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Parental perspectives of social interaction in children with autism

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Abstract---Social interaction plays a substantial role in an individual's life. Difficulty in social interaction is the significant feature of children with autism. Children with autism always show discomfort in communication and social interactions and produces behavioral problems. Parents being the significant members need to have proper understanding of the behaviours, conversation skills and factors contributing to the deficits in children with autism. Thus, the study focused on identifying the parents perspective of social interaction in children with autism with 200 parents of children with. Initiating interaction, responding to initiation and maintaining interaction are the three areas of focus of the study. Differences in social interaction was examined with age, gender, level of autism, mode of communication, family type, educational qualification of parents and parents occupation were considered for the study. The findings of the studied significant difference with regard to parents educational qualification and social interaction of children with autism. The implication of the finding with regard to the study variables is discussed in detail in this article.

Keywords---Autism Spectrum Disorder, Social Interaction, Parent Perspective.

Introduction

Social interaction plays a substantial role in an individual's life. Difficulty in social interaction is the significant feature of children with autism. Children with autism always show discomfort in communication and social interactions and

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produces behavioral problems (National Institute of Mental Health Information Resource Center, 2018). They show considerable deficits in peer relation conversations due to their unique interest and behaviors (Barry et.al 2003). Even when a child with autism learn communication skills, it is not of that fluent rather it is found to have very few conversational exchanges, very short responses, poor contextual speech with lack of information. (Jones & Schwartz, 2009; L. K. Koegel et al., 2014). Further they lack conversational skills relating to initiating, responding and sustaining conversations. (Hale & Tager-Flusberg, 2005; Jones & Schwartz, 2009). ASD children often show less eye contact, inability to understand others emotions and reacts inappropriately in real life situations. They were found to have difficulty in developing friendship with peers because of their rude and insensitive behaviours (Barnhill et al., 2002). Hence such difficulty causes social, occupational and functional impairments. From childhood onwards children with ASD show social relationship problems. As they grow older, they become sensitive to the difficulties in social interaction with peers which leads to problems in the maintenance of friendship even though they aspire to have more friends (Cook et al., 2008; De Boo & Prins, 2007; White et al., 2007). Because of deficit in social interaction, children with ASD become victims of bullying and rejected by peers, resulting in the development of risk likes depression, anxiety and socially isolated (Tse et al., 2007). Hence development of social skill in children with ASD plays an important role in supporting social relationship with their peers.

Reduction in social understanding leads to problems like attention, problem solving, processing of sensory, cognitive information and loco-motor problems. These challenges in communication and social interaction increase the antisocial behaviours in children with autism (Shea et al., 2018). Hence appropriate social intervention activities need to be implemented for the development of autistic children. More attention need to be given for improving imitation and joint attention skills to reduce the problems in social interaction (Lord et al., 2000; Williams et al., 2004). Improvement in the skills such as eye gaze, eye gaze following, joint attention, face recognition, emotion recognition, speech, language development, theory of mind, and imitation helps the autistic children to participate in the social interactions (Kupperman, 2012; Elisabeth et al., 2013 & Stichter et al., 2010).

Parents being the significant members of each individual has a great role in the development of children's behaviour and learning. Parents of children with autism if found to experience a higher level of stress when compared to other parents Tomeny et. al (2012) and it has been more evident on viewing it in sibling relationship perspective Smith and Elder (2010). This kind of a parenting stress can be reduced when the parents have the proper understanding of the behaviours, conversation skills and factors contributing to the deficits in children with autism. On the other hand, this will also help them in identify the correct professional and interventions strategies that will aid in bringing positive changes in children with autism. Understanding the importance of the role and contribution of parents in the understanding the nature of children with autism this study has attempted to analyze the parents' perspective of social interaction in children with autism.

Materials and Methods

Participants

The main purpose of this study is to create awareness among parents regarding the conversational skills of children with autism and help them in finding the possible ways and means of addressing it. For studying the parental perspectives of social interaction in children with autism, 200 children with autism and their parents were selected using purposive sampling method.

Data collection

The initiating interaction, responding to initiations and maintaining interactions components of Social Skill Rating form of TRIAD social skill assessment was used for the purpose of data collection. The data was collected from the parents through questionnaire method. Few demographic variables such as age, gender, level of autism, mode of communication, family type, educational qualification of parents and parents occupation were the variables considered for the study.

Statistical analysis

The analysis was carried out using the statistical software SPSS (version 17.0).

