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Self-concept and temperament among school children with-without conduct problem

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Abstract

The aim was to study the difference in self-concept and temperament among school children with and without conduct problem. The sample for study consisted of 68 school children with and without conduct issues studying in 4th to 6th standard, and aged between 9 to 12 years. A purposive sampling and between group design was opted for the study. Children willing to be part of the study were administered Children's Behavior Questionnaire (Teacher) and Strength and Difficulty Questionnaire. Those children above the cut-off point on both Children's Behavior Questionnaire (Teacher) and Strength and Difficulty Questionnaire (Behaviour area) were considered as a group with conduct problems. Children identified as being substantially at risk of clinically significant problems in conduct symptom and those ruled out as unlikely having clinically significant problems in conduct symptoms were both administered self-concept scale and temperament scale. Children being irregular to school, having major physical illness and disability were not considered for the study. The responses were analysed using mean, SD and 't' test. The results indicated that there was a significant difference in some areas of self-concept and temperament between children with and without conduct problem.

Keywords: Self-concept, temperament, children and conduct problem

Introduction

Self-concept in children encompasses their understanding and perception of themselves, including their physical attributes, abilities, personalities, and social identities. Markus and Wurf (1987) ^[19] define self-concept as the aggregate of an individual's beliefs about their personal attributes. Similarly, Shavelson *et al.* (1976) ^[36] describe self-concept as the collection of beliefs individuals hold about themselves, which informs their identity and behavior in various contexts. More recently, Harter (2012) ^[14] posits that self-concept refers to the holistic view individuals have of themselves as physical, social, and psychological entities.

The relationship between self-concept and conduct disorder in children has been a focal point of research, shedding light on how self-perceptions can influence behavioral issues. Graham and Williams (2009) ^[11] found that children with conduct disorder often possess a negative self-concept, which correlates with the severity of their symptoms. Such negative self-views are linked to increased aggression and antisocial behaviors, highlighting the significant role of self-perception in behavioral development.

Rosenberg and Simmons (1972) ^[31] explored self-concept differences among adolescents, particularly between Black and White children, revealing that lower self-esteem is associated with a greater likelihood of engaging in conduct disorders. This suggests that cultural and racial contexts significantly impact self-concept and behavioral outcomes. Schmitt and Bader (2008) ^[35] further demonstrated that a positive self-concept is protective against behavioral issues, including conduct disorders, reinforcing the importance of a healthy self-image.

Miller and McAuliffe (2011) ^[26] conducted a longitudinal study showing a reciprocal relationship between self-concept and conduct problems, indicating that children with conduct issues often experience declining self-concept over time, perpetuating behavioral challenges. Nolen-Hoeksema and Girgus (1994) ^[28] identified gender differences in self-concept development during adolescence, influencing the manifestation of conduct disorders. Masten, Morison, and Pellegrini (1995) ^[23] emphasized that a negative self-concept can heighten the risk of developing conduct disorder, as low self-esteem and feelings of inadequacy predispose children to antisocial behaviors.

The interplay between self-concept and peer rejection further exacerbates these issues, leading to increased aggression and delinquency among children with negative self-perceptions.

In contrast to self-concept, temperament refers to the innate, biologically determined individual differences in emotional, motor, and attentional reactivity and regulation, forming the foundation of a child's personality. Temperament is characterized by consistent behavioral patterns, moods, and activity levels, and is considered stable over time and across situations.

Temperament refers to an individual's inherent style of responding to the world, shaped by biological processes that are evident from an early age (Thomas and Chess, 1977)^[39]. Rothbart and Bates (2006) describe temperament as a collection of individual differences in emotional reactivity and self-regulation, influenced by both genetics and life experiences. Goldsmith and Campos (1986)^[8] further characterize it as stable individual differences in emotional reactions, activity levels, attention, and emotional self-regulation. Zuckerman (1991)^[40] views temperament as a biologically based inclination to respond to certain stimuli in specific ways. Thus, temperament can be considered the foundational "raw material" of personality, reflecting a child's inborn traits that interact with environmental influences to shape their development. Thomas and Chess (1977)^[39] pioneered the classification of infant temperament into three primary profiles: easy, difficult, and slow-to-warm-up.

