

NAVIGATING THE BARRIERS: TEACHERS' CHALLENGES IN IMPLEMENTING COMPETENCY-BASED EDUCATION

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Abstract

This paper explores the issue of teachers struggling to apply Competency-Based Education (CBE) in Pakistan and discusses the issue of its effectiveness. The research design was a quantitative one where a structured questionnaire was utilized to collect the data on 230 teachers, who were given the questionnaire in urban and rural schools and in public and private schools. This research paper sought to examine the perception of teachers towards CBE, major obstacles to its implementation, and also assess the potential of training, institutional support, resource access, and curriculum alignment. The descriptive and inferential statistics were performed by SPSS and included frequency analysis, mean scores, Pearson correlation, and regression analysis. The results show that teachers are fairly aware of CBE, and they hold a positive attitude towards its potential to improve student learning outcomes overall. Nevertheless, its implementation faces a few obstacles that include; poor training opportunities, institutional backing, inappropriate teaching resources, and the mismatch of the current curriculum with CBE principles. Correlation and regression results indicate that all the factors identified play a significant role in the process of CBE implementation with teacher training as the most important predictor, and institutional support and availability of resources as the next most significant predictors. The research also concludes that curriculum rigidity is still one of the biggest challenges towards using competency-based approaches in classrooms. The research finds that though CBE has high potential to enhance the quality of education in Pakistan, its effective implementation needs wholesale changes. These are through strengthening teacher training programs, institutional support, resource allocation, and curriculum and assessment system in line with competency-based principles. The results can be beneficial to policy makers and the teachers aiming at encouraging successful change in education in Pakistan.

Keywords

Competency-Based Education, Teacher Training, Curriculum Reform, Institutional Support, Learning Outcomes, Resource Availability

1 Introduction

Competency-Based Education is one of the approaches that concentrate on students who have acquired the particular skills and knowledge. This implies that students are not in a classroom simply because they have a set duration of time that they are supposed to have to learn and know the content (Rogers, 2021). This aims at ensuring that the students attain a range of abilities and when they do so, they are able to proceed to the next action. This form of learning is student-centered. It is less formal and structured. The concept of Competency-Based Education has been applied in most regions of the world particularly in the developed countries. It has also proved to be quite efficient in enabling the students to learn and process the information. But in Pakistan it is not that simple to put into practice (Nombo, 2022). The conventional system of education in Pakistan is highly exam oriented and time oriented. This renders it challenging to transition into a competency based system. To do this shift there must be some change. There should be a change in the policy, curriculum and techniques of teaching (Opondo et al., 2023). Educators make up of

this transition since they are those who will be operating Competency-Based Education into the classroom. It is a very sad truth that many teachers in Pakistan lack the means of training and support which would help them to make this change. Competency-Based Education and the traditional system are quite established and not well known by many teachers in Pakistan (Zeeshan et al., 2025). This renders it difficult on their part to comprehend and establish the system. The teachers are frequently required to deliver Competency-Based Education without having resources and support. This renders it extremely hard for them to work efficiently. Problem is also the curriculum of Pakistan. It gives too much attention to theoretical information and little to practical skills (Asad & Qureshi, 2025). This complicates the process of teachers changing their teaching strategies and examinations to Competency-Based Education. Resistance to change is also high as well as the absence of a policy framework and educational reforms makes implementing Competency-Based Education difficult. This paper is attempting to determine what are the impediments to the introduction of Competency-Based Education in Pakistan. It is considering the issues teachers deal with such as teacher preparation, curriculum development, assessment practices and institutional backup. These issues can be used by policy-makers and educational leaders to come up with strategies to eliminate them (Abdullah et al., 2025).

This study aims at bringing some insight that can be used to enhance education in Pakistan. It desires to ensure that the teachers are positioned to help students attain competency in their subjects of study. It will be an input to the discussion on Education reform in Pakistan and will assist in the process of bringing Competency-Based Education to the country. Competency-Based Learning is a learning technique and it may be quite effective.. In Pakistan, there are numerous issues that should be overcome. Competency-Based Education can be supported and implemented by the teachers so that the students could achieve their goals. Competency-Based Education concerns aiding students to learn and comprehend the content and it is highly student-based method. Competency-Based Education is very different to the traditional educational system in Pakistan. It emphasizes on exams and time based learning over mastering of specific skills and knowledge by students. This complicates the adoption of Competency-Based Education. There is nothing that cannot happen. Competency-Based Education can also be extremely successful in Pakistan with the changes and support (Ahmed Siddiqui et al., 2022). The teachers belong to this change and they should be assisted and prepared to introduce Competency-Based Education. They should be trained and provided with facilities to make them learn and apply Competency-Based Education. There should also be a curriculum change to the more skills-oriented and less theoretical knowledge oriented curriculum. In Pakistan, Competency-Based Education can become quite efficient. It should be properly executed.

