



The Relationship between Parental Characteristics and Social Interaction Skills of Autistic Children in SLB Sragen Region

Idha Rosydiana Fitri¹, Siti Arifah²

¹Mahasiswa Prodi Keperawatan, Fakultas Ilmu Kesehatan, Universitas Muhammadiyah Surakarta

²Dosen Prodi Keperawatan, Fakultas Ilmu Kesehatan, Universitas Muhammadiyah Surakarta

*Corresponding Author: Siti Arifah

Email: J210200064@student.ums.ac.id, Siti_arifah@ums.ac.id



Article Info

Article history:

Received 20 September 2023

Received in revised form 29 September 2023

Accepted 12 October 2023

Keywords:

Autism

Social Interaction

Children

Parents

Abstract

Autism is a disorder that occurs in brain tissue where the condition is a developmental disorder characterized by the inability to carry out social interactions, inability to communicate and repetitive behavior. This causes an autistic child to prefer to be alone and unable to communicate with other people well. Parental involvement in parenting significantly increases the developmental progress of children with autism, including allocating time for joint activities, frequent interaction, financial assistance, active parenting, and being involved in playing with children. Thus, the role of parents is very much needed. to provide care in the development of autistic children. This research aims to determine the relationship between parental characteristics and social interaction abilities for Autistic Children in SLB in the Sragen area. This research used a cross sectional method involving 60 parents who had autistic children at the Sragen Regency Special School which was conducted in September 2023. Social interaction data was measured using ATEC (Autism Treatment Evaluation Checklist). The data analysis used is the data normality test and continued with the Chisquare test to determine the relationship between variables. There is a weak relationship between age, parental education, employment and family income with the social interaction abilities of autistic children in the Sragen Regional Special School. ($p < 0.04$ $\phi = 0.34$, $p < 0.015$ $\phi = 0.282$, $p < 0.007$ $\phi = -0.268$, $p < 0.01$ $\phi = 0.336$). Several parental characteristics have a relationship with the social interaction abilities of autistic children, although the categories are weak.

Introduction

Autism is a neurological disease that can interfere with an individual's ability to engage in social interactions and communicate effectively with their environment" (Kanner, 1943). Leo Kanner (1943) outlined "three main characteristics for diagnosing autism: disturbances in interpersonal connections, difficulties in language development, and repetitive or stereotyped behavior."

Children with autism may exhibit additional symptoms such as speech and language disorders, including echolalia, language delays, and pronoun reversals. Autistic children also experience mood instability and respond incorrectly to sensory stimuli. It is important to note that these symptoms usually manifest before age 3" (Wong et al., 2014). "The developmental disorders that often cause problems are social interaction and communication skills" (Garguillo, 2012).

According to the Central Statistics Agency, "the current population in Indonesia is around 270.2 million, with the growth rate of autistic children estimated at around 3.2 million" (BPS, 2020). The Special School Statistics Data Center recorded the number of autistic children in Indonesia in 2023 as 144,102 children (Kemendikbud, 2020). This figure is an increase compared to 2022 when there were 133,826 autistic children in Indonesia (Kemendikbud, 2023). In the city of Sragen, several public and private schools have registered autistic children with an estimated 90 children. (Ministry of Education and Culture, 2022). Through this data, it is increasingly clear that the growth of children with autism is increasing.

DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) defines "autism as a multifaceted developmental disorder characterized by challenges in social interaction, communication, perception, motor skills, restricted interests, and repetitive behaviors" (American Psychiatric Association, 2013).

"Autistic children often struggle with social interactions, making it challenging for them to build meaningful relationships with their environment. Impaired social contact in autistic children can impact various elements of learning and behavior. Autistic children often exhibit isolated behavior, even when surrounded by their peers in a setting. Disorders can interfere with a child's socialization abilities or hinder his ability to form meaningful relationships" (Handojo, 2004).