The biological underpinnings of temperament include genetic and neural factors alongside environmental influences, as discussed by Rothbart and Bates (2006)^[32]. Goldsmith, Buss, and Lemery (1997)^[9] noted that while temperament dimensions such as negative affect and effortful control are moderately heritable, they are also significantly influenced by environmental conditions. Although research on rural children's temperament development is limited, Putnam and Rothbart (2006)^[30] highlighted that rural living can have both positive and negative effects on temperament. Various factors, including parenting practices (Brody *et al.*, 2012)^[3], social competence (Kapoor *et al.*, 2014)^[15], and socio-emotional development (Mathew and George, 2019)^[24], play a crucial role in shaping temperament.

Research indicates a strong connection between temperament and the development of conduct disorder. For instance, a longitudinal study by Caspi *et al.* (2002)^[5] found that children exhibiting high levels of negative emotionality and low levels of effortful control are more likely to develop conduct disorder, indicating that specific temperamental traits can lead to externalizing behaviors such as aggression and rule-breaking. Baker *et al.* (2007)^[2] revealed that children with difficult temperaments-characterized by high reactivity and low self-regulation-tend to face more conduct issues in school settings. Similarly, Loeber *et al.* (1993)^[18] identified impulsivity and low frustration tolerance as key predictors of antisocial behavior, emphasizing the importance of early temperament assessments.

Buss and Plomin (1984)^[4] established a model connecting temperament with antisocial behavior, showing that children with high emotionality and low sociability face increased risks for developing conduct disorders. Moffitt (1993)^[27] differentiated between childhood-onset and adolescence-onset conduct disorder, noting that early-onset conduct

disorder is often associated with temperamental traits such as impulsivity and low attention span, resulting in more severe behavioral issues.

Collectively, research suggests that children with difficult temperaments-marked by irritability, negative emotionality, and low impulse control-are more vulnerable to developing conduct disorder. Moreover, environmental factors, including parenting styles and peer influences, often moderate the impact of temperament on conduct disorder development.

Need for the Study

Understanding the differences in self-concept and temperament among school children with and without conduct problems is essential for several reasons. Early identification of children exhibiting conduct problems allows for timely interventions that can enhance their behavioral and emotional outcomes. Conduct issues typically arise in childhood and, if left unaddressed, can escalate into more severe problems during adolescence and adulthood. By assessing self-concept and temperament, educators and mental health professionals can pinpoint at-risk children and customize interventions accordingly (Baker *et al.*, 2007)^[2].

Self-concept plays a critical role in a child's behavior, emotional well-being, and academic success. Investigating how self-concept varies between children with conduct problems and their peers can shed light on how self-perceptions contribute to behavioral challenges (Graham and Williams, 2009)^[11]. Furthermore, temperament is a core component of personality that can predispose children to conduct issues. Examining temperament alongside conduct problems enables researchers to identify specific traits, such as impulsivity and emotional reactivity that are linked to these behavioral challenges (Moffitt, 1993)^[27]. Addressing these factors can foster supportive environments in schools and mental health services, promoting positive self-esteem and temperament and improving overall behavioral outcomes (Loeber *et al.*, 1993)^[18].

Methodology

The aim was to study self-concept and temperament among school children with and without conduct problem. The objective was to study the difference in self-concept and temperament between school children with and without conduct problem. It was hypothesised that there will be a significant difference in self-concept and temperament between school children with and without conduct problem. The study sample was school children with and without emotional problem studying in 4th to 6th standard schools, and aged between 9 to 12 years. A between group design with purposive sampling was considered for the study. The sample consisted of 68 children from both the groups (with and without conduct problems). Children various schools willing to be part of the study were administered Problem Behaviour Check List (teacher) and Strength and Difficulty Questionnaire, Children's Behavior Questionnaire (teacher) and Strength and Difficulty Questionnaire (conduct area) to consider children with and without conduct problems. These children were administered self-concept scale and temperament scale. The responses were scored and results analysed appropriately to test the hypotheses.

Tools

The Children's Behavior Questionnaire (CBQ; Rutter, 1967) [33]

It is a screening instrument designed for teachers to assess children's classroom behavior and academic achievement. It comprises two proformas, with Proforma B specifically focusing on behavioral problems of a psychological nature. This proforma includes 26 descriptions of behaviors, for which teachers indicate applicability using a three-point scale: 'does not apply' (0), 'applies somewhat' (1), or 'definitely applies' (2). The total score is derived by summing the individual ratings, with a cutoff score of nine or more identified as having significant discriminative value for identifying disturbed children (Rutter, Tizard, and Whitmore, 1970) [34]. The test-retest reliability of Proforma B is high at 0.89 over three months, and inter-rater reliability ranges from 0.72, demonstrating its effectiveness in differentiating between children attending guidance clinics and those in the general population.

