

Critical Thinking as A Predictor of Problem-Solving Skills Among Prospective Teachers

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Abstract:

The present study aimed to investigate the relationship between critical thinking and problem solving skills among prospective teachers. The study employed the Normative Survey Method. A sample of 1200 prospective teachers was selected from various colleges of Education using the Simple Random Sampling Technique. California Critical Thinking Skills Test developed by Peter Facione and Noreen Facione (1990) and Problem Solving Scale developed by Paul. P. Heppner and Chris. H. Petersen (1982) were used for data collection. The collected data were analyzed using Mean, Standard Deviation, t-test, f-test and Chi-Square test.

The findings of the study revealed that critical thinking significantly predicts problem-solving skills among prospective teachers. A positive and meaningful relationship was identified, indicating that prospective teachers with higher levels of critical thinking tend to exhibit better problem-solving abilities. The study also explored the association of selected demographic variables with critical thinking and problem-solving skills, revealing significant and non-significant variations among certain groups.

The study emphasizes the importance of strengthening critical thinking abilities in teacher education programmes to enhance prospective teachers' problem-solving competencies. The findings highlight the need for curriculum reforms, innovative pedagogical practices, and training strategies that foster analytical thinking and effective decision-making among future educators.

Keywords: Critical Thinking, Problem-Solving Skills, Prospective Teachers, Teacher Education, Predictor, Higher-Order Thinking.

1. INTRODUCTION

In the rapidly changing educational environment of the twenty-first century, teachers are expected to possess not only subject knowledge but also higher-order cognitive abilities to address diverse classroom challenges effectively. Among these competencies, critical thinking and problem-solving skills are considered essential for prospective teachers, as they influence instructional decision-making, classroom management, and teaching effectiveness.

Critical thinking refers to the ability to analyze, evaluate, interpret, and synthesize information to make reasoned judgments. It enables prospective teachers to assess teaching strategies, make informed decisions, and adapt instructional practices according to classroom needs. Likewise, problem-solving skills involve identifying challenges, generating alternatives, evaluating solutions, and implementing

effective actions to resolve issues. In educational settings, these skills are crucial for addressing academic, behavioural, and instructional challenges.

Researchers have emphasized the close relationship between critical thinking and problem-solving, suggesting that critical thinking serves as a foundation for effective problem resolution. Prospective teachers with strong critical thinking abilities are more likely to approach classroom problems systematically and make rational decisions.

However, teacher education programmes often focus more on theoretical knowledge than cognitive skill development, leaving prospective teachers inadequately prepared for real-world challenges. Therefore, it is important to examine whether critical thinking predicts problem-solving skills among prospective teachers. The present study seeks to investigate this relationship and provide insights for improving teacher education programmes by strengthening critical thinking and problem-solving competencies among future educators.

2. NEED AND SIGNIFICANCE OF THE STUDY

In the contemporary educational environment, prospective teachers require not only subject knowledge but also higher-order cognitive skills such as critical thinking and problem-solving skills to address classroom challenges effectively. These competencies are essential for decision-making, reflective teaching and instructional effectiveness. The need for the present study arises from the growing emphasis on competency-based teacher education and the concern that many teacher education programmes focus more on theoretical knowledge than cognitive skill development. As a result, prospective teachers may not be adequately prepared to manage real classroom situations effectively.

Although previous studies have examined critical thinking and problem-solving skills separately, limited research has explored their predictive relationship among prospective teachers. Therefore, it is important to investigate whether critical thinking predicts problem-solving skills among prospective teachers. The significance of the study lies in its contribution to teacher education and educational psychology by providing empirical evidence on the relationship between critical thinking and problem-solving skills. The findings may help teacher educators and policymakers develop effective teaching strategies to strengthen higher-order cognitive skills among prospective teachers and prepare professionally competent teachers.

3. STATEMENT OF THE PROBLEM

In the present educational context, prospective teachers require not only subject knowledge and pedagogical skills but also higher-order cognitive abilities such as critical thinking and problem-solving skills to manage classroom challenges effectively. These competencies are essential for informed decision-making, reflective teaching and addressing academic and behavioural issues.

However, many teacher education programmes continue to emphasize theoretical knowledge rather than the development of cognitive and analytical skills. Although previous studies have examined critical thinking and problem-solving separately, limited research has explored their predictive relationship among prospective teachers.

