

Parenting Styles and Peer Influence as Correlates of Expressive Language Skills among Children with Autism Spectrum Disorder

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Abstract: *Introduction:* It is more difficult for children with limited communication to understand the intentions of others and to communicate their own needs, feelings, and ideas because of their impaired expressive language skills.

Objectives: This study investigated parenting styles and the peer-influence as correlates of expressive language skills in children with autism spectrum disorders.

Methods: Convenient sampling was used to select 30 (male = 22; female = 8; age range 6 – 14 years old) children with an autism spectrum disorder. The instruments used for data collection were tagged Parenting Style Questionnaire, Peer Influence Questionnaire, and Expressive Language Skills Scale. The internal consistency of the Parenting Style Questionnaire, Peer Influence Questionnaire, and Expressive Language Skills Scale were Cronbach's $\alpha > 0.70, 0.64,$ and $0.63,$ respectively. The scale suitability for participants was determined, and it yielded a Cronbach's α of $0.79.$

Results: The findings revealed that the different parenting styles, such as authoritative, authoritarian, permissive, and neglectful, had a positive relationship with expressive language skills of children with autism spectrum disorder, but the relation was not significant. Moreover, peer influence positively correlated with respondents' language skills, but it was not significant.

Conclusions: Based on the findings, it can be conclusively stated that regardless of parenting styles used, there was a positive relationship between respondents' language skills, but the relationship was not significant. Therefore, further studies must be conducted to determine factors that are likely to contribute significantly to the language skills of children with an autism spectrum disorder.

Keywords: Parenting styles, peer influence, expressive language skills, children with autism spectrum disorder.

INTRODUCTION

Poor social communication is a hallmark of autism spectrum disorders. In terms of expressive language functioning, the severity of impairment differs across populations [1, 2]. The use of language can be effective in developing peer relationships. Peer play allows children to interact with one another, express their ideas, and engage in meaningful peer interaction [3]. Children with autism display a wide range of expressive and receptive language abilities, depending on the extent of their disability [4].

The expressive language skills of children with limited communication are impaired, making it more challenging for them to understand the intentions of others and to communicate their own needs, feelings, and ideas [5]. Children with autism have significant difficulties with expressive and derivational aspects of

sound production, such as stress and intonation [6]. Communication problems can lead to social conflicts and peer rejection [3].

An insufficient receptive vocabulary knowledge may contribute to or indicate difficulties in oral communicative competence, increasing the risk of peer rejection. Research has shown that receptive vocabulary knowledge is directly related to expressive language skills [7, 8]. Celce-Murcia reports that the capacity to express oneself orally is a complex and multifaceted capability with various sub-abilities [9].

In oral communicative competence, an individual must develop proficiency in using language appropriately in various social situations, but the concept entails a wide range of abilities. While improved vocabulary is essential for oral communicative competence, this knowledge is insufficient for effective communication.

Several factors can affect children's speech and language development, including family economic conditions, social environment, bilingual presence, and

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family social environment [10]. This study is interested in exploring the parenting styles and peer influence correlated with expressive language skills among children with an autism spectrum disorder.

There are many conditions characterised by autism, including Asperger's syndrome [11], which encompasses many disorders. Asperger's syndrome is a group of neurodevelopmental disorders that affect the brain. In other words, they are the result of an abnormality in brain development.

According to Gould and Ashton-Smith, the single feature that underpins all autistic spectrum conditions is a lack or impairment of social instinct [12]. Autism is a complex learning disorder explained by an interactionist developmental model that incorporates congenital and internal deficiencies and environmental deprivation [13]. As a result, early identification and intervention are critical for realising the full potential of the child.

Autism and related autism spectrum disorders are more common than previously thought. Autism was once thought to be a rare disability, but the number of children diagnosed in recent years has risen dramatically [14]. It is unclear whether the rise is due to better detection, broader diagnostic criteria, or increased incidence.

Children with autism spectrum disorder, who make up 1% of the child population, will require health, education, and social care services that recognise their needs. According to estimates, 70% to 75% of people with autism also have a learning disability, with 40% having profound or severe learning deficiencies [15]. Social impairments, less verbal ability, and self-injurious and aggressive behaviors are more common among students with severe learning disabilities than those with only mild learning disabilities.