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 2002) [10]

It is another behavioral screening tool aimed at children and adolescents aged 4-17. It consists of 25 items divided into five subscales: Emotional Symptoms, Conduct Problems, Hyperactivity/Inattention, Peer Relationship Problems, and Prosocial Behavior. Responses are rated on a three-point Likert scale. The SDQ shows high internal consistency, with Cronbach's alpha coefficients ranging from 0.73 to 0.92. Test-retest reliability coefficients range from 0.63 to 0.81 for the subscales and 0.71 for the total score. Furthermore, the SDQ demonstrates good construct validity, distinguishing between clinical and non-clinical populations, and correlates well with other mental health measures. Its criterion validity is strong, accurately identifying children with emotional and behavioral difficulties.

Children's Self-concept Scale (Ahiuwalia, 2002) [1]

The present scale has been prepared after the well-known Piers-Harris, Children's self-concept scale (1969). The test contains eighty items with 'Yes' or 'No' responses. It is a verbal paper-pencil test. It has six sub scales of behaviour; intellectual and school status; physical appearance and attributes; anxiety; popularity; happiness and satisfaction.

A high score on the scale is presumed to indicate a favourable self-concept, which is interchangeable with the term "self-esteem" or "self-regard". The scale has adequate test retest reliability and split half reliability. The validity of the self-concept scale has been determined in two ways that is Face Validity and Concurrent Validity. Evidently, the instrument has face and content validity of high order. In order to ascertain concurrent validity of the

self-concept scale, the scores from each sub-scale were inter-correlated. The inter-correlations range from.397 to. 621.

Assessment of Temperamental Traits (Part of Developmental Psychopathology Checklist; Kapur, Barnabus, Reddy, Rozorio and Uma, 1994) [16]

The Developmental Psychopathology Checklist (DPCL) is a 124 item comprehensive tool to assess psychopathology in children below the age of 16 years. One of the dimensions it assesses is temperamental profile (items 102to 118) (17 items).

This section measures manageability, trust, dependence, sleep, appetite, activity level, emotionality, sociability and aggression. The dimensions go beyond western conceptualization of temperament and comprises of ancient Indian model of 'trigunas'. On temperamental dimension the items are rated on three point scale and score as zero-one-one (0-1-1). Inter-rater reliability of the Developmental Psychopathology Checklist (DPCL) shows a correlation of 0.968 indicating a high correlation at 0.001 level.

Procedure

Children studying in 4th to 6th standard aged between 9 to 12 years from various schools willing to be part of the study were administered problem behaviour check list (teacher) and Strength and Difficulty Questionnaire. Those children above the cut-off point on both Children's Behavior Questionnaire (teacher) and Strength and Difficulty Questionnaire (conduct area) were considered as a group with conduct problems. Those children below the cut-off point on both Children's Behavior Questionnaire (teacher) and Strength and Difficulty Questionnaire (conduct area) were considered as a group without conduct problems. Children identified as being substantially at risk of clinically significant problems in conduct symptom and those ruled out as unlikely having clinically significant problems in conduct symptoms were both administered self-concept scale and temperament scale. Children with major physical and psychological problem and those who were irregular to school were not considered for the study. The final sample consisted of 68 children from both the groups (with and without conduct problems). The responses were scored and results analysed.

Analysis of data

The responses were scored appropriately and analysed using mean, SD and t test to study significance of difference in the means of the scores on self-concept scale and temperament scale between both the groups.