"Parental involvement in parenting is beneficial for the holistic development of children with autism, encompassing quality time spent engaged in activities, frequent interaction, financial assistance, nurturing parenting practices, and active participation in play. Parental participation covers a wide range of aspects such as ideas, plans, sentiments, nurturing, care, supervision, assessment, prayer, energy, and worry for the child. Involvement correlates with increased emotionality, physical contact, expressions of happiness, affection, satisfaction, or reassurance between parent and child" (Tamis-Le Monda & Cabrera, 2013). Several studies have established a correlation between parental participation and increased social skills, cognitive abilities, self-confidence, and exploration in children.

According to a study conducted by Rachmayanti and Zulkaida (2007) "parents are able to fully accept the situation when their children are diagnosed with autistic spectrum disorder. Acceptance depends on a variety of variables, including family support, financial ability, religious affiliation, educational attainment, marital status, age, and community support." The findings from the researchers only found that the factors that influenced parental acceptance were economic factors, education, religion, and support from the family. Based on this background description, the researcher wanted to know the relationship between parental characteristics and the social interaction abilities of autistic children in the Sragen Region Special School.

Methods

This research is a type of quantitative research using a descriptive correlation research design. The research used a cross sectional approach which was carried out at the Sragen Region SLB in September 2023. The sample in this study was 60 parents who had autistic children at the Sragen Region SLB. This research instrument is a demographic data questionnaire, which consists of age, gender, education level, occupation and family income of parents who have autistic children. Meanwhile, social interaction is measured using the Autism Treatment Evaluation Checklist (ATEC). ATEC is a test tool designed to evaluate the development of social interactions in children with autism who are undergoing treatment to reduce their autism symptoms. ATEC has 4 items, in this study only 1 item was used, namely the 2nd item regarding the social interaction abilities of autistic children which consists of 20 points. Each item that has been responded to will be converted into a number or score using the following procedure: 1 = Autistic children display the behavior "Not Correct", "Never Seen", and "Not a

Problem" in the existing statements. 2 = Autistic children display behavior that is sometimes/occasionally seen in existing statements 3 = Autistic children display behavior that is often seen in existing statements 4 = Autistic children display behavior that is very often seen in existing statements. In the data analysis process using univariate analysis and bivariate analysis, namely using chi square. The decision making criteria are: a) If the sig P value <0.05 (CI) 95%, Ha is accepted, then there is a relationship. b) If the sig P value ≥ 0.05 (CI) 95%, Ha is rejected, then there is no relationship. After getting the p value, continue by looking for the association value. If the data is in nominal form with a 2x2 table it is the phi coefficient.

Results and Discussion

Respondent Characteristics

Parental Characteristics

The results showed that the majority of parents with the criteria for late adulthood (36-45 years) were 22 people (36.7%). It is known that the average age of respondents is 40.21 years with the youngest being 29 years and the oldest being 65 years. Parents' education level. Most of them had graduated from high school, 32 people (53.3%). The type of work as self-employed is 27 people (45%) with an income of 500,000-2,500,000/month as many as 26 people (43.3%).

Table 1. Characteristics of Parents

Parental Characteristics	Information	Frequency	Percentage %
Age			
	Early Adulthood (26-35 years)	21	35%
	Late Adulthood (36-45 years)	22	36.7%
	Early Elderly (46-55 years)	15	25%
	Late Elderly (56-65 years)	2	3.3%
M = 40.2	Me = 40.0	SD = 7.99	Min = 29 max = 65
Education	No	1	1.7%
	Primary School	5	8.3%
	Middle school	13	21.7%
	high school	32	53.3%
	College	9	15%
Work	Doesn't work	8	13.3%
	Laborer	6	10%
	Farmer	6	10%
	Civil servants	2	3.3%
	Private employees	11	18.3%
	Self-employed	27	45%
Income	< 500,000/month	22	36.7%
	500,000 to 2,500,000/month	26	43.3%
	> 2,500,000/month	12	20%

Child Characteristics

In the table, it is known that respondents with the age criteria of 4-6 years were 28 (46.7%), 7-9 years were 20 people (33.3%), 10-12 years were 7 (11.7%) and 13 -15 years as many as 5 people (8.3%). It is known that the average respondent is 4 years old with a standard deviation of 2.81, with the youngest being 4 years old and the oldest being 15 years old.