This paper is one step toward realizing the challenges and coming up with ways of countering them. Policymakers in education as well as educators are able to ensure that Competency-Based Education is effective, in Pakistan, as well as ensure that students can accomplish their ambitions.

1.1 Research Objectives

- To determine the major challenges associated with the adoption of Competency-Based Education (CBE) by teachers in Pakistan.
- To examine the contribution of the institutional support and professional development to winning the battle of CBE.
- To test the views of teachers in relation to the effectiveness of CBE in enhancing the student performance.

- To determine how well the current curriculum and methods of assessment are in accordance with the principles of CBE.
- To give recommendations towards countering the challenges to successful implementation of CBE in Pakistan.

1.2 Research Questions

- What are the major obstacles to teacher implementation of Competency-Based Education (CBE) in Pakistan?
- What is the impact of the unsupportive institution in implementation of CBE in Pakistan?
- How do teachers think CBE is effective to improve student learning outcomes?
- How well the existing curriculum and assessment system in Pakistan is in line with the principles of CBE?
- What are the recommendations that can be proposed to overcome the challenges and enhance the execution of CBE in Pakistan?

2 Literature Review

International Competency-Based Education

Competency-Based Education (CBE) is an active model in improving the learning process of students across the world. Based on the assumptions that learning must be tailored and aimed at acquiring particular skills, CBE changes the focus of time learning to outcome learning. The conventional education systems have students who go through the grades and coursework depending on their age or on days they are in classroom without necessarily mastering the subject they are being taught. On the contrary, CBE gives students an opportunity to proceed at their personal pace whereby they are able to gain competencies which are essential to show proficiency before proceeding (Holubnycha et al., 2022). Worldwide, CBE has been effectively applied in different educational systems particularly in the North American continent and Europe. CBE has become widely embraced in such countries as the United States, Canada, and Finland as the reaction to the increased need in a more individualized approach to education. Studies have indicated that CBE could enhance the learning process, especially to students who are likely to perform poorly under conventional learning environments. Through mastery, CBE makes sure that each student attains a prescribed level of competence and this may be of great help especially to different learners. Nevertheless, there are still some obstacles especially during the assessment process, teacher training and curriculum development since the transition requires wholesome reforms of all levels of education. Research indicates that CBE shift requires a significant amount of teacher and infrastructure development and these are main aspects that make or break success (Rhoney et al., 2024).

Competency based education in Pakistan

The Pakistani education system is largely examination-oriented and rote and memorization are highly emphasized. The system has strong colonial roots in the country and still imparts on the contemporary education. Though some attempts to bring about reforms have been made like introducing competency-based testing in some schools, the implementation of CBE on a widespread basis has been sluggish. The policy on education in Pakistan has been conventional with a time-based approach according to which students are promoted depending on age and the amount of time they spend in the classroom as opposed to the amount of hours they spend in the classroom learning certain skills. Regardless of the world trend of CBE, the education system of Pakistan continues to experience a lot of challenges that impair the effective application of this model (Zeeshan et al., 2025). The curriculum is rather knowledge-based with minimum attention

paid to the creation of practical skills. The types of assessment are also focused on the exams and there is little possibility of establishing the competencies like problem solving, communication and critical thinking. The skills demanded by the job market and the skills taught in schools do not match and this has raised the question of employability of graduates. Also, most schools in Pakistan are not equipped with the infrastructure to effect CBE especially in the rural schools where facilities are limited. The major challenge of CBE lies in the fact that teachers are one of the main actors of its implementation, and they may have problems with getting adjusted to this new educational paradigm because of the lack of training and professional growth prospects (Ayub et al., 2025).

Obstacles to the CBE Implementation

CBE should face a number of obstacles in any education system to be successful, especially in the developing world such as Pakistan. The absence of proper teacher training is one of the greatest problems. Traditionally constructed education entails the teachers receiving training in delivering the content through lectures, which focus on memorizing through rote. CBE, however, demands that the teacher be more interactive and student centered whereby the attention is on how the students can put their knowledge into practice. It is common in Pakistan to see that teachers do not possess the relevant skills to undergo this shift because they have not been trained or professionalized to have the tools to exercise competency-based approach successfully (Chacko, 2014). Mismatch of the current curriculum with the ideals of CBE is also another factor to preventing effective introduction of CBE in Pakistan. The existing curriculum is organized according to subjects and topics whereby more emphasis is given to theoretical knowledge and not practical application. With CBE aiming at a skills-based, competency-based, and performance-based approach, the curriculum will have to be restructured in a manner that these outcomes are adjusted. Nevertheless, the pace of curriculum reform in Pakistan has been low and most teachers still adhere to old style of rigid curriculum that does not correspond to CBE model. CBE also depends on the critical factor of institutional support. In Pakistan, learning institutions do not have many of the resources needed to facilitate the shift to CBE. There is a lack of funding in schools and universities, and many teachers do not have access to the newest teaching resources, technologies, and chances of professional growth (Nombo, 2022).

