, on their level of agreement. This scale ranges from 1 to 6 points (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree). Articles 6, 8, 10, and 19 are oppositely rated. All articles' variable means were determined as an overall mean for the replies of every participant. The higher the mean score on the sample, the more the individual responder was thought to believe his school exhibited growth mindset qualities. The WMSM scale, developed by Mindset Works, Inc. (2015), assesses teachers' perceptions of faculty participation in acceptance of change as a proper state of the school, decision-making, leadership, openness to feedback, continual improvements, knowledge exchange, practice communities, meeting participants' needs or working on finding strategies to meet them, career development, and school-wide pride. The study participants chose a scale level on the survey to represent their level of agreement with questions concerning their school culture.

Data Analysis Technique

A maximum of 95% response is expected from the included number of

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[1] IBM SPSS Statistics. https://www.ibm.com/products/spss-statistics

participants. This data analysis aims to provide the findings of empirical and statistical assessments of the WMSM scale's factor structure. The One-Way ANOVA was used to check the mean differences between all the groups of respondents. Pearson Correlation test was run to check the relationship between the teachers' grade level, growth mindset and fixed mindset. The first part of the results consists of demographics, and the second part consists of One Way ANOVA and Pearson Correlation test among variables using item descriptive statistics. The underlying factor structure of the WMSM scale was then investigated using an exploratory factor analysis using maximum likelihood extraction methods and an oblique rotation. A proposed factor structure model was constructed from the exploratory factor analysis data based on logic, theory, and a study review. Data will be examined through factor analysis (Field, 2000). Before this analysis, the data obtained will be analysed to evaluate the expectations of normality and lost data (Sandra Forsythe, 2003)

Data Presentation and Analysis

This section presents the results and findings of the study. According to Adam et al. (2008), the discussion and interpretation of the presented data of the study are more important because it brings a clear meaning to the research results and findings and avoids the distortions that mislead regarding the conclusion. In this study, the data was about the teacher's growth mindset as the grade level increases and teachers' fixed mindset increases as the grade level increases. The main objective was to analyse the relationship between the teachers' grade level, growth mindset and fixed mindset. The One-Way ANOVA was used to check the mean differences between all the groups of respondents. Pearson Correlation test was run to check the relationship between the teachers' grade level, growth mindset and fixed mindset. The first part of the results consists of demographics, and the second part consists of One Way ANOVA and Pearson Correlation test.

Descriptive Statistics of Demographic

Table 1. Gender.

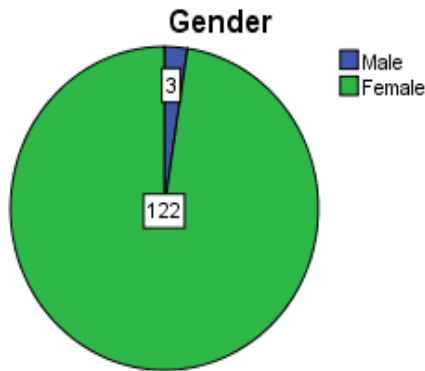| Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	3	2.4	2.4	2.4
	Female	122	97.6	97.6	100.0
	Total	125	100.0	100.0	

Figure 2. Gender Distribution across the Sample Population

Table 1 and Figure 2 shows the total number of participants, frequency and percentage of male and female. Therefore, it indicates that one hundred twenty-five (125) participants were included in this research study. Moreover, one hundred twenty-two (122) participants were female, and only three (03) participants were male. Hence, it revealed that the majority of the participants were female in this research study.

Table 2. Age.

