

Support Systems for Parents of People With Autism Spectrum Disorder and Their Relationship to Their Academic Qualifications

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Abstract

This study aimed to assess the level of support systems available to parents of people with autism spectrum disorder and their relationship to academic qualifications. The participants were 120 parents from Amman, Jordan, distributed across three educational levels: high school or lower, bachelor's degree, and postgraduate studies. A support systems scale for parents of people with autism spectrum disorder (SSSPASD) was developed, and its validity and reliability were verified. To answer the study questions, the descriptive survey method was employed, and arithmetic means, standard deviations, one-way ANOVA, and Scheffé's post-hoc test were used to analyze the data and obtain the results. The findings indicated that the availability, accessibility, and utilization of support systems were moderate, with institutional professional support being relatively higher than the other areas. The results also showed that people with higher educational qualifications were more aware of and better able to access and utilize support systems compared to those with a high school diploma or lower. The study recommends increasing awareness among people with lower educational levels about support systems, how to access them, and how to benefit from them, as well as enhancing community awareness and addressing the needs of parents of people with autism spectrum disorder.

Key words: Support systems; Parents of people with autism spectrum disorder; Academic qualifications; Jordan

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1. INTRODUCTION

Autism spectrum disorder (ASD) is currently viewed as a neurodevelopmental disorder that adversely affects communication and social interaction and is characterized by specific, stereotyped, and repetitive behavioral interests and activities (American Psychiatric Association [APA], 2022). In recent years, a rapid increase in its prevalence among children has been observed. According to the U.S. Centers for Disease Control and Prevention, the most recent estimate of the prevalence rate is one in every 31 children, or 3.2% (Centers for Disease Control and Prevention [CDC], 2025). Due to the nature of ASD characteristics, the disorder negatively affects parents. Having a child with autism means facing numerous difficulties and challenges and striving to mitigate their impact. Parents of children with autism play multiple roles in their children's lives—they are the first to recognize developmental issues, continue to care for their children until an accurate diagnosis is obtained, and seek or develop appropriate services for them (El-Zraigat, 2016). To provide appropriate educational services for a child with autism, parents need adequate information and practical skills related to ASD and its treatment. They must also learn specific strategies for interacting with their child, fostering desirable adaptive behaviors, and understanding the characteristics of the disorder and its negative effects on learning and behavior. Moreover, parents must be familiar with the laws that safeguard their child's right to appropriate and available services. In addition, they need to manage the psychological and

emotional stress associated with raising a child with autism. Therefore, specialized and appropriate parental support is essential to help them fulfill their roles and achieve their goals. Some parents cope effectively with these challenges, while others find the process of educating a child with autism to be a major source of psychological stress (National Research Council, 2001).

Having a child with ASD places an additional burden on the family. The consequences include financial and social costs, isolation, deprivation of social life, lifestyle and activity changes, and the emotional toll experienced by the family (Clements, 2005). Siblings of autistic children also face various emotional difficulties, including feelings of anger, disappointment, sadness, confusion, and anxiety (El-Zraigat, 2016).

Parents of children with ASD often experience isolation, pressure, and heightened stress during and after their child's diagnosis. Furthermore, the rapidly rising prevalence of ASD necessitates an expansion in both the quantity and quality of services and support available to meet the needs of parents with diagnosed children, particularly in underserved communities (Lee et al., 2024).

Given the nature of ASD, affected children require supportive environments to facilitate their learning, as they often struggle to generalize acquired skills to other settings. This difficulty in skill generalization highlights the importance of the parental role in creating a supportive learning environment. Parents are a key element in their child's educational process and need to learn methods for teaching adaptive skills and managing undesirable behaviors (National Research Council, 2001).

Among the various forms of support provided to parents, social support plays a vital role. It aims to establish networks of people and groups connected to parents, whose primary function is to offer emotional and psychological assistance and share appropriate information and resources. Social support also seeks to reduce psychological stress, enhance family adaptation, and strengthen family functioning (El-Zraigat, 2020).

