Creativity and Mental Health Among Tribal Adolescent Students: A Study of Sailana Tehsil

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Abstract
This study examines the relationship between creativity and mental health among tribal adolescent students at the high school level in government schools of Sailana Tehsil, Madhya Pradesh, India. Using a descriptive survey design, data were collected from 100 randomly selected tribal students. Creativity was assessed using the Torrance Test of Creative Thinking (TTCT) and mental health through a standardized Mental Health Scale. Results indicated moderate mean scores for creativity (M = 52.34, SD = 8.21) and mental health (M = 48.67, SD = 7.95), with a statistically significant positive correlation ($r = 0.62$, $p < 0.05$). Grade-wise analysis revealed progressive improvement from Grade 9 to Grade 11. Findings suggest that fostering creativity through culturally responsive pedagogy can significantly enhance the psychological well-being of tribal adolescents. Implications for inclusive educational policy are discussed.

Keywords: *Creativity; Mental Health; Tribal Adolescents; TTCT; Psychological Well-being; Inclusive Education*

1. Introduction

Creativity and mental health are foundational pillars of holistic human development, especially during adolescence — a transitional life stage marked by rapid cognitive, emotional, and social transformation (WHO, 2014). Creativity empowers adolescents to think divergently, express emotions constructively, and adapt to complex challenges, while sound mental health ensures emotional equilibrium, resilience, and positive self-concept. Their interplay is increasingly recognized as critical for academic success, social competence, and lifelong psychological well-being (Amabile, 1996; Csikszentmihalyi, 1996).

In India, tribal adolescents constitute a particularly vulnerable demographic. Despite possessing rich indigenous cultural heritage and community-based creativity, these students face significant structural disadvantages including poverty, geographic isolation, limited access to quality education, and inadequate mental health services (Das & Basu, 2018). Government schools in tribal regions such as Sailana Tehsil, Madhya Pradesh, frequently face challenges such as high dropout rates, under-resourced classrooms, and insufficient trained staff — all of which can suppress both creative potential and psychological well-being.

The present study addresses this gap by systematically investigating the levels of creativity and mental health among tribal high school students in Sailana Tehsil and analyzing the nature of their interrelationship, with the aim of generating evidence-based insights for inclusive educational policy and practice.

2. Literature Review

2.1 Creativity in Adolescence

Creativity, broadly defined as the capacity to generate novel, useful, and contextually appropriate ideas (Runco, 2014), encompasses cognitive dimensions such as fluency, flexibility, originality, and elaboration (Torrance, 2008). Research indicates that adolescence is a sensitive period for creative growth, as prefrontal cortex maturation enhances divergent thinking and abstract reasoning. Gupta and Singh (2019) reported significant positive associations between creativity and academic engagement among secondary school students, while Kim (2011) highlighted the declining trend in creative thinking scores, emphasizing the need for school-level interventions.

2.2 Mental Health Among Tribal Adolescents

The World Health Organization (2014) estimates that approximately 50% of all lifetime mental health conditions emerge before age 18. Tribal adolescents face compounded risk factors including poverty, nutritional deficiencies, early school dropout, and social exclusion — all adversely affecting psychological well-being (Das & Basu, 2018). Kumar and Prakash (2017) reported elevated levels of stress and poor self-concept among tribal youth in government schools, attributing these partly to culturally incongruent educational practices.

2.3 The Creativity–Mental Health Interface

A growing body of evidence suggests that creative engagement functions as a protective factor for mental health (Sarkar & Mishra, 2020). Creative activities have been associated with reduced stress, improved emotional regulation, enhanced self-efficacy, and greater psychological resilience (Bandura, 1997). Sharma and Rani (2016) found a significant positive correlation between creative thinking and emotional stability among Indian

adolescents. However, research specifically examining this relationship within tribal adolescent populations remains conspicuously absent — the primary gap addressed by the present study.

