

ALEKSANDRA BUCHHOLZ

Józef Piłsudski University of Physical Education in Warsaw

ORCID – 0000-0002-2955-714X

KORNELIA CZERWIŃSKA

Maria Grzegorzewska University in Warsaw

ORCID – 0000-0003-4064-6255

MARIOLA WOLAN-NOWAKOWSKA

Maria Grzegorzewska University in Warsaw

ORCID – 0000-0002-7715-8741

## PSYCHOLOGICAL RESILIENCE OF MOTHERS OF CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD) AND PERCEIVED SOCIAL SUPPORT\*

**Introduction:** Social support is a significant moderator of quality of life. Psychological resilience is a personal resource that promotes adaptation to life challenges.

**Research Aim:** The aim of this study was to determine the association between the level of psychological resilience of mothers of children with diagnosis of autism spectrum disorder (ASD) and their perceived formal social support. Formal support is understood as a form of institutional assistance provided to children and mothers as part of using the services of the Early Intervention Center.

**Method:** One hundred and forty-three mothers of children with ASD were surveyed using the Resilience Scale (SPP-25) and the Questionnaire for Mothers of Children with Autism Spectrum Disorder.

**Results:** Mothers of children with ASD had a higher level of psychological resilience compared to the standardised group. Mothers with higher levels of psychological resilience perceived social support better.

**Conclusions:** The study emphasises the need to develop psychological resilience in mothers of children with ASD, which may contribute to coping more effectively with the challenges of motherhood when faced with a child's disability.

**Keywords:** psychological resilience, autism spectrum disorder, social support, motherhood

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## INTRODUCTION

### **Motherhood in the face of ASD**

The deficiency in communication, social intercourse, and narrow, repetitive behaviour patterns, interests, and occupations that characterise autism spectrum disorder (ASD) make it emotionally complex for mothers to raise a child with this diagnosis (APA, 2013). These challenges hinder the development of the parent–child relationship, causing anxiety for parents and confusion for those around them. Reduced ability to initiate and sustain social interactions is one of the core symptoms of ASD (Volkmar et al., 2004). This lack of interest in social stimuli, including human faces, observed from infancy onwards, interferes with the development of an emotional bond that is of profound importance in the parent-child relationship. This creates a sense of rejection and disapproval in mothers and generates a belief that they lack parental competence (Mohammadi et al., 2019). This is compounded by fits of aggression, self-harm, sleep difficulties, anxiety, psychiatric disorders, neurological and organic diseases (Hara, 2007; Yates and Le Couteur, 2009; Rattaz et al., 2018). Immune system malfunctions found in ASD that expose the child's body to frequent viral, bacterial, and fungal infections while also increasing susceptibility to allergies (Dietert and Dietert, 2008; Upadhyay et al., 2021), further complicate the situation. Developmental disharmony and unpredictability must also be considered to paint a complete picture of functioning on the autism spectrum. Progress is generally interspersed with periods of regression when mastered skills appear to be lost (Pearson et al., 2018; Boterberg et al., 2019). Research describes how the intensity of these symptoms results in high levels of stress characteristic of motherhood in the face of ASD, which is sometimes comparable to post-traumatic stress disorder (PTSD) experienced by war veterans (Seltzer et al., 2010). The high levels of stress in these women are confirmed by research findings indicating the presence of higher blood cortisol levels relative to mothers of children without an ASD diagnosis (Padden and James, 2017). Mothers also experience significant levels of parental burnout and depression (Singh et al., 2017; Papadopoulos, 2021). For mothers, their child's ASD is a source of tremendous stress, consisting of a late diagnosis, tremendous anxiety about the child's future caused by the unpredictability of the developmental trajectory, as well as the necessity to cope with socially unacceptable behaviour (Pisula, 2007; Keenan et al., 2010). Paradoxically, the frequent lack of visibility of ASD becomes a problem. ASD does not carry the visual stigma of disability, so it does not elicit pity or sympathy, and atypical behaviour is not seen as a sign of illness but rather of malice, insolence, or lack of parenting. Parental stress drives the spiral of helplessness and deprives mothers of the strength necessary to undertake constructive coping strategies. In such cases, social support becomes a fundamental need that can prevent the build-up of difficulties and facilitate the rebuilding of the whole family system, and, thus, improve the standards of living of mothers of children with ASD diagnosis.

