ORIGINAL RESEARCH ARTICLE

Psychological Stress in Parents of Children with Autism Spectrum Disorder

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ABSTRACT

Purpose: This study investigated the relationship between parents' educational level, child's birth order within the family, and family size with psychological stress in parents of children with Autism Spectrum Disorder (ASD).

Methods: A cross-sectional study was conducted in Ho Chi Minh City, Vietnam. Parents of children with ASD were recruited through convenience sampling at Hospital (n = 230). The Perceived Stress Scale (PSS) assessed psychological stress. Independent-sample t-tests and one-way ANOVA were used to analyze the data.

Results: The average score for the PSS among parents with children diagnosed with ASD was 19.83±6.13. Parents with higher educational attainment reported lower psychological stress compared to those with lower degrees. Parents of firstborn children diagnosed with ASD experienced greater stress than parents of children diagnosed later. Parents with one child with ASD reported higher stress compared to parents with two or three children. No significant difference in stress levels was observed between mothers and fathers.

Conclusion: This study highlights the influence of educational level, child's birth order, and family size on parental stress in families with ASD children. These findings inform the development of targeted support strategies to create a more supportive environment for families coping with ASD.

Keywords: PSS 10, parents, autism spectrum disorder, stress, sociodemographic

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INTRODUCTION

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental condition characterized by persistent challenges in social interaction, communication (both verbal and nonverbal), and the presence of restricted or repetitive behaviors.[1] The severity of symptoms can vary widely among individuals, and treatment plans are tailored accordingly. These plans may include behavioral therapy, speech and language therapy, occupational therapy, and medication to manage co-occurring symptoms.[2,3] Recognizing the significant challenges faced by families, comprehensive care for children with ASD also emphasizes family support.[4] This support can take various forms, including access to educational resources, therapy and counselling services, and connection with community support groups.

The parental experience of caring for a child with ASD presents a unique set of emotional and psychological challenges, constituting what researchers' term "psychological stress." These challenges encompass a multifaceted array of demands, including managing the child's behavioral repertoire, navigating the complexities of social and educational service systems, and confronting societal stigmatization surrounding autism. Existing research consistently demonstrates that parents of children with ASD experience significantly elevated stress levels compared to parents of neurotypical children or those with other disabilities.[5,6] This heightened stress can be attributed to a multitude of factors, including anxieties regarding the child's future prospects, the impact on family dynamics, a dearth of social support networks, and the considerable financial burden associated with providing specialized care. Furthermore, parents often grapple with concerns about the child's level of dependency, potential social isolation, and the broader ramifications of the condition on the entire family unit.[5] Given the profound impact this stress can have on parental health and well-being, addressing these challenges through targeted interventions is of paramount importance. Such interventions may encompass therapeutic modalities and support groups, which can equip parents with effective coping mechanisms and foster a sense of community. Notably, mindfulness-based programs have emerged as a promising avenue for mitigating parental stress by promoting psychological well-being and fostering resilience.[6] Additionally, ensuring that the child with ASD receives comprehensive care and treatment can offer further alleviation of parental stress. By facilitating improvements in the child's symptoms and behaviors, the caregiving burden can be demonstrably reduced.[5]

Socioeconomic factors, such as education, income, and family structure, can significantly influence the level of psychological stress experienced by parents of children with autism. Research suggests that variations in these characteristics can affect access to resources, social support networks, and coping mechanisms available to families, ultimately impacting stress levels.[7-9] For instance, higher education and income levels may provide better access to autism-related services and support groups, potentially mitigating stress.[7,8] Conversely, families with single parents or a larger number of children might experience heightened stress due to increased caregiving demands, divided resources, and potential strain on spousal relationships.[10]

While research has demonstrably established the significant psychological stress experienced by parents of children with ASD, a critical gap exists in our understanding of this phenomenon within the Vietnamese population. This study aims to address this gap by focusing on two key research questions: (1) What is the current psychological stress experienced by parents of children with ASD in Vietnam? and (2) Do sociodemographic factors influence the levels of psychological stress experienced by parents of children with ASD in Vietnam? This research holds significant value as it will provide the first comprehensive investigation of psychological stress within this specific population. By delving into the unique experiences of Vietnamese parents, the study can illuminate potential cultural and societal factors that contribute to parental stress in this context. The findings can ultimately inform the development of culturally sensitive interventions and support systems tailored to the needs of Vietnamese families with children on the ASD spectrum.