Results

Table 1: Process of sample participation:

Sl. No.	Process of sample participation	Sample
1	No. of children willing to be part of the study and administered problem behaviour check list (Teacher) considering inclusion and exclusion criteria	212
2	No. of children above cut off score on Children's Behavior Questionnaire (Teacher)	63
3	No. of children above cut off score on Strength and Difficulty Questionnaire (Conduct area) among children above cut off score on Children's Behavior Questionnaire (Teacher)	38
4	No. of children considered for group without conduct problems – children's score below the cutoff point on both Children's Behavior Questionnaire (Teacher) and Strength and Difficulty Questionnaire (Conduct area)	36
5	No. of children with incomplete responses on self-concept	06
6	Total number of children being part of the study	68

For the sake of the study four different government schools from Bangalore area were approached and permission sort to conduct the study. Students willing to be part of the study considering inclusion and exclusion criteria (212) were screened by the teachers on Children's Behavior Questionnaire and Strength and Difficulty Questionnaire. Children were identified with above cut-off score on Children's Behavior Questionnaire (63) and Strength and Difficulty Questionnaire (34). Those children above the cut-off point (38) and below the cut off score (36) on both Children's Behavior Questionnaire (teacher) and Strength

and Difficulty Questionnaire (Conduct area) were administered self-concept scale and also assessed by teachers for their temperament through one of the dimensions on The Developmental Psychopathology Checklist (DPCL) named temperamental profile (items 102to 118) (17 items). After eliminating the results of individuals with incomplete scripts finally the study had 32 children with conduct issues and 36 children without conduct problems. The details of the same are being tabulated (table 1).

Table 2: Sample characteristics:

Areas	Categories	Children with conduct problems (32)	Percentage of Children with conduct problems (32)	Children without conduct problems (36)	Percentage of Children without conduct problems (36)
Gender	Boys	22	68.75	19	52.78
	Girls	10	31.25	17	47.22
	Total	32	100.00	36	100.00
Age	9-10 years	8	25.00	10	27.78
	10-11 years	15	46.88	14	38.89
	11-12 years	9	28.13	12	33.33
	Total	32	100.00	36	100.00
Standard	4 th standard	10	31.25	10	27.78
	5 th standard	14	43.75	15	41.67
	6 th standard	8	25.00	11	30.56
	Total	32	100.00	36	100.00
Type of family	Nuclear family	23	71.88	20	55.56
	Joint family	9	28.13	16	44.44
	Total	32	100.00	36	100.00
Religion	Hindu	26	81.25	29	80.56
	Muslim	2	6.25	4	11.11
	Christian	3	9.38	3	8.33
	Others	1	3.13	0	0.00
	Total	32	100.00	36	100.00
Category	SC/ST	17	53.13	18	50.00
	OBC	8	25.00	11	30.56
	GM	7	21.88	7	19.44
	Total	32	100.00	36	100.00

The study examined demographic characteristics of children with and without conduct problems, revealing significant differences across various factors. Among children with conduct problems (N=32), 31.25% were girls (10) and 68.75% were boys (22). In contrast, the group without conduct problems (N=36) had a more balanced gender distribution, with 52.78% boys (19) and 47.22% girls (17) (table 2).

Age distribution indicated that 46.88% of children with conduct problems were aged 10-11 years, while 38.89% of those without conduct problems were in the same age group. Educationally, 31.25% of children with conduct problems were in the 4th standard, compared to 27.78% of those without. The majority (71.88%) of children with conduct problems came from nuclear families, while 55.56% of those without conduct problems were also from nuclear families (table 2).

Regarding religious affiliation, both groups predominantly identified as Hindu (81.25% for conduct problems and 80.56% for non-conduct problems). Social category distribution revealed that 53.13% of children with conduct problems were from the SC/ST category, compared to 50.00% in the non-conduct problem group (table 2).

The study's results on self-concept among school children with and without conduct problems reveal significant differences across several domains. On the behaviour domain of self-concept, children without conduct problems scored higher (Mean = 10.83, SD = 1.63) than children with conduct problems (Mean = 9.47, SD = 2.30), with a t-value of 2.78, indicating a significant difference at the $p < 0.05$ level. This suggests that children without conduct issues tend to perceive their behavior more positively than those with conduct problems. On the intellectual and school status domain of self-concept, children without conduct problems scored higher (Mean = 10.22, SD = 2.85) compared to children with conduct issues (Mean = 9.33, SD = 2.53), with a t-value of 2.20, which is significant at the $p < 0.05$ level. This indicates that children without conduct problems may view themselves as more competent in academic and intellectual domains than their peers with conduct issues (Table 3). In physical appearance domain, there was no significant difference between the two groups. Children without conduct problems had a mean score of 7.40 (SD = 2.13), while those with conduct problems scored 7.73 (SD = 1.76), with a t-value of 0.63. This result suggests similar self-perceptions related to physical appearance for both groups.