Goldfarb *et al.* noticed that children with autism use inappropriate intonations, thereby giving a sentence a different meaning [16]. Moreover, syntactic development in children with autism follows a typical developmental course [17], but some exceptions exist. Kuder discovered a great deal of variation among autistic children and found that some children deviate from the pattern of normal development [6].

Tager-Flusberg suggested that systematic research was required to confirm this hypothesis [18]. Autism is commonly recognised as a heterogeneous spectrum consisting of repetitive, restricted behaviours with

distinct intellectual disabilities [19] and other developmental profiles [20]. Moreover, in describing autism spectrum disorder, the negative aspects are usually highlighted. However, many children and adults with autism may exhibit positive characteristics.

These include making eye contact and expressing varying degrees of emotions, such as happiness and anger. They may react to their surroundings in both positive and negative ways. Gupta and Singhal conducted a comprehensive study that supports the heterogeneity of autistic people [21]. This study was designed to examine how symptoms of autism are presented clinically, as well as language and learning skills in children with autism compared to their typically developing peers.

According to their research, children with autism have severe social interaction problems, language and communication barriers, difficulty self-helping, and sensory problems, with the symptoms manifesting differently in each child. Moreover, receptive and expressive language, imitative skills, motor skills, and letter and number knowledge were significantly lower than those of typically developing children. Research consistently demonstrates that children with autism develop skills in their own ways and have unique strengths and weaknesses.

During the early years of a child's lifetime, their experiences and the environments in which they grow up form the foundation of the architectural development of their brains [4]. This, in turn, impacts their capacity to become productive and healthy members of society. The most effective way for parents to balance parental demands on their children is to maintain a warm, supportive, and responsive environment.

By maintaining these elements, their children will have the best chance of integrating into society [22]. Children may experience various adjustment issues if the behavior and attitudes of their parents during the preschool years do not reflect an appropriate balance on these spectra. Most parenting research assumes that parenting style influences child adjustment, but there is also a possibility that adjustment may affect parent-childrearing practices [23].

Parents' protective and controlling behavior may increase when children with autism spectrum disorder lack reciprocal relationships and have communication difficulties [24, 25]. Due to this, negative parenting styles may amplify problem behaviors in children [26, 27]. In a study by Gau *et al.*, it was found that children

with autism spectrum disorder who had suboptimal parenting experienced more depression, anxiety, thought problems, social problems, distraction, impulsiveness, insubordination, and maladaptive behaviors [26].

It is crucial to understand peer group influence through several contexts to design educational processes and school systems that are productive in Nigeria and worldwide [28]. Researchers found that peer rejection in kindergarten predicts externalising behaviour in Grade 4, especially in boys. In addition, children whose peers reject them are often less inclined to initiate or maintain such relationships and develop externalising and internalising problems [3].

Numerous research studies have linked rejection by peers during the kindergarten years to decreased disciplinary behaviour, school avoidance, and poor academic performance [29, 30]. Children who have difficulty using language effectively are more likely to be excluded from peer interactions [31]. Children with poor expressive language will likely have trouble communicating with their peers as they age due to fear of rejection.

This explanation is consistent with previous studies that discovered a link between receptive vocabulary knowledge and peer rejection [32-34]. A third variable (i.e., disruptive interactions [34]) seems to explain the relationship between these two variables consistently.

MATERIALS AND METHODS

Research Design

The research design adopted for this study is a descriptive survey research design of the correlational type. The study is interested in examining the influence of parenting styles (authoritarian, authoritative, permissive, and neglectful parenting styles) and peer influence independently on the expressive language skills of children with an autism spectrum disorder. The researchers were not interested in the manipulation of the variables of interest in the study.

Research Question

Two research questions will be answered in this study. They are:

1. To what extent do parenting styles (authoritarian, authoritative, permissive, and neglectful) and peer groups influence the expressive language skills of children with autism spectrum disorder?