One form of social support is parent support groups, which provide parents with opportunities to share experiences and reduce isolation when coping with the challenges of raising a child with autism. Parent education programs also represent an important type of social support, promoting collaboration between parents and professionals to ensure optimal therapeutic and educational outcomes. Through social support, parents can develop helpful skills, access service resources, and expand their social networks. The nature of social support varies according to the family's needs and the diversity of its social systems (Albanese, Miguel, & Koegel, 1995; El-Zraigat, 2016).

Several studies have examined support systems for parents of people with ASD. Lee et al. (2024) emphasized

the importance of parent support groups and skill training for parents. Althoff et al. (2019) confirmed the effectiveness of parent-led interventions in enhancing verbal and nonverbal communication, social interaction, and reducing ASD symptoms. Similarly, Marsack and Hopp (2019) highlighted the need to address both current and future social and health support requirements for caregivers of people with autism.

Batool and Khurshid (2015) found that the severity of disability is a major factor contributing to parental stress when raising children with disabilities. Their study indicated that improving parental competence and confidence reduces stress and enhances their ability to handle challenging situations. Likewise, Mohammadi et al. (2019) reported that the competencies of parents of children with ASD were below the desired level, emphasizing the importance of studying parental competencies and the factors influencing them.

Carbone et al. (2024) found that parents of children with ASD experience high levels of psychological stress and reduced coping abilities due to the nature of the disorder. They underscored the importance of specialized treatment and family support. Mo et al. (2024) similarly found that psychological and educational interventions significantly reduced parental anxiety, depression, and parenting stress, reinforcing the need for supportive interventions for parents of children with autism.

Qiu et al. (2022) investigated the empathy levels of parents of children with ASD and found that they exhibited lower empathy scores. The study also revealed a negative correlation between cognitive empathy, social skills, and overall empathy and reaction levels among these parents.

Kuru and Piyal (2018) noted that professional understanding and support for parents of children with autism positively influence family outcomes, emphasizing the need to identify family needs and provide tailored programs to address them. Pejovic-Milovancevic et al. (2028) reported that more than 90% of parents emphasized the importance of additional support at home and school, and the need to strengthen relationships with service providers. The study identified communication, social interaction, and daily living challenges as the most pressing concerns, underscoring the need to raise awareness among healthcare providers about early signs of autism, improve service accessibility, and address educational barriers.

Marsack and Samuel (2017) demonstrated the importance of informal social support networks for parents of people with ASD, showing that such support partially mediates the relationship between caregiver burden and parental quality of life. Mandell and Salzer (2007) found associations between child age, gender, race, and parental education and income levels with participation in support groups. Their study revealed that parents of children

exhibiting self-injurious behavior, sleep difficulties, or severe language impairments were more likely to engage in support groups, emphasizing the importance of establishing such networks for less advantaged parents.

Boshoff et al. (2019) highlighted the significance of supporting parents of children with ASD and the role of positive interactions with professionals during diagnosis in enhancing parental awareness, information exchange, and support.

Milosevic et al. (2022) reported that support is not distributed equitably, showing disparities in support levels. They also found that autism-specific support—especially from other parents and volunteer organizations—is more beneficial than legal or nonspecialized support. Turgeon et al. (2021) indicated that parents reported e-training programs helped reduce stressful behaviors in their children and led to more effective use of behavioral interventions compared to waiting-list controls, confirming the importance of digital services in supporting parents of children with ASD. Similarly, Chong and Kua (2017) confirmed that parental support plays a crucial role in enhancing mothers' self-beliefs in their perceived competence.

Thus, the importance of studying the support systems available to parents of people with autism spectrum disorder in Jordan becomes evident, given their vital role in addressing the needs of this group and helping them achieve optimal levels of development and adaptation.

1.1 The Importance of the Study and Its Questions

The presence of a child with autism spectrum disorder negatively affects the life, role, and functions of the family, as the characteristics of the disorder lead to difficulties in communication and social interaction with the child, in addition to the special care and diverse needs required. Understanding the support systems available to parents helps determine the nature of the services provided and how they are delivered, as well as identify the specific needs of these parents. This information contributes to improving and developing these services. Thus, the quality and effectiveness of support systems influence the family's adjustment and psychological well-being.