Therefore, the present study seeks to examine whether critical thinking predicts problem-solving skills among prospective teachers. Hence, the investigator has undertaken the study entitled “Critical Thinking as a Predictor of Problem-Solving Skills among Prospective Teachers.”

4. REVIEW OF RELATED LITERATURE

a) Akben (2020)

Akben investigated the effects of problem-posing approaches on students' problem-solving skills and metacognitive awareness in science education. The study reported that learners exposed to structured reflective and analytical approaches demonstrated enhanced problem-solving abilities, suggesting a strong connection between higher-order thinking and effective resolution.

b) Karaoglan Yilmaz (2022)

Karaoglan Yilmaz examined learning analytics and their influence on students' academic self-efficacy and problem-solving skills. The findings revealed that analytical and reflective learning environments significantly improved learners' problem-solving capacities, thereby supporting the argument that critical and reflective thinking are essential predictors of problem-solving ability.

c) Huang and Sang (2023)

Huang and Sang conducted a systematic review of empirical research on critical thinking in teacher education. The review analyzed 43 studies and concluded that critical thinking among prospective teachers is context-dependent and multidimensional. The authors highlighted the need for teacher education institutions to strengthen critical thinking competencies to improve professional decision-making and problem-solving capabilities among future teachers.

d) Demir (2023)

Demir systematically reviewed research on critical thinking skills among teachers and pre-service teachers between 2013 and 2022. The findings revealed increasing attention to critical thinking in teacher education, with the California Critical Thinking Disposition Inventory frequently used for assessment. The study reported inconsistent findings regarding critical thinking levels but emphasized its significance in professional competence and classroom problem-solving.

e) Objectives of the Study

1. To study the Level of Critical Thinking among Prospective Teachers.
2. To study the Level of Problem Solving skills among Prospective Teachers.
3. To find out whether there is any significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Gender.
4. To find out whether there is any significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Locality.
5. To find out whether there is any significant difference in Critical Thinking and Parent's Educational Qualification among Prospective Teachers.
6. To find out whether there is any significant difference in Problem Solving Skills and Parent's Educational Qualification among Prospective Teachers.
7. To find out whether there is any significant difference in Critical Thinking and Family's Annual Income among Prospective Teachers.
8. To find out whether there is any significant difference in Problem Solving Skills and Family's Annual Income among Prospective Teachers.
9. To find out the relationship between Critical Thinking and Problem Solving Skills among Prospective Teachers.

f) Hypotheses of the Study

1. There is no significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Gender.

2. There is no significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Locality.
3. There is no significant association between Parent's Educational Qualification and Critical Thinking of prospective teachers.
4. There is no significant association between Parent's Educational Qualification and Problem Solving of prospective teachers.
5. There is no significant association between Family's Annual Income and Critical Thinking of prospective teachers
6. There is no significant association between Family's Annual Income and Problem Solving of prospective teachers.
7. There is no significant relationship between Critical Thinking and Problem Solving Skills among Prospective Teachers.

g) Variables of the Study

• **Independent Variable**

Critical Thinking

Critical thinking refers to the ability of an individual to think rationally, analytically and reflective in order to evaluate information, interpret evidence, identify assumptions and make reasoned judgements. It involves higher-order cognitive processes such as analysis, inference, evaluation, explanation and self-regulation.

• **Dependent Variable**

Problem Solving Skills

Problem-Solving skills refer to an individual's ability to identify problems, analyze causes, generate alternatives, evaluate possible solutions and implement appropriate strategies to resolve challenges effectively. It is a cognitive and behavioural process that enables individuals to make effective decisions in complex situations.

• **Demographic Variables**

The following demographic variables were considered for the study:

1. Gender (Male/Female)
2. Locality (Rural/Urban)
3. Parent's Educational Qualification (Illiterate/School Education/College Education)
4. Family's Annual Income (Rs. 10,001 to Rs. 25,000/Rs.25,000 to Rs. 50,000/Above Rs. 50,001)

h) Method of the Study

The present study employed the Normative Survey Method to investigate the relationship between Critical Thinking and Problem-Solving Skills among prospective teachers.

8.1 Population of the Study

The population of the study comprised all prospective teachers studying in Colleges of Education.

8.2 Sample of the Study

A sample of 1200 prospective teachers was selected from various Colleges of Education using Simple Random Sampling Technique.

8.3 Tools Used for the Study

The following standardized tools were used for data collection:

1. **California Critical Thinking Skills Test (CCTST)**

The California Critical Thinking Skills Test (CCTST) developed by Peter A. Facione and Noreen C. Facione (1990) was used to assess the level of critical thinking among prospective teachers.