2. What is the composite influence of the independent variable of parenting style (authoritarian, authoritative, permissive, and neglectful) and peer groups that influence the expressive language skills of children with autism spectrum disorder?

Population

This study's population comprised children with autism spectrum disorder selected from four schools and one speech and hearing clinic in Ibadan, Oyo state.

Sample and Sampling Technique

Thirty students were included in this study. The multistage sampling technique was adopted. The first stage involved the enumeration of the capital city by local governments (Ibadan North, Ibadan North-East, Ibadan North-West, Ibadan South-East and Ibadan South-West). The second stage involved using a simple random sampling technique to select one school or clinic from each local government.

The third stage involved using the purposive sampling technique to select children with autism spectrum disorder from each school or clinic, with six students selected from each school and a total of thirty children with autism spectrum disorder selected for this study.

Instrument

The research instruments used for data collection in this study were the Parenting Style Questionnaire, the Peer Influence Questionnaire, and the Expressive Language Skills Scale.

Parenting Styles and Dimensions Questionnaire

The Parenting Style Questionnaire was developed by Robinson *et al.* [35]. The researcher used closed-ended questions, which consisted of 26 items with a scale of four modified points (1 – *strongly disagree*, 2 – *disagree*, 3 – *agree*, 4 – *strongly agree*). This has test reliability of 0.64.

Peer Influence Questionnaire

The Peer Influence Questionnaire contained ten items that measured resistance to peer influence [36]. There were two subcategories for each item: The respondents had to select the option that best

described the group with which they interacted the most (i.e., *more vs. less peer resistant*). The participants were asked to indicate to what extent they believed the group had influenced them (i.e., *really true vs. sort of true*) [37]. The non-resistant group was tagged as 1, while the resistant group was tagged as 4. These two sub-items were combined to create an aggregate Likert-type scale. The total resistance to peer influence was generated by summing up the choices made for the ten items: the higher the scores, the higher the resistance to peer influence.

In addition to the appropriate criterion validity [36] and reliability (i.e., Cronbach's alpha > 0.70), the RPIQ demonstrated adequate internal consistency (Cronbach's alpha 0.70) [36, 38].

Expressive Language Skills Scale

The Expressive Language Skills Scale was adapted from the Spoken Language Checklist developed to assess spoken language acquisition [39]. Administration of the test takes about 15 to 20 minutes, and it has a concurrent validity of expressive language ranging from 0.72 to 0.86.

Method of Data Analysis

A descriptive study of simple percentages and Pearson's Product Moment Correlation were used to analyse the demographic variables of the respondents. Pearson's product-moment correlation measures the

relationship between parenting styles (authoritarian, authoritative, permissive, and neglectful parenting styles) and peers' influence (independent) on the expressive language skills of children with an autism spectrum disorder.

RESULTS

The demographic characteristics of the respondents revealed that 30 (36.7%) were in Prenursery and Nursery class, 16 (53.3%) were between Primary 1 and Primary 2, and 3 (10%) were in Primary 3 to Primary 5 classes. The implication is that most of the respondents were in Primary 1 and Primary 2.

The gender distribution of respondents revealed that 30 (73.3%) respondents were male, while the remaining 8 (26.7%) were female, indicating that many respondents were male.

A breakdown of respondents based on their age shows that 30.6% were aged between 3 and 6 years, followed by 10 (33.3%) aged between 7 and 10 years, and 2 (6.7%) aged between 11 and 14 years.

Research Questions

To what extent do parenting styles (authoritarian, authoritative, permissive, and neglectful) and peer groups influence the expressive language skills of children with autism spectrum disorder?