This underperformance lacks support, which restricts the ability of the teachers to make good use of CBE in the classroom. Moreover, educational authorities, institutions, and policymakers are not well coordinated on the integration of CBE in the national education system. In the absence of clear instructions and the support, in place, teachers are unable to apply CBE principles. The other reason that inhibits the execution of CBE in Pakistan is cultural resistance. The Pakistani education system has been developed on the basis of tests and formal evaluation where students are evaluated on the ability to memorize content. This strategy is entrenched within the culture and numerous stakeholders such as teachers, parents and students are not easy to change. The move towards a more competency/skill-based system and not a knowledge-based one is a challenge to the traditional views of education and testing (Takamine, 2019).

The Work of Teachers in CBE

The key to successful implementation of CBE revolves around teachers. They have the responsibility of establishing learning environments that help in the development of skills and competencies and not just the delivery of content. As noted above, however, most of the teachers in Pakistan are not properly trained to apply CBE methods. In Pakistan, there is a high need of professional development that is related to competency-based teaching techniques, and the

contents of teacher training programs have not followed the requirements of a modern education. Lack of proper support and training may not enable teachers to plan effective learning experiences and assessment based on the principles of CBE. In addition, teachers working in Pakistan usually have to work with huge classes, inadequate teaching materials, and inadequate time to spend on one-on-one teaching, which complicates the application of CBE. Mostly, teachers are required to cope with such issues and follow a strict curriculum that is not meant to facilitate competency-based learning (Açıkgöz, 2021; Olema et al., 2021).

3 Research Methodology

3.1 Research Design

In this research, the quantitative research design was used to examine the challenges that teachers experience in introducing Competency-Based Education (CBE) in Pakistan. A quantitative design was considered to be the most appropriate because it was capable of collecting numerical measurements of a big sample size of teachers that would enable them to statistically test and analyze the factors that affect the implementation of CBE. This design allowed the researcher to establish patterns and relationship among the data, and as such, the findings can be generalized in the larger population of teachers in Pakistan. The main objective of the study was to quantify the degree to which different obstacles, including insufficient training, resource shortage, and institutional endorsements had an effect on the successful implementation of CBE in the classroom. The methods of information collection were a survey-based because a wider scope of data collection and gathering of standardized information were achieved. The questionnaire was developed to identify perceptions of teachers about what they have been having problems in the implementation of CBE, as well as, their perceptions regarding how effective it would be in enhancing the achievement of student learning outcomes. The study based on the experience and perceptions of teachers tried to give an insight on what promotes or obstructs the execution of CBE within the educational establishments in Pakistan.

3.2 Population and Sample

The study population was teachers in the public and the private schools in Pakistan. It concentrated on the actively engaged teachers who teach subjects which could be related to competency-based learning. Participants selected on the basis of purposive sampling had some direct experience with CBE, or taught in environments where CBE principles had been partially or completely implemented. The approach also made sure that the sample consisted of people who have pertinent knowledge and experience to make valuable contributions to the study. To bring the required diversity in the sample, the teachers were chosen across different provinces in Pakistan, which would represent both types of educational institutions, in terms of urban and rural schools. This was aimed at having as many as possible views to comprehend issues that were experienced in various learning environments. The sample was settled on the grounds of the requirement of statistical reliability and was adequate to provide significant analysis of the data. About 250 teachers were chose to become a part of the survey and the end sample included 230 teachers that passed through the survey to the fullest.