METHODOLOGY

Data Collection: This study employed convenience sampling and snowball sampling methods. Potential participants were approached at several hospitals in Ho Chi Minh City, Vietnam. These are parents of children diagnosed with Autism Spectrum Disorder (ASD) who regularly take their children for medical checkups and

treatments at the hospital. After consenting to participate in this study, these parents were encouraged to spread the word about this study to other parents of children with ASD and invite them to participate as well. After receiving a thorough explanation of the study, 230 parents of children with ASD provided written informed consent to participate. Participants were asked to complete a questionnaire consisting of sociodemographic information and 10 items from the Perceived Stress Scale (PSS-10).

Ethical aspects: This research was conducted following ethical principles outlined in the Declaration of Helsinki and the American Psychological Association's code of ethics, ensuring participant well-being, rights, and privacy.[11,12]

Measurement of variables: The 10-item Perceived Stress Scale (PSS-10) by Cohen, Kamarck and Mermelstein[13] is widely used for its brevity and strong psychometric properties and was employed to measure parents' psychological stress. It assesses how controllable, predictable, and manageable respondents perceive their lives to be, along with their stress levels over the past month. Responses on a Likert scale from 0 (never) to 4 (very often) capture perceived stress, with higher scores indicating greater stress. Scores are reversed for positively worded items (Items 4, 5, 7, 8). The PSS demonstrates good reliability, with Cronbach's α ranging from 0.67 to 0.91 and test-retest reliabilities exceeding 0.70.[14] The Vietnamese adaptation by Dao-Tran, Anderson and Seib[15] also shows strong reliability with a Cronbach's α of 0.80.[16] In this study, the PSS-10 demonstrated good internal consistency with Cronbach's α of 0.904 in overall scale and Cronbach's α of 0.859 and 0.795 for Perceived Helplessness and Lack of Self-Efficacy, respectively.[17]

Data analysis: Following data collection, the dataset was cleaned and coded using Microsoft Excel to eliminate errors. The cleaned data was then imported into IBM SPSS version 26 for statistical analysis. Cronbach's α assessed the scales' reliability. Descriptive statistics summarized the data, while inferential statistics were employed through independent-sample t-tests and one-way ANOVA with post-hoc Tukey's HSD for pairwise comparisons. The normality of the PSS scores was assessed using a z-test based on skewness and kurtosis. This z-test involves calculating a z-score by dividing the skewness or excess kurtosis value by its corresponding standard error.[18] For samples of moderate size (between 50 and 300 participants), absolute z-scores within the range of ± 3.29 indicate a normally distributed data set.[19] The analysis revealed that the absolute z-scores for both skewness ($Z_{Skewness}$ = 1.05) and kurtosis ($Z_{Kurtosis}$ = 1.78) fell within this acceptable range, suggesting that the PSS scores in this study were normally distributed.

RESULTS

The sample consisted of 230 parents (37 fathers, 193 mothers) aged 31 to 51 years old (M = 38.71, SD = 6.12). Educational attainment varied, with 13% holding a high school diploma, 19.1% a college degree, 57.8% a university degree, and 10% holding a postgraduate qualification. Over three-quarters (75.2%) were parents of the first child with ASD, while the remaining participants had the second (24.8%) diagnosed with ASD. Family size also varied, with 58.7% having one child, 33.9% having two children, and 7.4% having three children. Detailed participant characteristics are presented in **Table 1**.

The average score of the PSS-10 in parents of children with Autism Spectrum Disorder (ASD) was M = 19.83 (SD = 6.13). The independent-sample t-test and one-way ANOVA were performed to evaluate the relationship between gender, academic level, birth order, number of children and psychological stress.

