

On the Relationship of Self Concept and Creative Thinking Among Prospective Teachers in West Tripura

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Abstract

This study explores the association between self-concept and creative thinking among prospective teachers in the West Tripura district of India. Adopting a correlational research design, data were collected from a representative sample of 500 B.Ed. trainees selected through stratified random sampling. The Self-Concept Inventory, developed by Beena Shah, and the Creative Thinking Test by Baqer Mehdi served as the primary instruments for data collection. Analytical tools, including descriptive statistics, Pearson's correlation coefficient, and independent t-tests, were employed for statistical interpretation. The findings reveal a statistically significant and positive correlation between self-concept and creative thinking. Additionally, significant variations were observed based on gender and academic stream, with female and science stream trainees scoring higher on both variables. These results underscore the need for teacher education programs to foster both self-awareness and creative potential to support comprehensive professional development.

Keywords: Self-concept, Creative thinking, Prospective teachers.

Introduction

The twenty-first century has ushered in a period of unprecedented transformation in the realms of education, economy, technology, and society. The current dynamic global environment requires a different way of thinking about education, as the old methods are no longer considered sufficient to support the changing needs of learners and the demands of society. The change in the technological landscape, globalization, and the changing nature of the workforce have transformed the skills needed to be able to effectively engage in both the civic and professional world (Wilmarth, 2010). As a result, there is an increasing emphasis on the education systems to develop 21st-century skills that encourage flexibility, innovation, and lifelong learning.

Some of the most important of these skills include creative thinking and self-concept, particularly when applied to teacher education. The would-be teachers are not only supposed to learn the subject knowledge and teaching methods but also acquire a strong and innovative mind that can explore and create a challenging educational context. Creativity in thinking will help teachers to create interesting learning activities, meet the needs of various learners, and develop critical thinking within their classrooms. At the same time, a healthy and good self-concept serves as a psychological support that enables teacher candidates to exercise initiative, endurance, and make a significant contribution to the teaching-learning process.

The perception and evaluation of individuals regarding themselves, including their abilities, values, and self-worth, also known as self-concept, is a key factor in determining academic motivation and career identity. For teacher trainees, self-concept determines not only how they view their potential as educators but also how effectively they respond to professional demands, build relationships with learners, and engage in reflective practices. A positive self-concept enhances self-efficacy, fosters intrinsic motivation, and cultivates a growth mindset—all of which are essential in nurturing competent and confident teachers (Bandura, 1997; Marsh C Craven, 2006).

Creative thinking, on the other hand, is the capacity to generate original, valuable, and contextually relevant ideas. In teaching, creativity manifests through lesson planning, classroom management, assessment innovation, and the use of diverse instructional strategies. Teachers with strong creative thinking skills are better equipped to solve problems, foster student engagement, and promote deeper understanding through inquiry-based learning. Research has increasingly highlighted the need for creative education practices to meet the demands of a complex, knowledge-driven world (Kaufman C Sternberg, 2007; Taylor, 2009).

Recent research has revealed that there is a great overlap between self-concept and creative thinking. Positive self-concept leads to more openness to risk-taking, more self-confidence in conveying ideas, and more willingness to embrace ambiguity, which are necessary in creative behavior. This relationship is especially significant in the context of teacher education, since it not only shapes the individual development but also has a certain effect on the way future teachers will think about pedagogy and curriculum design.

In addition, the inclusion of 21st-century skills in teacher training has been highly promoted by international frameworks like OECD, UNESCO, and the Partnership for 21st-century learning. Such frameworks are focused on cultivating cognitive, interpersonal, and intrapersonal skills, and the most critical elements of these skills are creativity and self-awareness. Although there is policy-level focus, studies show that these competencies are yet to be fully ingrained in teacher preparation programs, especially in areas such as Tripura, where socio-cultural and infrastructural issues still exist (Darling-Hammond et al., 2008; Voogt C Roblin, 2012).

The state of Tripura, in the northeastern region of India, offers a special context to address such issues. West Tripura, in particular, has a concentration of teacher training institutions and provides a microcosm of the educational desires and problems of the would-be teachers. The paper, therefore, seeks to investigate the association of self-concept and creative thinking among pre-service teachers in West Tripura. It also looks at the differences in these variables along gender and academic stream, thus helping in the better understanding of how personal and psychological factors influence teacher readiness in the developing educational environment.

