



The Psychological Difficulties in Children Between 6 Years to 14 Years with and Without Enuresis

¹Dr. Pankaj Singh, ²Dr. Anjali Edbor,

¹Designation- Clinical Psychologist, Department of Pediatrics, NKP Salve Institute of Medical Sciences & Research Centre, and Lata Mangeshkar Hospital, Nagpur, INDIA

²Designation Associate Professor, Department of Pediatrics, NKP Salve Institute of Medical Sciences & Research Centre, and Lata Mangeshkar Hospital, Nagpur, INDIA

*Correspondence:

Dr. Pankaj Singh,

Designation- Clinical Psychologist, Department of Pediatrics, NKP Salve Institute of Medical Sciences & Research Centre, and Lata Mangeshkar Hospital, Nagpur, INDIA.

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KEYWORDS

Child behavior checklist, parent counselling, Children guidance.

ABSTRACT:

AIM: The study aims to provide a comprehensive understanding of the impact of enuresis on various aspects of a child's development, including their self-perception, social interactions, emotional state, and academic performance, and how these factors may differ in children without the condition.

METHODS: A cross-sectional study was conducted involving children aged 6 to 14 years, with and without a diagnosis of enuresis. The study was conducted from November 2017 to June 2020. The study was conducted at N. K. P. Salve Institute of Medical Sciences & Research Center and Lata Mangeshkar Hospital, Nagpur. Used structured test –child behavior checklist (CBCL). The randomly selected children from different schools were referred for enuresis and without enuresis problems with other psychological difficulties (Total n 119). Used IBM- SPSS25 software to analyze average, percentile, mean, variance, frequency, and paired t-test.

RESULTS: The study found statistically significant depressive problems (t value 3.102), attention-deficit hyperactive disorder (ADHD) (t value of 2.870), oppositional defiant problems (t-value of 3.390), and conduct problems (t-value 5.081). The current study shows that children with enuresis faced more psychological problems than those without enuresis.

CONCLUSION: Comprehensive treatment approaches that address the physical, emotional, and social needs of children with enuresis, as well as providing support for their families, are crucial for promoting healthy psychological outcomes.

1. Introduction

Bedwetting, also called nocturnal enuresis, is just a component of growing up for a couple of children. But this will not be the case for every child—some children experience very negatively. Unfortunately, bedwetting is usually misunderstood, leading to common misconceptions about the condition.

The diagnostic and statistical manual for mental disorders (DSM-V: American Psychiatric Association, 2013), urinary incontinence (enuresis) is the loss of

bladder control. In children younger than age 3, it's normal to not have full bladder control. As children get older, they become more able to control their bladder. Wetting is called enuresis when it happens in a child who is old enough to control their bladder. Enuresis can happen during the day or at night. The prevalence of enuresis is 5%-10% among 5-year-olds, 3%-5% among 10-year-olds, and around 1% among individuals 15 years or older.[1]



The following reasons are- a) Small bladder: Urine that's produced during the night won't be held by a child's small, developing bladder. b) medical conditions: like diabetes, apnea, and tract infections, and Inadequate production of vasopressin during sleep. This hormone, also called antidiuretic hormone (ADH), reduces urine production. If a child's body is not producing enough vasopressin overnight, they may make more urine than the bladder can hold, and c) Psychological problems – Psychological problems could also be a risk factor for bedwetting. Behavior problems [2] and stressful life events [3] sometimes precede relapses in bedwetting and observed associations between bedwetting and psychological factors.

It is well established that childhood enuresis incorporates a significant impact on self-esteem. Low self-esteem is assumed to result from a mix of tension among families, social marginalization, and treatment failures. Half of the children who wet their beds or in the classroom report being teased by their peers or siblings, and feelings of bewilderment and humiliation are familiar. Children experience more significant distress and have lower self-esteem and confidence. The greater concern is the indisputable fact that enuresis, children also are at increased risk of physical and emotional.

