

EFFECT OF GROWTH MINDSET ON WORK VALUES OF SECONDARY SCHOOL TEACHERS

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Abstract

The aim of this research was to investigate the Effect of growth mindset on the work values of secondary school teachers. A quantitative design with a causal-comparative research design was used. All the teachers in public secondary schools in the District of Lahore were the target population, but stratified random sampling was used to select a sample of 810 teachers. Two instruments were used to collect data, including the Growth Mindset Scale developed by Khunaprom and Chansirisira (2023) and the Work Values Questionnaire (WVQ) developed by the researcher. The statistical data analysis was conducted by using SPSS and Amos. Descriptive statistics were used to calculate the level of growth mindset and work values of teachers, and Pearson correlation was used to examine the correlation between variables. Regression analysis was used to determine the effect of growth mindset on work values. The results indicated that teachers had an average score in terms of growth mindset and a moderate score in work values. The results also showed that there was a statistically significant positive relationship between growth mindset and work values. The proposed study adds to the existing body of literature regarding increasing awareness of the psychological belief of growth mindset and work value of teachers.

Keywords: Growth mindset, Work value, , Secondary school teachers.

Introduction:

The phenomenon of growth mind-set has gained considerable attention in modern educational studies. Extensive experimental studies indicate that programs based on growth mindset have the potential to boost student achievement along with participation in advanced classes, especially among low achievers (Yeager et al., 2019). But the research also shows that successful implementation of these approaches varies based on contextual circumstances, including peer norms and favorable schooling conditions. These findings demonstrate the importance of establishing environments that nurture growth-oriented ideologies in school environment.

Although most of the literature's concentrated on the mindsets of students, recent studies have emphasized the important role of teachers having growth mindsets. Perceptions about learning and ability from the classroom practices of teachers can contribute to changing the perceptions and outcomes of the current students (Seaton, 2018). Recent evidence indicates that the effectiveness of growth mindset interventions to improve student learning outcomes is dependent on teachers with favorable growth mindset beliefs (Yeager et al., 2022; Porter et al., 2022). The development of sustainable educational improvement is, therefore, dependent on the understanding of the mindset of the teachers towards growth (Shoshani ,2021).

In addition to academic success, educator's growth mindset is closely linked to professional well-being and resilience. The literature shows that educators with a malleable conceptualization of their teaching skills demonstrate greater positive affective reactions and engagement at work (Nalipay et al., 2022). Similarly, teacher grit and mindfulness, as well as growth mindset was identified as contributing to occupational well-being and professional persistence (He et al., 2023). These implications show that having a growth mindset of teachers makes them not only effective in the instruction but also psychologically sound and motivated.

Simultaneously, studies on work values indicate their significance in determining the professional practices and attitudes of educators. Such items as teamwork skills, job satisfaction, and emotional intelligence are also proven to significantly effect the work values of teachers (Quines & Piñero, 2022; Riego de Dios, 2020). These studies indicate that work-values are strongly linked to both personal beliefs and supportive contexts, and that work-values are a vital aspect of the professional identity of teachers. But, little consideration has been credited to the effect of how growth mindsets of teachers specifically effects their work values, even though there is evidence to show that implicit beliefs bears a significant effect on professional attitudes and outcomes (Chao et al., 2018 ;Jinwei,2023).

In light of this background, the current study was examine how growth mindset effect the values of teachers at work. This relationship allows the research to address the gap between the psychological beliefs and work values in the teaching profession. This study builds on the literature by showing that growth-oriented beliefs in teachers not only contribute to student achievement and teacher well-being but also frame the work values that guide good teaching practice.

Literature Review

Liu et al., (2023) examined the mediating effect of grit on the connection between growth mindset and work life balance and engagement in 547 EFL teachers in China. The results they obtained were able to determine that grit is an important mediator, as more teachers with a growth mindset are likely to be able to maintain effort and interest levels in time thus being able to attain more balance as well as engagement at work. The sample size of the study is large and SEM provides it credibility, however, self-report and specificity of the use of EFL may limit its applicability.

He et al., (2023) worked on mindfulness which enhanced the importance of well-being as per mediating mechanism between growth mindset and occupational well-being. They precisely proved the two variables in the relationship between mindfulness and grit to argument the positive influence of being growth minded on professional well-being using a same large sample (N = 547) of EFL teachers. This is a replication, the values of which are enriched with new variables, but the common data-set does not allow novelty.

A study by Zhang and He (2024) evaluated the relevance of perceived school climate as a modulator of the connection between the growth mindset and their work engagement of 353 teachers working in Shanghai secondary schools. Through analysis, they found out that the relationship varied in several dimensions with supportive climates increasing the strength of the positive relationships between mindset and engagement.

