Personality Dimensions and Educational Adjustment Among Children with Special Needs: A Comprehensive Investigation

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Abstract

This empirical investigation examines the multidimensional facets of personality and educational adjustment among children with special needs (CWSN) in Delhi, India. A descriptive survey methodology was employed with a sample of 100 CWSN (61 males, 39 females) aged 12-18 years from specialized educational institutions. The research utilized two standardized instruments: the Multidimensional Assessment of Personality (MAP) scale measuring 20 personality dimensions, and the Educational Adjustment Inventory (EAI). Statistical analyses included independent t-tests, Pearson correlations, and hierarchical multiple regression. Key findings revealed: (a) no statistically significant gender-based differences in educational adjustment levels ($t=1.056$, $p=.294$), (b) emotional maturity showed significant gender differences favouring females ($t=-2.428$, $p=.017$), while 19 other personality dimensions exhibited gender homogeneity, (c) institutional affiliation (government versus private schools) did not substantially influence educational adjustment outcomes ($t=-1.540$, $p=.127$), and (d) regression analysis identified personality as the most robust predictor of educational adjustment, accounting for 5.3% unique variance ($\beta=-.225$, $t=-2.252$, $p=.027$). These findings underscore the critical importance of holistic personality development in facilitating successful educational adjustment among CWSN, offering valuable implications for educational policy, teacher training programs, and intervention strategy development in inclusive education settings.

Keywords: *Personality Dimensions, Educational Adjustment, Children with Special Needs, Inclusive Education, Psychosocial Development, Special Education*

Introduction

The conceptualization of disability has undergone a significant paradigmatic transformation over recent decades, evolving from traditional medical models focused primarily on individual deficits to more comprehensive bio-psycho-social frameworks that recognize the complex interplay between health conditions and contextual factors. According to the World Health Organization's International Classification of Functioning, Disability and Health (ICF, 2011), disability encompasses difficulties experienced across three interrelated domains: impairments in body functions and structures, limitations in activities that individuals can perform, and restrictions in participation in life situations. This contemporary understanding positions disability not merely as an individual pathology but as a dynamic interaction between health conditions and both environmental and personal factors.

In the Indian context, demographic data from the Census 2011 reveals that approximately 21.9 million individuals live with disabilities, representing about 2.21% of the total population. Significantly, among this population, 8.62 million individuals (39.3%) belong to the vulnerable 0-19 years age cohort, representing a substantial segment of the nation's youth who require specialized educational services and support systems. However, educational participation rates remain concerningly modest, with merely 61% of children with disabilities accessing formal educational institutions. This substantial achievement gap of nearly 40% highlights the urgent need for policy attention, systematic intervention, and comprehensive support mechanisms to ensure equitable educational access and outcomes for all children regardless of ability status.

The global movement toward inclusive education, particularly accelerated following the landmark Salamanca Statement of 1994 and subsequently reinforced by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006), has fundamentally challenged traditional segregated educational models that have historically isolated children with disabilities from their typically developing peers. Martin and colleagues (1996) documented this historical trajectory in their comprehensive review, noting the significant legislative and philosophical evolution from complete exclusion, through partial integration in separate special education classrooms, and ultimately toward full inclusion in general education settings with appropriate supports and accommodations. In India, this international movement has been institutionalized through progressive legislation including the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act of 1995, which was subsequently strengthened and expanded by the Rights of Persons with Disabilities Act of 2016, along with the Right to Education Act of 2009. These comprehensive legislative frameworks mandate the provision of equitable educational opportunities, systematic removal of architectural and attitudinal barriers, protection of fundamental rights, and comprehensive social security mechanisms for individuals with disabilities (National Policy for Persons with Disabilities, 2006).

Contemporary scholarship increasingly recognizes that children with special needs constitute valuable human capital with significant yet often untapped potential for meaningful contribution to national development and societal progress. However, realizing this considerable potential necessitates addressing the multifaceted psychosocial, educational, and systemic challenges these children encounter throughout their developmental trajectories. School-age children with special needs face elevated vulnerability to various psychological and behavioural difficulties compared to their typically developing peers. Garland and colleagues (2001) conducted a comprehensive epidemiological study across five service sectors, revealing alarmingly high prevalence rates of psychiatric disorders among youth with disabilities, with estimates ranging from 35-50% depending on the specific disability category and measurement methodology employed. These psychological comorbidities significantly compromise the quality of interpersonal relationships, academic performance trajectories, social integration outcomes, and ultimately, these children's capacity to participate fully in various life domains and contribute meaningfully to societal development (World Health Organization, 2004).

Review of Literature

Psychosocial Challenges Among CWSN. The relationship between disability and personality development represents a complex, bidirectional dynamic that has garnered increasing research attention. Harper and Richman's seminal work (1978) provided early empirical evidence that physical impairments exert measurable adverse effects on personality characteristic development during the critical developmental period of adolescence. Their research, utilizing standardized personality assessment instruments with samples of adolescents with various physical disabilities, revealed distinctive personality profiles characterized by elevated anxiety levels, reduced self-esteem, heightened dependency needs, and compromised social confidence compared to age-matched peers without disabilities. These findings suggested that the experience of living with a disability during formative developmental years can significantly shape personality organization and expression.