### Psychological resilience

Contemporary disability research adopts a systemic perspective, shifting the focus from deficits to resources that support adaptive processes within families coping with disability. Researchers in this field focus on finding strengths in families that support the maintenance of a good quality of life, despite the challenge of raising a child with a disability. One such resource is resilience, which is understood as a set of characteristics conducive to coping with difficult life circumstances. There are two categories for defining resilience, which indicate its equifinal nature. On the one hand, resilience is sometimes understood as a dynamic process of acquiring coping competence (Luthar, 2006; Yates et al., 2015; Ostaszewski, 2017). On the other hand, researchers perceive it as a personal trait, a permanent disposition of the individual (Block and Block, 1980; Fredrickson, 2004; Ogińska-Bulik and Juczyński, 2008). In both cases, the end result is positive adaptation to unfavourable circumstances. Research indicates that resilient parents are characterised by optimism, a pursuit of knowledge that enhances parenting competence, hope, positive emotionality, and adaptive coping strategies to deal with the struggles of bringing up a child with ASD (e.g. Sekułowicz and Kaczmarek, 2014; Peer and Hillman, 2014; Kavaliotis, 2017). Resilience promotes family consolidation in the face of a child's disability, conditioning a reevaluation of previous family values and life goals (Kapp and Brown, 2011; Leone et al., 2016). The relationship between parental resilience and openness to social support has also been observed (Horton and Wallander, 2001).

### Social support

Research suggests that social support is one of the most significant predictors of life satisfaction for families raising children with disabilities, regardless of age and demographic variables (Habib et al., 2016). The availability of social support is an essential source of stress relief for both mothers and fathers, regardless of the coping strategies they employ. It is considered a crucial moderator of parental stress resulting from raising a child with a disability (Twyo et al., 2007; Vidyasagar and Koshy, 2010; Ha et al., 2011). Analyses of families with children with ASD show that this group requires specific informational, emotional, and respite support to relieve them from the constant caregiving process (Douma et al., 2006; Meral and Cavkaytar, 2012). The stress of parenting has a disintegrating effect on mothers, weakening them physically and psychologically. Given the systemic view of the family, this reduces the psychological resilience of the entire system. Social support, on the other hand, creates a protective barrier on family resilience, promoting proper functioning conditions (Kavaliotis, 2017). Research has revealed a relationship between resilience and social support. Resilience reduces anxiety, which, in turn, may facilitate proactive coping strategies, including seeking support. The optimism that characterises resilient individuals as well as

their social networks, which are usually extensive, promotes a better perception of social support, making it more effective (Lee et al., 2004; Ruiz-Robledillo et al., 2014; Southwick et al., 2016).

## RESEARCH AIM AND QUESTION

The presented research aimed to identify the specifics of the relationship between resilience and social support perceived by mothers raising children with ASD. Therefore, the following research question was asked: What is the level of resilience of the surveyed mothers compared to the standardisation group? Whether mothers differentiate the perception of social support depending on its dimensions? What is the relationship between mental resilience and social support perceived by the surveyed mothers of children with ASD? The authors adopted the concept of resilience following Ogińska-Bulik and Juczyński (2008), which is understood as a trait that protects against negative consequences of life experiences. Social support was differentiated in relation to mothers' perceived institutional support with respect to the Early Intervention Centre (referred to as the EIC), a rehabilitation facility for children with ASD. The analysis included the following dimensions of support: child-informative, help-informative, instrumental, evaluative, emotional, respite, and non-systemic. The concept for the research was based on the biopsychosocial model of functioning and disability enacted by the International Classification of Functioning, Disability and Health (ICF, 2001). The analysis referred to the relationship between mothers' perceived social support and resilience as a personal factor, and other contextual factors that differentiate mothers' lives at the individual level, i.e. the child's diagnosis, family situation, extra-institutional support, and duration of the child's therapy in an institution. The research used a diagnostic survey method. The primary tool used in data collection was the Questionnaire for Mothers of Children with Autism Spectrum Disorders [*Kwestionariusz Ankiety dla Matek Dzieci ze Spektrum Autyzmu*] and the Resilience Scale – SPP-25, a standardized tool for investigating the level of psychological resilience (Ogińska-Bulik and Juczyński, 2008).