Table 2. Characteristics of Autistic Children

Parental Characteristics	Information	Frequency	Percentage %
Age	4-6 year	28	46.7%
	7-9 year	20	33.3%
	10-12 year	7	11.7%
	13-15 year	5	8.3%
M = 7.15	Me = 70.0	SD = 2.81	Min = 4.00 max = 15.00

Social interaction

The table shows that the majority of respondents have autistic children with poor social interaction skills, 34 children (56.7%), 26 children (43.3%) with sufficient social interaction abilities.

Table 3. Social Interaction

Social interaction	Frequency	Percentage %
Not Good Enough	34	56.7%
	26	43.3%
	0	0
Total	60	100%

The Relationship between Parental Characteristics and Autistic Children

The age of the respondents was obtained using the coding technique of the results of the questionnaire. In this study, the most common ages were early adulthood (25-35) and late adulthood (36-45). The result of the p-value is $0.041 < 0.05$ which shows that there is a relationship between the age of parents and the social interaction abilities of autistic children, and the phi coefficient result is 0.349 which shows that the criteria for the closeness of the relationship between the age variable and the social interaction abilities of autistic children are weak.

The education range shows that the highest results are with high school parent education as much as 53.3%. In this study, a p value of $0.015 < 0.05$ was obtained, which indicates that there is a relationship between parents' latest education and the social interaction abilities of autistic children, and the results of the phi coefficient are 0.282, which indicates that the criteria for a close relationship between the gender variable and social interaction abilities weak autistic children

Older people's work shows the highest results, namely parents working as entrepreneurs, which has a result of 27 (45%). The analysis results have a p value of $0.007 < 0.05$, which shows that there is a relationship between the last education of parents and the social interaction abilities of autistic children, and the phi result is -0.268, which shows that the criteria for the closeness of the relationship between work variables and the social interaction abilities of autistic children are weak and tends in the opposite direction.

On average, parents who have autistic children in the Sragen area have an income of around 500,000 – 2,500,000 with 26 (43.3%). The analysis results have a p value of $0.011 < 0.05$, which shows that there is a relationship between parents' latest education and the social interaction abilities of autistic children, and the phi result is 0.336, which shows that the criteria for a close relationship between the income variable and the social interaction abilities of autistic children are weak.

Parental Characteristics

This study shows that parents with an age range of 36-45 are more numerous with a frequency of 22 (36.7%). According to the theory put forward by Atmadiyahanti, "parents in early adulthood and late adulthood have reached a point of physical and psychological maturity, which allows them to effectively regulate their emotions well. These parents also learn to face challenges head-on, which empowers them to put themselves in situations where they need to solve problems" (Atmadiyahanti, 2018).

There were 32 parents who had autistic children with a high school education (53.3%). "This is in line with Andriani's research where parents with a higher level of education tend to view the world as more tolerant and open than parents with a lower level of education" (Setyaningsih, 2015). "Parents who have a limited level of knowledge may have difficulty seeing and teaching their children." (Maharani, 2019).

"Education is a significant determinant in the formation of behavior. Behavior or actions resulting from education originate from knowledge and awareness obtained through learning and behavior processes. The level of education a person attains is directly correlated to their ability to acquire information, resulting in greater accumulation of knowledge. On the other hand, deficiencies in education will hinder the growth of an individual's mindset towards the new principles being offered." (Mubarak, 2006).

Nearly half of parents who have autistic children work as entrepreneurs, 22 (45%). This is in line with the theory according to Heinrich, (2014) "Working parents have an important role in fostering family ties with their children and try to contribute directly to their growth and development. In this case, it means that the parents' work cannot hinder the child's achievement of optimal growth and development. Work can damage relationships between parents and children, especially when parents are involved in working extended hours or night shifts." (Heinrich, 2014).

More than half of parents who have autistic children with an average income of 500,000-2,500,000 are 26 (43.3%). This is in accordance with the theory according to Ball and Binder (1995), which is related to development which is associated with low socioeconomic status. If there is a shortage of family income, the provision of stimulation facilities should be neglected.