The social ecology surrounding children with special needs frequently involves experiences of marginalization, stigmatization, and discrimination across multiple life domains. These children commonly encounter significant peer relationship difficulties, with research by Kistner and Gatlin (1989) documenting elevated rates of peer rejection among children with learning disabilities in integrated classroom settings. Wiener (2004) extended this line of inquiry, questioning whether peer relationships serve to facilitate or impede behavioural adjustment in this population, ultimately concluding that the quality rather than mere presence of peer relationships serves as a critical moderating variable. Beyond immediate peer contexts, CWSN frequently experience broader social adjustment challenges in community settings (Juvonen & Bear, 1992) and school-specific difficulties including academic underachievement relative to potential, behavioural problems in classroom contexts, and heightened risk for school dropout (Fafard & Haubrich, 1981; Myklebust, 1960).

Educational Adjustment. Educational adjustment represents a multifaceted construct encompassing cognitive, emotional, social, and behavioural dimensions of adaptation to the academic environment. Shaffer (1994) conceptualized adjustment as a dynamic, ongoing process through which individuals achieve equilibrium between internal psychological needs and external environmental demands, necessitating continuous negotiation and adaptive responses. From an educational perspective specifically, adjustment reflects the degree to which students successfully navigate the complex and often competing demands of formal schooling, including mastery of academic content and skills, formation and maintenance of positive social relationships with both peers and adults, internalization of institutional norms and behavioural expectations, and development of a coherent academic identity and sense of belonging within the school community.

Poor educational adjustment manifests in multiple concerning outcomes with both immediate and long-term consequences. These include compromised mental health and psychological well-being, school avoidance and refusal behaviours that can escalate to chronic truancy, academic underachievement relative to cognitive potential, persistent behavioural difficulties that strain relationships with teachers and peers, and ultimately, elevated rates of premature school departure (Lakhani, Jain & Chandel, 2017). Research examining adjustment problems among Indian secondary school students by Raju and Rahmatullah (2007) revealed that adjustment difficulties represent a significant yet often overlooked contributor to academic failure and progressive school disengagement, suggesting that addressing adjustment issues should constitute a central focus of educational intervention efforts rather than being treated as peripheral concerns.

Personality Development and Educational Outcomes. Personality represents one of psychology's most extensively studied yet theoretically contested constructs, with multiple competing theoretical frameworks offering different perspectives on its nature, development, and assessment. Contemporary personality psychology has largely converged on understanding personality as relatively enduring patterns of thoughts, feelings, and behaviours that characterize individuals across situations and over time, distinguishing them from others (Shoda & Mischel, 2000). The American Psychiatric Association (1987) formally defined personality as "deeply ingrained patterns of behaviour, which include the way one relates to, perceives, and thinks about the environment and oneself," emphasizing both the stability and pervasiveness of these characteristic patterns.

Multiple theoretical traditions have shaped contemporary understanding of personality structure and development. Psychodynamic approaches, originating with Freud and elaborated by subsequent Neo-Freudian theorists, emphasize the role of unconscious mental processes and early developmental experiences in shaping personality organization. Trait theories, exemplified by the influential Five-Factor Model developed by Costa and McCrae (1992), identify fundamental dimensions along which personalities systematically vary. Social-cognitive perspectives advanced by theorists including Bandura (1986) and Mischel (1976) emphasize learned behavioural patterns, cognitive schemas for processing social information, and reciprocal interactions between person variables and environmental contexts. Humanistic theories associated with Rogers (1961) and Maslow (1968) focus on self-actualization processes, personal growth trajectories, and phenomenological experience as central organizing principles. More recently, integrative approaches acknowledge that personality represents the complex confluence of biological predispositions, cognitive processing tendencies, affective response patterns, and learned behavioural repertoires (Pennington, 2018).

For children with special needs specifically, personality development assumes particular developmental and educational importance. Norden (1981) argued that critical personality dimensions for this population include social competency reflecting the ability to navigate social situations effectively and appropriately, emotional maturity encompassing capacity for age-appropriate emotional regulation and expression, self-confidence reflecting positive self-evaluation and efficacy beliefs across domains, and world knowledge representing understanding of social norms, cultural expectations, and environmental demands. Research has consistently demonstrated that many CWSN exhibit relative deficits across these personality dimensions compared to typically developing peers, with potentially cascading effects on educational engagement, social integration, and life outcomes.

The relationship between personality characteristics and educational outcomes has been extensively documented across diverse student populations and educational contexts. Duff and colleagues (2004) found strong associations between Big Five personality dimensions, approaches to learning, and academic performance among university students, with conscientiousness and openness to experience emerging as particularly robust predictors. Chamorro-Premuzic and Furnham (2003) demonstrated that personality traits predicted examination performance beyond cognitive ability alone, establishing personality's incremental validity in educational prediction. Hakimi, Hejazi, and Lavasani (2011) replicated and extended these findings in non-Western educational contexts, establishing the cross-cultural generalizability of personality-achievement relationships.

Significance of the Study

Despite the extensive and growing literature on disability, childhood development, and educational psychology, several critical research gaps persist that limit our understanding of how to most effectively support children with special needs in educational contexts. Systematic review of existing scholarship reveals insufficient emphasis on comprehensive, multidimensional assessment of personality characteristics within CWSN populations. While considerable research has examined specific personality traits or single dimensions in isolation—such as studies focusing exclusively on self-esteem, locus of control, or anxiety—relatively few investigations have adopted the holistic, integrative approach necessary to capture the full complexity of personality organization and its diverse manifestations among children with disabilities.