On the other hand, achieving a high quality of life for parents of children with autism spectrum disorder positively impacts their ability to meet their children's needs at the best possible level, which contributes to the acquisition of the required developmental skills. Conversely, the failure to meet these needs becomes a source of stress and tension and leads to poor adjustment (El-Zraigat, 2016).

The importance of the current study lies in its aim to evaluate the support systems for parents of people with autism spectrum disorder in Jordan and their relationship to the parents' academic qualifications. Specifically, the study sought to answer the following questions:

a) What is the level of support systems for parents of people with autism spectrum disorder in Jordan?

b) Do the levels of support systems for parents of people with autism spectrum disorder in Jordan differ according to their academic qualifications?

2. RESEARCH METHODOLOGY

To answer the research questions and achieve its objectives, the descriptive-inquiry method was used. This method focuses on collecting and organizing data in numerical form and tables in a systematic and organized manner from a specific population or sample. By using this research design, we can describe the phenomenon under study according to its variables based on the responses and analyze them statistically (El-Zraigat & Alquraan, 2017). The descriptive-inquiry approach is particularly suitable for this study, as it enables researchers to obtain accurate and objective information about the participants, their perceptions, and their responses, and to analyze these data statistically in order to reach sound conclusions related to the study questions.

2.1 Participants

The number of participants was (120) parents. The following table shows the academic qualifications. Before data collection began, the study participants were met and informed of the purpose of the study, with assurances that their information would be used solely for scientific research purposes and that confidentiality would be guaranteed. Following this, they were instructed on how to respond to the study's questionnaire.

Table 1
Frequencies and percentages by academic qualification variable

Categories	Frequency	Percentage
High school diploma or lower	32	26.7
Bachelor's degree	57	47.5
Postgraduate studies	31	25.8
Total	120	100.0

2.2 Support Systems Scale for Parents of People with Autism Spectrum Disorder (SSSFASD)

The scale aims to identify the extent to which different support systems are available to parents of children with autism spectrum disorder. It was constructed with reference to relevant scientific literature, such as the studies by El-Zraigat (2016), Perfect Pair ABA (2025), HANDS Center for Autism (2024), Milosevic et al. (2022), Chong & Kua (2017), Turgeon et al. (2021), Althoff et al. (2019), Green et al. (2010), Gomes et al. (2015), Parish et al. (2012), Burke et al. (2023), Bessette Gorlin et al. (2016), Iacono et al. (2016), Desquenne Godfrey et al.

(2024), Rispoli et al. (2019), Pinto et al. (2016), Carbone et al. (2024), Sheikh et al. (2019), Lenart & Pasternak (2023), McGhee et al. (2018), Habayeb et al. (2023), Shogren et al. (2017), Attar et al. (2024), Enner et al. (2020), Honda & Shimizu (2002), Waizbard-Bartov et al. (2023), Fabbri-Destro et al. (2009), Tsai et al. (2018), Snijder et al. (2022), Wingfield et al. (2020), Gomes et al. (2015), Zeidán-Chuliá et al. (2013), and Noland & Gabriels (2004).

Each participant was asked to read every statement carefully, then place a checkmark (✓) under the option that best expressed their level of agreement with each statement according to the following rating scale: Strongly Agree, Moderately Agree, Weakly Agree, Strongly Disagree.

The meaning of the rating scale was explained to the participants as follows:

Strongly Agree: The system or service is widely and clearly available, and the family benefits from it effectively.

Moderately Agree: The system or service is adequately available, but its use or effectiveness is partially limited.

Weakly Agree: The system or service exists only minimally or superficially and does not provide the family with sufficient real support.

Strongly Disagree: Indicates the complete absence of the system or service or its failure to reach the family in any way.

The following are the items included in the scale, distributed across three dimensions:

First: The Social Support Dimension

I have friends who understand what I am doing to meet the needs of my child with autism spectrum disorder.