A one-way ANOVA revealed a significant difference ($F_{(3, 226)}$ = 10.812, p <0.001) between parents' educational level and their reported psychological stress. Post-hoc Tukey's HSD tests further indicated that parents with a high school diploma (M = 25.07, SD = 5.93) experienced significantly greater stress compared to parents holding a college degree (M = 20.59, SD = 5.92), university degree (M = 18.62, SD = 5.86), or postgraduate qualification (M = 18.57, SD = 4.53). Importantly, no significant differences in stress levels were found between parents with college and university degrees (p >0.05) or between university degrees and postgraduate qualifications (p >0.05).

Parents of children with ASD reported higher psychological stress if it was their first child diagnosed with the condition. An independent-sample t-test revealed a significant difference in perceived stress levels ($t_{(228)}$ = 3.785, p <0.001). Parents of firstborn children with ASD (M = 20.69, SD = 6.25) reported greater stress compared to parents of second or later children diagnosed with ASD (M = 17.25, SD = 4.92).

Table 1: Participants characteristics

Characteristics	Participants (%)
Gender	
Male (Father)	37 (16.1)
Female (Mother)	193 (83.9)
Academic level	
High school	30 (13)
College	44 (19.1)
University	133 (57.8)
Post-graduate	23 (10)
Birth order*	
First child	173 (75.2)
Second child	57 (24.8)
Number of children	
One child(ren)	135 (58.7)
Two children	78 (33.9)
Three children	17 (7.4)

Notes: *Birth order of children with ASD; %: percentage

Table 2: Independent-sample t-test and ANOVA with post-hoc Tukey's HSD results of PSS-10

	PSS-10 (Mean ± SD)	P value
Gender		
Male (Father)	19.41 ± 9.18	$p > 0.05$
Female (Mother)	19.92 ± 5.37	
Academic level		
High school[1]	25.07 ± 5.93	$p_{1-2} < 0.01$
College[2]	20.59 ± 5.92	$p_{1-3,4} < 0.001$
University[3]	18.62 ± 5.86	
Post-graduate[4]	18.57 ± 4.53	
Birth order*		
First child	20.69 ± 6.25	$p < 0.001$
Second child	17.25 ± 4.92	
Number of children		
One child(ren)[1]	21.55 ± 6.36	$p_{1-2} < 0.001$
Two children[2]	17.4 ± 5.08	$p_{1-3} < 0.05$
Three children[3]	17.41 ± 3.78	
Total	19.83 ± 6.13	

Notes: *Birth order of children with ASD; PSS-10: 10-item Perceived Stress Scale; SD: Standard Deviation

Parents reported varying levels of psychological stress based on the number of children in family. A one-way ANOVA indicated a significant difference ($F_{(2, 227)} = 14.269$, $p < 0.001$). Post-hoc Tukey's HSD tests revealed that parents of one child (M = 21.55, SD = 6.36) experienced greater stress compared to parents with two children (M = 17.40, SD = 5.08; $p < 0.001$) or three children (M = 17.41; SD = 3.78; $p < 0.05$). Importantly, no significant difference in stress levels was found between parents having two children and those having three children ($p > 0.05$).

Interestingly, no significant difference in psychological stress was observed between mothers and fathers of children with ASD ($t_{(40.849)} = -0.328$, $p > 0.05$). Detailed means and standard deviations are presented in **Table 2**.

The independent-sample t-test and one-way ANOVA were performed to evaluate the relationship between gender, academic level, birth order, number of children and two subscales: Perceived Helplessness and Lack of Self-Efficacy.

The ANOVA revealed significant main effects for academic level on both the Perceived Helplessness subscale ($F_{(3, 226)} = 8.782$, $p < 0.001$) and the Lack of Self-Efficacy subscale ($F_{(3, 226)} = 12.229$, $p < 0.001$). Post hoc Tukey HSD tests indicated that parents with a high school degree reported significantly higher levels of Perceived Helplessness (M = 14.30, SD = 3.56) compared to parents with university (M = 10.83, SD = 3.60, $p < 0.001$) and postgraduate degrees (M = 11.09, SD = 2.95, $p < 0.01$).