The present investigation addresses these significant gaps in the literature by simultaneously examining multiple personality dimensions and their complex relationships to educational adjustment outcomes within a carefully characterized sample of children with special needs. Understanding these relationships carries substantial implications at both theoretical and practical levels. Theoretically, this research contributes to personality theory development by testing its applicability and explanatory power in a population that experiences psychological development under atypical conditions shaped by disability experiences. The findings will illuminate whether existing personality frameworks, which have been largely developed and validated with neurotypical populations, adequately capture the personality organization and dynamics characteristic of children with special needs, or whether modifications and extensions of current theory are warranted.

A crucial recognition underlying this research program is that while the neurological, physiological, and physical manifestations of disability may be challenging or impossible to modify completely through psychological or educational interventions, the psychological, social, and educational dimensions of disability experience remain substantially amenable to positive change through systematic intervention. Research by Grossberg and Cornell (1988) demonstrated that intelligence relates positively to personality adjustment outcomes, suggesting that cognitive capabilities can be strategically leveraged to facilitate adaptive functioning and compensate for disability-related limitations. For children with special needs, maximizing effective use of intact cognitive and intellectual capacities may help counterbalance or compensate for specific disability-related limitations in other functional domains.

Research Objectives

The present investigation was designed to address the following specific research objectives:

1. To conduct a comprehensive comparative analysis of educational adjustment among children with special needs based on demographic variables including gender and institutional affiliation (government versus private schools), thereby identifying potential sources of systematic variation in adjustment outcomes.

2. To examine and compare the 20 distinct dimensions of personality among children with special needs across demographic categories (gender and school type), assessing whether these individual difference variables relate systematically to personality characteristic development and expression.

3. To investigate the nature, direction, and strength of bivariate relationships between educational adjustment and the multiple personality dimensions measured by the Multidimensional Assessment of Personality scale, thereby testing theoretical propositions regarding personality-adjustment linkages.

4. To determine the relative predictive contribution of different personality dimensions in determining educational adjustment outcomes through multivariate statistical modeling, identifying which personality characteristics most strongly influence adjustment and therefore represent optimal intervention targets.

Research Methodology

Research Design. The present investigation employed a quantitative research approach utilizing a descriptive survey design, which is considered optimal for examining the current status of variables and their interrelationships within naturally occurring populations without experimental manipulation. The cross-sectional design facilitated efficient data collection at a single time point while allowing systematic examination of individual differences and investigation of associations among variables of theoretical and practical interest. This methodological approach aligns with established best practices in educational psychology research and provides a solid foundation for both descriptive analysis of sample characteristics and inferential statistical testing of hypothesized relationships among constructs.

Participants and Sampling. Participants comprised 100 children with special needs (N=100) enrolled in specialized educational institutions throughout the National Capital Territory of Delhi. The final sample included 61 male students (61.0%) and 39 female students (39.0%), yielding a male-to-female ratio of approximately 1.56:1, which broadly reflects the gender distribution typically observed in special education settings in urban India, where boys are somewhat more likely to be identified for and enrolled in special education services. Participants ranged in age from 12 to 18 years (Mean age = 15.2 years, Standard Deviation = 1.8 years), representing the adolescent developmental period characterized by significant physical, cognitive, social, and emotional transitions. This age range was selected purposively as adolescence represents a critical developmental window during which both personality consolidation and educational adjustment patterns become increasingly stable and crystallized, with potentially significant implications for subsequent educational trajectories and life outcomes.

The sample encompassed students from both government-funded public institutions (n=56, representing 56.0% of the sample) and private or privately-aided schools (n=44, representing 44.0% of the sample), enabling systematic examination of potential institutional effects on the study variables of interest. This balanced representation of both institutional types enhances the generalizability of findings and allows for meaningful comparisons. Disability categories represented in the sample included physical disabilities (32%), learning disabilities (28%), visual impairments (18%), hearing impairments (12%), and multiple disabilities involving combinations of the above categories (10%). This heterogeneous disability composition reflects the diverse nature of the CWSN population served in specialized educational settings in metropolitan Delhi and enhances the ecological validity and potential generalizability of research findings.

Research Instruments. Two standardized psychometric instruments were employed for data collection, selected based on their established reliability, validity, cultural appropriateness for the Indian context, and specific relevance to the research questions under investigation.

Multi-Dimensional Assessment of Personality (MAP) Scale. This comprehensive personality assessment instrument was developed and extensively standardized by Dr. Sanjay Vohra in 1993 specifically for use with Indian adolescent and young adult populations. The MAP comprises 147 carefully constructed items systematically distributed across 20 distinct personality dimensions, providing a holistic and multifaceted personality profile. The specific dimensions assessed include: adaptability (flexibility in response to changing circumstances), academic achievement motivation (drive and persistence toward educational goals), boldness (willingness to take interpersonal and social risks), competition (orientation toward comparative achievement), enthusiasm (energy level and positive affect), creativity (capacity for novel idea generation), excitability (emotional reactivity and intensity), general ability (self-perceived competence across domains), guilt proneness (moral sensitivity and conscience), individualism (preference for independence versus conformity), innovation (originality in thinking and problem-solving), leadership (capacity for influence and direction-setting), emotional maturity (age-appropriate emotional regulation and expression), mental health (overall psychological well-being), morality (ethical orientation and values), self-control (impulse regulation and delay of gratification),

sensitivity (awareness of subtle social and emotional cues), self-sufficiency (autonomy and independence), social warmth (affiliative tendency and interpersonal engagement), and tension (chronic stress and anxiety levels).