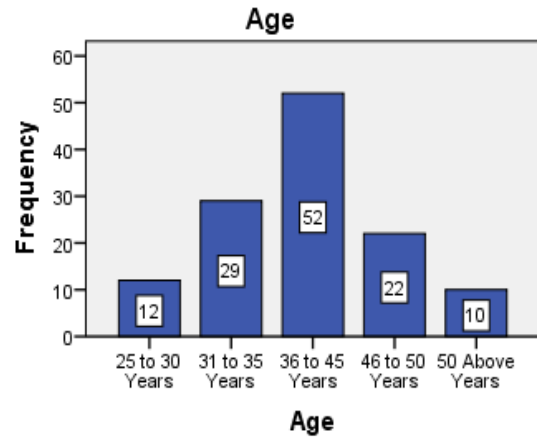| Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25 to 30 Years	12	9.6	9.6	9.6
	31 to 35 Years	29	23.2	23.2	32.8
	36 to 45 Years	52	41.6	41.6	74.4
	46 to 50 Years	22	17.6	17.6	92.0
	50 Above Years	10	8.0	8.0	100.0
	Total	125	100.0	100.0	

Figure 3. Age Graph of the Sample Population

Table 2 and Figure 3 demonstrate the total number of participants, frequency and percentage of the age of the participants. Therefore, it shows that one hundred twenty-five (125) respondents were part of this research study. Moreover, twelve (12) respondents were between the age of 25 to 30 years old, twenty-nine (29) respondents were between the age of 31 to 35 years old, fifty-two (52) respondents were between the age of 36 to 45 years old, twenty-two (22) respondents were between the age of 46 to 50 years old and ten (10) respondents were between the age of 50 above years old. Hence, it revealed that the majority of the participants were between 36 to 45 years old.

Table 3. Qualifications.

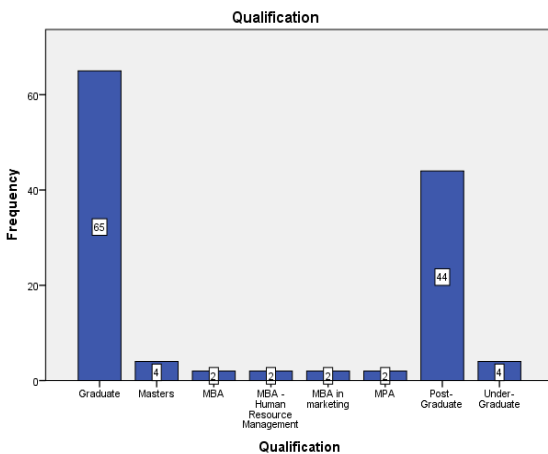|		Frequency	Percent	Valid Percent	Cumulative Percent
Qualification					
Valid	Graduate	65	52.0	52.0	52.0
	Masters	4	3.2	3.2	55.2
	MBA	2	1.6	1.6	56.8
	MBA - Human Resource Management	2	1.6	1.6	58.4
	MBA in marketing	2	1.6	1.6	60.0
	MPA	2	1.6	1.6	61.6
	Post-Graduate	44	35.2	35.2	96.8
	Under-Graduate	4	3.2	3.2	100.0
	Total	125	100.0	100.0	

Figure 4. Qualification Levels of the Sample Population

Table 3 and Figure 4 indicate the total number of participants, frequency and percentage of the qualification of the participants. Therefore, it shows that one hundred twenty-five (125) respondents were part of this research study. Moreover, sixty-five (65) participants were graduates, four (04) participants had a Master's degree, two (2) participants had an MBA degree, two (2) respondents had an MBA Human Resource Management degree, two (02) participants had MBA in Marketing degree, 2 participants were in MPA, forty-four (44) participants had the Post Graduate degree, and four (4) respondents were undergraduate. Hence, it revealed that the majority of the participants were graduates in this study.