- Reliability: The reliability coefficient calculated using the Kuder-Richardson Formula (KR-20) was reported as 0.62, indicating acceptable internal consistency for research purposes.
- Validity: The validity of the CCTST has been established through content validity, construct validity and experimental validation. The scale possesses strong content validity of the instrument as established by the authors during the process of standardization.

Therefore, the Critical Thinking Scale was considered suitable for assessing the Critical Thinking of prospective teachers.

2. Problem Solving Inventory (PSI)

The Problem Solving Inventory (PSI) developed by Paul P. Heppner and Chris H. Petersen (1982) was used to assess the problem-solving skills of prospective teachers.

- Reliability: The reliability coefficient of the scale was reported to be 0.89
- Validity: The tool possesses satisfactory content validity and construct validity as established by the authors.

8.4 Statistical Techniques Used

The collected data were analyzed using the following statistical techniques

1. Percentage Analysis
2. Mean
3. Standard Deviation
4. T-test
5. Chi-Square Test (χ^2)
6. Pearson's Product Moment Correlation

9 STATISTICAL ANALYSIS AND INTERPRETATION

9.1 Testing of Objectives & Hypotheses

The objectives and hypotheses framed for the study were tested through systematic statistical analysis. Appropriate techniques were employed to identify significant relationships and differences among the variables under investigation.

Objective 1

To study the Level of Critical Thinking among Prospective Teachers.

Table 1: Level of Critical Thinking among Prospective Teachers

Sl. No.	Variables	Level	Number of Prospective Teachers	Percentage
1	Critical Thinking	Low	209	17.4%
		Moderate	830	69.2%
		High	161	13.4%
	Total		1200	100%

Interpretation

Table 1 shows the level of critical thinking among prospective teachers. It is evident from the table that out of 1200 prospective teachers, 209 (17.4%) prospective teachers possess a low level of critical thinking,

830 (69.2%) prospective teachers possess a moderate level of critical thinking, and 161 (13.4%) prospective teachers possess a high level of critical thinking.

The results indicate that the majority of prospective teachers exhibit a moderate level of critical thinking. Comparatively, a smaller proportion of prospective teachers demonstrated a low level and a high level of critical thinking. Therefore, it can be inferred that prospective teachers possess an average capacity for analytical reasoning, reflective thinking, and logical decision-making.

Objective 2

To study the level of Problem Solving Skills among prospective teachers.

Table 2: Level of Problem Solving Skills among Prospective Teachers

Sl. No.	Variables	Level	Number of Prospective Teachers	Percentage
1	Problem Solving Skills	Low	298	24.9%
		Moderate	675	56.2%
		High	227	18.9%
	Total		400	100%

Interpretation

Table 2 shows the level of problem-solving skills among prospective teachers. It is evident from the table that out of the total prospective teachers, 298 (24.9%) possess a low level of problem-solving skills, 675 (56.2%) possess a moderate level of problem-solving skills, and 227 (18.9%) possess a high level of problem-solving skills.

The results indicate that the majority of prospective teachers exhibit a moderate level of problem-solving skills. Comparatively, a considerable proportion of prospective teachers possess a low level of problem-solving skills, while a relatively smaller proportion demonstrate a high level of problem-solving skills. Therefore, it can be inferred that most prospective teachers possess an average ability to identify, analyze, and resolve problems effectively.

Hypothesis 1

There is no significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Gender.

Table 3: Significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Gender.

S.No	Variables	Gender	N	Mean	SD	t-value	Significance
1	Critical Thinking	Male	179	31.13	11.523	0.22	Not Significance
		Female	1021	31.35	12.111		
2	Problem Solving Skills	Male	179	75.22	5.886	3.27	0.05 Level of Significant
		Female	1021	76.89	6.380		

Interpretation

Table 3 presents the significant difference in critical thinking and problem-solving skills among prospective teachers with respect to gender.

Regarding critical thinking, the mean score of male prospective teachers ($M = 31.13$, $SD = 11.523$) and female prospective teachers ($M = 31.35$, $SD = 12.111$) shows only a slight variation. The obtained t-value

(0.22) was found to be not statistically significant, indicating that there is no significant difference in critical thinking among prospective teachers with respect to gender.

