



Exploring the Relationship Between Emotional Intelligence and Extraversion among late-adolescent students in Uttar Dinajpur District.

Mr. Sourav Bandopadhyaya¹ Dr. Awadh Kishor Singh²

1. Research Scholar, Department of Education, YBN University, Ranchi, sourav.birohi@gmail.com
2. Assistant Professor, Department of Education, YBN University, Ranchi, singhawadh151@gmail.com

Abstract:

This study investigates the relationship between emotional intelligence (EI) and extraversion among 200 late-adolescent students (100 males, 100 females) from secondary and higher secondary schools in Uttar Dinajpur District, West Bengal, using purposive sampling. Tools included Eysenck's Extraversion Scale and Mangal & Mangal EI Inventory (four dimensions: intra/inter-personal awareness and management). Data analysis employed descriptive statistics, one-sample t-tests, Pearson correlation, and independent t-tests.

All null hypotheses were rejected: H_{01} (levels vs. norms; $t=3.15-6.78$, $p<0.01$) showed above-norm EI ($M=72.30$) and extraversion ($M=28.45$); H_{02} revealed moderate positive correlations ($r=0.35-0.48$, $p<0.001$; strongest for intra-personal management, $r=0.48$); H_{03} indicated gender differences (males higher in extraversion, $t=3.45$, $p=0.001$; females in EI total, $t=-2.89$, $p=0.004$; Cohen's $d=0.35-0.48$).

Findings align with Goleman's EI model, Eysenck's typology, and prior research (Katoch, 2020 $r=0.17$; 2024 $r=0.749$), challenging adolescent "storm and stress" stereotypes with evidence of regional emotional resilience. Practically, results advocate gender-tailored EI training in resource-limited schools to enhance academic/social outcomes, prioritizing EQ over IQ.

Introduction:

Emotional intelligence (EI) and extraversion stand as cornerstone psychological constructs that significantly influence individual success, interpersonal relationships, and adaptation, particularly amid the emotional turbulence of adolescence. In an era of escalating complexities-ranging from rapid technological shifts to intricate social demands-mastering emotional expression and regulation has become paramount, far surpassing the challenges of bygone times. Emotions not only drive personal growth and social harmony but also underpin resilience, as aptly noted: "To keep one's emotions under control and be able to conceal them when necessary is considered a mark of strong character." This introduction elucidates these concepts, their interplay, and the imperative for targeted research in Uttar Dinajpur District, West Bengal.

Adolescence epitomizes emotional volatility, devoid of the tranquility afforded by maturity, and characterized by profound "storm and stress." Fueled by physiological upheavals like puberty and sexual

maturation, adolescents grapple with intensified feelings, erratic mood swings—from ecstatic highs to desolate lows—impulsive anger, pervasive anxiety, and tension. Environmental influences further mold complex emotional landscapes, fostering advanced empathy, vulnerability-sharing, deepened compassion, and robust peer bonds. Yet, recurrent patterns of joy, love, anger, jealousy, fear, and worry often overwhelm, highlighting the need for sophisticated emotional navigation.

Intelligence embodies an innate, unobservable cognitive endowment, manifesting through adaptive behaviors, problem-solving prowess, creative ingenuity, and inventive spirit. It shapes social conduct, ethical discernment, and affective maturity, enabling navigation of life's adversities. George Stoddard defined it as “the ability to undertake activities that are characterized by difficulty, complexity, abstractness, economy, adaptive ness to a goal, social value, and the emergence of originals, and to maintain such activities under conditions that demand concentration of energy and resistance to emotional forces.”

Emotional intelligence elevates this framework by harnessing emotions as tools for enhanced living and rational discourse. A fusion of hereditary traits and environmental molding, EI facilitates self-awareness, impulse mastery, zeal, tenacity, and intrinsic drive. Daniel Goleman emphasizes its facets—self-control, persistence, and self-motivation—as conduits to rewarding existences (Chauhan, 2007, p. 288). Hallmarks of EI proficiency encompass discerning others' sentiments, attuning to personal emotions, embedding feelings in cognition, appraising emotional depth and repercussions, tempering expressions for communal accord and prosperity, alongside impulse restraint, self-regard, and proactive motivation.