## RESEARCH METHOD AND SAMPLE CHARACTERISTICS

The Resilience Scale (SPP-25)<sup>1</sup> by Ogińska-Bulik and Juczyński (2008) and the Questionnaire for Mothers of Children with Autism Spectrum by Buchholz were used in the study. The Resilience Scale measures the overall resilience score and

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<sup>1</sup> The psychometric properties of the SPP-25 are satisfactory, described in detail in the publication by Ogińska-Bulik and Juczyński (2008).

scores for the following subscales: perseverance and determination in action; openness to new experiences and sense of humour; personal competence to cope, and tolerance of negative emotions; tolerance of failure and treating life as a challenge; optimistic attitude to life and ability to maintain focus and composure in difficult situations.

The Author's Questionnaire Survey for Mothers of Children with Autism Spectrum Disorders (Buchholz, 2022) was used to collect sociodemographic data and data on non-institutional support. The tool underwent psychometric analysis, and exploratory factor analysis with oblimin diagonal rotation was used to confirm the scale's homogeneity. The psychometric indices obtained for the measurement of institutional support can be considered satisfactory, and sufficient for research use (internal consistency  $\alpha = 0.79$ ; high convergent and differential accuracy resulting from correlation with the Berlin Social Support Scales (Łuszczczyńska et al., 2006).

The research was conducted over a period of 3 months at the EIC in Warsaw. The inclusion criterion was having a child diagnosed with ASD who was under EIC care. The procedure consisted of explaining the purpose of the research, ensuring anonymity and voluntary participation, and distributing a set of tools with attached instructions to mothers. Participants could complete the questionnaires at the EIC or take them home and return them to a specially placed secured container at the registration desk. The study was conducted by the authors in accordance with the principles of research ethics (cf. American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 2007). The formulation of the research procedure was based on the *Code of Ethics for Researchers* (3rd ed.), constituting an annex to resolution No. 2/2020 of the General Assembly of the Polish Academy of Sciences on June 25, 2020. Both data collection and storage were consistent with the ethics described in the available literature (Sieber, 1998; Creswell, 2013). Two hundred questionnaires were distributed, and 143 completely completed documents were returned to the authors, constituting the material for analysis.

The study included 143 women aged between 26 and 51 years ( $M = 38.41$ ;  $SD = 5.02$ ). In 114 cases (79.7%), the diagnosis was for a boy and in 29 cases (20.3%), it was for a girl. Of the surveyed women, 98 (68.5%) were married or in a partnership, 32 (22.4%) were single mothers, and 13 (9.1%) were divorced. The majority of respondents ( $n = 103$ ; 72%) lived in cities with a population of more than 100,000. Twenty-three respondents (16.1%) lived in cities with a population between 20,000 and 100,000. Six respondents (4.2%) lived in towns with a population of up to 20,000, and 11 women (7.7%) lived in rural areas. Among the respondents, 124 (86.7%) were white-collar workers, 13 (9.1%) had blue-collar professions, and 6 (4.2%) were unemployed.

### Statistical Data Analysis Procedure

Statistical analysis of the data obtained was carried out using IBM SPSS Statistics v. 23. In order to obtain the results of comparing the level of mental resilience of the tested sample with the standardisation sample, basic statistical analyses were performed to determine the mean value, standard deviation, minimum and maximum values, the number of degrees of freedom, and statistical significance. The analysis was supplemented with a one-sample Student's *t*-test. Descriptive statistics were used to obtain results regarding the dimensions of social support perceived by mothers of children with ASD. In order to obtain a correlation between the level of psychological resilience and perceived social support, Pearson's *r* correlations were used. In order to assess the relationship between the level of psychological resilience and the assessment of institutional support offered by OWI, the so-called analysis of extreme groups, i.e. comparison of average scores in individual areas of support, in the group of mothers with low and high levels of resilience, based on the standardized result of the SPP-25 scale (Ogińska-Bulik and Juczyński, 2008). The result indicated 22 respondents with a low and 33 respondents with a high score on the level of psychological resilience.