With regard to problem-solving skills, the mean score of male prospective teachers ($M = 75.22$, $SD = 5.886$) was comparatively lower than that of female prospective teachers ($M = 76.89$, $SD = 6.380$). The obtained t-value (3.27) was found to be statistically significant at the 0.05 level, indicating that there is a significant difference in problem-solving skills among prospective teachers with respect to gender. Female prospective teachers demonstrated comparatively higher problem-solving skills than male prospective teachers.

Hypothesis 2

There is no significant difference in Critical Thinking and Problem Solving Skills among Prospective Teachers with respect to Locality.

Table 4: Significant difference in Emotional Intelligence and Teaching Competence among Prospective Teachers with respect to Locality.

S.No	Variables	Gender	N	Mean	SD	t-value	Significance
1	Critical Thinking	Rural	947	30.98	12.051	1.90	Not Significance
		Urban	253	32.60	11.843		
2	Problem Solving Skills	Male	947	76.64	6.140	0.06	Not Significance
		Female	253	76.66	7.028		

Interpretation

Table 4 presents the significant difference in critical thinking and problem-solving skills among prospective teachers with respect to locality.

Regarding critical thinking, the mean score of rural prospective teachers ($M = 30.98$, $SD = 12.051$) was comparatively lower than that of urban prospective teachers ($M = 32.60$, $SD = 11.843$). However, the obtained t-value (1.90) was found to be not statistically significant, indicating that there is no significant difference in critical thinking among prospective teachers with respect to locality.

With regard to problem-solving skills, the mean score of rural prospective teachers ($M = 76.64$, $SD = 6.140$) and urban prospective teachers ($M = 76.66$, $SD = 7.028$) showed only a negligible difference. The obtained t-value (0.06) was found to be not statistically significant, indicating that there is no significant difference in problem-solving skills among prospective teachers with respect to locality.

Hypothesis 3

There is no significant association between Parent's Educational Qualification and Critical Thinking of prospective teachers

Table 5: Association between Parent's Educational Qualification and Critical Thinking of Prospective Teachers

Sl. No.	Variable	df	Chi-Square (χ^2) - value	Significance
1	Critical Thinking	4	5.40	Not Significant

Interpretation

Table 5 shows that the calculated Chi-square (χ^2) value is 5.40 with 4 degrees of freedom ($df = 4$). The obtained value is found to be not significant at the prescribed level of significance. Hence, the null hypothesis is accepted.

This indicates that there is no significant association between Parent's Educational Qualification and the Critical Thinking of prospective teachers. In other words, the educational qualification of parents does not appear to have a significant influence on the level of critical thinking among prospective teachers in the present study.

Hypotheses 4

There is no significant association between Parent's Educational Qualification and Problem Solving of prospective teachers.

Table 6: Association between Parent's Educational Qualification and Problem Solving Skills of Prospective Teachers

Sl. No.	Variables	df	Chi-Square (χ^2) - value	Significance
1	Problem Solving Skills	4	9.73	Significant

Interpretation

Table 6 reveals that the calculated Chi-square (χ^2) value is 9.73 with 4 degrees of freedom ($df = 4$). The obtained χ^2 value is found to be significant at the prescribed level of significance. Therefore, the null hypothesis is rejected.

This indicates that there is a significant association between Parent's Educational Qualification and Problem Solving Skills of prospective teachers. It implies that the educational qualification of parents may influence the problem-solving skills of prospective teachers in the present study.

Hypothesis 5

There is no significant association between Family's Annual Income and Critical Thinking of prospective teachers.

Table 7: Association between Family's Annual Income and Critical Thinking of Prospective Teachers

Sl. No.	Variable	df	Chi-Square (χ^2) - value	Significance
1	Critical Thinking	6	5.40	Significant

Interpretation

Table 6 indicates that the calculated Chi-square (χ^2) value is 5.40 with 6 degrees of freedom ($df = 6$). The obtained χ^2 value is found to be significant at the prescribed level of significance. Therefore, the null hypothesis is rejected.

This indicates that there is a significant association between Family's Annual Income and Critical Thinking of prospective teachers. It implies that variations in family annual income may influence the critical thinking ability of prospective teachers in the present study.

Hypothesis 6

There is no significant association between Family's Annual Income and Problem Solving of prospective teachers.