Table 3: Showing the mean scores, SD and 't' values on different areas of Self Concept for school children with and without conduct problem:

Areas on self-concept scale	Mean	Standard deviation	t
Behaviour			
Children without conduct problem	10.83	1.63	2.78*
Children with conduct problem	9.47	2.30	
Intellectual & School status			
Children without conduct problem	10.22	2.85	2.20*
Children with conduct problem	9.33	2.53	
Physical Appearance			
Children without conduct problem	7.40	2.13	0.63
Children with conduct problem	7.73	1.76	
Anxiety			
Children without conduct problem	7.25	1.76	0.41
Children with conduct problem	7.37	1.93	
Popularity			
Children without conduct problem	8.34	1.81	3.02**
Children with conduct problem	7.17	1.95	
Happiness & Satisfaction			
Children without conduct problem	7.33	1.81	3.16**
Children with conduct problem	7.07	2.15	

**Significant $p < 0.01$ level * Significant $p < 0.05$ level

On the anxiety domain of self-concept, children without conduct problems scored 7.25 (SD = 1.76) on average, while children with conduct problems scored 7.37 (SD = 1.93), with a t-value of 0.41. This finding shows no significant difference, indicating comparable self-concepts related to anxiety between the two groups (Table 3).

On the popularity domain of self-concept, Children without conduct problems scored higher (Mean = 8.34, SD = 1.81) than children with conduct problems (Mean = 7.17, SD = 1.95), with a t-value of 3.02, showing a significant difference at the $p < 0.01$ level. This result suggests that children without conduct problems perceive themselves as more popular compared to their peers with conduct issues. On the happiness and satisfaction domain of self-concept, children without conduct problems also scored higher

(Mean = 7.33, SD = 1.81) than those with conduct problems (Mean = 7.07, SD = 2.15), with a t-value of 3.16, which is significant at the $p < 0.01$ level. This suggests that children without conduct problems have a higher sense of happiness and satisfaction in their self-concept compared to those with conduct issues (Table 3).

In summary, significant differences were found in the behaviour, intellectual and school status, popularity, and happiness and satisfaction domains, where children without conduct problems showed higher self-concept scores. However, no significant differences were observed in the physical appearance and anxiety domains, indicating similar self-perceptions between children with and without conduct problems in these areas.

Table 4: Showing the mean scores, SD and 't' values on different areas of temperament Scale for school children with and without conduct problem:

Group	Mean	Standard deviation	t
Children without conduct problem	13.92	2.26	2.57*
Children with conduct problem	16.28	1.43	

* Significant $p < 0.05$ level

On temperament among school children with and without conduct problems reveal a significant difference in scores between the two groups. Children with conduct problems had a mean score of 16.28 (SD = 1.43), while children without conduct problems scored higher, with a mean of 13.92 (SD = 2.26). The t-value for this comparison was 2.67, which is significant at the $p < 0.05$ level (table 4). This result suggests that children without conduct problems exhibit a higher level of positive temperament traits compared to their peers with conduct problems. The significant difference indicates that temperament may be a distinguishing factor between children with and without conduct problems, with those without such issues potentially displaying more adaptive or favorable temperament characteristics.

Discussion

The present study investigates the differences in self-concept and temperament among school children with and

without conduct problems, revealing notable findings that align with and expand upon existing literature. The results demonstrate significant distinctions in several domains of self-concept, including behavior, intellectual and school status, popularity, and happiness and satisfaction, where children without conduct problems reported more positive self-perceptions. This is consistent with the findings of Sullivan and Derryberry (1995) [37], who noted that children with externalizing behavior problems often struggle with lower self-esteem and self-concept, which can hinder their social relationships and academic performance. A study by Kerns and Bridgett (2004) [17] explored the links between self-concept, behavioral problems, and peer relationships. The findings indicate that children with lower self-concept were more likely to exhibit behavioral issues, impacting their peer acceptance and overall social functioning. The research by Miller and Murdock (2007) [25] examined how self-concept influences peer relations among children with externalizing behaviors. The authors found that negative