There are parents in my area who have experience helping me meet the needs of my child with autism spectrum disorder.

My relatives help me meet the needs of my child with autism spectrum disorder.

In my area, there are social support groups that offer various services to parents of children with autism spectrum disorder, and I can easily access them.

There are community or volunteer organizations that regularly provide support services for my child with autism spectrum disorder and my family.

Second: The Psychological Support Dimension

- There are specialized centers in the community that offer psychological services to help me cope with the stress and negative emotions resulting from caring for my child with autism spectrum disorder.
- There are family and marriage counseling programs in the community that contribute to fostering understanding and psychological support within parents caring for a child with autism spectrum disorder.
- Support groups are available in the community that

provide counseling and psychological guidance to help parents of children with autism spectrum disorder cope with and manage daily challenges.

- Telephone and online psychological support hotlines are available in the community, enabling parents caring for people with autism spectrum disorder to access appropriate guidance and psychological support during sudden crises.
- There are formal and voluntary organizations in the community that offer group counseling and psychological support sessions for parents of people with autism spectrum disorder, with the aim of exchanging experiences and providing psychological support.

Third: The Institutional Professional Support Dimension

- There are specialized centers in my area that provide the care services my child with autism spectrum disorder needs.
- My region has training centers that offer consulting services and educational programs to support parents of children with autism spectrum disorder.
- My region has specialized centers that provide the assessment and diagnostic services needed by my child with autism spectrum disorder.
- My region has inclusive schools that provide appropriate educational services for children with autism spectrum disorder.
- My area has vocational training centers that provide vocational rehabilitation services for people with autism spectrum disorder.
- There are workplaces in the community where people with autism spectrum disorder can be employed.
- My community has organizations that provide the financial support needed by parents of children with autism spectrum disorder.
- There are specialized agencies that provide legal support to ensure the rights of parents of children with autism spectrum disorder to access appropriate services and support.
- Formal and non-formal institutions collaborate to provide comprehensive services to parents of people with autism spectrum disorder.
- I can access and benefit from online platforms that offer training or guidance programs aimed at parents of children with autism spectrum disorder.

2.2.1 Scale Validity and Reliability

To verify the validity and reliability of the scale, content validity was used. The initial version of the scale was presented to ten judges in the field of special education, who were asked to evaluate the scale in terms of the suitability of each item to its corresponding dimension and its phrasing. Their observations were taken into account in preparing the final version of the scale.

Construct validity was also used, as the scale was administered to a sample of (30) participants outside the main study sample, and the correlation coefficients ranged between (0.78–0.86).

As for reliability, it was verified using Cronbach's alpha and the test-retest method on a sample of (30) participants from outside the study sample. The internal consistency coefficients (Cronbach's alpha) ranged between (0.85–0.91), while the test-retest reliability coefficients ranged between (0.79–0.81) across the scale dimensions.

2.3 Data Collection Procedures

Data were collected using the Support Systems Scale for Parents of People with Autism Spectrum Disorder (SSSFPASD). Prior to data collection, meetings were held with the parents, during which they were informed of the purpose of the study, that the data were being collected for scientific purposes, and how to respond to the questionnaire. The scale was then distributed, and participants were asked to read each statement carefully and place a checkmark (✓) under the option that reflected their level of agreement with each statement according to the specified rating scale (strongly agree, somewhat agree, weakly agree, strongly disagree). The scale was administered directly to the participants, and interviews were conducted to ensure the clarity of the scale items and the accuracy of their responses. These interviews facilitated effective communication with the participants, supported their understanding of the scale items, and helped obtain complete and reliable data for statistical analysis.

2.4 Statistical Analysis

After data collection was completed, the data were coded, entered, and prepared for statistical analysis. Descriptive statistical methods, including means and standard deviations, were used to summarize the data and describe participant's responses across the study variables. Inferential statistical analyses were then conducted using one-way analysis of variance (ANOVA) to examine differences among the mean scores of participants' responses. Schiff's post hoc test was applied to determine the direction and sources of these differences. These statistical methods enabled the researchers to obtain accurate results that addressed the research questions.