Table 8: Association between Family's Annual Income and Problem Solving Skills of Prospective Teachers

Sl. No.	Variable	df	Chi-Square (χ^2) - value	Significance
1	Problem Solving Skills	6	9.82Not	Not Significant

Interpretation

Table 6 reveals that the calculated Chi-square (χ^2) value is 9.82 with 6 degrees of freedom ($df = 6$). The obtained χ^2 value is found to be not significant at the prescribed level of significance. Therefore, the null hypothesis is accepted.

This indicates that there is no significant association between Family's Annual Income and Problem Solving Skills of prospective teachers. It implies that differences in family annual income do not significantly influence the problem-solving skills of prospective teachers in the present study.

Hypothesis 7

There is no significant relationship between Critical Thinking and Problem Solving Skills among Prospective Teachers.

Table 9: Correlation Coefficient Values for Critical Thinking and Problem Solving Skills among Prospective Teachers.

Variables	Correlation Coefficient (r)	Significance
Critical thinking and Problem Solving Skills	0.684	0.01Level of Significant

Interpretation

The table presents the relationship between critical thinking and problem-solving skills among prospective teachers. The obtained correlation coefficient ($r = 0.684$) was found to be positive and statistically significant at the 0.01 level.

This indicates that there exists a strong positive relationship between critical thinking and problem-solving skills among prospective teachers. It implies that prospective teachers with higher levels of critical thinking tend to demonstrate better problem-solving skills. Similarly, lower levels of critical thinking are associated with lower problem-solving skills.

10. MAJOR FINDINGS OF THE STUDY

The major findings of the present study entitled “Critical Thinking as a Predictor of Problem-Solving Skills among Prospective Teachers” are summarized as follows:

1. The study found that the majority of prospective teachers (69.2%) possessed a moderate level of critical thinking, while 17.4% exhibited a low level and 13.4% demonstrated a high level of critical thinking.
2. The study revealed that the majority of prospective teachers (56.2%) possessed a moderate level of problem-solving skills, whereas 24.9% exhibited a low level and 18.9% demonstrated a high level of problem-solving skills.
3. No significant difference was found in critical thinking among prospective teachers with respect to gender, indicating that male and female prospective teachers possess nearly similar levels of critical thinking.
4. A significant difference was found in problem-solving skills among prospective teachers with respect to gender, wherein female prospective teachers demonstrated comparatively higher problem-solving skills than male prospective teachers.
5. No significant difference was found in critical thinking and problem-solving skills among prospective teachers with respect to locality, indicating that rural and urban prospective teachers possess relatively similar levels of these competencies.
6. The study revealed a significant difference in critical thinking among prospective teachers with respect to the selected background variable ($df = 6$), whereas no significant difference was observed in problem-solving skills.
7. A strong positive and statistically significant relationship was found between critical thinking and problem-solving skills among prospective teachers ($r = 0.684$, $p < 0.01$), indicating that higher critical thinking is associated with better problem-solving skills.
8. The effect size analysis revealed that the relationship between critical thinking and problem-solving skills demonstrated a large practical effect ($r^2 = 0.468$), indicating that 46.8% of the variance in problem-solving skills is explained by critical thinking.

11. DISCUSSION OF THE RESULTS

The findings of the present study provide substantial evidence that critical thinking plays a significant role in enhancing problem-solving skills among prospective teachers. The moderate level of critical thinking and problem-solving skills observed among prospective teachers suggests that teacher education institutions are contributing to the development of higher-order cognitive skills; however, there remains considerable scope for improvement.

The absence of significant differences in critical thinking with respect to gender and locality indicates that prospective teachers are receiving relatively similar educational opportunities and cognitive development experiences. This may be attributed to the standardized curriculum, common pedagogical practices, and equal access to teacher education programmes irrespective of demographic background.

However, the significant gender difference observed in problem-solving skills suggests that female prospective teachers demonstrated comparatively stronger abilities in identifying and resolving problems. Such differences may arise due to variations in learning approaches, academic engagement, or social experiences.

The most significant finding of the study is the strong positive relationship between critical thinking and problem-solving skills ($r = 0.684$). This finding confirms the theoretical assumption that critical thinking serves as a cognitive foundation for effective problem-solving. Prospective teachers with stronger critical thinking skills are likely to analyze situations more effectively, evaluate alternatives critically, and make informed decisions when solving classroom-related and educational problems.

The large effect size further strengthens the argument that critical thinking substantially contributes to problem-solving skills. Since nearly 46.8% of the variance in problem-solving skills is explained by critical thinking, the findings emphasize the importance of integrating critical thinking-oriented instructional strategies in teacher education programmes.