3. Objectives of the Study

The present study was conducted with the following specific objectives:

- To assess the level of creativity among tribal adolescent students at the high school level.
- To examine the mental health status of tribal adolescent students in government schools.
- To analyze grade-wise developmental variations in creativity and mental health.
- To determine the nature and strength of the relationship between creativity and mental health.
- To derive evidence-based educational implications for promoting creativity and psychological well-being.

4. Research Hypotheses

- H1: Tribal adolescent students will demonstrate a moderate level of creativity as measured by the TTCT.
- H2: Tribal adolescent students will demonstrate a moderate level of mental health.
- H3: There will be a statistically significant positive correlation between creativity and mental health.
- H4: Creativity and mental health scores will show progressive increase across Grade levels 9 through 11.

5. Research Methodology

5.1 Research Design

A descriptive survey research design was adopted. This cross-sectional, non-experimental design is appropriate for examining naturally occurring phenomena, describing existing conditions, and exploring relationships among variables without manipulation. The design enabled systematic collection of quantitative data from a representative sample.

5.2 Population and Sampling

The study population comprised all tribal adolescent students (ages 14–17 years) enrolled in government high schools (Grades 9–11) in Sailana Tehsil, Madhya Pradesh. A sample of 100 students was selected using stratified random sampling, ensuring proportionate representation across gender and grade levels.

5.3 Research Instruments

Two standardized instruments were employed:

(a) Torrance Tests of Creative Thinking (TTCT) — Form B: Measured four dimensions: Fluency, Flexibility, Originality, and Elaboration. The TTCT has demonstrated strong test-retest reliability (r = 0.71–0.94) and concurrent validity across diverse populations (Torrance, 2008).

(b) Mental Health Scale: A standardized scale validated for Indian adolescent populations assessing five domains — Emotional Stability, Self-Concept, Social Adjustment, Stress Management, and Self-Esteem. Internal consistency in the present sample: Cronbach's alpha = 0.84.

5.4 Data Collection Procedure

Formal institutional permissions and informed consent were obtained prior to data collection. Both instruments were administered in group sessions during regular school hours in a standardized manner. Instructions were provided in Hindi. Data collection sessions lasted approximately 90 minutes, with a 10-minute break between the two instruments.

5.5 Statistical Analysis

Data were analyzed using IBM SPSS Statistics (Version 25.0). Descriptive statistics (mean, standard deviation) characterized creativity and mental health score distributions. Pearson's product-moment correlation coefficient (r) examined the strength and direction of their relationship. Statistical significance was evaluated at the 0.05 level (two-tailed).

6. Results and Analysis

6.1 Creativity Scores: Overall and by Dimension

Table 1 presents descriptive statistics for overall creativity and each TTCT dimension among the tribal adolescent sample.

TTCT Dimension	N	Mean	SD	Min–Max
Fluency	100	14.20	2.30	8–19
Flexibility	100	12.80	2.10	7–18
Originality	100	11.60	2.50	6–17
Elaboration	100	13.74	1.98	9–18
Total Creativity	100	52.34	8.21	31–74

Table 1: Descriptive Statistics of TTCT Creativity Scores (N = 100)

The mean total creativity score of 52.34 (SD = 8.21) indicates a moderate level of creative ability among tribal adolescents. Fluency yielded the highest mean (M = 14.20), while Originality recorded the lowest (M = 11.60), suggesting students generate ideas readily but may be constrained in producing unconventional responses. Figure 1 illustrates these dimension-wise patterns.