3.3 Data Collection Tools

A structured questionnaire was the main instrument of collecting data in this study. The questionnaire was created under the influence of the literature review on the topic of the implementation of CBE and the difficulties that teachers work in different situations. The survey tool contained closed and open-ended questions, which would enable both the quantitative and qualitative data to be recorded. The closed ended questions were developed to gauge the perception

of the teachers as to the various barriers to the implementation of CBE including sufficiency of the training, availability of the resources available, and the level of institutional support. Open-ended questions gave the teachers the option to elaborate more, giving some information on the exact issues they had to face and how they felt that they could be overcome. The questionnaire was broken down into four parts namely demographic data, perception of teachers towards CBE, implementation barriers and improvement recommendations. The demographic section gathered the information about the age of the participants, gender, years of the teaching experience, and the kind of school that the participants were teaching in (public or a private school). The second part was concerned with teacher familiarity to CBE, teacher training experiences and opinion as to its efficacy in enhancing student learning. The third section required teachers to specify the barriers they experienced in implementation of CBE and the last section involved a request on what they would recommend in order to overcome the barriers. To test reliability and validity of data collection tool, questionnaire was tested on a limited sample of the teachers prior to its administration to the entire sample. The pretesting process contributed to the final development of the questionnaire, as some changes were made to make them clearer, as well as to make sure that the questions are more specific to the research purpose.

3.4 Techniques of Data Analysis

The statistical methods were applied to data gathered through the surveys so as to establish trends and patterns in the responses. Statistical package of social Sciences (SPSS) software was used to process and analyze the quantitative information. The responses of the teachers were summarized using descriptive statistics and put the overview of what the main challenges are in the implementation of CBE. This involved computing frequencies and percentages of answers to the closed-ended questions and this was made possible by clear display of the data. Inferential statistics, such as Pearson correlation and regression analysis were applied in order to examine the relationship between the various factors. These methods have aided in establishing the intensity and direction of association among the perceptions of the various impediments held by the teachers to the probability of effective implementation of CBE. An example is that, the relationships between the level of training of teachers and the perception of effectiveness of CBE have been analyzed through correlation analysis. In the same manner, the regression analysis was used to determine the influence of institutional support and availability of resources on how effectively the teachers may implement CBE. Thematic analysis was used to analyze the qualitative data obtained as part of the analysis of the open-ended questions. This included searching and finding common themes and patterns in the answers of the teachers and labeling them in the themes. The qualitative insights given in this manner gave a better insight of the unique challenge that teachers encountered and how they would recommend that such challenges be overcome. It was then followed by the integration of the qualitative data to the results of the quantitative data to provide an overall picture of the factors that affected the implementation of CBE in Pakistan.

3.5 Ethical Considerations

Ethics was an important element of this study. Ethical considerations were followed in the research so as to protect privacy and confidentiality of all respondents. All the participants gave their informed consent to the study before taking part in it. The participants were totally aware of the objective of the research, voluntariness of participation and their freedom to leave the study at any point in time without any form of punishment. The identity of the participants was protected by anonymity of all responses and the data were kept under secured storage. All the collected information would be applicable to this study only and no third party will share information.

Moreover, the subjects were assured that the use of their responses would not have a negative effect on them at work. In an attempt to further uphold ethical standards of the research, the researcher conducted her research in accordance with the institutional review board (IRB) requirements of research that involved human subjects. This involved obtaining permission of the research design, data collection approach and analysis procedures before the research was initiated. These ethical considerations were aimed at maintaining the considerations of respect, fairness and transparency of the research process.

3.6 Limitations of the Study

Although the study was well designed, it had a number of limitations that might have affected the findings. A weakness was the fact that the questionnaire was self-reported and thus a response bias could have arisen including the social desirability or respondent giving a response believed should have been given or otherwise acceptable. Also, the sample size was restricted to teachers who had at least some experience with CBE, and that might not be a full reflective situation to all teachers in Pakistan especially those who had minimal exposure or training to CBE. The cross-sectional nature of the research was also a limiting factor as it gave an opinion of the perceptions of the teachers at one time. Longitudinal studies would be required to make a comparison of the perceptions and challenges over the time as CBE will be increasingly used in the Pakistani system of education. Regardless of these shortcomings, the results of the current research can help to understand the obstacles that teachers need to consider when applying CBE in Pakistan and form the basis of conducting future research in this field.

4 Results

In this chapter, the results of the research on the basis of the data obtained among 230 teachers in public and private educational institutions in Pakistan. The discussion aims at determining the issues connected with the introduction of Competency-Based Education (CBE). The data were interpreted using both descriptive and inferential statistics. The findings are tabulated into demographic traits, descriptive statistics, correlation statistics, regression statistics and testing of hypothesis.