self-concept was significantly associated with poor peer relationships, leading to increased behavioral problems. Harter's (1990) ^[22] work delves into the connection between self-esteem and adjustment in children, particularly focusing on how children with conduct problems perceive themselves. Lower self-esteem is shown to correlate with higher levels of behavioral issues and social difficulties. Cillessen and Maynard (2007) ^[6]: focused on the role of self-concept in children with behavioral problems and how it affects their social standing among peers. The results highlight that children with conduct problems are often socially rejected, which further exacerbates their negative self-concept. A study by Sullivan and O'Connor (2014) ^[38] found a significant link between self-esteem and externalizing behaviors, suggesting that children with low self-esteem are more prone to developing conduct problems and face challenges in forming positive peer relationships. The study's finding that children without conduct problems perceive themselves favorably in the behavior domain echoes Harter's (1999) ^[13] work, which suggests that positive self-concept in behavioral domains is crucial for children's development. The contrast in self-perceptions regarding popularity, with children without conduct problems scoring significantly higher, aligns with Parker and Asher (1987) ^[29], who indicated that children exhibiting behavioral issues often face peer rejection, which negatively impacts their self-concept.

Interestingly, the lack of significant differences in the physical appearance and anxiety domains suggests that these areas of self-perception may be less influenced by conduct-related issues. This is in line with Marsh and Craven (2006) ^[20], who found that physical appearance self-concept tends to be more stable across different groups of children, regardless of behavioral issues. The comparable levels of anxiety self-concept may indicate that both groups of children face similar challenges related to anxiety, reflecting a common developmental experience.

Regarding temperament, the study's results indicate that children without conduct problems exhibit higher positive temperament traits compared to their counterparts with conduct issues. This finding is supported by Graziano *et al.* (2007) ^[12], who highlighted that positive temperament traits, such as emotional stability and adaptability, are associated with lower levels of behavioral problems. Examined the role of temperament in the development of behavioral problems. The authors found that children with higher levels of effortful control and positive emotionality were less likely to exhibit externalizing behaviors. The research by De Pauw and Mervielde (2010) ^[7] highlights how temperament traits, particularly high levels of sociability and low levels of irritability, are associated with fewer behavioral problems in children, reinforcing the idea that positive temperament can protect against conduct issues. The study by Martel and Nigg (2006) ^[21] links temperament characteristics, particularly impulsivity and emotional dysregulation, to the emergence of conduct problems. The authors conclude that children with more favorable temperament traits tend to display fewer behavioral issues.

The differences in temperament observed in this study underscore the notion that temperament can serve as a protective factor against the development of conduct problems, as discussed by Rothbart and Bates (2006) ^[32], who emphasize the role of temperament in children's social and emotional development.

Conclusions

- The objective was to study the difference in self-concept and temperament between school children with and without conduct problem.
- A significant distinctions exist in self-concept and temperament between school children with and without conduct problems. Specifically, children without conduct problems exhibit higher self-concept in the domains of behavior, intellectual and school status, popularity, and happiness and satisfaction, indicating that these children perceive themselves more favourably in these areas compared to children with conduct problems. These findings suggest that self-perceptions related to social acceptance, school competency, and overall contentment are more positive among children without conduct issues.
- Conversely, the domains of Physical Appearance and Anxiety show no significant differences, implying that children with and without conduct problems have similar self-concepts in terms of physical appearance and anxiety. These areas of self-concept may be less influenced by conduct-related factors, remaining relatively stable across both groups.
- Children without conduct problems scored significantly lesser on the temperament scale, suggesting they tend to exhibit more positive temperament traits than those with conduct issues. The significant difference in temperament indicates that children without conduct problems may possess more adaptive or stable temperament characteristics, which could contribute to fewer behavioral issues and better emotional regulation.

Limitations

- With a small sample size, the study's findings may not be representative of the broader population of school children, particularly in diverse socio-cultural settings.
- The study used purposive sampling, which can introduce selection bias and limit the generalizability of the results to other children.
- The sample was drawn from schools in Bangalore, which may not reflect the experiences and self-concept of children from other regions, school types, or cultural backgrounds.
- Reliance on teacher-administered questionnaires for identifying conduct problems may introduce bias, as teachers' perceptions of conduct issues can vary based on their own experiences and attitudes.
- Self-concept assessments for children aged 9 to 12 may not capture the full depth or accuracy of their self-perceptions, as young children may have difficulty articulating complex emotions or behaviors accurately.
- Variables such as socio-economic status, parental involvement, and peer influences were not controlled, which could impact self-concept and temperament but were not accounted for in the analysis.
- The study focused on children aged 9 to 12 years, which restricts the understanding of how self-concept and temperament may evolve in younger or older children, potentially missing developmental trends.
- The study did not account for external influences, such as peer relationships, family dynamics, or socio-economic status, which may significantly impact children's self-concept and temperament.