Parents often punish children for wetting the bed or in the classroom, worsening self-esteem and exacerbating the emotional problem. Clinical psychological problems are a consequence of bedwetting due to the distress and loss of self-esteem often reported by sufferers.[4]

The impact of bedwetting on children found that bedwetting's social impact was most worrisome for these children. These children are less likely to participate in social activities like sports and cultural activities, including school camps, sleepovers, and family holidays, for fear of wetting the bed. Children who wet the bed may also worry that their bedroom smells of urine and are reluctant to ask friends over. Introverted personality can hurt development. **Joinson 2007** investigated the psychological problems associated with bedwetting and combined (day and night) wetting in children.[5]

2. Objectives

AIM: The study aims to provide a comprehensive understanding of the impact of enuresis on various aspects of a child's development, including their self-perception, social interactions, emotional state, and

academic performance, and how these factors may differ in children without the condition.

STUDY DESIGN

A cross-sectional study was conducted involving children aged 6 to 14 years, with and without a diagnosis of enuresis. study was conducted from November 2017 to June 2020. The study wear conducted at N. K. P. salve institute of medical sciences & research center and Lata Mangeshkar Hospital, Nagpur.

The participants were recruited from a range of primary care clinics and schools located within a diverse metropolitan area, ensuring the sample represented a broad spectrum of socioeconomic and cultural backgrounds. This approach allowed the researchers to capture the experiences of children from various demographic and socioeconomic profiles, providing a more comprehensive understanding of the psychological difficulties faced by those with enuresis across different community settings.

TOOL USED

Data was collected using a structured self-administered questionnaire having in one setting. It contained all socio-demographic characteristics. The second-conduct starchier standardizes CBCL testing -child behavior checklist for ages 6–18 (CBCL/6-18; Achenbach and Rescorla 2001). The 113 items on this measure are rated as Not True (0), somewhat or sometimes True (1), or very true or often true (2). Validity and reliability are excellent, and extensive normative data are available for youngsters starting from 6 to 18.

DATA COLLECTION PROCEDURES

To assess the psychological well-being of the participants, the researchers employed a multi-faceted approach. They utilized a combination of standardized questionnaires to measure various aspects of mental health and emotional functioning, such as anxiety, depression, somatic problem, Oppositional defiant problem, and Conduct problem. Additionally, they conducted semi-structured interviews with the participants and their caregivers to gain deeper insights into the children's social interactions, academic performance, and overall quality of life. The researchers also reviewed the participants' academic performance records to evaluate their educational outcomes and any potential challenges they faced in the school setting.



The study also included a comprehensive assessment of the participants' enuresis status, including the age of onset, frequency of bedwetting episodes, and any associated medical or behavioral factors. Each subject took about 45 minutes to respond to the above tools, clinical interview, and counselling. Scoring was done consistently with the instructions given within the manual—parenting counselling and guidance to understand children's behavior, reward therapy, token technique, and management.

STATISTICAL ANALYSIS

First, the original response was checked consistently with the manual guideline, and then it had been coded into a psychological problem. The coded data were entered into Group A- with enuresis, Group B- without enuresis into an excel sheet, and then put into IBM- SPSS Version 25 software for further statistical analysis. The descriptive analysis had done using frequency and proportion, mean, variance, paired t-test, and frequency tables and graphs used for presenting the information. The finding decided to use crude and adjusted or with a 95% confidence interval.

3. Methods

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4. Results

Finally, 119 parents' responses are enclosed in the study around 67 boys and 52 girls. Of these 43 (36.13%) children from 6 years to 7 years old, 39 (32.77%) children from 8 years to 9 years old, 27 (22.68%) children from 10 years to 11 years old, and 10 (8.40%) children from 12 years to 14 years old, with an average mean age (8.31, SD 2.098). All participants lived in an urban area. Regarding socioeconomic standard (SES), 83 (36.74%) are from moderate economic status, 12 (10.08%) are from low economic status, and 24 (20.16%) from high economic status. shows the type of delivery, pre-term delivery 32 (26.89 %) subjects with enuresis 19 (30.64%) and without enuresis 13 (22.80%). Some studies showed more bed-wetting was prematurely born.[6,7,8], full-term delivery 31 (26.05%) subjects with enuresis 22 (35.48%) and without enuresis 9 (15.78%) and post-term delivery 13(10.92%) subjects with enuresis 8(12.90%) and without enuresis 5 (8.77%) are delivered through normal vaginal delivery (NVD), 35(29.41%) subjects with enuresis 24 (38.70%) and without enuresis 11 (19.29%), through cesarean section (CS) 39 (32.77%) subjects with enuresis 23 (37.09%) and without enuresis 16 (28.07%) and through instrumental delivery (ID) 2 (1.68%) subjects with enuresis 2 (3.22%). complications for the child during birth 14 (11.76%) subjects with enuresis 9 (14.51%) and without enuresis 5(8.77%) of children's parents reported delayed neonate crying some studies had suggested an association between bed-wetting and developmental delays, delayed crying, or language developmental delayed, physical growth, and skeletal maturation. 7 (5.88%) subjects with enuresis 5 (8.06%) and without enuresis 2 (3.50%) reported decreased oxygenation, 21 (17.64%) subjects with enuresis 13 (20.96%) and without enuresis 8 (14.03%) reported low birth weight. Type of Infant feeding 31 (26.05%) subjects with enuresis 26 (41.93%) and without enuresis 5 (8.77%) subjects are on breastfeeding, 22 (18.48%) subjects with enuresis 13 (20.96%) and without enuresis 9 (15.78%) are on spoon-feeding, 23 (19.32%) subjects with enuresis 10 (16.12%) and without enuresis 13 (22.80%) on Bottle-Feeding.