Therefore, teacher education institutions should prioritize pedagogical approaches such as problem-based learning, inquiry-oriented teaching, reflective practices, collaborative learning, debates, and case-based instruction to enhance both critical thinking and problem-solving skills among prospective teachers. Strengthening these competencies may help prepare competent, reflective, and professionally effective teachers capable of addressing the challenges of contemporary education.

12. EDUCATIONAL IMPLICATIONS OF THE STUDY

1. The findings of the present study have important implications for teacher education institutions, teacher educators, curriculum developers and policymakers. Since critical thinking was identified as a significant predictor of problem-solving skills among prospective teachers, teacher education programmes should emphasize the development of higher-order cognitive skills.
2. Teacher education institutions should integrate critical thinking-oriented pedagogies, problem-based learning, inquiry-based teaching, reflective practices and case-based learning to strengthen problem-solving competencies among prospective teachers. Curriculum reforms may include activities that promote reasoning, analysis, decision-making and experiential learning to prepare teacher trainees for real classroom challenges.
3. Teacher educators should adopt interactive teaching methods such as discussion, brainstorming, collaborative learning and classroom simulations to enhance critical thinking and problem-solving abilities. Furthermore, assessment practices should move beyond rote learning and include reflective assignments and problem-solving tasks.
4. The findings also suggest the need for competency-based teacher education policies that focus on developing professionally competent teachers. Therefore, strengthening critical thinking among prospective teachers may significantly enhance their problem-solving skills and improve overall classroom effectiveness.

13. RECOMMENDATIONS OF THE STUDY

Based on the findings of the present study entitled “Critical Thinking as a Predictor of Problem-Solving Skills among Prospective Teachers,” the following recommendations are proposed:

1. Teacher education institutions should strengthen critical thinking skills among prospective teachers through reflective, analytical and activity-based learning experiences.

2. Problem-based learning, inquiry-based teaching and case-study approaches should be integrated into teacher education programmes to improve both critical thinking and problem-solving skills.
3. Teacher educators should adopt innovative teaching methods such as discussions, debates, brainstorming, reflective practices and classroom simulations to foster higher-order thinking skills.
4. Teacher education curricula should be revised to include modules, workshops and practical activities that enhance critical thinking and problem-solving competencies.
5. Assessment practices should focus on analytical and application-oriented learning rather than relying only on memory-based examinations.
6. Training programmes and workshops should be organized to improve prospective teachers' problem-solving and decision-making abilities.
7. Educational policymakers should promote competency-based teacher education programmes emphasizing critical thinking and problem-solving skills.
8. Future studies may include larger and diverse samples, additional variables and different research approaches to strengthen the generalizability of findings.

14. SUGGESTIONS FOR FUTURE RESEARCH

Based on the findings of the present study entitled “Critical Thinking as a Predictor of Problem-Solving Skills among Prospective Teachers,” the following suggestions are proposed for future research:

1. Future studies may include larger and more diverse samples of prospective teachers from different regions and institutions to improve the generalizability of findings.
2. Similar studies may be conducted among different educational groups, such as in-service teachers, school students and higher education learners.
3. Future research may include additional variables such as self-efficacy, emotional intelligence, creativity, academic achievement and decision-making ability to better understand their influence on problem-solving skills.
4. Comparative studies may be conducted based on demographic variables such as gender, locality, type of institution and subject specialization.
5. Experimental, longitudinal and mixed-method studies may be undertaken to examine the development of critical thinking and problem-solving skills and the effectiveness of instructional interventions.
6. Future research may explore mediating and moderating variables influencing the relationship between critical thinking and problem-solving skills among prospective teachers.

15. CONCLUSION

The present study entitled “Critical Thinking as a Predictor of Problem-Solving Skills among Prospective Teachers” examined the relationship between critical thinking and problem-solving skills among prospective teachers. The findings revealed a positive and significant relationship, indicating that prospective teachers with higher levels of critical thinking tend to possess better problem-solving abilities. The study highlights that critical thinking and problem-solving skills are essential competencies for effective teaching and professional success. The findings emphasize the importance of integrating problem-based learning, inquiry-based teaching and reflective practices in teacher education programmes to strengthen these skills.

In conclusion, the study confirms that critical thinking is an important predictor of problem-solving skills among prospective teachers. Therefore, teacher education institutions should focus on developing critical thinking competencies to prepare competent and professionally effective teachers for modern educational settings.

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