The Relationship between Parental Characteristics and the Social Interaction Abilities of Autistic Children

The results of this study show that the p-value value is $0.041 < 0.05$, which shows that there is a relationship between the age of parents and the social interaction abilities of autistic children, and the results of the phi coefficient are 0.349, which shows that the criteria for a close relationship between the age variable and the child's social interaction abilities weak autism. The research results showed that the age of most parents was late adulthood or around 36-45 years old with 22 respondents (36.7%). This is in line with Atmadiyahanti's theory, which shows that "parents in middle and late adulthood have physical and psychological maturity. As a result, they are better equipped to regulate their emotions and effectively overcome challenges. By growing their maturity through experience, parents become more adept at self-reflection and problem solving" (Atmadiyahanti, 2018). According to Notoatmojo (2012), "adult individuals are better able to adapt their behavior to suit their environment. Additionally, higher levels of maturity are associated with greater ability in cognitive and professional tasks."

Parents with the latest education who have children with autism have a p-value of $0.015 < 0.05$, which indicates that there is a relationship between the parent's latest education and the social interaction abilities of autistic children, and the results of the phi coefficient are 0.282, which indicates that the criteria for the closeness of the relationship between gender variable with weak autistic children's social interaction abilities. This is in line with Andriani's research,

which found that "parents with a higher level of education tend to have a more receptive and accepting point of view compared to parents with a lower level of education" (Setyaningsih, 2015). "Parents with limited educational attainment may face challenges in understanding and providing education for their children." (Maharani, 2019). "Parents inherently fulfill the role of educators, but if the quality of education provided is inadequate, understanding certain ideals in an individual's life becomes a challenge." (Andriani, 2018)

Education is the process of changing the attitudes and behavior of a person or group of people in an effort to mature humans through teaching and training efforts. "Parent education plays an important role in toddler development and will influence parents' knowledge by stimulating their children's growth. Education is the process of changing the attitudes and behavior of individuals or groups of individuals in an effort to mature themselves through teaching and training efforts" (Soetjningsih, 2014). "Compared to parents with less education, someone with a higher level of education will be more sensible and use efficient coping mechanisms to deal with life's challenges" (Notoatmojo, 2012).

Parents who have autistic children with interaction abilities have a p-value value of $0.007 < 0.05$, which shows that there is a relationship between parents' work and the social interaction abilities of autistic children, and the results of the phi coefficient are -0.268 , which shows that the criteria for a close relationship between variables gender and the social interaction abilities of autistic children are weak and tend to be in the opposite direction. This is in line with Andriani's research which shows that "economic position and employment have an impact on parenting practices. Specifically, parents with lower economic status tend to be stricter with their children, while parents with higher economic status are more likely to pamper and pamper their children. Parents with low socio-economic status have a longer working duration, so they rarely gather with their families at home" (Setyaningsih, 2015).

"The majority of parents in this study are self-employed or not self-employed/housewives. Moreover, it is widely acknowledged that parents, especially mothers, show no signs of having a workload. This is due to the fact that the majority of them are employed as housewives, which allows them enough time to provide care and attention" (Sethi S in Ariani, 2014).

Parents who have autistic children with poor interaction skills have a p-value value of $0.011 < 0.05$, which shows that there is a relationship between parental income and the social interaction skills of autistic children, and the phi coefficient results are 0.336 , which shows that the criteria for a close relationship between gender variable with weak autistic children's social interaction abilities. Low income levels can affect family functioning. The psychosocial burden felt by families who have autistic children is also related to the family's inability to fulfill economic functions because the family is filled with anxiety and worry about the future, cost of living and treatment of their child (Dian Afriyanto, 2018) (Notoatmodjo, 2010).

"Inadequate development of social interaction skills may also arise from a dearth of incentives and stimulation provided by the family during the child's time at home. Children lack specialized support and individualized care, allowing them unlimited autonomy without parental supervision. Due to childhood disorders, autistic children are never involved in communication and social interactions with their families. Parents play an important role in facilitating children's social relationships. The family environment serves as a beneficial catalyst for children, as it is the closest and most time-intensive setting compared to the school environment, where they interact with peers and teachers. The level of stimulation offered by the family or parents has a significant role in shaping children's social interaction abilities" (Ratnadewi, 2010).