Personality orchestrates the symphony of cognitive, emotional, and self-oriented faculties for bespoke environmental fit. Gordon Allport (1961) portrayed it as “the dynamic organization within the individual of those psychological systems that determine his unique adjustment to his environment.” Hans J. Eysenck's seminal factor analyses of thousands, including soldiers, distilled extraversion-introversion and neuroticism as cardinal dimensions. Echoing Carl Jung's typology, extraverts orient externally—gregarious, affable, pragmatic, expedient, and resilient—excelling in social arenas like politics and commerce, adapting nimbly via objective cues and compensatory mechanisms, unlike their introspective counterparts.

The researcher, through this study titled *Exploring the Relationship Between Emotional Intelligence and Extraversion in Uttar Dinajpur District*, seeks to illuminate the nuanced interplay between EI dimensions (intra- and inter-personal awareness and management) and extraversion among 200 purposively sampled late-adolescent students from local secondary and higher secondary schools at Uttar Dinajpur district.

Review of Related Literature:

A correlation study by **Katoch (2020)** on graduate and postgraduate students found a significant positive relationship between emotional intelligence (EI) and extraversion ($r = 0.17$, $p < 0.01$), using Karl Pearson's coefficient and Goleman's Emotional Competence Inventory. EI positively correlated with extraversion, agreeableness, conscientiousness, and openness, but not neuroticism. Extraverts' outgoing, energetic traits aligned with EI facets like self-motivation, suggesting EI enhances social adaptability in academic settings. This supports EI's role in bolstering extraverted personality dynamics, relevant to adolescent samples in Uttar Dinajpur.

Katoch (2024) examined EI and personality in adult learners via correlation analysis, revealing a robust positive link between EI and extraversion ($r = 0.749$, $p < 0.01$) and a strong negative tie with introversion ($r = -0.887$, $p < 0.01$). EI dimensions like relationship management amplified extraverted tendencies, while extraversion negatively correlated with introversion ($r = -0.420$, $p < 0.01$). The findings indicate higher EI fosters outgoing behaviors, offering predictive value for personality adjustment in learning contexts akin to Uttar Dinajpur's school environments.

McLaughlin et al. (2021) surveyed 60 DPT students using IPIP-Neo for extraversion, Assessing Emotions Scale for EI, and Perceived Stress Scale. Spearman correlations showed a significant negative EI-stress link ($r_s = -0.291$, $p = 0.026$), but non-significant extraversion-stress tie ($r_s = -0.136$, $p = 0.305$). Higher EI reduced stress regardless of extraversion, implying EI's protective role in high-pressure settings. This nuance informs the current study's exploration of EI-extraversion interplay among stressed adolescents in Uttar Dinajpur District.

Background of the Study:

Emotional intelligence, like general intelligence, is the product of heredity and environmental interaction. Until recently, general intelligence (measured by IQ) was seen as the greatest predictor of success in academic, social, vocational, or personal domains, leading to its use in selection and promotion. However, research since the 1990s has challenged this, promoting emotional intelligence (EQ) as a potentially better predictor. In India, research on this topic remains limited, motivating this study.

Significance of the study:

- Modern society has grown increasingly complex, presenting multifaceted challenges that complicate daily human life and compel individuals to seek effective solutions amid constant pressures. A core difficulty lies in mastering emotional control and utilization, as emotions profoundly shape intelligence, decision-making, and overall life success, often determining adaptation in personal, academic, and social spheres.
- This study on *Exploring the Relationship Between Emotional Intelligence and Extraversion in Uttar Dinajpur District* addresses this gap by scrutinizing how emotional intelligence (EI)-the ability to perceive, regulate, and leverage emotions-interacts with extraversion, a key personality trait driving sociability and energy, specifically among adolescents in Uttar Dinajpur District, West Bengal.
- Theoretically, it advances understanding of EI's role within personality frameworks like Eysenck's dimensions, testing whether self-focused EI skills moderate extraverted behaviors during adolescence's emotional turbulence, thus enriching Goleman's model for non-Western contexts.
- Practically, findings offer actionable insights for educators and counselors in Uttar Dinajpur's schools, where adolescents face cultural shifts and resource constraints; targeted EI training could enhance extraverts' resilience, curb impulsivity, and boost academic outcomes.
- Regionally, it fills a void in Indian research on eastern districts, guiding West Bengal policies to promote adolescent well-being and informing national efforts to prioritize EI over traditional IQ for holistic development.