Zeng et al., (2019) tried to analyze well-being and perseverance as mediators between growth mindset and work engagement in a sample of 472 secondary teachers in Chengdu, China. Through structural equation modeling, they established that there was strong mediation effect between the interventions of well-being and perseverance, which both had significant results in predicting an increase in work

engagement levels. Although the study has a high validity due to a large sample size and an underlying strong methodology, but the cultural nature of the study was only Chinese education setting, not other cultures.

In the context of this literature, the present study investigated the effect of growth mindset on teacher work values. This relationship enables the study to fill in the gap between the psychological beliefs and the work values of the teaching profession. The present study contributes to the literature theoretically in that beliefs in teachers' growth mindset not only lead to student achievement and good teaching practice but also construct work values involved in effective teaching practice.

Theoretical Framework

The present study is construct on the basis of the Mindset Theory developed by Dweck (2006) , The capacity of individuals to believe in the malleability of their abilities determine their motivation and behavior as well as their achievement. Instructors having a growth mentality come under the perception that professional skills may be enhanced by hard work, deliberate academic activity, and feedback. These beliefs ensure resilience, openness to challenges, and continuous improvement and consequently enhance work values such as ethical commitment, instructional competence, collaboration, accountability, and professional growth (Yeager et al., 2019; Paunesku et al., 2015).

Conceptual Framework



Research Objectives

This study aims to explore the effect of growth mindset on secondary school teachers' work values. The objectives of the study were to:

1. Measure the perceptions of teachers about growth mindset of teachers, work value
2. Investigate the relationships between growth mindset and work values of secondary school teachers.

3. Examine the direct effects of growth mindset on work values of secondary school teachers.

Research Questions

The research questions for this study were as following:

1. What do secondary school teachers perceive about their growth mindset?
2. What do secondary school teachers perceive about their work values?
3. What is the relationship between growth mindset and work values of secondary school teachers?
4. What is the effect of growth mindset on work values of secondary school teachers?

Significance of the study

This study is significant for both theory and practice. Theoretically, it extends the literature on growth mindset beyond its well-established relationship with student outcomes to its potential influence on teachers' internalized professional values. By investigating the association between growth mindset and work values, the study contributes to educational psychology and teacher professional development research, offering insights into the interplay between belief systems and value orientations (Chen et al., 2022). Practically, the findings can guide policymakers, school leaders, and teacher educators in designing professional learning initiatives that foster growth-oriented beliefs, thereby cultivating values such as resilience, collaboration, and lifelong learning among educators (Yeager et al., 2019). In the context of secondary education, where teachers face complex instructional and behavioral challenges, fostering a growth mindset may serve as a protective factor against burnout and disengagement (Kirkpatrick et al., 2022). Moreover, in countries like Pakistan, where educational reforms emphasize teacher professionalism and moral integrity, understanding how mindset shapes work values can inform culturally relevant interventions to enhance teacher quality and student outcomes.

Research Methodology

In this study, the researcher used quantitative research approach to investigate how growth mindset effect on teacher work values. Causal-comparative (ex post facto) design was used, which was suitable when the independent variable cannot be manipulated but can only be observed in its natural form (Fraenkel et al., 2019). This method enabled the researcher to investigate differences and correlations among variables in real world educational contexts without experimental controls.

The causal-comparative design allows exploring how naturally existing variations in growth mindset relate to variations in work values of teachers. Through examining these naturally occurring conditions, the study was able to present data that are both practical and realistic in relation to a real-life teaching set up. This increases the validity of the results and improves their applicability to practice.

Population and Sample

There were 2789 teachers in five Tehsils of government secondary school teachers in District Lahore. Proportionate stratified random sampling was also used to gave a fair representation of sample from each Tehsil. Strata from each Tehsil was made and 30 percent of the teachers from the particular Tehsil was randomly selected to get the required sample of 810 teachers.

Instrumentation

The GMQ was adapted from Khunaprom and Chansirisira (2023) which is the modification of the Mindset Theory of Dweck applied to determine the mindset of the educators towards development in the educational settings. It consisted of 30 items that measured six dimensions such as (a) Development Paradigm, (b) Challenges in

Learning, (c) Accepting Failures and Mistakes, (d) Effort in Learning, (e) Openness to Accepting Criticism, and (f) Inspiration with Success. The ratings of items were done according to a five-point Likert scale (1 = Strongly Disagree to 5= Strongly Agree). The content validity index of the instrument (CVI) was 91, the contextual accuracy of the instrument was guaranteed by including experts in the review. Use of pilot test on 50 teachers showed Cronbach's alpha of 0.928 which is exceptionally high.