Conclusion

There is a relationship between parental age and the social interaction abilities of autistic children in the Sragen Regional Special School (p -value = 0.04) with a weak relationship (phi

coefficient = 0.349). There is a relationship between recent education and the social interaction abilities of autistic children in the Sragen Regional Special School (p-value = 0.015) with a weak relationship (phi coefficient = 0.282). There is a relationship between work and the ability to social interaction of autistic children in special schools in the Sragen area (p-value = 0.007) with a weak relationship (phi coefficient = - 0.268). There is a relationship between income and the social interaction abilities of autistic children in the Sragen Regional Special School (p-value = 0.011) with a weak relationship (phi coefficient = 0.336).

References

- Adriana, D. (2013). *Tumbuh Kembang & Terapi Bermain Pada Anak*. 2013. Jakarta: Salemba Raya
- Andriani, P. P. (2018). *Pola Asuh Orang Tua Pada Anak Jalanan*. Universitas Lampung, 32-38.
- Atmadiyanti, A. L., Sriati, A., & Nurhidayah, I. (2018). Hubungan Tingkat Kecemasan Orang Tua dengan Pola Asuh pada Anak Spektrum Autisme di SLB Kota Bandung. *Jurnal Kesehatan*, 9(1):1-10.
- Burhan Bungin. (2006). *Metodologi Penelitian Kuantitatif*. Edisi pertama. Jakarta: Kencana
- Cooper, K., & Stewart, K. (2013). Does Money Affect Children's Outcomes?: A Systematic Review. October 2013
- Dian afriyanto, s. a. (2018). perbedaan kemampuan bersosialisasi dan kematangan emosional anak paud dan non paud. *Jurnal Berita Ilmu Keperawatan*, 1-9.
- Dewi, EUD & Sari, MR. (2013). Gambaran Pola Asuh Orang Tua Yang Memiliki Anak Autis di SLB Negeri Gedangan. Akper William Booth Surabaya.
- Gina Green. (2008). *Autism and ABA*. Jakarta: Gramedia.
- Handojo, Y. (2003). *Autisma*. Jakarta: PT Buana Ilmu Populer Kelompok Gramedia.
- Handojo, Y. (2009). *Autisma pada anak*. Jakarta: PT. Bhuana Ilmu Populer Kelompok Gramedia.
- Hartono D, (n.d). Pusponegoro, Pandangan Umum mengenai Klasifikasi Spektrum Gangguan Autistik dan kelainan Susunn saraf Pusat (makalah) (Jakarta: Konferensi Nasional Autisme-1,2003)
- Hasdianah. (2013). *Autis pada anak*. Yogyakarta: Nuha Medika.
- Hasanah, U. (2016). Pola Asuh Orangtua Dalam Membentuk Karakter Anak. *Elementary*, 2(2):3-11
- Heinrich, C. J. (2014). Parents'(Employment(and(Children's(Wellbeing(. 24(1)
- Hurlock, (2003). *Psikologi Perkembangan: Suatu Pendekatan Sepanjang Rentang Kehidupan (5th ed.)*. Jakarta: Erlangga
- Ilmi, B; Wahyuni, S; Mato, R. (2012). Hubungan Pola Asuh Orang Tua Terhadap Perkembangan Sosial Anak Retardasi Mental Di SLB (C) YPPLB Cendrawasih Makassar, e-library nani Hasanudin. STIKES Nani Hasanudin Makasar
- Lestari, L. (2017). *Tumbuh Kembang dan Perawatan Dini untuk Anak dengan Gangguan Spektrum Autis*. Yogyakarta: Fitramaya
- Maharani, A. P., & Panjaitan, R. U. (2019). Resiliensi dan Hubungannya dengan Tingkat Stres Orang Tua yang Memiliki Anak Penyandang Autism Spectrum Disorder. *Jurnal Ilmu Keperawatan Jiwa* , 2(1):47-54