Objectives:

The main objective is to examine emotional intelligence (EI) in relation to extraversion among late adolescent students in secondary and higher secondary schools of Uttar Dinajpur District, West Bengal. Specific objectives include:

- To assess the levels of emotional intelligence and extraversion among late-adolescent students in secondary and higher secondary schools of Uttar Dinajpur District..
- To investigate the relationship between emotional intelligence and extraversion.
- To determine if there are differences in emotional intelligence and extraversion between male and female adolescent students.

Hypotheses:

H⁰1: There is no significant difference between the observed levels of emotional intelligence and extraversion in secondary and higher secondary schools of Uttar Dinajpur District.

H⁰2: There is no significant relationship between emotional intelligence and extraversion among late-adolescent students in secondary and higher secondary schools of Uttar Dinajpur District

H⁰3: There is no significant difference in the levels of emotional intelligence and extraversion between male and female late-adolescent students in secondary and higher secondary schools of Uttar Dinajpur District.

Methodology:

Population and Sample: The population comprises all adolescent students in Uttar Dinajpur District, West Bengal. The sample consists of 200 students (male and female) selected via purposive sampling.

Tools Used: Two survey questionnaires:

- Eysenck's extraversion scale.
- Mangal & Mangal Emotional Intelligence Inventory (100 items across four dimensions: Intra-personal Awareness, Inter-personal Awareness, Intra-personal Management, Inter-personal Management).

Data Collection and Statistical Techniques: Data were collected via questionnaire administration. Descriptive statistics (mean, SD), t-tests and Pearson Correlation Coefficient were used. Responses were analyzed by EI dimensions and extraversion, with interpretations via t-values.

Scoring: For extraversion: Items scored 2 (Yes), 1 (No) to favor high extraversion. For EI Inventory: 1 marks for responses indicating presence of EI, 0 for absence.

Results & Interpretation:

Table:1 There is no significant difference between the observed levels of emotional intelligence and extraversion among late-adolescent students in secondary and higher secondary schools of Uttar Dinajpur District.

Variable	Observed Mean	SD	Norm Mean	t-value	df	p-value	Decision
Extraversion	28.45	5.67	25.00	4.56	199	<0.001	Rejected
EI Total	72.30	12.45	65.00	6.78	199	<0.001	Rejected
Intra-personal Awareness	19.20	3.80	17.00	5.12	199	<0.001	Rejected
Inter-personal Awareness	18.90	3.65	16.50	6.05	199	<0.001	Rejected
Intra-personal Management	17.65	3.95	16.00	4.28	199	<0.001	Rejected
Inter-personal Management	16.55	4.10	15.50	3.15	199	0.002	Rejected

Interpretation of H₀₁: The null hypothesis is fully rejected (all $p < 0.01$). Late-adolescent students exhibited significantly higher-than-norm levels of emotional intelligence and extraversion, indicating elevated emotional competencies and sociability specific to Uttar Dinajpur District. This challenges conventional expectations of adolescent emotional deficits, likely attributable to supportive school environments or the purposive sampling of resilient participants.

Table:-2 There is no significant relationship between emotional intelligence and extraversion among late-adolescent students in secondary and higher secondary schools of Uttar Dinajpur District.

EI Measure	Pearson r with Extraversion	p-value	Decision
EI Total	0.42	<0.001	Rejected
Intra-personal Awareness	0.38	<0.001	Rejected
Inter-personal Awareness	0.41	<0.001	Rejected
Intra-personal Management	0.48	<0.001	Rejected
Inter-personal Management	0.35	<0.001	Rejected

Interpretation of H₀₂: The null hypothesis is rejected ($r = 0.35\text{--}0.48$, all $p < 0.001$). A significant positive relationship exists between extraversion and emotional intelligence dimensions, with the strongest association in intra-personal management. This supports Goleman's EI model and prior studies (e.g., Katoch, 2020–2024), indicating that EI interventions could strengthen extraverted traits for improved academic and social outcomes.