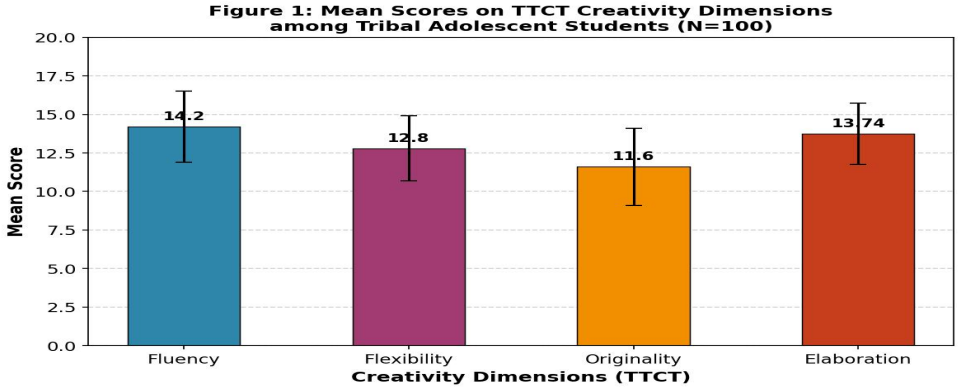

Figure 1: Mean Scores on TTCT Creativity Dimensions among Tribal Adolescent Students (N = 100). Error bars represent ±1 SD.

6.2 Mental Health Scores: Overall and by Dimension

Table 2 presents descriptive statistics for overall mental health and its five subscale dimensions.

Mental Health Dimension	N	Mean	SD	Min–Max
Emotional Stability	100	9.80	1.80	5–14
Self-Concept	100	10.20	2.00	5–15
Social Adjustment	100	9.40	1.90	4–14
Stress Management	100	9.60	1.70	5–14
Self-Esteem	100	9.67	1.95	5–15
Total Mental Health	100	48.67	7.95	29–68

Table 2: Descriptive Statistics of Mental Health Scores (N = 100)

The total mean mental health score of 48.67 (SD = 7.95) reflects a moderate level of psychological well-being. Self-Concept yielded the highest subscale mean (M = 10.20), whereas Social Adjustment was weakest (M = 9.40). This suggests cultural identity supports self-concept, while social adjustment may be compromised by cultural discontinuity between home and school.

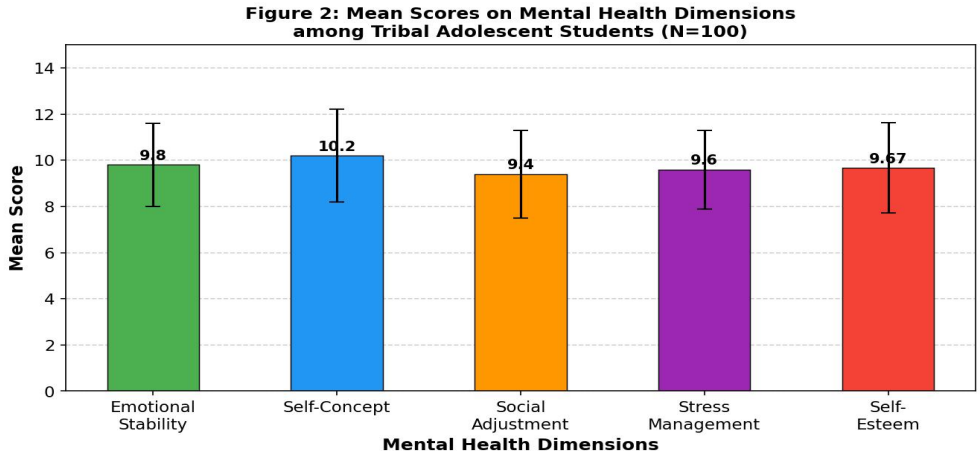

Figure 2: Mean Scores on Mental Health Dimensions among Tribal Adolescent Students (N = 100). Error bars represent ±1 SD.

6.3 Correlation between Creativity and Mental Health

Table 3 presents results of Pearson's correlation analysis.

Variables	r Value	Significance
Total Creativity × Mental Health	0.62	p < 0.05 (Significant)
Fluency × Mental Health	0.55	p < 0.05 (Significant)
Flexibility × Mental Health	0.51	p < 0.05 (Significant)
Originality × Mental Health	0.48	p < 0.05 (Significant)
Elaboration × Mental Health	0.57	p < 0.05 (Significant)

Table 3: Pearson's Correlation between Creativity Dimensions and Mental Health (N = 100)

The Pearson's correlation coefficient ($r = 0.62$, $p < 0.05$) reveals a statistically significant, moderately strong positive relationship between overall creativity and mental health. All four TTCT dimensions were independently and significantly correlated with mental health, with Elaboration ($r = 0.57$) and Fluency ($r = 0.55$) showing the strongest associations. Figure 3 illustrates the scatter plot with regression line.