- Melly, Budiman. Gangguan Metabolisme pada Anak Autistik di Indonesia, (makalah) (Jakarta Konferensi Nasional Autisme-I, 2023)
- Morris, A. S., Robinson, L. R., Hays-Grudo, J., Claussen, A. H., Hartwig, S. A., & Treat, A. E. (2017). Targeting parenting in early childhood: A public health approach to improve outcomes for children living in poverty. *Child Development, 88*(2), 388–397. <https://doi.org/10.1111/cdev.12743>
- Mulyadi, Kresno., Sutadyi, Rudy dan Anwar, Liza .(2014). Autism Parent Support Group Meeting (makalah disampaikan diseminari autis Tangerang, 04 oktober 2014)
- Noble, K. G., Houston, S. M., Brito, N.H., Bartsch, H., Kan, E., Kuperman, J. M., Akshoomoff, N., Amaral, D. G., Bloss, C. S., Libiger, O., Schork, N. J., Murray, S. S., Casey, B. J., Chang, L., Ernst, T. M., Frazier, J. A., Gruen, J. R., Kennedy, D. N., Van Zijl, P., ... Sowell, E. R. (2015). Family income, parental education and brain structure in children and adolescents. *Nature Neuroscience, 18*(5),
- Notoatmojo, S., (2002). *Metode Penelitian Kesehatan*. Jakarta: PT. Rineka Cipta.
- Notoatmodjo, S. (2015). *Metodelogi penelitian kesehatan*. Jakarta: Renika Cipta.
- Priyatna, A. (2010). *Amazing Autism!: Memahami, Mengasuh, dan Mendidik Anak Autis*. Jakarta: Elex Media Komputindo
- Prickett, K. C., & Augustine, J. M. (2016). *Maternal Education and Investments in Children's Health*. HHS Public Access. <https://doi.org/10.1111/jomf.12253> .Maternal
- Rahmawati, S. (2012). Metode aba (applied behaviour analysis): kemampuan bersosialisasi terhadap kemampuan interaksi sosial anak autis. *Jurnal Keperawatan Soedirman (The Soedirman Journal of Nursing), 7*(1), 1-9.
- Sangka, C. E. P., Umijati, S., & Rochmah, N. (2021). Correlation Between Breastfeeding and Child Development Aged 3-24 Months in Keputih Public Health Center, Surabaya, Indonesia. *Jurnal Widya Medika*.
- Setyaningsih, W. (2015). Hubungan Pola Asuh Orang Perkembangan Autisme di SLB Surakarta. *Jurnal Kesehatan, 6*(2): 123-129
- Sitta R Muslimah. (2009). *Terapi ABA Anak Autistik*. Jakarta : Gramedia
- Suharni, Eka, N. L., & Maemunah, N. (2016). Hubungan Pola Asuh Orang Tua terhadap Interaksi Sosial pada Anak Autis di Yayasan Insan Mandiri JL. Pisang Kipas No. 34 A Kelurahan Jatimulyo Malang. *Nursing News, 1*(1): 137- 143.
- Sutadi, R. (2011). Maret 31. Intervensi dini autisme: Applied Behavior Analysis (ABA) dan Biomedical Intervention. Dipetik Oktober 17, 2016, dari Back To ABA: <http://www.backtoaba.com/index.php>
- Sutadi, Rudy. (2014). *Melatih Bicara Penyandang Autis Menggunakan ABA*. (Modul ABA) Jakarta.
- Wong, C., Odom, S. L., Hume, K., Cox, A. W., Fettig, A., Kucharczyk, S., Brock, M. E., Plavnick, J. B., Fleury, V. P., & Schultz, T. R. (2014). Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder. <http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/2014-EBP-Report.pdf>
- Yusuf, E. A. (2003). *Autisme Masa Kanak*. Sumatra Utara: USU Digital Library.
- Yuwono, J. 2009. *Memahami anak autistik (kajian teori dan empirik)*. Bandung: Alfabeta