Table no.1: Distribution of socio-demographic profile.

AREAS		COUNTS AND PERCENTAGE		
NO. of Participation		Male	Female	Total Count
		67	52	119
		With Enuresis	Without Enuresis	
	Boys	38 (61.29%)	29 (50.87%)	67 (56.30%)



	Girls	24 (38.70%)	28 (53.84%)	52 (43.69%)
Age range		With Enuresis	Without Enuresis	Total Count
	6-7 Years	24 (38.70%)	19(33.33%)	43 (36.13%)
	8-9 Years	18 (29.03%)	21(36.84%)	39 (32.77%)
	10-11 Years	13(20.96%)	14 (24.56%)	27 (22.68%)
	12-14 Years	7 (11.29%)	3(5.26%)	10(8.40%)
Social economic Condition (SEC)		With Enuresis	Without Enuresis	Total Count
	Low	8 (12.90%)	4 (7.01%)	12 (10.08%)
	Moderate	47(75.80%)	36 (63.15%)	83 (69.74%)
	High	7 (11.29%)	17(29.82%)	24 (20.16%)
CHILD DELIVERED AS		With Enuresis	Without Enuresis	Total Count
	Pre-term	19 (30.64%)	13 (22.80%)	32 (26.89%)
	Full -Term	22 (35.48%)	9 (15.78%)	31 (26.05%)
	Post-term	8 (12.90%)	5 (8.77%)	13 (10.92%)
DELIVERY TYPE		With Enuresis	Without Enuresis	Total Count
	Normal Vaginal Delivery (NVD)	24 (38.70%)	11 (19.29%)	35 (29.41%)
	Cesarean Delivery (CS)	23 (37.09%)	16 (28.07%)	39 (32.77%)
	Instrumental Delivery (ID)	2 (3.22%)	0 (0%)	2 (1.68%)
COMPLICATIONS FOR CHILDREN DURING BIRTH		With Enuresis	Without Enuresis	Total Count
	Delayed neonate crying	9 (14.51%)	5 (8.77%)	14 (11.76%)
	Decreased oxygenation	5 (8.06%)	2 (3.50%)	7 (5.88%)
	Low birth weight	13 (20.96%)	8 (14.03%)	21 (17.64%)
TYPE OF INFANT FEEDING		With Enuresis	Without Enuresis	Total Count
	Breast Feeding	26 (41.93%)	5 (8.77%)	31 (26.05%)
	Spoon Feeding	13 (20.96%)	9 (15.78%)	22 (18.48%)
	Bottle Feeding	10 (16.12%)	13 (22.80%)	23 (19.32%)

%- Percentage

Table no.2: Distribution pre & post play therapy

Paired Samples Statistics													
Pair	Depression	With Enuresis	Mean	Std. Deviation	Paired Differences					t	Sig. (2-tailed)		
					Mean	Std. Deviation	Mean	Std. Deviation	Std. Error Mean			95% Confidence Interval of the Difference	
												Lower	Upper
1			59.14	10.919	5.965	14.517	1.923	2.113	9.817	3.102	.003		