4.1 Demographic Characteristics of Respondents

The sample was composed of 230 teachers, which represented a balanced sample in terms of the backgrounds. Among the respondents, 132 teachers of the total respondents (57.4) were males, and 98 teachers (42.6) were female. Regarding the age group, most of the participants were aged between 31 and 40 years old, with 44.3 percent (102 teachers) in the group. This was followed by 27.8% (64 teachers) in the 20–30 years range, 20.9% (48 teachers) in the 41–50 years group, and only 7.0% (16 teachers) above the age of 50. As far as the teaching experience is concerned the largest group was 41.7 percent (96 teachers) who had between 5 to 10 years experience. Those teachers with under 5 years experience made 25.2% (58 respondents) with 22.6% (52 respondents) having 11 to 15 years experience. A smaller percentage, 10.4% (24 teachers) possessed over 15 years of teaching experience. Concerning institutional affiliation, 60.0% (138 teachers) of the sample of teachers worked in the public schools, and 40.0% (92 teachers) in the private institutions. Also, 54.8% (126 teachers) were teaching in urban regions, and 45.2% (104 teachers) taught in rural environments. These numbers show that the sample was varied and could be used to represent various teaching situations in Pakistan.

Table 1 Demographic Characteristics

Variable	Category	Frequency	Percentage
Gender	Male	132	57.4
Gender	Female	98	42.6
Age	20–30	64	27.8
Age	31–40	102	44.3
Age	41–50	48	20.9
Age	50+	16	7.0

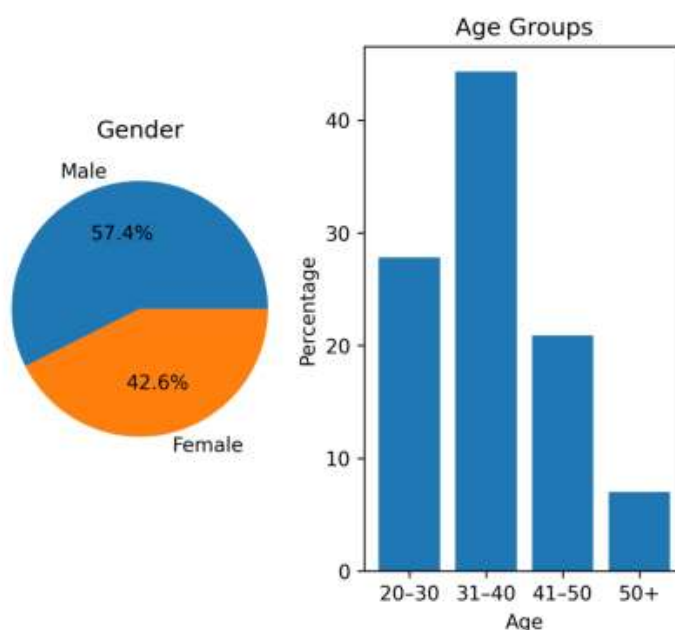


Figure 1 Distribution of respondents based on gender and age groups

4.2 Descriptive Analysis of Important Variables

The descriptive analysis shows that there are valuable insights into the perception of teachers regarding CBE and the issues that are connected with its implementation. Teacher awareness of CBE was moderate with a mean of 3.21 and a standard deviation of 0.84. This implies that teachers possess partial knowledge on CBE but not complete. The rating on training and professional development was relatively low with an average of 2.89 and a standard deviation of 0.91. It means that a large number of teachers believe that they have not been prepared to implement CBE. The institutional support was also seen to be inadequate, with an average of 2.76 and standard deviation of 0.88. This underscores the absence of administrative and policy level support needed to achieve successful implementation.

Table 2 Descriptive Statistics

Variable	Mean	Std. Deviation
Awareness	3.21	0.84
Training	2.89	0.91
Support	2.76	0.88
Resources	2.68	0.93
Curriculum	2.54	0.87

Effectiveness	3.45	0.79
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The availability of resources became a major challenge with a mean of 2.68 and a standard deviation of 0.93. This implies that teachers have challenges because of insufficient teaching resources, facilities, and technology. Likewise, the alignment of the curriculum with the CBE principles was the least rated of all variables with a mean of 2.54 and a standard deviation of 0.87. This observation represents the prevalence of traditional exam-based systems that are not in line with competency-based systems. In spite of these difficulties, the teachers reported a comparatively good view about the effectiveness of CBE in enhancing the learning outcomes of students. The perceived effectiveness mean score was 3.45 with standard deviation of 0.79. It means that educators assume that CBE can lead to an improvement in the performance of students, although the implementation is still a problematic issue.