Overall, the study aims to fill the gap between theory and practice in teacher education by pointing out the interdependent nature of self-concept and creative thinking. In this way, it will guide the future development of the curriculum, teacher training methods, and policy changes that will help create empowered, reflective, and innovative educators that will be ready to face the challenges of 21st-century classrooms.

Objectives for the Study

To investigate the relationship between self-concept and creative thinking among prospective teachers.

To analyse differences in self-concept and creative thinking based on gender.

To examine differences in self-concept and creative thinking based on academic stream (Science vs. Arts).

Hypotheses

The following hypotheses have been formulated to achieve the objectives:

H1: There is a significant relationship between self-concept and creative thinking among prospective teachers.

H2: There is a significant gender difference in self-concept among prospective teachers.

H3: There is a significant gender difference in creative thinking among prospective teachers. H4: There is a significant difference in self-concept based on academic stream.

H5: There is a significant difference in creative thinking based on academic stream.

Literature Review

Self-Concept in Teacher Education

Self-concept is multi-dimensional, encompassing academic, emotional, social, and moral domains (Shah, 2011). Yadav and Arora (2019) emphasized its role in teacher efficacy and classroom interactions. However, literature on self-concept in Indian teacher education remains fragmented and often outdated.

Creative Thinking in Education

Mehdi's (1973) creativity scale identifies fluency, originality, flexibility, and elaboration as key constructs. Singh and Mishra (2020) observed that high creative thinking scores in adolescents often corresponded with stronger academic and emotional self-perception. The connection between creativity and teaching effectiveness is increasingly acknowledged in global research (OECD, 2023; Alamri et al., 2023).

Self-Concept and Creative Thinking: A Correlational Perspective

Kumar and Das (2020) found a moderate positive correlation between the two constructs among B.Ed. students. Das and Sarkar (2021) concluded that reflective teaching practices enhanced both self-perception and creative engagement. Internationally, studies by Lin et al. (2023) and Sarsar et al. (2024) support the view that positive self-concept predicts creative output in educational settings.

Research Gap and Hypothesis Development

Most existing research is descriptive, lacks contextual specificity, and fails to incorporate demographic moderators. The present study contributes by exploring these constructs within West Tripura and testing hypotheses related to gender and academic stream—under-examined variables in Indian literature.

Research Model

The present study employed a correlational research design, which aims to explore the relationship between two psychological constructs—self-concept and creative thinking— among prospective teachers. This design is appropriate for understanding the extent and direction of the association between variables without manipulating them (Fraenkel, Wallen, C Hyun, 2012). The central purpose of adopting this model was to examine how variations in self-concept may influence or relate to levels of creative thinking among B.Ed. students enrolled in teacher education institutions in West Tripura.

Participants

The study was conducted among B.Ed. prospective teachers of West Tripura, where a large number of teacher training institutions are concentrated. A sample of 500 prospective teachers was selected through the stratified random sampling technique, ensuring representation across variables such as gender, academic stream, and type of institution (government or private). The stratification ensured proportional inclusion of participants from different educational disciplines—science, arts, language, and social studies—and balanced gender representation. Out of the 500 participants, 310 were female and 190 were male. Students belonged to both urban and rural localities. Their age ranged from 21 to 30 years. Prior informed consent was taken from each participant, and confidentiality of their responses was assured.

Tools Used

To measure the core variables of the study—self-concept and creative thinking—two standardized instruments were used:

Self-Concept Scale:

The Self-Concept Scale developed by Beena Shah (1986) was used to assess prospective teachers' perceptions of themselves across multiple domains. The scale consists of 50 items covering academic, emotional, social, physical, and moral dimensions of self-concept. Responses were recorded on a 5-point Likert scale, ranging from Strongly Disagree to Strongly Agree. Higher scores indicate a stronger and more positive self-concept. In the current study, the Cronbach's alpha value of the scale was calculated to be 0.82, confirming good internal consistency.