		Without Enuresis	53.18	13.999							
Pair 2	Anxiety	With Enuresis	56.95	10.531	4.246	14.868	1.969	.301	8.191	2.156	.035
		Without Enuresis	52.70	11.776							
Pair 3	Somatic Problem	With Enuresis	60.19	11.374	5.702	21.680	2.872	-.051	11.454	1.986	.052
		Without Enuresis	54.49	15.074							
Pair 4	ADHD	With Enuresis	54.70	13.242	8.544	22.477	2.977	2.580	14.508	2.870	.006
		Without Enuresis	46.16	19.257							
Pair 5	Oppositional Defiant problem	With Enuresis	54.79	13.028	10.596	23.599	3.126	4.335	16.858	3.390	.001
		Without Enuresis	44.19	21.094							
Pair 6	Conduct Problem	With Enuresis	61.61	4.570	10.667	15.849	2.099	6.461	14.872	5.081	.000
		Without Enuresis	50.95	13.497							

The present study shows the most at risk of having psychological difficulties in children with 48/76 (63%) moderate socio-economic status, referred to a psychological evaluation, and finds out the psychological causes of enuresis. An internalizing behavior is a behavior directed inwardly toward oneself. It is an over-controlled and self-directed type of behavior. Internalizing behavior patterns are subtle and often goes unnoticed by parents and other adults. Examples include social withdrawal and eating disorders. Such behavior can be caused by internalized negative emotions including sadness, guilt, fear, worry, depression, and anxiety. In the study Internalizing disorder- children with a depressive problem -with enuresis mean $59.14 \pm SD 10.919$, and without enuresis mean $53.18 \pm SD 13.999$, t-value 3.102 is statistically significant at the level of <0.05 level.

Children with Anxiety problems with enuresis mean of $56.95 \pm SD 10.531$, and without enuresis mean of

$52.70 \pm SD 11.776$, t value 2.156 is not statistically significant at the level of >0.05 level. Both means shows that children with and without enuresis faced Anxiety problem.

For children with Somatic problems with enuresis mean was $60.19 \pm SD 11.374$, and without enuresis mean of $54.49 \pm SD 15.074$, the t value of 1.986 is not statistically significant at the >0.05 level. Both means to show that children with and without enuresis faced psychosomatic issues.

Externalizing behavior is problem behavior directed outwardly toward others or the social environment. It is characterized as an under-controlled and out-directed mode of responding. Rule-breaking behaviors or acts that violate social norms such as physical aggression and defiance are examples of externalizing behavior. They stem from externalizing emotions like anger and hostility. When left untreated, serious externalizing



problems in young children can lead to externalized behavior disorders such as ADHD, oppositional defiant disorder, and conduct disorder. Externalizing disorders are behavioral disorders with visible behavioral symptoms such as ADHD, with an enuresis mean of $54.70 \pm SD 13.242$, and without enuresis mean of $46.16 \pm SD 19.257$, t-value of 2.870 statistically significant at the level of <0.05 level. Mean shows that children with enuresis faced more ADHD problems than those without enuresis.

Children with oppositional defiant problems with enuresis mean of $54.79 \pm SD 13.028$, and without enuresis mean of $44.19 \pm SD 21.094$, t-value of 3.390 is statistically significant at the level of <0.05 level. Mean shows that children with enuresis faced more oppositional defiant problems than those without enuresis.

Children with conduct problems with enuresis mean $61.61 \pm SD 4.570$, and with enuresis mean $50.95 \pm SD 13.497$, t-value 5.081 is statistically significant at the <0.05 level. Mean shows that children with enuresis faced more conduct problems than those without enuresis.

Table no. 3–Distribution of the studied children family disturbance

Areas	With Enuresis	Without Enuresis	Total	t-value /Sig (2-Tailed)
1 Parenting Stress/Single Parenting	18 (29.03%)	7 (12.28%)	25 (21.00%)	5.169 (.000)
2 Birth of Sibling	36 (58.06%)	33 (57.89%)	24 (20.16%)	1.784 (.083)
3 Nuclear Family	26 (41.93%)	32 (56.14%)	58 (48.73%)	- 2.675 (.012)
4 Parents with Alcoholism	28 (45.16%)	19 (33.3%)	47 (39.49%)	3.576 (.001)