Table 4. Designation

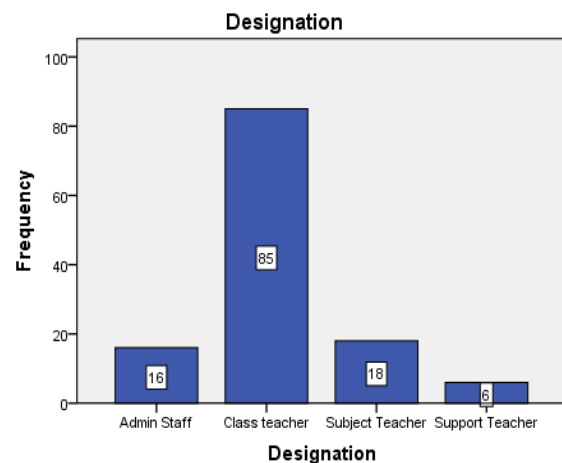|		Frequency	Percent	Valid Percent	Cumulative Percent
Designation					
Valid	Admin Staff	16	12.8	12.8	12.8
	Class teacher	85	68.0	68.0	80.8
	Subject Teacher	18	14.4	14.4	95.2
	Support Teacher	6	4.8	4.8	100.0
	Total	125	100.0	100.0	

Figure 5. Designations of the Sample Population

Table 4 and Figure 5 show the total number of participants, frequency and percentage of the designation of the

participants. Therefore, it shows that one hundred twenty-five (125) respondents were part of this research study. Moreover, sixteen (16) respondents were the admin staff of the schools, eighty-five (85) respondents were class teachers, eighteen (18) respondents were subject teachers, and six (06) respondents were support teachers. Hence, results revealed that the majority of the participants were the class teacher.

Table 5. Current Teaching Level.

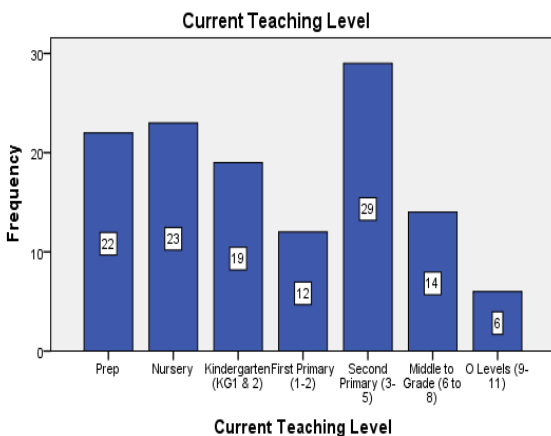| Current Teaching Level		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Prep	22	17.6	17.6	17.6
	Nursery	23	18.4	18.4	36.0
	Kindergarten (KG1 & 2)	19	15.2	15.2	51.2
	First Primary (1-2)	12	9.6	9.6	60.8
	Second Primary (3-5)	29	23.2	23.2	84.0
	Middle to Grade (6 to 8)	14	11.2	11.2	95.2
	O Levels (9-11)	6	4.8	4.8	100.0
	Total	125	100.0	100.0	

Figure 6. Teaching Levels of the Sample

Population

Table 5 and Figure 6 demonstrate the total number of participants, frequency and percentage of the current teaching level of the participants. Therefore, it shows that one hundred twenty-five (125) respondents were part of this research study. Moreover, twenty-two (22) respondents were teaching at Prep level, twenty-three (23) respondents were teaching at Nursery level, nineteen (19) respondents were teaching at Kindergarten (KG 1-2) level, twelve (12) respondents were teaching at First Primary (1-2) level, twenty-nine (29) respondents were teaching at Second Primary (3-5) level, fourteen (14) respondents were teaching at Middle to Grade (6 to 8) level, and six (06) respondents were teaching at O Levels (9-11) level. Hence, results revealed that the majority of the participants were teaching at Second Primary (3-5) level.

Table 6. Total Work Experience.