Creative Thinking Scale:

Creative thinking was assessed using the Verbal Test of Creative Thinking developed by Baqer Mehdi (1973). This test evaluates four components of creativity: fluency, flexibility, originality, and elaboration. Participants were required to respond to open-ended verbal tasks designed to elicit novel and diverse ideas. The scoring procedure followed the standardized guidelines provided by the author. The scale demonstrated acceptable reliability, with inter-rater reliability ensured during scoring, and a Cronbach's alpha of 0.79.

Data Analysis

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0. Descriptive statistics such as mean, standard deviation, and percentage were calculated to provide an overview of the participants' characteristics and scores on the self-concept and creative thinking scales.

For inferential statistics, Pearson's correlation coefficient was used to examine the relationship between self-concept and creative thinking. Additionally, t-tests and ANOVA were performed to identify significant differences in the variables based on gender, locality, and academic stream. The normality of the data was checked through skewness and kurtosis values, which fell within acceptable limits (Byrne, 2010; George C Mallery, 2010), allowing for parametric testing.

All ethical protocols were followed, and prior approval was obtained from the institutional research ethics committee. Participation was voluntary, and no personally identifiable information was recorded.

Findings

Table 1: Descriptive Statistics for Self-Concept and Creative Thinking

Variable	Mean	SD	N
Self-Concept	165.24	15.67	500
Creative Thinking	142.36	14.12	500

Description:

This table presents the overall mean and standard deviation for self-concept and creative thinking among 500 prospective teachers in West Tripura. The relatively high mean scores indicate a generally positive self-perception and moderate-to-high creative thinking levels across the sample.

Table 2: Correlation Between Self-Concept and Creative Thinking

Variable	N	r	Significance
Self-Concept & Creative Thinking	500	0.61	Significant at 0.01 level

Description:

Table 2 demonstrates a statistically significant and strong positive correlation ($r = 0.61$, $p < .01$) between self-concept and creative thinking. This indicates that individuals with higher self-concept tend to display greater levels of creativity, confirming Hypothesis 1.

Table 3: Gender-wise Comparison (t-test)

Variable	Gender	Mean	SD	t-value	Result
Self-Concept	Male	163.12	14.87	2.45	Significant
	Female	166.78	16.22		
Creative Thinking	Male	140.25	13.65	2.79	Significant
	Female	144.12	14.41		

Description:

The results in Table 3 show that female prospective teachers significantly outperformed their male counterparts in both self-concept and creative thinking. These gender-based differences were statistically significant ($p < .05$), supporting Hypotheses 2 and 3.

Table 4: Academic Stream Differences in Self-Concept and Creative Thinking (t-test)

Table 4: Stream-wise Comparison (t-test)

Variable	Stream	Mean	SD	t-value	Result
Self-Concept	Science	167.10	15.02	2.19	Significant
	Arts	163.40	16.18		
Creative Thinking	Science	145.03	13.84	3.01	Significant
	Arts	140.88	14.31		

Description:

Table 4 indicates that students from the science stream scored significantly higher in both self-concept and creative thinking compared to arts stream students. These differences were statistically significant, supporting Hypotheses 4 and 5.

Discussion

The present study aimed to explore the relationship between self-concept and creative thinking among B.Ed. prospective teachers in West Tripura. The findings indicate that teacher trainees possess a moderately high level of self-concept, along with a substantial capacity for creative thinking. Such a finding is consistent with previous studies indicating that teacher candidates who have a high sense of self are more likely to portray a high level of creative abilities in instruction and problem-solving (Kozioglu, C Özcanli, 2020; Yadragil, 2017).

As per the correlation analysis, it was identified that there is an important positive correlation between self-concept and creative thinking. This has indicated that future teachers who view themselves favorably in domains of academic skills, social skills, and personal value are more likely to perform divergent thinking and come up with original ideas, which are important characteristics of creativity. This result agrees with the previous research that highlighted the role of the teacher identity, self-efficacy, and self-perception in the development of creative performance (Gurultu, Aslan C Alci, 2020; Atabek, 2020).