5 Both are working Parents	24 (38.70%)	18 (31.57%)	42 (35.29%)	2.769 (.011)
6 Family Financial Problem	38 (61.29%)	27 (47.36%)	65 (54.62%)	3.883 (.000)
7 Parents' Serious Injury or Illness	13 (20.96%)	5 (8.77%)	18 (15.12%)	4.382 (.001)

Family is a significant part of where children develop many positive or many negative things. In the present study, children increased risk of psychological problems with enuresis (bedwetting). They were parenting stress 25 (21.00%), births a sibling 24 (20.16%). Nuclear family 58 (48.73%) subjects with enuresis 26 (41.93%) and without enuresis 32 (53.14%). Parents with alcoholism 47 (39.49%) subjects with enuresis 28 (45.16%) and without enuresis 19 (33.33%). Both are working parents 42 (35.29%) subjects with enuresis 24 (38.70%), without enuresis 18 (31.57%), family financial problems 65 (54.62%) subjects with enuresis 38 (61.29%) and without enuresis 27 (47.36%), parents' serious injury or illness 18 (15.12%) subjects with enuresis 13 (20.96%) and without enuresis 5 (8.77%), stressful events are associated with an increased risk of a psychological problem with enuresis.

Table no. 4 – Distribution of the studied children's academic difficulties.

Areas	With Enuresis	Without Enuresis	Total	t-value /Sig (2-Tailed)
1 Crying more when school started	21 (33.87%)	15 (26.31%)	36 (30.25%)	2.828 (.010)
2 Academic work issues	48 (77.41%)	37 (64.91%)	85 (71.42%)	3.738 (.001)
3 Subject or Sub-teacher fear	32 (51.61%)	19 (33.33%)	51 (42.85%)	4.605 (.000)
4 Learning	43 (69.35%)	38 (66.66%)	81 (68.06%)	2.351 (.024)



	Disorder				
5	Lack of Peer-peer support	47 (75.80%)	31 (54.38%)	78 (65.54%)	4.873 (.000)
6	Fear of Failure	39 (62.90%)	24 (42.10%)	63 (52.94%)	4.873 (.000)

The present study noted day by day children are at school and related academic difficulties like- crying more when school is starting 36 (30.25%) subjects with enuresis 21 (33.87%) and without enuresis 15 (26.31%), academic work issues 85 (71.42%) subjects with enuresis 48 (77.41%) and without enuresis 37 (64.91). Other teachers fear 51 (42.85%) subjects with enuresis 32 (51.61%) and without enuresis 19 (33.33%). Based on the wide range of achievement tests, around 81 (68.06%) subjects with enuresis 43 (69.35%) and without enuresis 38 (66.66%) are diagnosed with learning disorders. 78 (65.54%) subjects with enuresis 47 (75.80%) without enuresis 31 (54.38%) are facing a lack of peer group support and communication. 63 (52.94%) subjects with enuresis 39 (62.90%) and without enuresis 24 (42.10%) are fear of failure.

Table no. 5– Distribution of the studied children with and without social factors.

Areas	With Enuresis	Without Enuresis	Total	t-value /Sig (2-Tailed)
1 TV programs or Movies (Horror)	32 (51.61%)	29 (50.87%)	61 (51.26%)	1.791 (.083)
2 Live Death / Accident	6 (9.67%)	3 (5.26%)	9 (7.56%)	2.236 (.076)

Other social factors like media- watching horror television program/ horror movies or show 61 (51.26%) subjects with enuresis 32 (51.61%) and without enuresis 29 (50.87%), and seeing the live accident or died 9 (7.56%) subjects with enuresis 6 (9.67%) and without enuresis 3 (5.26%).

5. Discussion

According to the current study, children's average mean age is 8.31 years (SD 2.098). The majority of research found that children who wet the bed more frequently experience premature delays, delayed language [11,12], delayed newborn crying [9,10], gross motor abilities [12], and skeletal development [13].