Table 1: Correlation between Parenting Styles, Peer Influence, and Expressive Language Skills of Children with Autism Spectrum Disorder

Variables		3	1a	1b	1c	1d	1	2
Expressive language skills	Pearson Correlation	1						
	Sig. (2-tailed)							
Authoritarian	Pearson Correlation	0.301	1					
	Sig. (2-tailed)	0.106						
Authoritative	Pearson Correlation	0.086	0.691**	1				
	Sig. (2-tailed)	0.652	0.000					
Permissive	Pearson Correlation	0.136	-0.124	0.587**	1			
	Sig. (2-tailed)	0.474	0.515	0.001				
Neglectful	Pearson Correlation	0.066	-0.453*	0.222	0.448*	1		
	Sig. (2-tailed)	0.729	0.012	0.239	0.013			
Parenting styles	Pearson Correlation	0.204	0.996**	0.723**	0.928**	0.582**	1	
	Sig. (2-tailed)	0.279	0.000	0.000	0.000	0.001		
Peer influence	Pearson Correlation	0.241	0.018	0.175	0.146	0.175	0.210	1
	Sig. (2-tailed)	0.199	0.924	0.354	0.440	0.354	0.265	

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' survey (2021).

Table 2: Summary of Multiple Regression Analysis Showing the Composite Influence of the Independent Variable on the Dependent Variable

Model	Sum of square	Df	Mean square	F	Sig	Remark
Regression	3411.021	5	682.204	6.93	0.013	Significant
Residual	2361.364	24	98.39			
Total	2772.385	29				
R = 0.693						
R ² = 0.055						
Adjusted R ² = 0.314						

The results in Table 1 show the Pearson correlation analysis. Parenting styles factors value yielded 0.729, positively related to expressive language skills but not significant with the p -value $0.204 > 0.05$. This shows a positive but not significant relationship. This implies that parenting styles are positively related to the expressive language skills of children with an autism spectrum disorder. Furthermore, the authoritarian parenting styles value is 0.301, which shows a positive relationship with expressive language skills of children with autism spectrum disorder but is not significant with the p -value $0.106 > 0.05$. The results from the table also indicated that permissive parenting style positively correlated with expressive language skills ($r = 0.204$, p -value $0.279 > 0.05$). Although the relationship between permissive parenting and expressive language skill is positive, the relationship is not significant. In the same vein, neglectful parenting style ($r = 0.66$, p -value $0.729 > 0.05$) and peer influence ($r = 0.241$, p -value $0.199 > 0.05$) yielded a positive correlation with expressive language skills of the sampled respondent but the relationships are not significant. Children with autism spectrum disorders exhibited improved expressive language skills when their parents used neglectful parenting methods and their peers influenced them.

Research Question 2

What is the composite influence of the independent variable, parenting style (authoritarian, authoritative, permissive, and neglectful), and peer groups' influence on the expressive language skills of children with autism spectrum disorder?

Table 2 shows that the independent and dependent variables have a composite relationship ($R = 0.23$). Consequently, the independent variables accounted for 31.4% of the total variance in expressive language (Adjusted $R^2 = 0.314$). Furthermore, the combined effect is statistically significant ($F(5, 24) = 6.93$; $p < 0.05$). Therefore, the composite influence of the independent

variable, parenting styles (authoritarian, authoritative, permissive, and neglectful), and peer influence accounted for 14% of the variation in the expressive language skills of children with an autism spectrum disorder.

DISCUSSIONS

The extent to which parenting styles (authoritarian, authoritative, permissive, and neglectful) and peer groups influence the expressive language skills of children with autism spectrum disorder was investigated in this study.

The findings revealed that parenting style did not have a significant influence on the expressive language skills of children with autism spectrum disorders. This finding is not consistent with the report of Mohammadi and Zarafshan, who reported that parenting styles play a significant role in the communication skills of persons with autism [40]. This result also does not align with the finding of Nijhof and Engels, who reported that an authoritative parenting style significantly affects adolescents' psychological and social development [41].

Moreover, this study's findings are inconsistent with those of Bingham *et al.*, who stated that parenting style plays a significant role in a child's development [42]. Parents who are democratic or have good parenting skills would have children with high scores in academic achievement. In this study, parenting styles did not significantly influence children's language skills.

Nevertheless, the results revealed that the relationship between permission parenting style and communication skills related positively, which aligns with the submission of Mohammadi and Zarafshan [40]. This indicates that using permissive parenting would likely lead to a decrease in prosocial behaviours but improved expressive language skills. On the other

hand, the authoritative parenting style allows for high warmth and firm control.