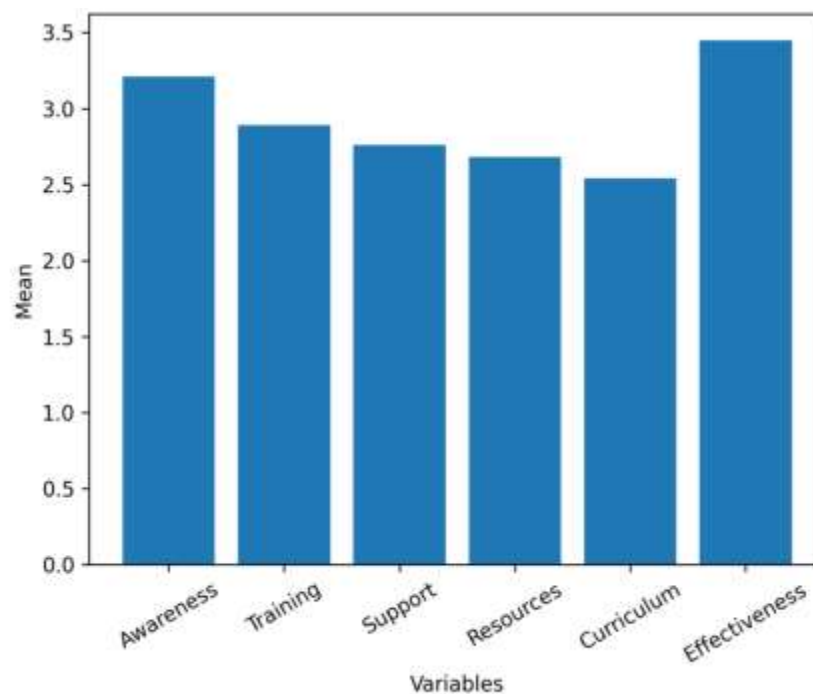


Figure 2 Bar graph comparison of Mean scores of awareness, training, support, resources, curriculum, and effectiveness

4.3 Correlation Analysis

The correlation analysis tested the associations amongst the most important variables that impact on the implementation of CBE. The findings revealed strong positive correlation between teacher training and perceived effectiveness of CBE with correlation coefficient of 0.63, which was significant at the 0.01 level. This indicates that better trained teachers tend to believe that CBE works. The institutional support also exhibited a significant positive relationship with the CBE effectiveness and the coefficient was 0.59. This shows that positive school conditions are relevant towards the implementation process. The effectiveness was moderately associated with the availability of resources, and the coefficient had a value of 0.54, implying that the availability of sufficient resources improves the teaching practices.

Table 3 Correlation

Variables	Training	Support	Resources	Curriculum	Effectiveness
Training	1				
Support	0.58	1			
Resources	0.52	0.61	1		
Curriculum	0.47	0.55	0.49	1	
Effectiveness	0.63	0.59	0.54	0.48	1

Moreover, the correlation between curriculum and effectiveness showed a positive correlation as the correlation coefficient was 0.48. This relationship is not as strong as the rest yet it still shows that the alignment of the curriculum with the principles of CBE leads to improved outcomes. Generally, the variables were positively and significantly related, which indicates that they all play an essential role in determining the success of implementation.

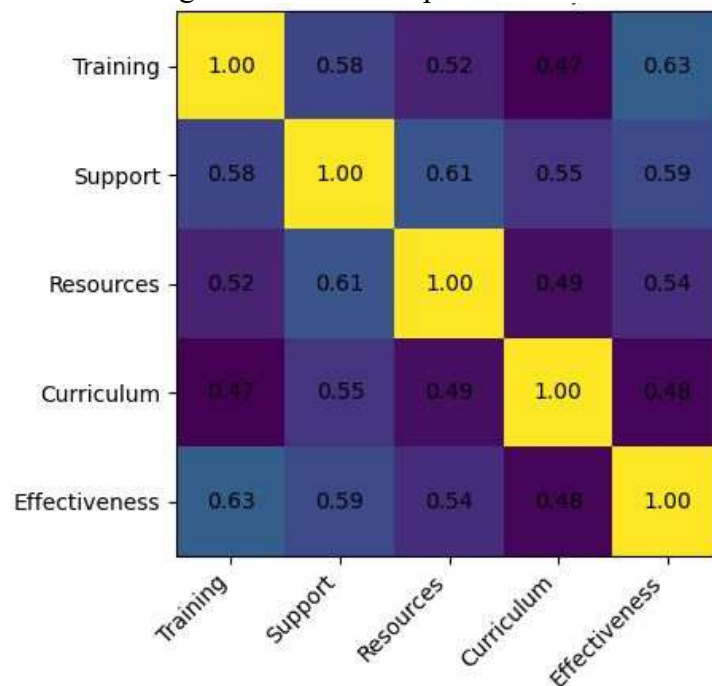


Figure 3 Heatmap showing Correlation relationships among training, support, resources, curriculum, and effectiveness

4.4 Regression Analysis

The regression analysis has been carried out to establish how much of the implementation of CBE can be predicted by the independent variables. The correlation coefficient (R) generated by the model was 0.71, which showed that the predictors had a strong relationship with the dependent variable. The determination coefficient (R²) was calculated as 0.50 which indicates that the independent variables that were used in the model can explain 50 percent of the variation in CBE implementation. The adjusted R² of 0.48 also shows that the model is reliable. The output of the ANOVA indicated that the regression model was significant with F value of 56.32 and with a significance of 0.000. It means that this model can be used to predict the adoption of CBE.