Results and Discussion

Association between the Age of Children with Autism and Dimensions of Social interactions based on Parents perception

Age	Level of Social Skills				Statistical Inference
	Low		High		
Initiating Interactions	n:101	%	n:99	%	$X^2 = 1.548$ df = 2 P > 0.05 Not Significant
3-6 years	43	51.8	40	48.2	
7-9 years	33	55.0	27	45.0	
10-12 years	25	43.9	32	56.1	
Responding to Initiations	n:109	%	n:91	%	$X^2 = 3.061$ df = 2 P > 0.05 Not Significant
3-6 years	40	48.2	43	51.8	
7-9 years	33	55.0	27	45.0	
10-12 years	36	63.2	21	36.8	
Maintaining Interactions	n:108	%	n:92	%	$X^2 = 0.069$ df = 2 P > 0.05 Not Significant
3-6 years	45	54.2	38	45.8	
7-9 years	33	55.0	27	45.0	
10-12 years	30	52.6	27	47.4	

From the above table it is evident that there exists no significant association between age of children with autism and their social skills. The age of diagnosis of autism spectrum disorder starts at an early age of 3 years, the core features continue to persist throughout their childhood, adolescence and adulthood. Hence age has a major role to play in social skill development in children with autism. On examining the severity of the feature of autism, few cross sectional and longitudinal studies have reported that core features appear to be decreased as age progress during adolescence and adulthood (Fecteau et.al 2003, Mawhood et.al 2000, Shattuk et al., 2007). Factors like early identification, appropriate intervention and educational services play a significant role in reducing the core feature of autism as the age progresses (Volkmar 2005b).

Distribution of Children with Autism by Gender and Dimensions of Social interaction based on Parents Perspective

Gender of the Child	Parent		
	Mean	S. D	Statistical Inference
Initiating interactions			T = -0.095
Male	21.04	5.616	df = 198
Female	21.13	5.547	P>0.05
			Not Significant
Responding to Initiations			T = -0.583
Male	9.24	3.326	df = 198
Female	9.54	3.092	P>0.05
			Not Significant
Maintaining Interactions			T = 0.568
Male	19.55	5.442	df = 198
Female	19.05	5.760	P>0.05
			Not Significant

The above Table indicates that there is no significant ($P<0.05$) difference between the gender of the child and the dimensions of social interactions as perceived by the parents of children with autism. The result of the study is in concurrent with the research studies that examined gender differences on social skills in children with autism from toddlerhood through adulthood (Van Wijngaarden- Cremers et al. 2013) and other studies which had specifically controlled IQ (Holtmann et al. 2007) and uncontrolled group (Andersson et al. 2013) of girls and boys with autism. From the above table it is highlighted that with regard to Initiating and maintaining interaction there is no significant differences observed as most of the children were able to verbalize their needs and concerns and majority of them were diagnosed as to having mild autism.

Distribution of Children with Autism by family type and Dimensions of Social interaction based on Parents Perspective

Family Type of the Child	Parent		
	Mean	S.D	Statistical Inference
Initiating Interactions			T = -0.416
Joint	20.86	5.654	df = 198
Nuclear	21.20	5.556	P>0.05, Not Significant

Responding to Initiations			T = 1.115
Joint	9.64	3.117	df = 198
Nuclear	9.11	3.341	P>0.05, Not Significant
Maintaining Interactions			T = 0.131
Joint	19.47	6.105	df = 198
Nuclear	19.37	5.143	P>0.05, Not Significant

The above table shows that there exists no significant difference in the social skills of children with autism based on the types of family. It is a common notion that children from Joint family show better social skills due to presence of more adults in the family. In the current scenario where both parents are working, most of the children are left alone with their other family member especially with their grandparents. Due to poor acceptance, lack of knowledge of handling children with autism and over protectiveness, most of the times children with autism are left out with their mobile phones and television in order to avoid more challenging behaviors from them. Hence the social interaction among the family members in both joint and nuclear family is greatly affected due to influence of media. More studies are needed in this area to find the impact of family type on social skills in children with autism.

One way analysis of variance based on mode of communication of children with autism and dimensions of social skills

Mode of communication	Parents				
	df	SS	MS	$\bar{X}$	Statistical Inference
Initiating Interactions					
Between Groups	3	61.787	20.596	G1=21.28 G2=20.62 G3=22.11 G4=20.76	F=0.657 P>0.05 Not Significant
Within Groups	196	6140.3	31.328		
Responding to Initiations					
Between Groups	3	5.143	1.714	G1=9.05 G2=9.34 G3=9.54 G4=9.37	F=0.160 P>0.05 Not Significant
Within Groups	196	2106.3	10.747		
Maintaining Interactions					
Between Groups	3	96.073	32.024	G1=18.65 G2=19.89 G3=20.16 G4=18.50	F=1.051 P>0.05 Not Significant
Within Groups	196	5974.3	30.481		

G1=Verbal G2 =Gestures G3 = Making Sounds G4=No Communication

The above table depicts the analysis of variance between the different modes of communication of children with autism and dimensions of social interactions as perceived by the parents. Children with autism spectrum disorder have been reported to have difficulty in social pragmatic inferencing (Loukusa et al., 2007). The results of others have established that social-pragmatic abilities progress with age in individuals with ASD, these difficulties persist into adulthood even in the most capable individuals with normal intelligence with ASD (Lönngqvist, 2017; Loukusa&Moilanen, 2009). Even though children with autism develop some mode of communication it is essential to develop communication along with

pragmatic skill. Hence mode of communication has not brought significant impact in social skill development in children with autism.