Total Work Experience		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10 to 15 years	25	20.0	20.0	20.0
	15 to 20 years	12	9.6	9.6	29.6
	3 to 5 years	22	17.6	17.6	47.2
	3 to 5 years, 5 to 10 years	1	.8	.8	48.0
	5 to 10 years	33	26.4	26.4	74.4
	less than 2 years	21	16.8	16.8	91.2
	more than 20	11	8.8	8.8	100.0
	Total	125	100.0	100.0	

Total Work Experience

Figure 7 bar chart: 10 to 15 years = 25; 15 to 20 years = 12; 3 to 5 years = 22; 3 to 5 years, 5 to 10 years = 1; 5 to 10 years = 33; less than 2 years = 21; more than 20 = 11.

Figure 7. Work Experience of the Sample Population

Table 6 and Figure 7 demonstrate the total number of participants, frequency and percentage of the total work experience of the participants. Therefore, it shows that one hundred twenty-five (125) respondents were part of this research study. Moreover, twenty-five (25) respondents had 10 to 15 years of work experience, twelve (12) respondents had 15 to 20 years of work experience, twenty-two (22) respondents had 3 to 5 years of work experience, one (1) participant had 3 to 5 years or 5 to 10 years work experience, thirty-three (33) respondents 5 to 10 years work experience, twenty-one (21) respondents had less than 2 years work experience, and eleven (11) respondents had more than 20 years work experience. Hence, results revealed that the majority of the participants had 5 to 10

years of work experience.

Table 7. Mean and Standard Deviation.

Statistics		Growth Mindset	Fixed Mindset
N	Valid	125	125
	Missing	0	0
Mean		3.9928	2.8696
Median		4.0000	2.9000
Mode		4.30	3.20
Std. Deviation		.38104	.61069

Table 7 shows the mean, median, mode and standard deviation of growth mindset and fixed mindset. Mean shows the average responses of the participants, median shows the middle number of the responses of the participants, mode shows the frequency of most repeated responses of the participants, and standard deviation shows the dispersion of the data. If the standard deviation is less than, it shows the data is not more spread and near to the mean, but if the standard deviation is more than, it shows the data is more spread, and it is not close to the mean. Hence, results revealed that the mean value of the growth mindset $M = 3.99$ with the standard deviation value SD = .381, the median value of the growth mindset is 4 that indicates the middle number of the participants was 4, and the mode value of the growth mindset is 4.30 that indicates the frequency of most repeated number is 4

because 4.3 is round about 4. Moreover, results revealed that the mean value of fixed mindset $M = 2.87$ with the standard deviation value SD = .611, the median value of fixed mindset is2.9 that indicates the middle number of the participants was 2 because it is round about 3, and the mode value of the fixed mindset is 3.20 that indicates the frequency of most repeated number is 3 because 3.2 is round about 3.

One Way ANOVA

The analysis of variance One Way ANOVA test is used to find out whether there is the mean of two or more than two independent groups is statistically significant or not.

Table 8. Variables

Variables	School Level	n	M	SD
Growth Mindset	Prep	22	3.98	.271
	Nursery	23	3.93	.484
	Kindergarten (KG 1 & 2)	19	4.02	.430
	First Primary (1-2)	12	4.10	.323
	Second Primary (3-5)	29	4.04	.373
	Middle to Grade (6 to 8)	14	3.89	.381
	O Levels (9-11)	6	3.88	.306
Fixed Mindset	Prep	22	3.04	.605
	Nursery	23	2.91	.575
	Kindergarten (KG 1 & 2)	19	2.72	.586
	First Primary (1-2)	12	2.92	.666
	Second Primary (3-5)	29	2.89	.605
	Middle to Grade (6 to 8)	14	2.68	.574
	O Levels (9-11)	6	2.73	.876