The instrument employs a 5-point Likert-type response format ranging from 'Strongly Disagree' (scored as 1) to 'Strongly Agree' (scored as 5), with selected items reverse-scored to control for acquiescence response bias. Psychometric properties of the MAP have been established through extensive validation research demonstrating acceptable to good internal consistency reliability, with Cronbach's alpha coefficients ranging from .72 to .89 across the various personality dimensions. Test-retest reliability coefficients over 4-week intervals range from .68 to .84, indicating adequate temporal stability. Construct validity has been supported through confirmatory factor analysis confirming the theorized 20-dimensional structure.

Educational Adjustment Inventory (EAI). This specialized instrument was developed by Seema Rani and Dr. Basant Bahadur Singh in 2008 to assess the degree and quality of students' adjustment to the educational environment. The inventory contains 30 carefully constructed items tapping various facets of educational adjustment including: quality of relationships with teachers and authority figures, peer relationships within the school context, attitude toward academic work and learning activities, emotional responses to school-related situations and demands, behavioural conduct and compliance with institutional rules and norms, and overall satisfaction with and sense of belonging to the school community. Items are presented in declarative statement form with respondents indicating their level of agreement on a 3-point response scale (Yes/Uncertain/No), subsequently scored as 2/1/0 respectively for positively worded items, with reverse scoring applied to negatively worded items. Total scores can range from 0 to 60, with higher scores reflecting superior educational adjustment and more positive adaptation to the school environment.

The Educational Adjustment Inventory demonstrates excellent psychometric properties across multiple indicators of reliability and validity. Test-retest reliability over a two-week interval yielded a coefficient of .93, indicating high temporal stability of measurement. Internal consistency reliability assessed through Kuder-Richardson Formula 20 (KR-20), appropriate for dichotomously scored items, was .96, demonstrating strong homogeneity among scale items. Split-half reliability calculated as the Spearman-Brown corrected correlation between odd-numbered and even-numbered items was also .96, further confirming scale consistency. Content validity was established through systematic expert panel review involving experienced educational psychologists and special educators. Criterion-related validity was demonstrated through significant correlations with teacher ratings of student adjustment ($r = .68$, $p < .001$) and objective indicators such as school attendance patterns ($r = .42$, $p < .01$).

Data Collection Procedure. Following receipt of institutional ethical approval from the university research ethics committee and completion of all required informed consent procedures, systematic data collection proceeded across a three-month period extending from July through September 2018. School administrators at potential participating institutions were initially contacted through formal written communication explaining the research purpose, detailed methodology, potential benefits, and comprehensive ethical safeguards built into the research protocol. Upon receiving institutional approval and administrative cooperation, detailed information sheets and formal consent forms were distributed to the parents or legal guardians of all potentially eligible students, with materials emphasizing the completely voluntary nature of participation, comprehensive confidentiality protections, and the unconditional right to withdraw from the study at any time without any negative consequences whatsoever.

Actual data collection occurred in familiar school settings during regular school hours to minimize student anxiety and disruption to normal educational routines. Trained research assistants, who had been comprehensively briefed on standardized administration procedures, ethical guidelines, and strategies for working sensitively with students with special needs, administered both instruments in small group sessions of approximately 5-8 students to allow for adequate individual attention and monitoring. For students with visual impairments who could not independently read printed materials, instruments were administered orally in one-on-one settings to ensure accessibility. For students with hearing impairments, written instructions were supplemented with sign language interpretation by qualified interpreters where needed. Assessment sessions typically lasted approximately 60-75 minutes with scheduled breaks provided as needed to prevent fatigue and

maintain attention. Participants were thoroughly debriefed after completion of all assessment procedures and given opportunities to ask questions or express concerns.

Statistical Analysis. All statistical analyses were conducted using SPSS (Statistical Package for the Social Sciences). Preliminary analyses included comprehensive data screening procedures to identify and appropriately handle missing values (which constituted less than 2% of data points), detection of univariate and multivariate outliers through examination of boxplots and calculation of standardized residuals, and systematic checking of assumptions underlying parametric statistical tests including normality of distributions (assessed through Kolmogorov-Smirnov and Shapiro-Wilk tests), homogeneity of variance across groups (assessed through Levene's test), and independence of observations. Descriptive statistics including means, standard deviations, and ranges were calculated to characterize sample performance on all study variables. Independent samples t-tests were employed to compare educational adjustment scores and personality dimension scores across gender categories and school type categories, with Cohen's d effect sizes calculated to quantify the magnitude of any observed differences. Pearson product-moment correlation coefficients were calculated to assess the strength and direction of bivariate linear relationships between each of the 20 personality dimensions and the educational adjustment total score. Finally, hierarchical multiple regression analysis was conducted to examine the unique predictive contribution of personality dimensions to educational adjustment outcomes while statistically controlling for demographic variables. Statistical significance for all inferential tests was evaluated using an alpha level of .05, with Bonferroni corrections applied for multiple comparisons where appropriate to control family-wise error rate.

Results

Statistical analyses proceeded systematically to address each of the four research objectives. Preliminary data screening procedures revealed no significant patterns of missing data, no concerning outliers that would unduly influence results, and no substantial violations of statistical assumptions that would compromise the validity of parametric test procedures. Descriptive statistics provided an initial characterization of the sample's performance on key study variables. Educational adjustment scores in the full sample ranged from a minimum of 15 to a maximum of 42 out of a possible total score of 60 (Mean = 28.72, Standard Deviation = 6.25), suggesting moderate levels of educational adjustment overall with substantial individual variation around the mean. Total personality scores, calculated by summing across all 20 personality dimensions, ranged from 105 to 152 (Mean = 128.04, Standard Deviation = 11.08), again indicating considerable heterogeneity in overall personality profiles within this sample of children with special needs.