One way analysis of variance based on educational qualification of parents of children with autism and dimensions of social interaction

Educational Qualification of Parents	PARENTS				
	Df	SS	MS	$\bar{X}$	Statistical Inference
Initiating Interactions Between Groups Within Groups	3 196	310.303 5891.8	103.434 30.060	G1=16.50 G2=22.76 G3=19.38 G4=21.15	F=3.441 P<0.05 Significant
Responding to Initiations Between Groups Within Groups	3 196	36.914 2074.60	12.305 10.585	G1=7.75 G2=9.83 G3=8.68 G4=9.39	F=1.162 P>0.05 Not Significant
Maintaining Interactions Between Groups Within Groups	3 196	136.764 5933.61	45.588 30.274	G1=15.00 G2=20.52 G3=19.27 G4=19.41	F=1.506 P>0.05 Not Significant

G1=Uneducated G2 =High School G3 = Higher Secondary G4=Degree

A significant difference has been found between the dimension of initiating interaction and educational qualification of parents of children with autism with regard to parent perspective. It stated that educational qualification of the parents does not influence the social skills of the children with autism. It is the quality of efforts and methods used by parents with their children with autism will affect the social skills rather than the educational qualification in particular. Parents of children with Autism must initiate different play methods and produces more play commands than other parents of developing children (Freeman & Kasari, 2013). Parents must learn adaptive teaching skills to bring change in the behavior of the children. While Ahmad & Dardas (2015) proved that compared to economic level, educational level of parents of autistic children has improved quality of life and wellness. Parent's educational qualification has a significant role in understanding the condition and working on the intervention process. Argyrakouli & Zafiropoulou, (2003) found that parents with higher educational qualification have higher level of self-esteem which could help the parents to appropriate measures to overcome behavior problems.

One way analysis of variance based on parent occupation of children with autism and dimensions of social skills

PARENT OCCUPATION	Parents				
	df	SS	MS	$\bar{X}$	Statistical Inference
Initiating Interactions Between Groups Within Groups	3 196	46.652 6155.5	15.551 31.406	G1=20.33 G2=22.17 G3=21.31 G4=20.82	F=0.495 P>0.05 Not Significant
Responding to				G1=7.73	F=1.469

Initiations Between Groups Within Groups	3 196	46.426 2065.09	15.475 10.536	G2=9.42 G3=9.73 G4=9.33	P>0.05 Not Significant
Maintaining Interactions Between Groups Within Groups	3 196	35.289 6035.09	11.763 30.791	G1=18.47 G2=19.04 G3=20.02 G4=19.35	F=0.382 P>0.05 Not Significant

G1=Agriculture G2 =Business G3 = Government Employee G4=Others

The above table denotes the one-way analysis of variance between occupation of the parents of children with autism and dimensions of social interaction with regard to parents' perspective. There is no significant ($P>0.05$) difference in the level of social interactions with respect to parents' occupation of children with autism. Various research studies highlighted that autism spectrum disorder is found commonly among parents who are in white collar jobs and in professional occupation (Wheelwright et al., 2001). These findings were even stronger in case of mothers of children with autism (Windham et al., 2009). Various other studies have also reported that there exists a significant relationship between the paternal occupation and development of social and soft skills in children (Rani, P., & Dhanda, B. 2003)

One way analysis of variance based on level of autism of children with autism and dimensions of social skills

LEVEL OF AUTISM	PARENTS				
	df	SS	MS	$\bar{X}$	Statistical Inference
Initiating Interactions Between Groups Within Groups	3 196	166.978 6035.17	55.659 30.792	G1=20.70 G2=22.17 G3=19.29 G4=19.71	F=1.808 P>0.05 Not Significant
Responding to Initiations Between Groups Within Groups	3 196	11.300 2100.2	3.767 10.715	G1=9.25 G2=9.44 G3=8.88 G4=10.29	F=0.352 P>0.05 Not Significant
Maintaining Interactions Between Groups Within Groups	3 196	40.585 6029.79	13.528 30.764	G1=19.34 G2=19.86 G3=18.41 G4=18.29	F=0.440 P>0.05 Not Significant

G1=Mild G2 =Moderate G3 = Severe G4=Profound

The above Table represents the results of analysis of variance between severity of autism and the dimensions of social interactions. The overall results indicate that

there is no significant ($P>0.05$) difference in the levels of social skills with respect to level of autism severity. With respect to severity of autism, children having deficits in communication fails to participate in social play activities. Bult, et al. (2011) and Memari et al. (2014) studied that child with physical or motor impairment and cognitive deficits facing problems like exclusion from the day-to-day activities.

Conclusion

The role of social interaction in every life situation has a powerful role in getting along with a family and related people in our environment. The areas of deficits in children with autism is very obviously found and the various finding of the study have shown the various factors like age, family type, level of autism etc has very little impact on this deficit. This again proves that these deficits in social communication and other social skill are innate and less influenced by the external factors. The results of the study give a new way looking at children with autism especially on addressing the social interaction needs. Right way of approach and constant exposure to social situation can alone pose better results in the conversational skills of children with autism. When the social skills and social conversations are intervened, it will lead to better peer acceptance and social wellbeing in the life of children with autism.

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