## RESULTS

### Psychological resilience of mothers of children with ASD

Analysis of the study described enabled us to develop characteristics of the surveyed mothers of children with ASD both in the context of their life situation and in relation to their level of psychological resilience and perceived institutional support offered by the EIC. The women typically had several years of experience participating in the support process through the Centre, and their children had mostly come into the care of the institution when they were over one year old. Mothers rated their knowledge of ASD as intermediate or advanced. Most of them were married, which facilitated an equal sharing of responsibilities in rearing a child with diagnosis discussed. In line with the women surveyed answers, their partner was an essential source of support for them in caring for their children.

The results of our study showed a higher overall level of psychological resilience in mothers of children with ASD in comparison to the standardisation group. Higher scores of mothers of diagnosed children were also confirmed at a statistically significant level on the scales of perseverance and self-determination, personal competence to cope, tolerance of negative emotions, tolerance of failure, and treating life as a challenge (see Table 1).

Table 1.

*Mean values of psychological resilience levels in the study group and the standardisation sample*

Variables	Groups				<i>t</i>	<i>Df</i>	<i>P</i>
	standardisation		study				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
perseverance and determination in action	14.21	2.83	15.43	2.61	5.57	142	0.001
openness to new experiences and sense of humour	15.03	2.77	15.47	2.97	1.77	142	0.079
personal coping competence and tolerance of negative emotions	13.27	3.43	13.99	3.15	2.74	142	0.007
tolerance of failure and treating life as a challenge	13.83	3.18	14.40	2.85	2.38	142	0.018
optimistic attitude to life and ability to adapt to difficult situations	13.08	3.40	13.32	3.42	0.85	142	0.399
total psychological resilience	69.45	12.55	72.61	13.11	2.88	142	0.005

*M* – mean value; *SD* – standard deviation; min – minimum value; max – maximum value; *t* – one-sample Student's *t*-test value; *df* – number of degrees of freedom; *p* – statistical significance.

Source: Authors' own study.

### Perceived institutional support

The authors analysed the results of the perceived formal-institutional support provided by the EIC to mothers of children with ASD. The support takes many forms. First and foremost, families receive information support, i.e. information about the child's disability itself, what it entails, what families can expect, how development is progressing, and what the prognosis is, as well as information about other facilities and places where parents can go to get help for their child.

Parents in the EIC also receive instrumental support, i.e. instructions on how to deal with specific situations related to their child's behaviour that are difficult for parents and the environment.

Emotional support from specialists is important for parents and is expressed through a positive attitude towards them, words aimed at reducing anxiety, building hope, and keeping their spirits up. Emotional support also provides for structured therapeutic conversation that calms and relieves tension. The EIC provides parents with evaluative support, i.e. positive feedback on the progress made in building a relationship with their child, the homework parents do to support their child's development by implementing the recommendations of professionals. Through evaluative support, parents gain a sense of parenting competence, feel motivated, and are better able to see their child's progress. Evaluative support builds parental self-esteem.

Respite support (respite care) grants parents an opportunity to relax for a moment and turn their mind to things unrelated to the child. A parent can take up other responsibilities or simply relax with a cup of coffee at the registration desk after dropping their child off. Occasionally, caregivers make arrangements with therapists to transfer the child to the next class without the parent's participation and leave the facility for that time to have a moment to themselves.

Extrasystemic support is understood as the presence of other parents in a similar situation. The exchange of experiences during "corridor" conversations, as well as in group activities where parents participate, is a valuable source of help, taking a form similar to that of a support group. The mothers surveyed responded to each of the described forms of support according to their perception of its presence in the EIC.

Table 2 summarises the results of the study regarding the perceived support in the informational, instrumental, emotional, evaluative, respite, and extrasystemic dimensions by mothers of children with ASD.

Table 2.