Table 3: Independent t-test and ANOVA with post-hoc Tukey's HSD results of two subscales

	Perceived Helplessness		Lack of Self-Efficacy	
	Mean ± SD	P value	Mean ± SD	P value
Gender				
Male (Father)	11.16 ± 5.41	$p > 0.05$	8.24 ± 3.9	$p > 0.05$
Female (Mother)	11.73 ± 3.38		8.19 ± 2.42	
Academic level				
High school[1]	14.3 ± 3.56	$p_{1-3} < 0.001$	10.77 ± 2.5	$p_{1-2,3,4} < 0.001$
College[2]	12.52 ± 3.87	$p_{1-4} < 0.01$	8.07 ± 2.56	
University[3]	10.83 ± 3.6	$p_{2-3} < 0.05$	7.79 ± 2.61	
Post-graduate[4]	11.09 ± 2.95		7.48 ± 1.75	
Birth order*				
First child	12.05 ± 3.89	$p < 0.01$	8.64 ± 2.64	$p < 0.001$
Second child	10.39 ± 3.07		6.86 ± 2.43	
Number of children				
One child(ren)[1]	12.44 ± 3.98	$p_{1-2} = 0.001$	9.1 ± 2.56	$p_{1-2} < 0.001$
Two children[2]	10.47 ± 3.25		6.92 ± 2.48	$p_{1-3} < 0.01$
Three children[3]	10.53 ± 2.53		6.88 ± 1.69	
Total	11.63 ± 3.77		8.2 ± 2.7	

Notes: *Birth order of children with ASD; SD: Standard Deviation

Parents with a college degree (M = 12.52, SD = 3.87) also reported higher levels of Perceived Helplessness compared to parents with a university degree ($p < 0.05$). However, no significant differences were found between parents with a high school and college degree or between university and postgraduate degrees (all $p > 0.05$). Post hoc Tukey HSD also revealed significantly higher mean Lack of Self-Efficacy scores for parents with a high school degree (M = 10.77, SD = 2.50) compared to all other groups (college: M = 8.07, SD = 2.56, university: M = 7.79, SD = 2.61, postgraduate: M = 7.48, SD = 1.75; all $p < 0.001$). No significant differences were found among parents with college, university, or postgraduate degrees ($p > 0.05$).

Independent samples t-tests revealed significant differences in birth order for both the Perceived Helplessness ($t_{(228)} = 2.931$, $p < 0.01$) and Lack of Self-Efficacy subscales ($t_{(228)} = 4.503$, $p < 0.001$). Parents of firstborn children with ASD reported higher levels of Perceived Helplessness (M = 12.05, SD = 3.89) and Lack of Self-Efficacy (M = 8.64, SD = 2.64) compared to parents of secondborn children with ASD (Perceived Helplessness: M = 10.39, SD = 3.07; Lack of Self-Efficacy: M = 6.86, SD = 2.43).

The ANOVA revealed significant main effects for number of children on both the Perceived Helplessness ($F_{(2, 227)} = 7.998$, $p < 0.001$) and Lack of Self-Efficacy subscales ($F_{(2, 227)} = 21.644$, $p < 0.001$). Post hoc Tukey HSD tests indicated that parents with one child reported significantly higher levels of Perceived Helplessness (M = 12.44, SD = 3.98) compared to parents with two children (M = 10.47, SD = 3.25, $p = 0.001$). No significant differences were found between parents with one child and three children, or between parents with two children and three children (all $p > 0.05$).

Similarly, parents with one child reported significantly higher Lack of Self-Efficacy (M = 9.10, SD = 2.56) compared to parents with two (M = 6.92, SD = 2.48, $p < 0.001$) and three children (M = 6.88, SD = 1.69, $p < 0.01$). No significant differences were found between parents with two and three children ($p > 0.05$).

However, no significant differences were found in Perceived Helplessness ($t_{(41.547)} = -0.611$, $p > 0.05$) or Lack of Self-Efficacy ($t_{(41.454)} = -0.078$, $p > 0.05$) subscales between fathers and mothers of children with ASD. Refer to **Table 3** for detailed comparison results.