The One-Way ANOVA test was run to find out the mean average of all the groups of participants that either the mean (average) of the respondents was different or the same. Table 8 shows the total number of participants, level of the school, variables, mean and standard deviation. Therefore, results show that twenty two 22 participants were teaching at Prep level and the mean regarding growth mind set was M = 3.98 with standard deviation SD=.271, twenty three 23 participants were teaching at Nursery level and the mean regarding growth mind set was M = 3.93 with standard deviation SD=.484, nineteen 19 participants were teaching at Kindergarten (KG 1 & 2) level and the mean regarding growth mind set was M = 4.02 with standard deviation SD=.430, twelve 12 participants were teaching at First Primary (1-2) level and the mean regarding growth mind set was M = 4.10 with standard deviation SD=.323, twenty nine 29 participants were teaching at Second Primary (3-5) level and the mean regarding growth mind set was M = 4.04 with standard deviation SD=.373, fourteen 14 participants were teaching at Middle to Grade (6 to 8) level and the mean regarding growth mind set was M = 3.89 with standard deviation SD=.381 and six 6 participants were teaching at O Levels (9-11) level and the mean regarding growth mind set was M = 3.88 with standard deviation SD=.306.

Furthermore, results show that twenty two 22 participants were teaching at

Prep level and the mean regarding fixed mind set was M = 3.04 with standard deviation SD=.605, twenty three 23 participants were teaching at Nursery level and the mean regarding fixed mind set was M = 2.91 with standard deviation SD=.575, nineteen 19 participants were teaching at Kindergarten (KG 1 & 2) level and the mean regarding fixed mind set was M = 2.72 with standard deviation SD=.586, twelve 12 participants were teaching at First Primary (1-2) level and the mean regarding fixed mind set was M = 2.92 with standard deviation SD=.666, twenty nine 29 participants were teaching at Second Primary (3-5) level and the mean regarding fixed mind set was M = 2.89 with standard deviation SD=.605, fourteen 14 participants were teaching at Middle to Grade (6 to 8) level and the mean regarding fixed mind set was M = 2.68 with standard deviation SD=.574 and six 6 participants were teaching at O Levels (9-11) level and the mean regarding fixed mind set was M = 2.73 with standard deviation SD=.876.

Hence, results showed that the mean (average) of all the groups of participants regarding growth mindset was almost the same because all the mean values were around 4. So, this study revealed that there is no mean difference between the different teaching level groups about growth mindset. On the other hand, results showed that the mean (average) of all the groups of participants regarding fixed mindset was almost the same because all the mean values are around 3. So, this study revealed that there is no mean difference between the different teaching levels of groups about fixed mindset. But there is a mean difference between the comparison of a growth mindset and a fixed mind according to the teaching level.

Table 9. ANOVA.

		Sum of Squares	df	Mean Square	F	Sig.
Growth Mindset	Between Groups	.550	6	.092	.620	.714
	Within Groups	17.453	118	.148		
	Total	18.004	124			
Fixed Mindset	Between Groups	1.827	6	.305	.809	.565
	Within Groups	44.417	118	.376		
	Total	46.244	124			

Table 9 of ANOVA tells about the fitness of the overall research model. ANOVA table shows the value of the degree of freedom, the Mean Square between the groups, the value of F and the Significance value. The benchmark value of significance is 0.05. If the p-value is less than the benchmark value of 0.05, that indicates the mean difference between all the groups of participants, but if the p-value is greater than the benchmark value of 0.05,

that indicates there is no significant difference between all the groups of participants and the average score is same. Hence, results revealed that the value of the degree of freedom $df = 6$, the value of the mean square of growth mindset $MS = .092$, the value of the mean square of fixed mindset $MS = .305$, the value of F regarding growth mindset $F = .620$, the value of F regarding fixed mindset $F = .809$. Moreover, the significance value of growth mindset $p = .714$ indicates there is no mean difference between all the groups of participants about growth mindset because the significance value is greater than the 0.05 benchmark value. On the other hand, the result shows that the significance value of fixed mindset $p = .565$ indicates there is no mean difference between all the groups of respondents because the significance value is greater than the 0.05 benchmark value. Hence, results revealed that the mean difference is the same for all teaching levels regarding growth mindset and fixed minds

Correlation

The correlation test was used to determine the relationship between the variables and whether all the variables were statistically significant to each other or not.