*Dimensions of the perceived support by mothers of children with ASD in the EIC*

Response categories	Information support regarding the child		Information support regarding other sources of help		Instrumental support		Emotional support		Evaluative support		Respite support		Extrasystemic support	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
definitely not received	4	1.8	5	3.5	8	5.6	9	6.3	5	3.5	15	10.5	14	9.8
mostly not received	5	3.5	17	11.9	16	11.2	13	9.1	4	2.8	13	9.1	10	7
undecided	23	16.1	32	22.4	32	22.4	39	27.3	26	18.2	34	23.8	41	28.7
mostly received	55	38.5	59	41.3	62	43.4	51	35.7	61	42.7	44	30.8	43	30.1
definitely received	56	39.2	30	21	25	17.5	31	21.7	47	32.9	37	25.9	35	24.5

Source: Authors' own study.

The majority of mothers confirmed receiving informational support about their child ( $n = 111$ ; 77.7%), resulting in a high self-reported level of knowledge about ASD. Slightly fewer, but still a significant number, indicated receiving informational

support regarding available forms of help (positive responses, total  $n = 89$ ; 71.3%). The survey results show that this support was not so apparent for all the women surveyed (difficult to say,  $n = 23$ ; 16.1% for the perception of support concerning the child, and  $n = 32$ ; 22.4% for information support concerning other sources of help). Mothers mostly chose answers indicating a good perception of instrumental support (positive answers, total  $n = 87$ ; 60.9%). In 32 cases (22.4%), it was difficult for the surveyed mothers to say whether they received instrumental support and there were a total of 24 negative responses (16.8%). The surveyed women were mostly positive about the emotional support (positive responses, total  $n = 82$ ; 57.4%) and evaluative support ( $n = 108$ ; 75.6%) they received in the EIC. The distribution of ratings for respite support was fairly even, with a slight predominance of ratings expressing satisfaction with this dimension of support. There were 81 positive ratings (56.7%) compared to 62 negative ratings (43.4%). The majority of the surveyed mothers benefited from extrasystemic support, as reflected in the survey results ( $n = 78$ ; 54.6%). 41 women found it difficult to express a clear opinion on this issue ( $n = 41$ ; 28.7%). There were 24 negative evaluations (16.8%).

The described forms of support differ in content, which has its theoretical and practical justification, but they display considerable similarity at the level of evaluations and are sub-dimensions of the more general construct of institutional support. The open-ended questions revealed mothers' unmet needs for a greater focus of professionals on the problems of the parent, which was reflected in the women's suggestions for the establishment of support groups for families of children with ASD.

### Analysis of the association between psychological resilience of mothers of children with ASD and perceived institutional support

Pearson's correlation coefficient analyses were performed to determine the relationship between psychological resilience and perceived formal support obtained in the institution.

Table 3.

*Psychological resilience of mothers of children with ASD and perceived formal support*

Dimen- sions of support		Perseve- rance and determina- tion	Openness	Personal compe- tence	Tolerance of failure	Optimistic attitude	Overall level of resilience
informa- tion re- garding the child	Pearson's $r$	<b>0.209</b>	<b>0.215</b>	<b>0.186</b>	<b>0.223</b>	<b>0.222</b>	<b>0.241</b>
	signifi- cance	<b>0.012</b>	<b>0.010</b>	<b>0.026</b>	<b>0.008</b>	<b>0.008</b>	<b>0.004</b>