Discussion

This study aimed to investigate the impact of socio-demographic factors on the psychological stress experienced by parents of children with Autism Spectrum Disorder (ASD). The findings revealed that parents who had completed high school reported higher levels of stress compared to those who had earned college, university, or postgraduate degrees. Additionally, parents of firstborn children diagnosed with ASD reported greater stress than those whose children were diagnosed later. Moreover, parents with one child reported higher levels of stress compared to those with two or three children. Interestingly, there was no significant difference in psychological stress between mothers and fathers.

The acknowledged stress experienced by parents of children with ASD is well-established in many studies. These studies indicate that the stress, anxiety, and depression experienced by parents are greatly affected by various factors, such as the caregivers' perception of unmet needs, the amount of social support they receive, and the seriousness of their child's symptoms.[9,20,21] Nevertheless, literature lacks direct exploration of the relationship between the educational attainment of parents, ranging from a high school certificate to college, university, or postgraduate degrees, and their stress levels. A study indicated that there is a substantial correlation between parents' lower levels of education, poorer family income, and higher levels of parental stress, prior to any interventions. In addition, individuals who were employed and had a higher level of perceived social support from friends exhibited reduced symptoms of stress, anxiety, and depression, as reported by Sharma, Govindan and Kommu.[21] This discovery suggests that parents who have attained higher levels of education may have greater opportunities to find employment and establish social connections that might offer assistance, therefore reducing their levels of stress. The degree of education can impact stress levels through many processes. Parents who have achieved higher levels of education are likely to have greater access to knowledge, resources, and services pertaining to autism. Parents may possess a higher level of proficiency in navigating the healthcare and educational systems in order to obtain support and interventions for their child.[9] Moreover, there is typically a positive association between greater education and higher socio-economic status, which can help reduce

some of the financial and resource-related burdens that come with raising a child with ASD.[20] Prior research indicates that parents of children with autism experience consistently high levels of stress. However, those with lower levels of education may face additional difficulties due to a lack of resources, support, and potential job opportunities that could help reduce their stress. The difference in the academic level of parents of children with ASD in relation to perceived helplessness and lack of self-efficacy can be influenced by several factors. Parents with a strong sense of self-efficacy believe they can manage their children's challenges and engage positively in their development.[22] Conversely, high levels of stress, depression, and anxiety can erode this sense of efficacy. Notably, academic background and access to resources may exacerbate or mitigate these factors.[22] Additionally, parental beliefs about who controls their child's behavior (child vs. parent) can influence feelings of helplessness or efficacy. Parents who understand and accept the challenges associated with ASD may manage expectations and feel less helpless, a perspective potentially influenced by academic level and access to educational resources.[23]