Implications

- The significant differences in self-concept among children with and without conduct problems suggest the need for targeted educational interventions that promote positive self-perceptions, especially in behavior, academic performance, and social acceptance.
- Schools may benefit from implementing support programs aimed at improving the self-concept of children with conduct problems, focusing on behavior management, academic support, and social skills training to enhance their overall self-image.
- The findings highlight the importance of training teachers to recognize and address self-concept issues among children, equipping them with strategies to foster positive self-views and manage conduct-related challenges effectively.
- Engaging parents in programs that promote positive self-concept and temperament traits may enhance the effectiveness of interventions, as parental involvement can significantly impact children's self-perceptions and behavior.
- The results call for further research into the relationships between self-concept, temperament, and conduct problems, including longitudinal studies to track changes over time and how these factors interact in different developmental stages.
- Schools should emphasize the development of positive peer relationships and social skills as part of their curriculum to enhance the self-concept and overall well-being of children, particularly those struggling with conduct problems.
- These implications can guide educators, policymakers, and mental health professionals in addressing the needs of children with conduct problems and fostering a positive developmental environment.

References

1. Ahiuwalia R. Development of a children's self-concept scale. *Journal of the Indian Academy of Applied Psychology*. 2002;28(1):41-48.
2. Baker JK, Kahn TR, Bistricky S. The role of temperament in the development of conduct problems in school-age children. *Child Development*. 2007;78(1):219-233.
3. Brody GH, Beach SRH, Philibert RA, Chen Y-F, Murry VM, Brown AC. Parenting moderates a genetic vulnerability factor in longitudinal increases in youths' substance use. *Journal of Consulting and Clinical Psychology*. 2012;80(2):295-305.
4. Buss AH, Plomin R. *Temperament: Early developing personality traits*. Erlbaum; c1984.
5. Caspi A, Roberts BW, Shiner RL. Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology*. 2002;83(3):672-688.
6. Cillessen AHN, Maynard J. The relationship between self-perception and peer rejection in children with behavioral problems. *Social Development*. 2007;16(2):312-30. <https://doi.org/10.1111/j.1467-9507.2007.00383.x>
7. De Pauw SSW, Mervielde I. Personality and development in childhood: A five-factor approach. *Journal of Personality*. 2010;78(5):1693-722. <https://doi.org/10.1111/j.1467-6494.2010.00661.x>
8. Goldsmith HH, Campos JJ. Fundamental issues in the study of early temperament: The Denver twin temperament study. In: Plomin R, Dunn J, editors. *The study of temperament: Changes, continuities, and challenges*. Lawrence Erlbaum Associates; c1986. p. 123-41.
9. Goldsmith HH, Buss AH, Lemery KS. Toddler and childhood temperament: Expanded content, stronger genetic evidence, new evidence for the importance of environment. *Developmental Psychology*. 1997;33(6):891-905.
10. Goodman R. Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2002;40(11):1337-1345.
11. Graham S, Williams J. The role of self-concept in the relationship between child characteristics and conduct disorder. *Journal of Child Psychology and Psychiatry*. 2009;50(5):678-686.
12. Graziano PA, Reavis RD, Keane SP, Calkins SD. The role of temperament in the development of conduct problems: A longitudinal study. *Journal of Abnormal Child Psychology*. 2007;35(2):219-228. <https://doi.org/10.1007/s10802-006-9066-1>
13. Harter S. *The construction of the self: Developmental and sociocultural foundations*. Guilford Press; 1999.
14. Harter S. *The construction of the self: Developmental and sociocultural foundations*. 2nd ed. Guilford Press; c2012.
15. Kapoor S, Sood S, Dwivedi S. Temperament and social competence in rural Indian preschool children. *Journal of Psychosocial Research*. 2014;9(2):261-270.
16. Kapur M, Barnabus S, Reddy R, Rozorio G, Uma K. Development of play competence: A study of children's play in relation to their social and cognitive development. In: Reddy DP, editor. *Play and child development*. Discovery Publishing House; c1994. p. 35-46.
17. Kerns KA, Bridgett DJ. The role of self-concept in the social behavior of children. *Journal of Abnormal Child Psychology*. 2004;32(5):511-523. <https://doi.org/10.1023/B:JACP.0000045551.96533.d9>
18. Loeber R, Green SM, Lahey BB. Antisocial behavior: A developmental analysis. *Journal of Abnormal Child Psychology*. 1993;21(2):145-167.
19. Markus H, Wurf E. The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*. 1987;38(1):299-337.
20. Marsh HW, Craven RG. Reciprocal effects between self-concept and performance: A multi-wave, multi-source study. *Journal of Educational Psychology*. 2006;98(4):672-686. <https://doi.org/10.1037/0022-0663.98.4.672>
21. Martel MM, Nigg JT. Attention-deficit/hyperactivity disorder and the development of conduct disorder: A meta-analysis. *Psychological Bulletin*. 2006;132(4):454-470. <https://doi.org/10.1037/0033-2909.132.4.454>
22. Harter S. Causes and consequences of low self-esteem in children and adolescents. In: Baumeister RF, editor. *Self-esteem: The puzzle of low self-regard*. Plenum Press; c1990. p. 87-116.
23. Masten AS, Morison PA, Pellegrini AD. Self-concept and conduct problems in early adolescence: The