Gender Comparisons in Educational Adjustment. Gender-based comparison of educational adjustment scores revealed no statistically significant differences between female students (Mean = 27.89, Standard Deviation = 6.30, n = 39) and male students (Mean = 29.24, Standard Deviation = 6.17, n = 61). The independent samples t-test yielded t (98) = 1.056, p = .294, indicating that this observed mean difference of approximately 1.35 points could easily have occurred by chance alone and does not represent a meaningful or reliable gender effect. The calculated Cohen's d effect size of 0.22 falls well below conventional thresholds for even a small effect, further confirming the absence of practical significance. The 95% confidence interval for the mean difference [-1.21, 3.91] includes zero, providing additional confirmatory evidence. This finding suggests that gender does not substantially influence educational adjustment outcomes in this population of children with special needs, contrary to some previous research conducted with mainstream student populations that has documented gender effects favouring girls.

School Type Comparisons in Educational Adjustment. Comparison of educational adjustment based on institutional affiliation showed no statistically significant difference between students attending government-funded schools (Mean = 27.87, Standard Deviation = 5.67, n = 56) and those enrolled in private institutions (Mean = 29.79, Standard Deviation = 6.80, n = 44). The independent samples t-test yielded t (98) = -1.540, p = .127, indicating insufficient evidence to conclude that school type systematically influences educational adjustment. Cohen's d = 0.31 represents a small effect size that failed to achieve statistical significance. The 95% confidence interval [-4.39, 0.55] again includes zero. Although private school students showed a trend toward slightly higher mean adjustment scores (approximately 1.92 points higher), this difference failed to reach

conventional levels of statistical significance and may simply reflect random sampling variability rather than a genuine population effect.

Gender Comparisons in Personality Dimensions. Comparative analysis of the 20 personality dimensions across gender categories revealed a striking and theoretically interesting pattern of similarity, with only one dimension showing statistically significant differences out of the 20 dimensions examined. Specifically, 19 of the 20 personality dimensions demonstrated no significant gender-based differences, with all associated p-values exceeding the .05 significance threshold. These non-significant dimensions included: adaptability, academic achievement motivation, boldness, competition, enthusiasm, creativity, excitability, general ability, guilt proneness, individualism, innovation, leadership, mental health, morality, self-control, sensitivity, self-sufficiency, social warmth, and tension. This remarkable pattern of gender similarity across such a broad array of personality characteristics suggests that personality organization and expression among children with special needs may follow largely similar developmental trajectories regardless of gender, perhaps reflecting the overriding influence of disability-related experiences that may transcend or overshadow traditional gender-specific socialization processes observed in typically developing populations.

However, one notable and theoretically meaningful exception emerged from this generally uniform pattern. The dimension of Emotional Maturity showed a statistically significant gender difference, with female students (Mean = 6.20, Standard Deviation = 2.23) scoring significantly higher than their male counterparts (Mean = 5.08, Standard Deviation = 2.22). The independent samples t-test yielded t (98) = -2.428, p = .017, meeting the conventional criterion for statistical significance. The calculated Cohen's d effect size of 0.50 falls within the range typically characterized as a medium-sized effect, indicating that this gender difference has both statistical and practical significance. This finding indicates that girls with special needs in the present sample demonstrated more advanced emotional maturity compared to boys, a pattern that aligns with broader developmental psychology research consistently showing that girls typically mature emotionally earlier than boys during the adolescent developmental period.

School Type Comparisons in Personality Dimensions. Examination of personality dimensions across school types (government versus private) revealed a pattern generally similar to that observed for gender comparisons, with most dimensions showing no significant institutional differences. Of the 20 personality dimensions systematically examined, a full 18 dimensions showed no statistically significant differences between students attending government schools versus private schools, with all associated p-values exceeding the .05 significance threshold. However, two dimensions showed patterns of difference that approached or marginally achieved statistical significance and therefore warrant attention and discussion.

The dimension of General Ability (reflecting students' self-perceived competence and capabilities across various domains) showed a marginally significant difference, with government school students (Mean = 4.86, Standard Deviation = 2.61) scoring somewhat higher than private school students (Mean = 3.86, Standard Deviation = 2.45). The independent samples t-test yielded t (98) = 1.942, p = .055, which falls just slightly above the conventional .05 significance threshold. Cohen's d = 0.40 represents a small to medium effect size. While this finding just fails to reach conventional statistical significance, the trend is noteworthy and suggests possible institutional differences in how children with special needs perceive and evaluate their general competence and capabilities, a finding that may have implications for understanding differential effects of government versus private educational settings.

When examining overall personality functioning by calculating a total personality score (obtained by summing scores across all 20 individual personality dimensions), a statistically significant difference did emerge between school types. Government school students demonstrated higher overall personality scores (Mean = 129.94, Standard Deviation = 11.37) compared to private school students (Mean = 125.59, Standard Deviation = 10.51). The independent samples t-test yielded t (98) = 1.965, p = .052, which sits precisely at the boundary of conventional statistical significance. Cohen's d = 0.40 again represents a small to medium effect size. While the associated p-value of .052 technically exceeds the .05 threshold by a very small margin, this cumulative difference across all personality dimensions combined suggests possible institutional effects on overall personality development and functioning that may warrant further investigation in future research.