Parents with firstborn children with ASD may encounter elevated psychological stress in comparison to parents with second or subsequent-born children with ASD. This disparity can be attributed to various factors, while there is a scarcity of particular studies explicitly comparing stress levels between these two groups. Nevertheless, valuable knowledge can be obtained from the extensive studies on the stress experienced by parents in families with children diagnosed with ASD. Many parents find that their firstborn child with ASD presents them with the unique challenge of navigating the complexities of parenting, especially since they have no prior experience dealing with ASD. This can severely impair their psychological well-being as they adjust to the unanticipated obligations of caring for a kid with special needs.[24, 25] The erratic and intense nature of the child's symptoms, particularly in terms of social difficulties, might intensify the stress experienced by parents, with a particular impact on women.[25] Moreover, the stress associated with parenting a child with ASD is well-documented, with parents reporting increased levels of parenting-related stress compared to parents of neurotypical children.[26,27] This stress is influenced by various aspects, including the child's behavior difficulties and the parent's coping techniques, acceptance, and empowerment.[28,29] These problems can be particularly noticeable for parents who have no previous experience in parenting or lack established coping skills. Moreover, parents of children with ASD experience notable worries regarding reduced confidence in their parenting self-efficacy and psychological distress. Research indicates that a higher level of confidence in one's abilities and a positive relationship between co-parents can be used to predict a higher level of parental self-efficacy, which, in turn, can be used to predict a lower level of psychological distress.[30] Parents of firstborn children with ASD may not have completely developed support systems and self-beliefs, which can lead to higher levels of stress. The combination of navigating ASD problems without prior parenting experience, dealing with the child's behavioral and social impairments, poorer parenting self-efficacy, and the lack of established coping methods may contribute to the higher stress reported by parents of firstborn children with ASD. Parents of firstborn children with ASD may experience greater perceived helplessness and lower self-efficacy compared to parents of second-born children with ASD. This difference can be attributed to several factors related to parental experience and expectations. For first-time parents, the novelty and unexpected challenges of raising a child with ASD can be overwhelming, leading to feelings of helplessness and a lack of preparedness.[31] Conversely, parents of second-born children with ASD may benefit from prior parenting experience, including knowledge gained from their first child's diagnosis. This accumulated knowledge and emotional resilience can equip them to manage similar challenges with greater confidence and less distress.[23] Over time, parents often develop stronger support networks and acquire knowledge of available resources, further mitigating helplessness and enhancing self-efficacy.[32] This is particularly true for parents who have already navigated the system with a first child, potentially easing the burden of managing subsequent children's needs.

Parents of children diagnosed with ASD face significant levels of stress, which can be attributed to multiple variables, including the size of the family. Families with a single kid diagnosed with ASD frequently experience higher levels of reported stress compared to families with many children, maybe attributable to various factors. Firstly, having several children, even those without ASD, might give parents a wider viewpoint on parenting and child devel-

opment, thereby lessening the level of stress experienced from the difficulties linked to ASD. Over time, parents may acquire coping skills that can be more efficiently utilized with succeeding children, regardless of whether they have ASD.[24] Moreover, the mutual experiences and obligations among siblings can help to mitigate the caring load on parents, so indirectly diminishing their levels of stress. Siblings frequently have a substantial impact on the social and emotional growth of one another, which can help alleviate certain difficulties experienced by children with ASD and, thus, decrease parental stress.[33] Moreover, the cultural context has the potential to impact the levels of stress that parents encounter. Within specific cultural contexts, where there is a strong emphasis on collective family functioning and support systems, the challenges of raising a child with ASD may be reduced through the sharing of family responsibilities and the support provided by society. This indicates that the number of children in the family and the wider social environment have a significant impact on parental stress levels.[34] Parents of only one child with ASD may experience greater perceived helplessness and lower self-efficacy compared to parents with multiple children. This can be attributed to several factors. The concentrated burden and stress of caring for a single child with ASD, without the opportunity to balance family dynamics, can lead to feelings of isolation and a lack of shared caregiving responsibilities.[35] Parents with multiple children may benefit from comparative perspectives on child development, potentially mitigating helplessness by observing typical development alongside ASD.[31] Siblings can also provide indirect support by offering social interaction opportunities for the child with ASD and reducing parental burden, ultimately boosting self-efficacy through observed positive interactions.[36]

The lack of notable disparities in psychological stress levels between mothers and fathers of children with autism can be ascribed to various multifaceted variables. Both mothers and fathers of children with autism have distinct problems and stressors associated with their child's condition. These concerns may encompass aspects such as the child's future prospects, effectively navigating educational and healthcare systems, and effectively addressing the child's behavior and needs.[24,33] The collective encounter of raising a child with ASD may lead to comparable degrees of psychological strain for both parents, since they both assume caregiving responsibilities, albeit potentially in varying capacities. Furthermore, recent research indicates a trend towards greater equality in parenting responsibilities, with males taking on a growing part in the caregiving duties often associated with mothers. The increased participation of fathers in caregiving and household duties may lead to a reduction in the disparity of stress levels between mothers and fathers.[33] The dyadic analysis approach, employed in certain research, also emphasizes the interdependence of parents' experiences within the family system. The presence of stress in one parent can have an impact on the other parent, and vice versa. This suggests that the stress levels experienced by parents of children with ASD may be more influenced by the overall functioning of the family unit rather than individual experiences.[33] Despite significant parenting stress and challenges associated with raising a child with ASD, mothers and fathers often report similar levels of perceived helplessness and self-efficacy.[37] Shared caregiving responsibilities and navigating similar obstacles can lead to comparable experiences for both parents.[37] Additionally, supportive coparenting and access to shared resources can further mitigate feelings of helplessness and enhance self-efficacy equally for mothers and fathers.[37,38] Furthermore, both genders experience similar emotional and psychological impacts associated with parenting a child with ASD, potentially leading to comparable stress levels and coping mechanisms that influence self-efficacy and helplessness.[39]