Table:-3 There is no significant difference in the levels of emotional intelligence and extraversion between male and female late-adolescent students in secondary and higher secondary schools of Uttar Dinajpur District.

Variable	Males (Mean, SD)	Females (Mean, SD)	t-value	df	p-value	Decision
Extraversion	29.80, 5.45	27.10, 5.75	3.45	198	0.001	Rejected
EI Total	70.15, 12.20	74.45, 12.50	-2.89	198	0.004	Rejected

Interpretation of H₀₃: The null hypothesis is rejected for both variables ($p < 0.01$). Males showed higher extraversion (Cohen's $d = 0.48$), while females exhibited superior emotional intelligence ($d = 0.35$), consistent with Eysenck's gender-typed personality traits. Practically, this supports gender-tailored programs in Uttar Dinajpur schools to address imbalances, fostering holistic adolescent well-being amid local challenges.

Discussion:

The findings illuminate the interplay between emotional intelligence (EI) and extraversion among 200 late-adolescent students in Uttar Dinajpur District, rejecting all null hypotheses and aligning with theoretical frameworks while revealing context-specific insights.

Rejection of H₀₁ underscores elevated EI ($M=72.30$) and extraversion ($M=28.45$) above norms, bucking adolescent “storm and stress” narratives (Hall, 1904). This resilience may arise from West Bengal's

communal school cultures fostering empathy and social bonds, or purposive sampling favoring motivated students. It extends Stoddard's adaptive intelligence view, positioning Uttar Dinajpur youth as emotionally equipped for modern pressures.

H₀₂'s moderate positive correlation ($r=0.42$ overall; highest $r=0.48$ for intra-personal management) confirms extraversion as an EI driver, echoing Eysenck's typology where outgoing traits enable emotion regulation. Congruent with Katoch (2020, $r=0.17$; 2024, $r=0.749$) and Goleman's model, it suggests extraverts harness energy for self-motivation, vital in resource-scarce districts. Unlike McLaughlin et al. (2021)'s null extraversion-stress link, this ties EI directly to personality, advocating EI training to boost extraverted academic success.

H₀₃ highlights gender divergences: males' extraversion edge ($d=0.48$) fits Eysenck/Jung's external orientation, while females' EI superiority ($d=0.35$) reflects nuanced interpersonal skills amid cultural expectations. This nuances Allport's personality adjustment dynamic, urging gender-sensitive counseling in Uttar Dinajpur to mitigate impulsivity in boys and amplify girls' relational strengths.

Overall, results advance non-Western EI-personality research, filling Indian eastern district gaps. Limitations include purposive sampling (potential bias) and cross-sectional design (no causality). Future longitudinal studies could explore interventions, informing West Bengal policies for adolescent holistic development beyond IQ.

Conclusion:

This study on 200 late-adolescent students in Uttar Dinajpur District confirms a significant positive relationship between emotional intelligence (EI) and extraversion, with all null hypotheses rejected: observed levels exceeded norms (H₀₁, $p < 0.01$), a moderate correlation emerged (H₀₂, $r = 0.35-0.48$, $p < 0.001$), and gender differences were evident (H₀₃, $p < 0.01$), males higher in extraversion and females in EI.

These findings validate Goleman's EI framework and Eysenck's personality dimensions in a non-Western, resource-constrained context, extending Katoch's (2020, 2024) correlations to adolescents and challenging adolescent "storm and stress" stereotypes with evidence of regional resilience.

Practically, educators in Uttar Dinajpur schools can implement gender-tailored EI training to leverage extraverts' strengths, enhancing academic performance, peer relations, and well-being amid cultural shifts-prioritizing EQ over IQ for holistic development.

Suggestions for Further Study:

1. Extend to all of West Bengal, not just Uttar Dinajpur.
2. Increase sample size.
3. Purposive sampling bias and cross-sectional design.
4. Include English-medium students.
5. Study special needs children of the same age group.

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Web Addresses

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