2.4.1 Statistical Standard

A four-point Likert scale was used to score the study instrument, assigning one score to each item out of four (strongly agree, agree, disagree, strongly disagree), represented numerically by (4, 3, 2, 1), respectively. The following scale was adopted for analyzing the results:

- 1.00–2.00: Low
- 2.01–3.00: Moderate
- 3.01–4.00: High

The scale was calculated using the following equation:
 $\{(\text{Upper limit of the scale (4)} - \text{Lower limit of the scale (1)}) / \text{Number of required categories (3)}\}$

$$= (4 - 1) / 3 = 1.00$$

Then, the value (1.00) was added to the end of each category range.

3. RESULTS AND DISCUSSION

This section presents the study findings, organized according to the research questions.

What is the level of support systems for parents of people with autism spectrum disorder in Jordan?

To answer this question, the arithmetic means, standard deviations, and ranks were calculated and are shown in the Table 2.

Table 2
Arithmetic means and standard deviations of support system levels, ranked in descending order by arithmetic means

Rank	Number	Dimension	Mean	SD	Level
1	3	Institutional professional support	2.89	0.36	Moderate
2	1	Social support	2.79	0.41	Moderate
3	2	Psychological support	2.24	0.58	Moderate
		Overall support	2.69	0.34	Moderate

The data in Table (2) indicate that the level of support systems provided to parents of people with autism spectrum disorder was moderate. This result underscores the importance of raising awareness about support systems for parents of people with autism spectrum disorder. Considering the arithmetic means for the areas of support systems, it was found that institutional professional support ranked first, showing a relatively higher level than the other areas. The social support area ranked second, while the psychological support area ranked last.

Do the levels of support systems for parents of people with autism spectrum disorder in Jordan differ according to their academic qualifications?

To answer this question, the arithmetic means and standard deviations were extracted at the level of support systems according to the academic qualification variable, and the Table 3 illustrates this.

The data in Table 3 indicate that the level of support systems provided to parents of children with autism spectrum disorder was average across all educational levels. The arithmetic means also show that the level of support follows an upward trend corresponding to the parents' educational level. The data indicate that knowledge and use of support systems increase with higher academic qualifications. This finding highlights the importance of raising awareness about support systems among parents of people with autism spectrum disorder, particularly those with lower levels of education.

To determine the significance of apparent differences in arithmetic means between educational groups, a one-

way ANOVA test was used. Table 4 presents the results of the analysis according to the effect of the academic qualification variable on the level of support systems provided to parents of children with autism spectrum disorder.

Table 3
Arithmetic means and standard deviations of the level of support systems according to the academic qualification variable

Dimension	Category	N	Mean	SD
Social support	High school diploma or lower	32	2.62	.331
	Bachelor's degree	57	2.85	.395
	Postgraduate studies	31	2.93	.406
	Total	120	2.82	.397
Psychological support	High school diploma or lower	32	2.05	.506
	Bachelor's degree	57	2.17	.668
	Postgraduate studies	31	2.47	.447
	Total	120	2.23	.593
Institutional professional support	High school diploma or lower	32	2.79	.391
	Bachelor's degree	57	2.87	.344
	Postgraduate studies	31	3.01	.351
	Total	120	2.89	.364
Overall support	High school diploma or lower	32	2.56	.286
	Bachelor's degree	57	2.68	.382
	Postgraduate studies	31	2.86	.296
	Total	120	2.68	.354

Table 4
One-way ANOVA for academic qualification effect on support systems

	Source	Sum of Squares	df	Mean Squares	F	Sig.
Social support	Between groups	1.69	2	.85	5.77	.004
	Within groups	17.17	117	.15		
	Total	18.87	119			
Psychological support	Between groups	3.16	2	1.58	4.77	.010
	Within groups	38.76	117	.33		
	Total	41.92	119			
Institutional professional support	Between groups	.83	2	.42	3.24	.043
	Within groups	15.02	117	.13		
	Total	15.85	119			
Overall support	Between groups	1.44	2	.72	6.29	.003
	Within groups	13.40	117	.12		
	Total	14.84	119			

The results indicated that there were statistically significant differences at the level of ($\alpha = 0.05$) between the mean responses of the sample, attributed to the academic qualification variable, in all areas of support systems, as follows:

- In the area of social support, the F-value was 5.77 at the significance level of 0.004, which is statistically significant, indicating meaningful differences between the educational groups.