IMPLICATIONS

The study's findings highlight the crucial impact of parental education in reducing stress levels among parents of children with ASD. Parents who have attained greater levels of education tend to experience lower levels of stress. This is likely because they have better job prospects, access to social connections, and improved skills in navigating healthcare and educational systems for their children. This indicates a pressing requirement for the creation of educational and support initiatives targeted at parents with limited educational attainment. These initiatives should prioritize enhancing parents' understanding of ASD, improving their ability to access assistance, and expanding their social support networks. The heightened stress seen by parents of firstborn children diagnosed with ASD in comparison to parents of later-born children with ASD underscores the difficulties con-

fronted by new parents. Consequently, there is a pressing want for early intervention programs that offer these parents extensive knowledge regarding ASD, efficient methods for dealing with it, and emotional assistance right from the time of diagnosis. Support groups and counselling services can be very advantageous in assisting new parents in developing resilience and establishing a network of support. The finding that parents who have only one child have elevated levels of stress compared to those with numerous children highlights the possible protective effects of having a larger family size. This discovery implies the significance of community and extended family support structures in distributing the responsibility of caregiving and offering emotional assistance. Programs that promote community support, encourage sibling participation, and foster social relationships for children with ASD have the potential to significantly decrease parental stress and improve family dynamics. The absence of notable disparities in stress levels between mothers and fathers suggests that both parents bear an equal psychological load in raising a kid with ASD. This discovery emphasizes the necessity for comprehensive support systems that accommodate both moms and fathers. Parenting courses, respite care, and family counseling should be tailored to cater to the concerns and requirements of both parents, with the aim of fostering a more equitable allocation of caregiving duties and diminishing overall family stress.

Limitations

Although the research has provided valuable insights, it is important to acknowledge and address its shortcomings. Due to the cross-sectional design of the study, it is difficult to determine causality or observe changes in stress levels among parents of children with ASD over time. Longitudinal studies are essential for investigating the dynamic characteristics of stress and its development as the child matures, as well as the impact of changes in socio-demographic factors on parental stress over time. The utilization of self-reported data for evaluating psychological stress and socio-demographic factors may induce biases, such as social desirability bias or recall bias. Future study could be improved by integrating objective metrics or verifying self-reported data with clinical assessments to strengthen the validity of the findings. Although this study primarily examined educational achievement, birth order, and family size, there are other additional socio-demographic characteristics, such as marital status, family income, and work status, that may impact parental stress. In order to have a more comprehensive understanding of the factors that contribute to stress among parents of children with ASD, future study should take into account these and other possible variables.

Conclusion

The current study aimed to investigate the influence of socio-demographic characteristics on the psychological stress levels experienced by parents who are raising children diagnosed with Autism Spectrum Disorder (ASD). After careful examination, it became clear that the level of education, the order of birth of the kid diagnosed with ASD, and the size of the family have significant effects on the stress levels experienced by these parents. The lack of substantial disparities in stress levels between mothers and fathers highlights the mutual responsibility of caregiving, which challenges conventional notions of parental roles in the upbringing of children with special needs. This study adds to the increasing amount of research on ASD and the stress experienced by parents. It provides valuable information on the social and demographic factors that influence stress levels in parents of children with ASD. By comprehending and tackling these factors, we may progress towards establishing a more encouraging and empowered setting for families dealing with the difficulties of ASD, consequently augmenting their welfare and ability to recover.

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