According to the current study, internalizing behavior in children who have a depressive condition is statistically significant at the level of 0.05. Mean reveals that enuresis-affected kids had greater depression issues than enuresis-unaffected kids did. Some studies found obese children reported having poor mental health and psychosocial function, and they are more likely to be displeased with their weight and have a depressive episode [16,17]. Other investigations revealed enuresis children are known to be sad or depressed [14,15]. Anxiety-related issues in children are not statistically significant at the level of >0.05. However, because they are ashamed and want to hide the disease, both groups of kids—those with and those without enuresis—are always under pressure in society. Lower quality of life has been documented by another researcher [18,19]. Various behavioral disorders, including phobias, anxiety disorders, disruptive behavior disorders, issues at school, reading difficulties, and subclinical psychiatric symptoms, were also seen in other investigations. [20,21]. At the level of >0.05, children with somatic issues are not statistically significant. Children with and without enuresis both had psychosomatic problems, as demonstrated by both methods. internalizing behavior issues have a detrimental effect on a child's emotional state, social interactions, and self-esteem in school-aged children [22,23]. Children with enuresis (bedwetting) have lower self-esteem in the current study, Children with enuresis (bedwetting) had lower self-esteem in the current study, and even parents reported more internalizing behavior issues.

On another side of externalizing behavior - **attention-deficit hyperactive disorder (ADHD)**, are statistically significant at the level of <0.05 level. There is a link between enuresis and hyperactivity, according to numerous other studies. [24]. At the level of <0.05, children with oppositional defiant issues are statistically significant. According to Von Gontard 2015 research, youngsters exhibit greater rates of oppositional defiant disorder (ODD) symptoms [25]. At the 0.05 level, children with conduct issues are statistically significant. 26/76 (34%) of the children in the current study who had



enuresis (bedwetting) also had symptoms of ADHD, and the findings showed that the prevalence of ADHD increased with age (5-8 Years).

Birth of a sibling or parental separation as triggers for the recurrence of the enuresis [26], single parent [27], and parents' overprotectiveness and dominance were significantly high in the family of enuresis children [28,29]. According to W. J. Warzak noted children with enuresis have a greater risk of becoming victims of emotional and psychological abuse by their family members [30]. Herrenkohl, Herrenkohl, Rupert, Egolf, and Lutz, in their study, found that behavioral functioning is very much affected by the family climate [31]. Studies relating primary nocturnal enuresis to parenting stress [32,33]. **Academic difficulties** - Crying more when school started, and academic work issues affect children's self-esteem and school performance [34,35]. Teachers fear, and peer relationships most children have a negative perception of school, teachers, and peer relationships issues [36]. Learning disorder- A similar study supported by **M Esposito, M Carotenuto, M Roccella** found learning difficulties were present in enuretic children[37]. Lack of Poor-peer support and fear of failure in most children they fear of being detected by peers at school can cause stress and unable to participate in school activities [38]. Other social factors like media- watching horror television programs/ horror movies or show- even in **Tahereh Boryri** study found parental divorce, computer games, watching a horror movie, and stress and domestic violence had significant correlation with enuresis. [39], seeing live death, accident [40,41]. The present study did not find any emotionally or physically bullied subjects. All these factors are also positively related to enuresis.

6. CONCLUSIONS

In conclusion, the psychological difficulties experienced by children with enuresis can be substantial and may have long-lasting effects on their development and quality of life. While children without enuresis may not face the same challenges, it is essential to recognize that both groups may encounter unique psychological hurdles. Comprehensive treatment approaches that address the physical, emotional, and social needs of children with enuresis, as well as providing support for their families, are crucial for promoting healthy psychological outcomes.

The research highlighted in this paper underscores the importance of early identification, assessment, and intervention for children with enuresis. By addressing the

psychological difficulties associated with the condition, healthcare professionals can help to mitigate the negative impacts on a child's well-being and facilitate their overall healthy development. This can involve providing comprehensive mental health support, such as counseling, therapy, and psychoeducation, to help children with enuresis develop effective coping strategies, improve self-esteem, and strengthen their social skills. Additionally, involving the child's family and school community in the treatment process can create a supportive environment that further promotes the child's psychological well-being and successful integration into their daily life.

7. LIMITATION –

Further research is needed to explore the long-term trajectories of children with and without enuresis, as well as to identify the most effective strategies for supporting their psychological needs.

By prioritizing the holistic well-being of children with enuresis, we can work towards ensuring that they have the best possible opportunities to thrive, develop resilience, and reach their full potential. This comprehensive approach involves addressing not only the physical aspects of enuresis, but also these children's emotional, social, and psychological needs. By providing them with the necessary support, resources, and interventions, we can empower them to overcome their challenges and cultivate a positive self-image, healthy relationships, and a strong foundation for future success.

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