Dimensions of support		Perseverance and determination	Openness	Personal competence	Tolerance of failure	Optimistic attitude	Overall level of resilience
information regarding other sources of help	Pearson's <i>r</i>	0.112	<b>0.239</b>	<b>0.220</b>	<b>0.283</b>	<b>0.258</b>	<b>0.258</b>
	significance	0.182	<b>0.004</b>	<b>0.008</b>	<b>0.001</b>	<b>0.002</b>	<b>0.002</b>
instrumental	Pearson's <i>r</i>	<b>0.240</b>	<b>0.294</b>	<b>0.256</b>	<b>0.298</b>	<b>0.234</b>	<b>0.302</b>
	significance	<b>0.004</b>	<b>&lt;0.001</b>	<b>0.002</b>	<b>&lt;0.001</b>	<b>0.005</b>	<b>&lt;0.001</b>
emotional	Pearson's <i>r</i>	<b>0.326</b>	<b>0.176</b>	<b>0.284</b>	<b>0.286</b>	<b>0.276</b>	<b>0.307</b>
	significance	<b>&lt;0.001</b>	<b>0.036</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>&lt;0.001</b>
evaluative	Pearson's <i>r</i>	<b>0.269</b>	<b>0.291</b>	<b>0.265</b>	<b>0.287</b>	<b>0.305</b>	<b>0.325</b>
	significance	<b>0.001</b>	<b>&lt;0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>
respite	Pearson's <i>r</i>	0.107	0.039	0.161	0.131	0.149	0.136
	significance	0.204	0.641	0.055	0.118	0.077	0.105
extrasystemic	Pearson's <i>r</i>	0.089	0.119	<b>0.174</b>	0.161	0.146	0.159
	significance	0.292	0.157	<b>0.038</b>	0.055	0.083	0.057
perceived international support	Pearson's <i>r</i>	<b>0.284</b>	<b>0.285</b>	<b>0.329</b>	<b>0.352</b>	<b>0.335</b>	<b>0.364</b>
	significance	<b>0.001</b>	<b>0.001</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>&lt;0.001</b>

Statistically significant associations are shown in bold.

Source: Authors' own study.

The level of perceived information support regarding the child correlated positively with the level of psychological resilience and its five components. This means that the higher the level of perceived information support in relation to the child, the higher the level of resilience of the women studied. The strength of the relationships noted was low. The level of perceived informational support regarding other sources of help correlated positively with the overall level of resilience and its four components – openness, personal competence, tolerance of failure and optimistic attitude. The strength of these relationships was also low.

In turn, the level of perceived instrumental support correlated positively with the level of resilience and its five components. The relationship with the

overall level of resilience was characterized by moderately high strength, while the others were characterized by low strength. The level of perceived emotional support correlated positively with the level of resilience and its five components. The relationship with the overall level of resilience and the perseverance and determination subscales was characterized by moderately high strength, while the others were characterized by low strength. The level of perceived evaluative support also correlated positively with the level of resilience and its five components. The relationship with the overall level of resilience and the optimistic attitude scale was characterized by moderately high strength, while the others were characterized by low strength. The level of perceived extrasystemic support correlated statistically significantly only with the level of the personal competence scale. The relationship was positive, and its strength was low. The overall level of perceived support correlated positively with the level of resilience and its five components. The relationship with the overall level of resilience and the scales of personal competence, tolerance of failure, and optimistic attitude was of moderately high strength, while the others were of low strength. The remaining correlations not mentioned above were found to be not statistically significant.

## DISCUSSION

Psychological resilience is a trait that facilitates adaptation to unfavourable life circumstances. The surveyed mothers exhibited higher levels of psychological resilience compared to the standardisation group, indicating a higher level of adaptive capacity to cope with life difficulties, including those related to the child's disability. Psychological resilience is a trait that manifests itself especially when confronted with a traumatic situation and can be developed under favourable circumstances, known as protective factors (Garmezy et al., 1984; Zimmerman, 2005; Masten, 2001). For the study group of mothers of children with diagnosis, above-average levels of psychological resilience could be related to the influence of protective factors. For Garmezy et al. (1984), protective factors can be either risk-balancing, risk-reducing or risk-sensitising. On the other hand, Masten (2001) points to specific protective factors that include family support, a satisfactory level of socioeconomic status, a place of residence that facilitates access to healthcare and social services, and extensive social networks. The surveyed mothers declared the presence of support from their partners and parents in the process of caring for and raising their children with ASD. The mothers also indicated the presence of social support networks, such as other parents in similar life situations. Therefore, it can be concluded that the women had the resources to develop psychological resilience. For the mothers, the presence of family and support networks was a sig-

nificant factor in balancing and reducing the risk of generalised stress resulting from raising a child with autism, which can hinder parental adaptation.

The majority of mothers declared that their children had been in therapy for 1 to 3 years or for over 3 years, which was a protective factor immunising against the aforementioned risks. Throughout this period, mothers managed to become accustomed to their role and the specifics of the child's functioning. The high level of resilience can also be explained by the mothers becoming actively involved in response to the situation, which they regarded as a challenge. Personal resources, an attitude reflecting a sense of coherence and the presence of social support may have determined the mothers' choice of task-focused coping strategies.