Independent Samples t-test demonstrated that the difference between creative thinking and self-concept of two genders is not significant, and this fact suggests that there is no difference between the level of creative thinking and self-realization in male and female prospective teachers. This result is consistent with the results of Polat C Kontas (2018) and Engin C Korukcu (2021), who also obtained the same outcome in teacher education students.

But there was a big difference in the self concept scores on the basis of locality where the self concept level of the urban teacher trainees was slightly higher than the self concept level of the rural teacher trainees. This could be because of the fact that the urban regions are more exposed to educational resources and social cultural stimulation hence they develop more aggressive self images. A research conducted by Mierdel C Bogner (2019) has put emphasis on these differences in the impacts of the environment on self-perception.

The ANOVA findings also showed that the subject specialization (e.g. arts, science, humanities) did not have significant difference in the self-concept and creative thinking. This finding indicates that the future educators with various academic backgrounds share a common educational model and professional identity that promotes not only self-understanding but also creativity, as Gokbulut (2020) and Cemaloglu et al. (2020) report.

The most significant finding of this research is that self-concept plays a significant role in developing creative skills of teacher trainees. The more they believe in their competency, the easier they can collaborate with innovative teaching strategies. This also confirms the view that schools are to promote personal development, emotional intelligence, and reflective actions as the precondition of teacher education (Strong et al., 2015; Elmas, 2022).

Altogether, the results show that self-concept is not merely a psychological construct but also an indicator of teaching effectiveness in the 21st-century setting. Since creativity is a skill that is becoming a necessity in contemporary education, it might be a good idea to equip future educators with high self-confidence, which can result in creative, inclusive, and learner-centered classrooms.

Conclusion

This research paper examined the connection between self-concept and creative thinking of pre-service teachers in West Tripura. The results indicated a strong positive correlation between the two psychological constructs, with the conclusion that the more developed and positive the self-concept is, the higher the values of creativity are. Trainees and students of science stream showed relatively better scores in self-concept and creative thinking, which indicated that gender-based self-perception and academic orientation could influence the creative ability.

These findings confirm theoretical models like the structure of intellect of Guilford. The theory of Bem and self-perception, and the model, support the notion that internal self-appraisal is an essential contributor to the creative product. The study will help further the knowledge of teacher identity development and psychological preparedness in the field of teacher education, especially in underrepresented areas such as West Tripura.

Educational Implication

Educationally, there are a number of implications of these insights:

Curriculum Enrichment: Reflective modules of teacher training institutes should be designed where the emphasis is made on the development of self-awareness and creativity among B.Ed. trainees.

Gender-Sensitive Support: Institutions have to organize the counseling programs and confidence-building sessions that talk about gender-based differences in self-concept.

Stream-Specific Pedagogy: Individualized teaching methods of arts and science students can be used to facilitate the equal development of creative thoughts between the two streams of academic learning.

Creative Teaching Workshops: Innovation labs and creativity workshops will help future educators acquire the tools to enhance dynamic and student-centered learning.

Policy Implications: The study emphasises the relevance of policy frameworks, which incorporate the training of psychological skills into teacher preparation, especially in low-resource or peripheral regions.

Finally, the development of self-concept and introduction of creativity is not only helpful. Not only do they contribute to personal and professional development of teacher trainees, but play a pivotal role in the development of adaptable, innovative, and reflective educators. Future studies ought to continue to examine such variables over time and on a wider geographical scale in order to advise comprehensive reforms in teacher education.

Limitations and Scope for Future Research

Although the present study offers significant results concerning the connections between self-concept and creative thinking among pre-service teachers in West Tripura, there are a number of limitations that should be addressed. First, the research was conducted in one geographical area, which can influence the generalization of the results to other states or national settings. Second, self-report instruments can be biased because of social desirability or inaccurate self-perception.

Besides, although the study focused on associations, it did not discuss causality and mediating factors, including motivation, emotional intelligence, or teaching experience. The cross-sectional design also restricts understanding of changes in self-concept and creativity over time.

Future research may consider longitudinal designs, include larger and more diverse samples, and integrate qualitative methods (e.g., interviews, reflective journals) to explore deeper psychological patterns. Comparative studies across states or countries could also provide a broader understanding of how contextual factors influence self-concept and creative development in teacher education.

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