The researcher constructed the WVQ based on the extant literature and professional consultation to objectively evaluate professional and personal values of work on the part of the teachers. It had 30 questions with six dimensions which included (a) Ethical and Moral Commitment, (b) Professionalism, (c) Social Values, (d) Collaboration (e) Accountability, and (f) Global Orientation. The rating of items was done by using a five-point Likert scale. The WVQ got a CVI of 0.93, a pilot test produced a Cronbach's alpha of 0.912, which is also high on reliability.

Data

Analysis

In this research data were analysed through inferential statistics and descriptive statistics. The perception of teachers about the growth mindset and work values were measured through descriptive statistics, that is, mean, standard deviation, frequencies, and percentages. The analyses gave an impression of the patterns of central tendencies and variations in responses of the participants to learn about the general tendencies in the data-set. The descriptive outcomes also helped to form the basis of interpretation of the nature of variables as well as acted as a precursor in deriving inferential tests.

Inferential analysis was done to investigate the relationship and effect between the study variables. Pearson correlation was used to explore how strong and in which direction the relations between growth mindset and work values were. The direct predictive value of growth mindset on work values was also determined using regression analysis. The statistical analysis was conducted through the SPSS and AMOS, software with guarantees of a high level of computations and correct determination of the results. These statistical tools together were able to comprehensively give an insight in understanding the relationship between variables in light of the research objectives.

Table 1

Overall Descriptive Statistics (Mean and S.D) of Growth mind set of secondary school teachers (N = 810)

	Min	Max	M	S. D
Development Paradigm	1.30	5.00	2.97	0.568
Challenges in Learning	1.20	5.00	2.99	0.580
Accepting Failures	1.00	5.00	3.00	0.605
Effort in Learning	1.25	4.70	3.01	0.613
Openness to Accepting Criticism	1.25	5.00	3.01	0.598
Inspiration with Success	1.00	4.70	2.99	0.597

The descriptive statistics show that the sample (N = 810) of the teachers of secondary school displayed an average level of all six components of growth mindset. The scores (means) were between 2.97 (Development Paradigm) and 3.01 (Effort in Learning and Openness to Accepting Criticism) indicating quite equal (almost equal) perception at different dimensions. The degree of the variation of the standard deviations was measuring between 0.568 and 0.613, which means that there was a moderate distribution of the responses and can be considered as some dispersion in

the beliefs and attitudes of the teachers. The minimum and maximum scores on the elements (67, 1.00-5.00) indicate that although some instructors displayed either very low or extremely high growth mindset tendencies, the greatest number lay between the moderate and the high score points, indicating that they could perform more work on the development of mindset.

Table 2

Descriptive Statistics (Mean and S.D) of work values of secondary school teachers (N=810)

	Min	Max	M	S. D
Ethical and Moral Commitment	1.00	4.70	2.64	0.702
Professionalism	1.30	4.90	3.01	0.564
Social Values	1.00	4.70	2.61	0.690
Collaboration	1.00	4.80	2.65	0.706
Accountability	1.00	4.80	2.66	0.709
Global Orientation	1.00	5.00	2.61	0.701

Descriptive statistics show that the teachers of secondary schools (N =810) indicated moderate results all along the six aspects of work values. The mean value was found to be between 2.61 (Social Values and Global Orientation) and 3.01 (Professionalism) denoting the fact that there was a relatively higher compliance with the professional standards than other values. The standard deviations that lay between 0.564 and 0.709 have suggested a moderate measure of inconsistency in the responses. There are low and high endorsements, expressed by minimum and maximum scores (1.00 to 5.00), indicating that although there were teachers who have firm allegiance to these work values, there might be other teachers who needed professional development with regard to focus areas.

Table 3

Correlations growth mind set and work value (N=810)

	WVF1	WVF2	WVF3	WVF4	WVF5	WVF6	Work Values
GMF1	.631**	.687**	.623**	.418**	.526**	.632**	.635**
GMF2	.535**	.773**	.538**	.521**	.514**	.529**	.669**
GMF3	.533**	.677**	.526**	.525**	.537**	.627**	.641**
GMF4	.603**	.729**	.547**	.590**	.481**	.514**	.596**
GMF5	.520**	.717**	.664**	.520**	.532**	.523**	.617**
GMF6	.645**	.726**	.655**	.632**	.535**	.536**	.637**
Growth Mind Set	.699**	.809**	.674**	.688**	.592**	.600**	.722**

** . Correlation is significant at the 0.01 level (2-tailed).

According to the Pearson correlation analysis, all the scales of growth mindset show statistically significant and positive correlation with the work values at 0.01 level, which implies that individual dimensions of growth mindset are correlated positively with work values among teachers, where teachers that have stronger growth mindset orientations have greater values associated with work. The correlations between the overall growth mindset score or overall work values score ($r = .722$, $p < .01$) imply that there is a strong positive relationship such that as the growth mindset among the teachers improves, the professional values of the teachers are also likely to do the same. There are also moderate positive correlations between all factors of

growth mindset and WVF1 (Ethical and Moral Commitment), which varies between and $r = .645$.