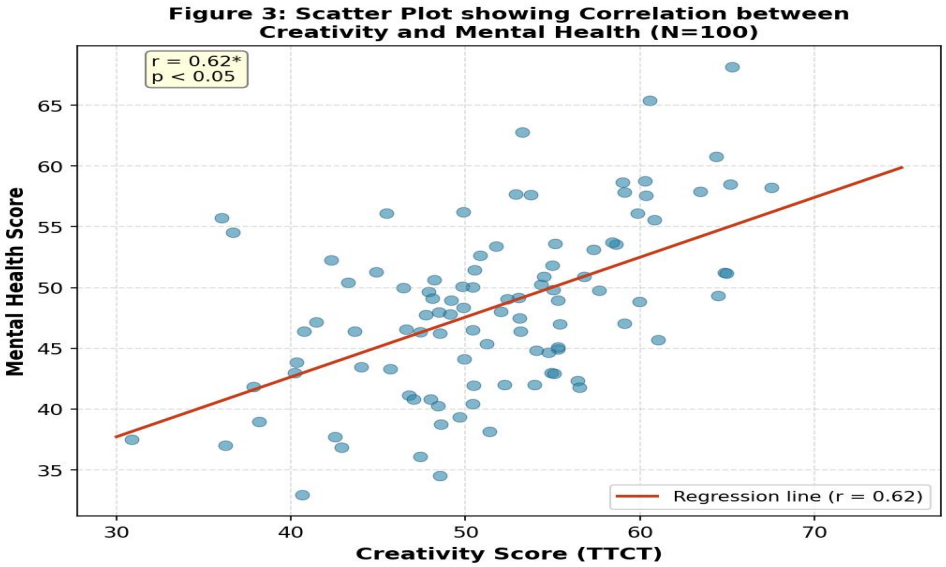

Figure 3: Scatter Plot with Regression Line showing Correlation between Creativity and Mental Health ($r = 0.62$, $p < 0.05$, $N = 100$).

6.4 Grade-wise Analysis

Table 4 presents a grade-level comparison of mean scores to examine developmental variations.

Grade	n	Creativity M (SD)	Mental Health M (SD)	Correlation r
Grade 9	34	50.2 (8.4)	46.5 (7.8)	0.56
Grade 10	33	52.8 (7.9)	49.1 (8.0)	0.62
Grade 11	33	54.0 (8.1)	50.4 (8.1)	0.66

Table 4: Grade-wise Mean Scores for Creativity and Mental Health

A progressive increase in both creativity and mental health scores was observed from Grade 9 to Grade 11. The creativity–mental health correlation also strengthened across grades ($r = 0.56$ to $r = 0.66$), suggesting that as adolescents mature, creative and psychological resources become more deeply integrated.