The evaluation of each of the parenting styles in relation to expressive language skills of autistic children showed a positive association but not a significant one. The results on the different parenting styles did not corroborate previous findings, which noted that parents who opted for the authoritarian parenting style were more likely to raise autistic children with a high level of behavioural control and low level of externalising problems [43, 44]. In another study, it was concluded that parental factors played a significant role in the language development of children with autism [45], which is not consistent with the present finding.

Parker and Benson noted that authoritative parenting styles helped children develop greater self-reliance, self-esteem, and coping abilities, all while developing a positive self-image [46]. This does corroborate the findings of this study. Moreover, Nijhof and Engels concluded that authoritarian parenting adversely affected children's coping abilities and self-confidence [41]. Thus, children could not develop their own skills and social interactions, eventually becoming dependent on their parents. This was not consistent with the findings of this study because the result did not show authoritarian parenting style as having an adverse effect on the expressive language skills of participants.

The lack of parental involvement and interaction results in an increased risk of violence, particularly in male juveniles [47], and it can also result in delinquent behaviour for adolescents [48]. In these circumstances, parental styles did not contribute to the expressive language skills of children with an autism spectrum disorder.

Although persons with autism spectrum disorder find it challenging to maintain gaze, they possess a limited number of pragmatic skills. The results displayed in Table 2 show that peer influence improved children's expressive language skills. This result negates the findings of Carter *et al.*, who reported that using peer-based interventions for children with autism spectrum disorder increases and enhances social connections, acquisition of social and communication skills, and development of new friendships [49].

In contrast, a subset of these persons cannot speak or have limited means of communication [50], which may be responsible for the insignificant effect of peer

influence on the expressive language development of the respondents. The outcome of this research work is not in agreement with the findings of Ojo, who reported in her own findings that peer pressure had a significant influence on an individual's life, including in the social and communication domains [51]. Possessing limited social, pragmatic, and communication skills, persons with autism spectrum disorder are most likely to be the subject of mockery and bullying [52], which in turn limits their peer interaction and expressive language skills.

Our study revealed that peer influence did not significantly affect the expressive language skills development of the respondents. The findings of previous studies have been contradictory in this regard. Using large-scale pre-kindergarten samples, Justice *et al.* found that peers had no main effect on classroom behaviour [53], whereas Mashburn *et al.* found the main peer effect, although it was small [54]. Given this inconsistency, it is worth considering how our sample and design differed from these previous studies. We assessed expressive language skills among children with autism spectrum disorder of different age groups. The initial language skills for participation were derived from the mother's reports.

We may be unable to identify an actual effect of peer language because of the normative development of language skills with all the diverse influences arising from their condition. We may have failed to find any correlation due to the design of our study, or it may be a replication of the previous null-finding by Justice *et al.* [53].

The combined effect of the independent variables on the expressive language skills of the participants was significant, as shown in Table 2. The results are consistent with previous studies suggesting that distal variables such as socioeconomic status and variables representing the proximal environment are crucial for predicting child language development [55, 56]. Parental style includes factors such as sensitivity and positive regard, parental language, including the quantity and quality of language input [57], and the environment in which children learn to read. Early developing neural mechanisms play an essential role in language exposure and development.

CONCLUSION

In conclusion, the study aimed to improve understanding of the impact of parenting styles

(authoritarian, authoritative, permissive, and neglectful) on the expressive language skills of children on the autism spectrum. According to the findings of this study, regardless of parenting styles used, there was a positive relationship between respondents' language skills, but the relationship was not significant.

From the viewpoint of the result, peer influence revealed a positive relationship with the expressive language skills of children with autism spectrum disorder, but the relationship was not significant. Based on the study's findings, it is recommended that further studies be conducted to determine factors that could likely contribute to the expressive language skills of the respondents.

This study was not interested in the predictive influence of parents' socioeconomic status, school type and gender on the expressive language of the participants. Moreover, the study was limited to a small sample size due to the unique characteristics of children with an autism spectrum disorder.

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CONFLICTS OF INTEREST

There are no conflicts of interest regarding the authorship and publication of this article.

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