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Motivational Differences Between High and Low Creative Students: A Comparative Study of Secondary School Students in Himachal Pradesh

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Abstract

This study investigates the motivational and psychological needs that distinguish high creative students from low creative students. Moving beyond the "IQ-creativity" debate, this research focuses on the personality and motivational ecosystem as defined by Murray's psychological needs. A sample of 500 10th-grade students from the Solan and Sirmour districts of Himachal Pradesh was assessed using the Baquer Mehdi Verbal Creativity Test and the Meenakshi Personality Inventory. Results indicate significant differences in eight of the ten psychological needs measured. High creative students demonstrated significantly higher needs for achievement, autonomy, exhibition, and endurance, while low creative students exhibited higher levels of abasement. Gender-specific analyses revealed that while both creative males and females share certain traits, creative females demonstrate a notably higher need for achievement and endurance compared to their male counterparts.

1. Introduction

The historical assumption that high intelligence (IQ) serves as the primary driver of exceptional contribution has been increasingly scrutinized. Research by Hudson (1966) and Cropley (1966) suggests that high creative performance is not merely a cognitive function but a complex interaction within the total personality system. Vinacke (1952) and Guilford (1967) emphasized that creativity is fueled by a system of needs, attitudes, and motives. Recent findings (Gocłowska et al., 2019; Jalifi et al., 2025) further suggest that IQ acts only as a "baseline," with personality traits like openness and psychological needs like autonomy acting as the true catalysts for creative output.

Despite the theoretical importance of motivation in creativity, there is a dearth of doctoral-level research focusing on the motivational characteristics of adolescent students in the Himalayan

region of India. The present study addresses this gap by exploring the motivational profiles of 10th-grade students in Himachal Pradesh.

2. Methodology

2.1 Research Design

The study employed an **ex-post-facto research design**. Since creativity is an inherent trait and cannot be directly manipulated, students were categorized into groups (High vs. Low Creative) based on pre-existing scores. A descriptive survey method was used to gather and analyze data.

2.2 Sample

A random sampling technique was used to select **500 students** (228 males and 272 females) from 10th-grade classrooms in the Solan and Sirmour districts of Himachal Pradesh.

2.3 Tools

- **Creativity:** Verbal Creativity Test by Dr. Baquer Mehdi.
- **Motivation/Needs:** Meenakshi Personality Inventory by Meenakshi Bhatnagar (measuring 10 psychological needs).

2.4 Statistical Analysis

Data were analyzed using independent samples t-tests to compare mean scores across groups and genders, with significance levels set at $p < 0.05$ and $p < 0.01$.

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3. Results and Interpretation

3.1 Comparison of High and Low Creative Groups (Total Sample)

The study found significant differences in nearly all psychological needs except for **n-Affiliation**.

Psychological Need	High Creative (Mean)	Low Creative (Mean)	t-value	Significance
n-Achievement	10.72	9.61	-4.819	sp < 0.01$

Psychological Need	High Creative (Mean)	Low Creative (Mean)	t-value	Significance
n-Autonomy	8.43	7.27	-5.088	sp < 0.01$
n-Exhibition	7.45	6.19	-3.879	sp < 0.01$
n-Aggression	6.99	5.79	-4.093	sp < 0.01$
n-Abasement	10.02	10.79	3.368	sp < 0.01$
n-Endurance	10.62	10.00	-2.637	$p < 0.01$
n-Affiliation	9.41	8.99	-1.858	Not Sig.

- **High Creative Profile:** Characterized by a strong drive for achievement, independence (autonomy), and a desire for self-expression (exhibition). They also show higher persistence (endurance) and assertiveness (aggression).
- **Low Creative Profile:** Characterized by significantly higher **n-Abasement**, suggesting a higher tendency toward self-devaluation, guilt, or submissiveness.

3.2 Gender-Based Observations

- **High Creative Males:** Specifically distinguished by higher scores in **n-Dominance** ($t = -3.473, p < 0.01$) and **n-Exhibition**, suggesting a profile geared toward leadership and assertiveness.
- **High Creative Females:** Demonstrated significantly higher **n-Achievement** ($M = 11.12$) compared to creative males ($M = 10.22$) and higher **n-Endurance**. This suggests that creative females in this region may rely more on persistence and goal-orientation to express their creativity.
- **Commonalities:** Both creative males and females showed no significant difference in **n-Affiliation**, reinforcing the idea that creative individuals are often less dependent on social approval (Getzels & Jackson, 1962).

4. Discussion

The findings align with classic creativity research (Barron, 1969; Torrance, 1974) which posits that creative individuals possess a distinct "personality core" characterized by autonomy and achievement. The significantly higher **n-Succorance** (need for support/sympathy) among high creative students in this study is an interesting deviation, possibly reflecting the developmental needs of adolescents in a transitionary academic phase.

The higher **n-Abasement** scores among low creative students confirm Helson's (1996) findings that creativity is negatively associated with self-doubt. In the local context of Himachal Pradesh, the data suggests that fostering self-acceptance and reducing submissive tendencies could potentially unlock creative potential in students.

5. Conclusion

Creativity is intrinsically linked to a student's motivational structure. To foster creativity in secondary education, schools should move beyond cognitive training and focus on:

1. **Encouraging Autonomy:** Allowing students self-direction in projects.
2. **Achievement Orientation:** Creating environments where original contributions are recognized as high achievement.
3. **Reducing Abasement:** Building self-confidence to mitigate the self-doubt that characterizes low creative groups.

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