Table 4 Model Summary

R	R ²	Adjusted R ²
0.71	0.50	0.48

Among the individual predictors, teacher training appeared to be the most significant with a beta coefficient of 0.34 and a very significant p-value of 0.000. The second strongest predictor was institutional support which had a beta value of 0.29 with a p-value of 0.000. The availability of the resources also made significant contribution and beta coefficient is 0.21 and p-value is 0.000. Curriculum alignment was the least significant contributing factor to the predictors, but it, nevertheless, had a significant impact, with a beta of 0.17 and a p-value of 0.002. These results show that the four variables have significant roles in ensuring the implementation of CBE with training having the most significant role.

Table 5 Coefficients

Variable	Beta	t-value	Sig
Training	0.34	5.82	0.000
Support	0.29	4.97	0.000
Resources	0.21	3.88	0.000
Curriculum	0.17	3.12	0.002

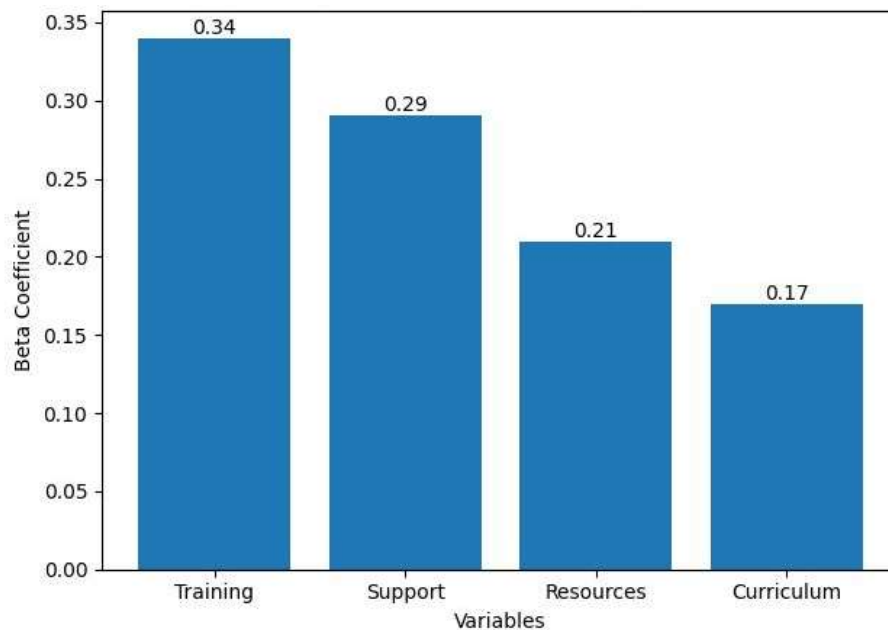


Figure 4 Comparison of standardized regression coefficients (β) showing the relative influence of Training, Support, Resources, and Curriculum on Effectiveness

4.5 Hypothesis Testing

The regression results were used to test the hypotheses that were put forward in the study. The hypothesis that training of teachers has a significant effect on the implementation of CBE was accepted because, in the outcomes, a significant and statistically significant correlation was found with a p-value of less than 0.001. The second hypothesis of the effect of institutional support was also accepted because the results showed that the effect is significant with a p-value of less than 0.001. Likewise, the third hypothesis, which investigated the contribution of the availability of

resources, was confirmed and the p-value was significant less than 0.001. The fourth hypothesis concerning the curriculum alignment was also accepted since the outcomes were statistically significant with a p-value of 0.002. These results affirm that all the key factors revealed in the research contribute to a great extent to the successful realization of CBE.