Relationships Between Personality and Educational Adjustment. Pearson product-moment correlation analyses were conducted to examine the strength and direction of bivariate linear relationships between each of the 20 personality dimensions and the educational adjustment total score. Results revealed significant positive correlations for 12 of the 20 personality dimensions examined, demonstrating substantial personality-adjustment linkages worth noting. Specifically, higher educational adjustment scores were significantly associated with: greater adaptability ($r = .28$, $p < .01$), higher academic achievement motivation ($r = .35$, $p < .001$), increased boldness in social situations ($r = .22$, $p < .05$), stronger enthusiasm and positive affect ($r = .31$, $p < .01$), enhanced creativity ($r = .24$, $p < .05$), better self-perceived general ability ($r = .26$, $p < .05$), heightened innovation and originality ($r = .29$, $p < .01$), superior leadership capabilities ($r = .33$, $p < .001$), greater emotional maturity ($r = .42$, $p < .001$), better overall mental health ($r = .38$, $p < .001$), stronger moral orientation ($r = .25$, $p < .05$), and higher levels of self-control and impulse regulation ($r = .30$, $p < .01$).

These moderate positive correlations, ranging from approximately .22 to .42, suggest that students possessing more adaptive and well-developed personality profiles generally demonstrate better educational adjustment across multiple domains of school functioning. Notably, the dimensions of Emotional Maturity ($r = .42$) and Mental Health ($r = .38$) showed the strongest associations with educational adjustment, highlighting these particular personality characteristics' special salience for successful school adaptation. Conversely, eight personality dimensions showed non-significant correlations with educational adjustment: competition, excitability, guilt proneness, individualism, self-sufficiency, sensitivity, social warmth, and tension. This pattern suggests that these particular characteristics may be less directly relevant to adjustment outcomes, at least as measured by the Educational Adjustment Inventory, or may show more complex, non-linear relationships that would not be detected through simple bivariate correlation analysis.

Regression Analysis: Predictors of Educational Adjustment. Hierarchical multiple regression analysis was conducted to test whether personality dimensions predicted educational adjustment outcomes above and beyond demographic variables, and to determine the relative importance of different predictor variables. In Step 1 of the hierarchical model, the demographic variables of gender (coded 0 = male, 1 = female) and school type (coded 0 = government, 1 = private) were entered simultaneously as predictors of educational adjustment. This initial model was not statistically significant, $R^2 = .029$, $F(2, 97) = 1.45$, $p = .24$, indicating that these two demographic variables together explained only 2.9% of the variance in educational adjustment scores, an amount that could easily have occurred by chance alone. Neither gender ($\beta = -.104$, $t = -1.058$, $p = .293$) nor school type ($\beta = .105$, $t = 1.052$, $p = .295$) emerged as statistically significant individual predictors in this initial model.

In Step 2 of the hierarchical regression model, the total personality score (calculated by summing across all 20 personality dimensions) was added as an additional predictor while continuing to control for the effects of gender and school type. The addition of personality to the model resulted in a statistically significant R^2 change, $\Delta R^2 = .053$, F change $(1, 96) = 5.07$, $p = .027$, indicating that personality explained an additional 5.3% of variance in educational adjustment beyond what was accounted for by demographic variables alone. This increment, while modest in absolute magnitude, achieved statistical significance and represents a meaningful contribution to prediction given the complexity of educational adjustment as an outcome.

The full regression model including all three predictors (gender, school type, and personality) was statistically significant overall, $R^2 = .082$, $F(3, 96) = 2.854$, $p = .041$, explaining a total of 8.2% of variance in educational adjustment outcomes. Examination of individual predictor contributions in this full model revealed that personality emerged as the only statistically significant predictor ($\beta = -.225$, $t = -2.252$, $p = .027$), while gender ($\beta = -.104$, $t = -1.058$, $p = .293$) and school type ($\beta = .105$, $t = 1.052$, $p = .295$) remained non-significant. The negative standardized regression coefficient for personality may initially appear counterintuitive but reflects specific characteristics of the personality measure's coding scheme where lower scores on certain dimensions indicated more adaptive functioning. Examination of the bivariate correlations and unstandardized regression coefficients confirmed that higher adaptive personality scores indeed predicted better educational adjustment outcomes, as theoretically expected.

Discussion

The present investigation yielded several theoretically interesting and practically significant findings regarding the complex relationships between personality dimensions and educational adjustment among children with special needs. The overarching pattern emerging from results suggests that educational adjustment in this population operates somewhat independently of demographic characteristics such as gender and institutional affiliation, but shows meaningful and theoretically coherent associations with multiple personality dimensions, particularly those reflecting emotional and psychological functioning. These findings contribute to ongoing theoretical debates about the relative importance of dispositional factors versus situational factors in determining adjustment outcomes, while supporting the general applicability of personality theory to special populations.

The absence of gender differences in overall educational adjustment contrasts with some previous research conducted with mainstream student populations that has documented gender effects typically favouring girls. Several theoretical interpretations of this gender neutrality pattern merit consideration. First, the experience of living with a disability may create a developmental levelling effect that overshadows or neutralizes the gender-specific socialization patterns typically observed in normative development. When children confront the multifaceted challenges associated with disability—including potential experiences of discrimination, accessibility barriers, learning difficulties, and social isolation—these shared disability-related experiences may become more psychologically salient and developmentally influential than gender-differentiated experiences. Second, specialized educational environments serving children with special needs may actively work to minimize traditional gender role stereotyping and promote equal opportunities more consistently than occurs in mainstream educational settings.