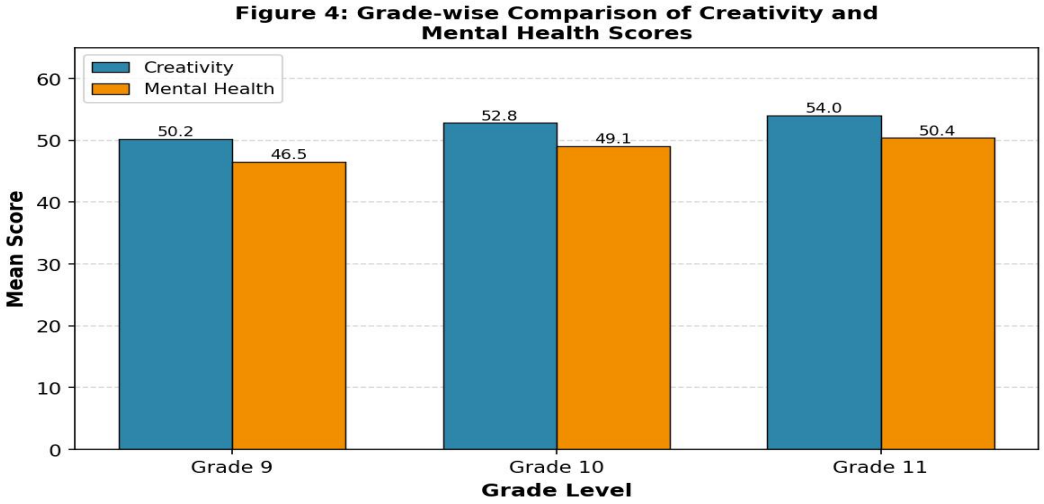

Figure 4: Grade-wise Comparison of Mean Creativity and Mental Health Scores (Grades 9–11).

7. Discussion

The present study provides robust empirical evidence for a significant positive relationship

between creativity and mental health among tribal adolescent students in Sailana Tehsil. The moderate mean scores observed for both creativity (M = 52.34) and mental health (M = 48.67) reflect the co-existence of inherent psychological strengths — rooted in tribal cultural identity and community solidarity — alongside significant developmental constraints imposed by socio-economic disadvantage and educational resource deficits. This resonates with Masten's (2014) concept of 'ordinary magic,' wherein resilience emerges from ordinary protective factors within the child's ecology.

The significant positive correlation ($r = 0.62$, $p < 0.05$) is consistent with theoretical frameworks positing creativity as a protective psychological resource (Amabile, 1996; Csikszentmihalyi, 1996). Adolescents with higher creative capacity appear to employ divergent thinking as a coping mechanism, converting stressors into opportunities for problem-solving and self-expression. This reduces psychological distress, enhances self-efficacy, and promotes emotional regulation — all constitutive dimensions of positive mental health.

The grade-wise analysis reveals a developmentally consistent pattern: both creativity and mental health improve progressively from Grade 9 to Grade 11, aligned with cognitive developmental models that position late adolescence as a period of increasing metacognitive awareness and emotional self-regulation (Larson, 2000).

From a socio-cultural perspective, the findings highlight the underutilized creative potential embedded in tribal traditions of storytelling, artistic expression, music, dance, and craft. When formal education fails to validate these indigenous modalities, it not only suppresses creativity but may also undermine cultural identity and self-esteem — core mental health components.

8. Educational Implications

The findings carry substantive implications for educational policy and practice in tribal regions:

- Culturally Responsive Curriculum: Integrate tribal art, folklore, and indigenous craft as core vehicles of creative learning to validate cultural identity.
- Arts-Based Mental Health Interventions: Introduce art therapy, expressive writing, and drama-based interventions as evidence-based psychological support strategies in tribal schools.
- Teacher Capacity Building: Train teachers in creativity facilitation, culturally responsive pedagogy, and adolescent mental health literacy.
- School Counseling Infrastructure: Establish counseling cells staffed by trained mental health professionals in tribal government schools under NEP 2020.
- Community-School Partnerships: Formally integrate tribal elders and artisans as cultural co-educators, strengthening students' identity and sense of belonging.
- Policy Advocacy: Use study findings to support targeted interventions under NIPUN Bharat and Samagra Shiksha addressing both creative and mental health dimensions.

9. Conclusion

This study provides empirical evidence for a significant positive relationship between creativity and mental health among tribal adolescent students in government high schools of Sailana Tehsil, Madhya Pradesh. Creativity functions as a meaningful psychological resource during adolescence, with higher creative ability associated with greater emotional stability, improved self-concept, and enhanced adaptive coping. The progressive improvement across grade levels further affirms the role of cognitive maturation in consolidating creative and psychological resources.

Despite the inherent cultural richness of tribal communities, moderate scores in both domains underscore the need for systemic educational and psychological interventions tailored to tribal adolescents' specific needs. Culturally responsive pedagogy, arts-integrated learning, and community-anchored school programs offer promising avenues for simultaneously promoting creativity and mental health. Future longitudinal, multi-site studies with mixed methods are recommended to establish causal pathways and test specific intervention effectiveness.

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