Table 10. Correlations.

Correlation		Current Teaching Level	Growth Mindset	Fixed Mindset
Current Teaching Level	Pearson Correlation	1	-.009	-.129
	Sig. (2-tailed)		.919	.150
	N	125	125	125
Growth Mindset	Pearson Correlation	-.009	1	-.113
	Sig. (2-tailed)	.919		.211
	N	125	125	125
Fixed Mindset	Pearson Correlation	-.129	-.113	1
	Sig. (2-tailed)	.150	.211	
	N	125	125	125

Table 10 presents the correlation coefficient matrix for three variables and the significance value of the correlation coefficient. In this table, (N) indicates the total number of participants. Therefore, one hundred twenty-five (125) respondents were part of this study. The 'r' indicates the value of the Pearson correlation. This table shows the significance value. The benchmark value of significance is 0.05. If the p-value is less than the benchmark value of 0.05, that indicates the relationship between the variable is statistically significant, but if the p-value is greater than the benchmark value of 0.05, that indicates the relationship between the variables is not statistically significant. The results show that all the variables are correlated with each other's because 1 is on the diagonal of the table. Moreover, results revealed that teaching levels were negatively and weakly

correlated with a growth mindset because the Pearson correlation value r = -.009, but this relationship is not statistically significant because the significance value is greater than the 0.05 benchmark value. Furthermore, teaching level was negatively and weakly correlated with fixed mindset by Pearson correlation value r = -.129, but this relationship is not statistically significant because the significance value is greater than the 0.05 benchmark value.

Moreover, results revealed that a growth mindset is negatively and weakly correlated with a fixed mindset because the Pearson correlation value r = -.113, but this relationship is not statistically significant because the significance value is greater than the 0.05 benchmark value.

Hence, the hypothesis of this study was rejected that a growth mindset decreases if the grade level increases and a fixed mindset increases if the grade level increases because this result revealed that there is no statistically significant relationship between grade level, growth mindset and fixed mindset.

The main objective of this study was to investigate the interconnection between grade level, growth mindset and fixed mindset. The data was collected from the different levels of participants such as Prep,

Nursery, Kindergarten (KG 1 & 2), First Primary (1 – 3), Second Primary (3 to 5), Middle to Grade (6 to 8), and O levels (9 to 11). The majority of the participants were female in this research study. One Way ANOVA test was run to find out the mean differences between the different groups of people such as Prep, Nursery etc. Therefore, the results of ANOVA revealed that the mean (average) of all the groups of participants regarding growth mindset was almost the same because all the mean values are around 4. So, this study revealed that there is no mean difference between the different teaching level groups about growth mindset. On the other hand, results showed that the mean (average) of all the groups of participants regarding fixed mindset was almost the same because all the mean values are around 3. So, this study revealed that there is no mean difference between the different teaching levels of groups about fixed mindset. But there is a mean difference between in comparison of a growth mindset and a fixed mind according to the teaching level.

The correlation test was run to analyse the interconnection between the variables such as teaching level, growth mindset and fixed mindset. The Pearson correlation revealed that there is no

statistically significant correlation between the teaching level, growth mindset and fixed mindset because the significance value was greater than the 0.05 benchmark value. On the basis of these results, the hypothesis of this study was rejected.

Conclusion

To sum up, it is concluded that the WMSM scale accurately measures and apprehends four underlying latent features, or constructs, of a growth school mindset, shared leadership, effective discussions and peer support, clear goals and a strategy with professional cooperation, and student support. With the help of the data from the WMSM scale, principals may help their teachers adopt a growth school attitude to initiate discussions and gather opinions regarding their school culture. Principals may examine their own mentality and willingness to cooperate, provide chances for faculty involvement in decision-making and change processes, collaborate to identify clear goals, give focused feedback, and allow time for teachers to learn and communicate. The conception and execution of a mindset training program that was integrated into the physics classroom are described in this study. Our strategy was founded on the results that