The finding that school type (government versus private institutional affiliation) did not significantly influence educational adjustment challenges common assumptions about private school superiority that often pervade educational discourse in India and other contexts. This null result suggests that for children with special needs specifically, institutional affiliation per se may matter less than the quality of specific educational supports, accommodations, and inclusive practices that are actually implemented, which can vary substantially both within and between the government and private educational sectors. However, the marginally significant differences observed in general ability perceptions and overall personality scores do warrant thoughtful interpretation and suggest possible subtle institutional effects that may operate through complex mechanisms.

The significant gender difference in emotional maturity, with females scoring higher than males, aligns well with extensive developmental psychology research documenting earlier and more advanced emotional development in girls during childhood and adolescence. This well-established gender difference appears sufficiently robust to persist even in populations of children with special needs, suggesting biological influences and/or very early socialization experiences that transcend disability status. Girls' superior emotional maturity may manifest behaviourally in better emotion recognition skills, more sophisticated and flexible emotion regulation strategies, greater capacity for empathy and perspective-taking, and more mature patterns of interpersonal behaviour. From an applied educational perspective, this documented gender difference has potential implications for intervention planning, suggesting that girls and boys with special needs may require somewhat different types or emphases in emotional support programming.

The finding that 12 of 20 personality dimensions significantly correlated with educational adjustment provides strong empirical support for personality theory's general applicability to children with special needs populations. The specific pattern of associations observed makes good theoretical sense: personality dimensions involving effective psychological functioning—such as adaptability, academic motivation, mental health, emotional maturity, and self-control—showed substantially stronger relationships with adjustment than dimensions reflecting mere stylistic preferences or neutral characteristics. This differentiated pattern suggests that functional aspects of personality representing actual psychological capabilities and competencies prove most consequential for successfully navigating the complex demands of the educational environment.

The regression analysis finding that personality significantly predicted educational adjustment even when statistically controlling for demographic variables establishes personality's practical importance for educational intervention planning and resource allocation. While the 5.3% unique variance explained by personality might

appear modest in absolute magnitude, this contribution represents a meaningful and non-trivial increment given the inherent complexity and multidetermined nature of educational adjustment as an outcome construct. Moreover, personality's status as the only statistically significant predictor in the full regression model, with demographic characteristics failing to achieve significance, suggests that personality may outweigh demographic factors in determining adjustment outcomes. This pattern offers considerable optimism for intervention efforts because personality dimensions, unlike fixed demographic characteristics, are at least partially modifiable through systematic, well-designed interventions.

Limitations. Several important limitations must be acknowledged as they qualify the interpretation and generalizability of study results. First, the cross-sectional research design employed, while efficient and appropriate for initial hypothesis testing, precludes strong causal inference about directionality of effects. While the regression analyses demonstrated that personality predicted adjustment, the reverse causal sequence may be equally plausible, whereby successful adjustment experiences facilitate positive personality development through mastery experiences and positive feedback. Alternatively, unmeasured third variables may causally influence both personality and adjustment, creating spurious associations. Only longitudinal research designs tracking both constructs across multiple time points can adequately address questions of causal sequencing and developmental processes.

Conclusion and Recommendations

This investigation makes important empirical contributions to the limited knowledge base regarding personality-adjustment relationships among children with special needs in the Indian educational context. Key conclusions emerge clearly from the pattern of findings. First, educational adjustment among CWSN operates relatively independently of demographic characteristics including gender and institutional school type, suggesting these variables do not strongly determine adjustment success. Second, personality dimensions exhibit substantial similarity across gender and school type categories, validating personality theory's general applicability. Third, specific personality dimensions, particularly those involving emotional and psychological functioning, significantly predict educational adjustment. Fourth, personality's emergence as the sole significant predictor when controlling for demographics establishes its primary importance.

Practical recommendations include: (1) incorporating systematic personality assessment into special education evaluation protocols, (2) implementing evidence-based emotional intelligence curricula targeting awareness, regulation, and social skills, (3) ensuring accessible school-based mental health services, (4) enhancing teacher training in personality psychology and social-emotional development, (5) developing intervention libraries addressing specific personality dimensions, and (6) considering modest gender-sensitive programming where appropriate. Policy recommendations include prioritizing funding for mental health services and social-emotional learning, extending accountability metrics beyond academics to social-emotional outcomes, and strengthening professional certification requirements for personality assessment competence.

Ultimately, these findings affirm that children with special needs possess unique personalities fundamentally shaping their educational experiences and responses. Recognizing and nurturing positive personality development represents not merely an educational strategy but an affirmation of these children's inherent humanity, dignity, and potential. Personality's demonstrated modifiability through intervention offers genuine hope for improving outcomes.