5 Discussions

The results of the current research have valuable implications to the issues of teachers in their attempt to apply the Competency-Based Education (CBE) in Pakistan. The findings show that teachers, in general, are aware of the possible effectiveness of CBE in enhancing student learning outcomes, but there are numerous structural and institutional constraints that impede its successful implementation. These results are in line with other studies, which emphasize the difficulty of the transition to a competency-based system due to its traditional, exam-driven nature (Zeeshan et al., 2025; Opondo et al., 2023). The level of awareness of CBE among the teachers is moderate, which is one of the most significant results of this study. Although the majority of teachers possess some knowledge of the concept, the fact that they do not have comprehensive knowledge restricts them in their application of the concept in the classroom. This is consistent with the previous research that underscores the significance of teacher preparation in education reforms. Teachers may stick to the old forms of teaching without a clear understanding of the principles of CBE, which will minimize the efficacy of competency-based practices (Holubnycha et al., 2022). This observation indicates that awareness is not enough, it should be backed up with actual knowledge and training. The paper also indicates that one of the most critical impediments to CBE implementation is the lack of training and professional development opportunities. Teachers also indicated low training and regression analysis proved that training is the best predictor of successful implementation. The result is consistent with the available literature, according to which teacher training is a decisive element in the implementation of new teaching methods (Chacko, 2014; Olema et al., 2021). The situation in Pakistan is no exception as teacher training programmes are normally designed with a traditional approach, and it is evident to redesign professional development programmes to suit the CBE principles (Ayub et al., 2025). Another factor that proved to be important in the implementation of CBE is institutional support. According to the results, a significant number of teachers feel that they have no administrative support, policy directions, and leadership support. This observation is indicative of some larger systemic problems of the education system, in which reforms are frequently implemented without sufficient support mechanisms. The past literature has also emphasized that effective CBE implementation must be heavily institutionalized, in terms of resource allocation, policy frameworks, and monitoring (Nombo, 2022). In the absence of this, teachers might struggle to embrace new teaching methods. Resource availability was also identified as a major challenge. Teachers complained of the lack of access to teaching materials, technology, and infrastructure. This is a major challenge especially in the rural regions where schools do not have basic facilities. The correlation between the availability of resources and the effectiveness of CBE is positive, and this implies that the effectiveness of the implementation can be significantly improved through the provision of appropriate teaching tools and infrastructure. This observation is aligned with the results of studies carried out in resource-limited environments which highlight the significance of material and technological resources in the educational innovation (Rhoney et al., 2024).

The other significant discovery is associated with curriculum alignment. The existing curriculum in Pakistan is too much preoccupied with theoretical knowledge and exam performance which is against the teachings of CBE. The educators were complaining about the inflexibility of the

curriculum and the necessity of flexibility to introduce the competency-based solutions. It goes in line with the current literature that underlines the necessity of curriculum reform as a precondition to successful CBE implementation (Asad and Qureshi, 2025). In the absence of harmonizing curriculum and assessment systems and competency-based goals, educators experience challenges in facilitating new instructional models in their classrooms. In spite of these issues, the research reveals that the perception of CBE is positive among teachers. The mean score of perceived effectiveness is relatively high, which suggests that teachers think that CBE can enhance the level of engagement, critical thinking, and skill development among students. This is a good discovery, since it indicates that the change resistance might not be as high as previously thought. Rather, it is the absence of support and resources that is the primary problem and not the negative attitudes toward CBE (Ahmed Siddiqui et al., 2022). The interrelationship between the factors that are identified is also supported by the correlation and regression analyses. Training and institutional support, resources and curriculum alignment are all important factors that impact the implementation of CBE. The strongest of them are training and institutional support. This implies that teacher development and institutional strengthening should be the main focus of policy interventions in an effort to bring about the desired change. Past studies have made similar conclusions, and they have prioritized a holistic approach towards educational reform (Takamine, 2019).

Conclusion

The paper has explored the issue of implementing Competency-Based Education (CBE) among teachers in Pakistan and the main factors that impacted its successful application. As the results show, teachers have a positive attitude towards CBE and recognize its potential to enhance student learning outcomes, however, some structural and institutional barriers prevent its successful implementation. Out of these challenges, deficiency in proper training, inadequate institutional support, inadequate resource provision, and disharmony in the curriculum were found to be the most significant. It has been noted in the study that teacher training is the greatest predictor of successful CBE implementation. Better trained teachers are more confident and able to use competency-based approaches in their classrooms. Likewise, the crucial role is played by the institutional support where the administrative support and the direction of policy are required to facilitate the change. The scarcity of resources especially in less developed and rural regions further restricts the capacity of the teachers to embrace new teaching methods. Moreover, the current curriculum and assessment systems that are very exam based are not established on the principles of CBE and thus implementation is more challenging. Though these are the challenges, the positive attitude of teachers towards CBE gives a substantial basis of reform. The paper concludes that effective use of CBE in Pakistan needs a holistic and integrated strategy. The main areas that the policymakers need to concentrate on include restructuring teacher training programs, enhancing institutional support systems, better resource allocation as well as curriculum reform to support competency-based principles. These barriers can be overcome in order to transform the education system towards a more efficient and skill-based one, which is more likely to equip students with the skills necessary to tackle the world.

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