Table 4

Regression Analysis for the effect of growth mindset on work values of secondary school teachers

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.766 ^a	.718	.718		.44893

The regression measurements show that growth mindset is highly and statistically connected to work values of secondary school teachers. Using the model, the R value was .766 indicating that the predictor (growth mindset) and the outcome variable (work values) have a high positive relationship. The R Square of .718 indicates that the phenomenon of variance in work values proportional to 71.8, can be explained by the growth mindset of teachers whereas the rest that is 28.2 percent may be represented by other considerations that are not covered in the equation defining the problem studied by the researchers. Adjusted R Square has not changed (.718), and it seems that the model is stable, and there is a minimum bias in the sample size adjustments. The standard error of the estimate (.44893) is rather low, which shows that the model works quite well to predict the values of work.

Table 5

One way ANOVA for difference in growth mindset on work values of secondary school teachers

Model	Sum of Squares	Df	Mean Square	F	Sig.
1					
Regression	1716.528	1	571.528	25.834	.000 ^b
Residual	11149.533	809	22.539		
Total	12866.061	810			

The statistical significance of the regression model is also supported by the results of the ANOVA which is one-way. The F-Statistic is 25.834 and the p-value is .000 ($p < .01$) implying that the model is significant predictor of work values on the basis of the level of the growth mindsets. The fact that the large regression sum of squares (1716.528) is large in comparison with residual sum of squares (11149.533) illustrates that the variance of the total work values can be explained by the difference in the growth mindset of teachers to a great extent.

Major Findings

1. The descriptive analysis of growth mindset among secondary school teachers ($N = 810$) shows moderate mean scores across all six components.
2. Work values exhibited moderate mean levels, ranging from 2.61 (Social Values and Global Orientation) to 3.01 (Professionalism), with standard deviations between 0.564 and 0.709.
3. The study findings show that there is a positive relationship between growth mindset and work values positively and significantly ($r = .722$, $p < .01$). At the individual dimension level, the dimension of Challenges in Learning (GMF2) showed the strongest correlation with the dimension of Instructional Competence and Professionalism (WVF2) ($r = .773$, $p < .01$). Inspiration from Success (GMF6) also had high correlations with instruction competence ($r = .726$, $p < .01$), as well as interpersonal and social values ($r = .655$, $p < .01$).
4. Regression further provided evidence of the predictive relationship between the

growth mindset and the values of work ($R = .766$, $R^2 = .718$). The findings in the one-way ANOVA were between $F = 25.834$, $p < .01$, which confirmed the statistical significance of this predictive relationship.

Conclusion

The research comes to the conclusion that growth mindset is one of the critical psychological variables that determine the work values in the case of the teachers of the secondary schools. The teachers having faith in their ability to develop with effort, feedback, and resilience feel more motivated to comply with ethical adherence, portray instructional proficiency, collaborate efficiently, and participate in a effective development in the profession.

Discussion

These results are consistent with the Mindset Theory of Dweck (2006) which holds that mindset ideas on whether or not abilities can be changed result in the nature of motivation, behavior, and achievement. In teaching, a growth mindset promotes receptiveness to challenges, ability to persevere through obstacles and accept feedback all of which comes naturally into better work value. The works of some previous researchers (Paunesku et al., 2015; Yeager et al., 2019) have also demonstrated that the development of a growth mindset results in increased professional engagement and commitment, which also contributes to the current findings.

Practically, the results indicate that teacher professional learning communities, reflective practice workshops, and mindset-oriented coaching interventions have the potential to make a significant contribution to teachers as far as their professional values are concerned. Integrating growth mindset principles in teacher training and professional development, an education system can contribute not only to the better instructional capability but also to an ethical commitment, collaboration, and life-long learning culture. Finally, the findings of the current research support the worthiness of psychological belief systems as the force towards professional excellence in education.

Recommendations

1. The study found moderate level of growth mindset was moderate, and mindset-specific training should be implemented in order to make teachers feel more confident about the persistence of possible improvement and the possibility of life-long learning.
2. The results reported moderate level of Work Values as compared to growth mindset hence institutions must reinforce these values in teachers.
3. Findings demonstrated that there is strong and highly significant relationship that exists between growth mindset and work values which indicates that the teaching and teacher training process should have modules based on the mindset to develop professional development, ethics and collaboration.

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