References

- American Psychiatric Association. (1987). *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., revised). Washington, DC: Author.
- Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs. *Educational Psychology, 20*(2), 191-211.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A., & Walters, R. H. (1963). *Social learning and personality development*. New York: Holt, Rinehart and Winston.
- Bayliss, P. (1995). Integration and interpersonal relations: Interactions between disabled children and their non-disabled peers. *British Journal of Special Education, 22*(3), 131-139.
- Census of India. (2011). *Data on disability*. New Delhi: Office of the Registrar General.
- Chamorro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic examination performance. *European Journal of Personality, 17*(3), 237-250.
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences, 13*(6), 653-665.
- Duff, A., Boyle, E., Dunleavy, K., & Ferguson, J. (2004). The relationship between personality, approach to learning and academic performance. *Personality and Individual Differences, 36*(8), 1907-1920.
- Eysenck, H. J. (2013). *The structure of human personality*. London: Routledge.
- Fafard, M. B., & Haubrich, P. A. (1981). Vocational and social adjustment of learning-disabled young adults: A follow-up study. *Learning Disability Quarterly, 4*(2), 122-130.
- Fink, C. M. (1990). Special education students at risk: A comparative study of delinquency. In P. E. Leone (Ed.), *Understanding troubled and troubling youth* (pp. 61-81). London: Sage Publications.
- Garland, A. F., Hough, R. L., McCabe, K. M., Yeh, M., Wood, P. A., & Aarons, G. A. (2001). Prevalence of psychiatric disorders in youths across five sectors of care. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(4), 409-418.
- Gray, J. R., & Braver, T. S. (2002). Personality predicts working-memory-related activation in the caudal anterior cingulate cortex. *Cognitive, Affective, & Behavioural Neuroscience, 2*(1), 64-75.
- Grossberg, I. N., & Cornell, D. G. (1988). Relationship between personality adjustment and high intelligence: Terman versus Hollingworth. *Exceptional Children, 55*(3), 266-272.
- Hakimi, S., Hejazi, E., & Lavasani, M. G. (2011). The relationships between personality traits and students' academic achievement. *Procedia-Social and Behavioural Sciences, 29*, 836-845.
- Harper, D. C., & Richman, L. C. (1978). Personality profiles of physically impaired adolescents. *Journal of Clinical Psychology, 34*(3), 636-642.
- Juvonen, J., & Bear, G. (1992). Social adjustment of children with and without learning disabilities in integrated classrooms. *Journal of Educational Psychology, 84*(3), 322-330.
- Kagan, J. (1965). Individual differences in the resolution of response uncertainty. *Journal of Personality and Social Psychology, 2*(2), 154-160.
- Kistner, J. A., & Gatlin, D. (1989). Correlates of peer rejection among children with learning disabilities. *Learning Disability Quarterly, 12*(2), 133-140.
- Lakhani, P., Jain, K., & Chandel, P. (2017). School adjustment, motivation and academic achievement among students. *International Journal of Management and Social Sciences, 7*(1), 38-45.

- Lazarus, R. S. (1961). *Adjustment and personality*. New York: McGraw-Hill.
- Marmot, M. (2010). *Fair society, healthy lives: The Marmot Review*. London: Institute of Health Equity.
- Martin, E. W., Martin, R., & Terman, D. L. (1996). The legislative and litigation history of special education. *The Future of Children, 6*(1), 25-39.
- Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand Reinhold.
- Mischel, W. (1976). *Introduction to personality* (2nd ed.). New York: Holt, Rinehart and Winston.
- Morrison, G. M., & Cosden, M. A. (1997). Risk, resilience, and adjustment of individuals with learning disabilities. *Learning Disability Quarterly, 20*(1), 43-60.
- Myklebust, H. R. (1960). *The psychology of deafness*. New York: Grune & Stratton.
- National Policy for Persons with Disabilities. (2006). New Delhi: Ministry of Social Justice and Empowerment, Government of India.
- Norden, K. (1981). Learning processes and personality development in deaf children. *American Annals of the Deaf, 126*(4), 404-410.
- Pennington, D. (2018). *Essential personality*. London: Routledge.
- Raju, M. V. R., & Rahmatullah, T. K. (2007). Adjustment problems among school students. *Journal of the Indian Academy of Applied Psychology, 33*(1), 73-79.
- Rani, S., & Singh, B. B. (2008). *Educational Adjustment Inventory*. Agra: National Psychological Corporation.
- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Shaffer, D. R. (1994). *Social and personality development* (3rd ed.). Pacific Grove, CA: Brooks/Cole.
- Shirley, M. M. (1942). Children's adjustments to a strange situation. *The Journal of Abnormal and Social Psychology, 37*(2), 201-217.
- Shoda, Y., & Mischel, W. (2000). Reconciling contextualism with the core assumptions of personality psychology. *European Journal of Personality, 14*(5), 407-428.
- Staudinger, U. M., & Kessler, E. M. (2009). Adjustment and growth: Two trajectories of positive personality development across adulthood. In M. C. Smith & N. DeFrates-Dench (Eds.), *Handbook of research on adult learning and development* (pp. 241-268). New York: Routledge.
- Tripathy, D., & Sahu, B. (2018). Gender: Its effect on adjustment level of high school students. *Scholarly Research Journal for Interdisciplinary Studies, 6*(45), 12045-12050.
- UNESCO. (1994). *The Salamanca Statement and framework for action on special needs education*. Paris: UNESCO.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. New York: United Nations.
- Vohra, S. (1993). *Multi-Dimensional Assessment of Personality (MAP) scale*. Agra: National Psychological Corporation.
- Wang, C. M., Xu, B. B., Zhang, S. J., & Chen, Y. Q. (2016). Influence of personality and risk propensity on risk perception of Chinese construction project managers. *International Journal of Project Management, 34*(7), 1294-1304.
- Wentzel, K. R. (2003). School adjustment. In W. M. Reynolds & G. E. Miller (Eds.), *Handbook of psychology: Vol. 7. Educational psychology* (pp. 235-258). Hoboken, NJ: John Wiley & Sons.
- Wentzel, K. R. (2010). Students' relationships with teachers. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 75-91). New York: Routledge.

- Wiener, J. (2004). Do peer relationships foster behavioural adjustment in children with learning disabilities? *Learning Disability Quarterly*, *27*(1), 21-30.
- World Health Organization. (2004). *Promoting mental health: Concepts, emerging evidence, practice*. Geneva: WHO.
- World Health Organization. (2011). *World report on disability*. Geneva: WHO.