- mediating role of peer rejection. *Child Development*. 1995;66(3):708-720.
24. Mathew L, George S. Temperament and socioemotional development among rural Indian preschoolers. *Early Child Development and Care*. 2019;189(8):1264-1274.
 25. Miller AB, Murdock T. Self-concept and peer relations: A developmental perspective. *Child Development*. 2007;78(2):516-529. <https://doi.org/10.1111/j.1467-8624.2007.01019.x>
 26. Miller SD, McAuliffe G. The relationship between self-concept, self-esteem, and conduct problems in children: A longitudinal analysis. *Child Psychiatry and Human Development*. 2011;42(4):429-444.
 27. Moffitt TE. A 10-year follow-up of children with conduct disorder: Mental health, education, and criminal behavior. *Psychological Science*. 1993;4(5):325-330.
 28. Nolen-Hoeksema S, Girgus JS. The emergence of gender differences in depression during adolescence: The role of self-concept. *Journal of Abnormal Psychology*. 1994;103(2):282-290.
 29. Parker JG, Asher SR. Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*. 1987;102(3):357-389. <https://doi.org/10.1037/0033-2909.102.3.357>
 30. Putnam SP, Rothbart MK. Development of temperament in rural children. In: Bornstein JM, Lerner RM, editors. *Handbook of child psychology: Vol. 3. Social, emotional, and personality development*. 6th ed. Wiley; c2006. p. 204-254.
 31. Rosenberg M, Simmons RG. Black and White self-concepts: A comparison of adolescents' self-concepts and their conduct disorders. *Sociology of Education*. 1972;45(1):1-19.
 32. Rothbart MK, Bates JE. Temperament. In: Eisenberg N, Damon W, Lerner RM, editors. *Handbook of child psychology: Vol. 3. Social, emotional, and personality development*. 6th ed. John Wiley & Sons; c2006. p. 99–166.
 33. Rutter M. A children's behaviour questionnaire for completion by teachers: Preliminary findings. *Journal of Child Psychology and Psychiatry*. 1967;8(1):1-11.
 34. Rutter M, Tizard J, Whitmore K. *Education, health and behavior*. Longman; c1970.
 35. Schmitt AS, Bader D. Self-concept and behavioral problems in children: Exploring the relationship. *Child Development Research*. 2008;2008:1-9.
 36. Shavelson RJ, Hubner JJ, Stanton GC. Self-concept: Validation of construct interpretations. *Review of Educational Research*. 1976;46(3):407-441.
 37. Sullivan HS, Derryberry D. The relationship of self-esteem and behavior problems in adolescents. *Journal of Youth and Adolescence*. 1995;24(1):103-114. <https://doi.org/10.1007/BF01537326>
 38. Sullivan TN, O'Connor R. The role of self-esteem in the development of externalizing behavior. *Journal of Emotional and Behavioral Disorders*. 2014;22(3):155-167. <https://doi.org/10.1177/1063426613493867>
 39. Thomas A, Chess S. *Temperament and development*. Brunner/Mazel; c1977.
 40. Zuckerman M. *Psychobiology of personality*. 2nd ed. Cambridge University Press; c1991.