- In the area of psychological support, the F-value was 4.77 at the significance level of 0.010, also statistically significant, indicating an effect of academic qualification on the perceived level of psychological support.

- Significant differences were also found in the area of institutional professional support, where the F-value was 3.24 at the significance level of 0.043.

- For the overall level of support systems, the results likewise showed statistically significant differences, with $F = 6.29$ and $p = 0.003$.

To identify the direction of differences between the average responses of participants regarding the level of support systems according to the academic qualification variable, the Scheffé post-hoc test was applied. The results indicated statistically significant differences between parents with a high school diploma or lower and those with a postgraduate degree, with the differences favoring the latter group.

These results confirm that academic qualification has a statistically significant effect on the level of support systems perceived by parents of children with autism spectrum disorder. People with higher educational qualifications tend to rate the level of support systems more highly than those with lower qualifications. This result supports the earlier descriptive analysis, which showed an upward trend in the arithmetic means in favor of the postgraduate group, reflecting the effect of awareness, knowledge of available services, and greater ability to access them.

4. DISCUSSION OF RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

The results indicated that parents participating in the study were moderately aware of the availability of support systems in the community and that the institutional professional support area was relatively higher than the other areas, ranking first. The results also showed that parents with higher educational qualifications were more aware of the availability of support systems and more capable of accessing and benefiting from them.

Participants generally reported a moderate assessment level, calling for further efforts to strengthen various areas of support—particularly psychological support, which ranked last. These findings can be explained by the fact that people with higher academic qualifications possess greater cognitive awareness of available services

and sources of support, as well as the ability to access institutions and use their skills in research and information gathering to benefit from institutional, professional, social, and psychological support. A higher level of education also enhances social and communication skills, which facilitates seeking and utilizing support when needed.

Therefore, it can be said that the family's educational level is a key factor influencing access to and utilization of support systems. Higher education is generally associated with a stronger family awareness of the importance of support in addressing the challenges of raising people with autism spectrum disorder, as well as with more developed problem-solving, decision-making, and communication skills with service providers.

The results confirm the critical importance of raising awareness of the support systems available to parents of people with autism spectrum disorder more broadly within Jordanian society, as this enables them to benefit more effectively from these systems. The findings also highlight the importance of supporting parents and equipping them with the skills and procedures needed to access appropriate support services and to use them in the care, education, and rehabilitation of their children with autism spectrum disorder, in addition to addressing their family and psychological needs. Such awareness and knowledge of support systems enable parents to adapt to the demands of disability and enhance their ability to respond to the specific needs of their children and themselves. Addressing the needs of children with autism spectrum disorder and their families contributes to improving quality of life and enhancing opportunities for social inclusion and active participation in society. These results are consistent with previous studies, such as those by Lee et al. (2024), Althoff et al. (2019), Marsack and Hopp (2019), Batool and Khurshid (2015), Mohammadi et al. (2019), Carbone et al. (2024), Mo et al. (2024), Qiu et al. (2022), Kuru and Piyal (2018), and Pejovic-Milovancevic et al. (2028).

The study's findings are limited by the relatively small sample size, which included parents of people with autism spectrum disorder from different age groups, both verbal and non-verbal. Awareness of support systems may vary according to the characteristics of the people diagnosed with the disorder.

In light of the findings, the study recommends the following:

Raising awareness among people with lower educational levels about available support services and how to access and utilize them.

Strengthening the role of professional institutions in empowering parents to acquire the necessary skills to support their children with autism spectrum disorder and make optimal use of support systems.

Increasing public awareness of the importance of support systems and promoting their effective utilization,

particularly among parents of people with autism spectrum disorder.

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