instructional techniques have a significant influence on students' views and, as a result, on the success of mindset training. We see a lot of promise in using this effect to improve "conventional" development and fixed mindset therapies. As a result, the instructor in our research was totally engaged and added mindset-friendly teaching approaches to the training. Leaders may employ the WMSM scale as a boundary object to collect and measure their school's culture, as well as to build solutions that address the particular individual and school requirements in their environment. Because all of the mean values are around 4, the ANOVA findings indicated that the mean (average) of all of the groups of participants in terms of development mindset were practically identical. As a result of this research, it was discovered that there is no significant variation in development mentality amongst the various teaching level groups. However, the results revealed that the mean (average) of all the groups of participants in terms of fixed mentality was nearly the same since all of the mean values were around 3. As a result of this research, it was discovered that there is no significant variation in fixed mentality teaching levels between groups. However, according to the

instruction level, there is a mean difference between the growing and fixed mindsets. The correlation test was used to look at how the variables of instruction level, growth mindset, and fixed mentality interacted. Because the value of significance was more than the 0.05 benchmark value, the Pearson correlation demonstrated that there is no statistically significant link between teaching level, growth mindset, and fixed mentality. The hypothesis of this study was rejected based on these findings. Possibilities for faculty to play an active role in decision-making and change procedures, career development that focuses on the development of teachers' psychological and social skills that support student academic skills, and scheduled time for professional collaboration are all examples of school growth mindset culture interventions. Professional development and support incorporated in the workday that increases teaching abilities at providing students with psychosocial support are significant techniques for the development of teachers' skills. Teachers can learn to reflect on their own mindsets and how their epistemologies impact their pedagogical choices and student expectations.

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Appendices

Appendix A. Survey Questionnaire (WMSM) Survey

1.	All staff members are asked to participate in leadership opportunities regularly during the school year.
2.	We have procedures where instructors actively participate in site initiative decision-making and planning.
3.	Management and leaders convey decision-making strategies to employees and solicit their feedback.
4.	During planning, collaboration, and decision-making sessions, employees can securely put ideas "on the stand" and "take them off."
5.	Teachers are asked to provide constructive criticism of administrative procedures and suggestions for extra help.
6.	Employees are hesitant to collaborate with or assist new or struggling teachers.
7.	Teachers monitor and provide feedback to one another to improve team performance.
8.	Within our faculty, we have restricted cliques or "camps."
9.	Teachers share or co-develop lessons, assessments, and student work regularly.
10.	Our teachers tend to keep our lectures, tactics, assessments, and other materials hidden from one another.
11.	Teachers are informed about instructional expectations, standards, and evaluation methods.
12.	Administrators express confidence that staff members can improve their teaching abilities through practice and feedback.
13.	Outside of official assessments, teachers receive clear feedback and continuing support for their work.
14.	Teachers, coaches, and administrators collaborate to create teacher development objectives and strategies.
15.	Teachers get individualised professional development tailored to their specific needs and objectives.
16.	Mentoring, co-teaching, and organised and efficient learning are all given time during the weekday.
17.	Our school's administrators and instructors are confident that they can assist all students in achieving their learning objectives.
18.	There are systems for teachers and administrators to share information and collaborate on students' particular requirements and satisfaction.
19.	Teachers and students have a "we against them" mentality.
20.	We assess our existing situation and define short- and long-term performance objectives.

Appendix B. Scale Development

S. No.	Models	Level of Agreement
1	You have a specific level of intelligence, and it isn't much you can do about it.	() Disagree Strongly () Disagree Somewhat
2	You can always make significant improvements in your intelligence.	() Disagree Slightly () Agree Slightly
3	You can learn new things, but you can't significantly increase your baseline IQ level.	() Agree Somewhat () Agree Strongly
4	Even your fundamental intelligence level may be significantly altered.	