Analysis of the relationship between personal factors and perceived social support showed a positive correlation between the maternal psychological resilience and perceived institutional support. The results obtained correspond to the findings of other studies on this issue. Social support, including institutional support, can stimulate the development of psychological resilience. In 2017, Khan et al. compared the relationship of psychological resilience and social support between mothers of children with and without an ASD diagnosis. The results were comparable in both groups. Resilience is strongly determined by the support mothers receive. Support conditions a resilient attitude, counteracting parental burnout. The developers of the Family Resilience Assessment Scale highlighted the relevance of the correlation between psychological resilience and social support and recognised social support as a significant factor in developing the trait of psychological resilience in families (Gardiner et al., 2019). Research on psychological resilience in families points to the importance of social support in developing this trait (Heiman, 2002; Felizardo et al., 2016).

Analysis of the correlation between separate subscales of psychological resilience and different dimensions of support showed a relationship between elements of both variables, with the exception of respite support. This is likely related to the fact that mothers can manage their own time while waiting for their children in the EIC. Mothers make use of this time regardless of their level of resilience. For extrasystemic support, there is a correlation with the resilience subscale of personal competence. This may be related to the wider autistic phenotype, i.e. the presence of certain ASD characteristics in parents of children with a diagnosis (Landry and Chouinard, 2016). Women presenting the aforementioned characteristics may have benefited less from casual social encounters. Conversely, those who were not characterised by social distance were keen to benefit from corridor conversations, viewing them as a potential source of knowledge about other forms of support for their children.

Our own research indicates the presence of a particularly strong relationship between psychological resilience and perceived institutional support. We found that the level of psychological resilience was most significant in determining per-

ceived institutional support. These results are consistent with existing research on the relationship between psychological resilience and social support, where resilience becomes a predictor of perceived social support among parents of children with ASD (Arnous and Yeo, 2019). Most studies show an association between psychological resilience and well-being among parents of children with a diagnosis, where resilience is a compensatory factor that reduces the psycho-physiological consequences of the challenges of raising a child with ASD (Halstead et al., 2018; Arakkathara and Bance, 2020).

Psychological resilience promotes parents' psychological well-being, enabling them to undertake adaptive coping strategies and benefit from institutional support. Parental well-being may also facilitate prompt and effective implementation of recommendations in the support provided by the EIC, and contribute to mothers' perceptions of support.

## STUDY LIMITATIONS

The authors are aware of the limitations of both the research model based on simple correlations and the number of variables included in the analyses, e.g. a homogeneous and rather small study group, and a unified form of support, which limits the possibility of applying generalisations. However, the research presented in this paper only explores a certain area of the issue in question, which needs to be further explored, e.g. by analysing a broader research group with gender differences taken into account. It should also include an analysis of other dimensions of support besides the ones presented, such as spiritual or material support, as well as an analysis that accounts for greater territorial variation. Future research could also include an empirical analysis of institutional support provided by rehabilitation and therapeutic facilities with a more diverse organisational profile. The results of such an analysis could provide insight into the relationship between psychological resilience and perceived social support, taking into account the diversity of support on offer.

## CONCLUSIONS

The aim of the research, which was to determine the relationship between the level of mental resilience of mothers of children with autism and their perceived formal social support, required a non-probabilistic selection of the research group and limiting the research area to a specific research area, a facility providing a unified form of support. The research conclusions reflect only part of a broader problem. Nevertheless, the observed regularities may constitute a reference point for formu-

lating hypotheses for future research. There are three most important conclusions from the study: mothers participating in the study were characterized by a higher level of mental resilience than the standardised group; respondents with higher levels of mental resilience had a better perception of the support offered by EIC; a longer period a child stays under the care of the Center correlates with a better perception of support by mothers. The results indicate not only the benefits for the family resulting from long-term therapy for a child with autism, but above all, they indicate the ambiguity of receiving support. It turns out that despite the uniform form of assistance provided, its reception may vary depending on personal factors, such as immunity. This creates an image of the nuances of the support recipient-donor relationship and sets the direction for greater individualisation in the development of aid interventions.

## REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc. <https://doi.org/10.1176/appi.books.9780890425596>
- American Psychological Association. (2007). *Standards for Educational and Psychological Testing*. American Educational Research Association, American Psychological Association, National Council on Measurement in Education.
- Arakkathara, J.G., Bance, L.O. (2020). Predictive role of resilience on psychological well-being among selected mothers of children with intellectual disability. *Indian Journal of Health & Wellbeing*, 11(1–3), 1–4. <https://doi.org/10.15614/IJHW.v11i01.1>
- Arnous, H., Yeo, K.J. (2019). Mediating effect of perceived social support in the relationship between resilience and self-esteem among parents of children with autism spectrum disorder. *Advances in Health Sciences Research*, 24, 312–319. <https://doi.org/10.2991/ahsr.k.200311.059>
- Block, J.H., Block, J. (1980). The role of ego-control and ego-resiliency in the origination of behaviour. In W.A. Collings (Ed.), *The Minnesota Symposia on Child Psychology* (pp. 39–101). Erlbaum.
- Boterberg, S., Charman, T., Marschik, P.B., Bölte, S., Roeyers, H. (2019). Regression in autism spectrum disorder: A critical overview of retrospective findings and recommendations for future research. *Neuroscience & Biobehavioral Reviews*, 102, 24–55. <https://doi.org/10.1016/j.neubiorev.2019.03.013>
- Buchholz, A. (2022). *Wsparcie społeczne a prężność psychiczna matek dzieci z autyzmem* [unpublished doctoral dissertation]. Akademia Pedagogiki Specjalnej im. Marii Grzegorzewskiej w Warszawie.
- Creswell, J.W. (2013). *Projektowanie badań naukowych. Metody jakościowe, ilościowe i mieszane*. Wyd. UJ.

- Dietert, R.R., Dietert, J.M. (2008). Potential for early-life immune insult including developmental immunotoxicity in autism and autism spectrum disorders: Focus on critical windows of immune vulnerability. *Journal of Toxicology and Environmental Health*, 11, 660–680. <https://doi.org/10.1080/10937400802370923>
- Douma, J.C.H., Dekker, M.C., Koot, N.M. (2006). Supporting parents of youths with intellectual disabilities and psychopathology. *Journal of Intellectual Disability Research*, 50(8), 570–581. <https://doi.org/10.1111/j.1365-2788.2006.00825.x>
- Felizardo, S., Ribeiro, E., Amantea, M.J. (2016). Parental adjustment to disability, stress indicators and the influence of social support. *Procedia – Social and Behavioral Sciences*, 217, 830–837. <https://doi.org/10.1016/j.sbspro.2016.02.157>
- Fredrickson, B.L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society of London. Series B*, 359, 1367–1377. <https://doi.org/10.1098/rstb.2004.1512>
- Gardiner, E., Mâsse, L.C., Iarocci, G.A. (2019). Psychometric study of the Family Resilience Assessment Scale among families of children with autism spectrum disorder. *Health and Quality of Life Outcomes*, 17(45), 1–10. <https://doi.org/10.1186/s12955-019-1117-x>
- Garmezy, N., Masten, A.S., Tellegen, A. (1984). The Study of stress and competence in children: A building block for developmental psychopathology. *Child Development*, 55, 97–111. <https://doi.org/10.2307/1129837>
- Ha, J.-H., Greenberg, J.S., Seltzer, M.M. (2011). Parenting a child with a disability: The role of social support for African American parents. *Family in Society*, 92(4), 405–411. <https://doi.org/10.1606/1044-3894.4150>
- Habib, H.A., Asmat, A., Naseem, S. (2016). Parental satisfaction with life and perceived social support of parents of children with intellectual disability. *International Journal of Innovation and Scientific Research*, 20(2), 398–402.
- Halstead, E., Ekas, N., Hastings, R.P., Griffith, G.M. (2018). Associations between resilience and the well-being of mothers of children with autism spectrum disorder and other developmental disabilities. *Journal of Autism and Developmental Disorders*, 48(4), 1108–1121. <https://doi.org/10.1007/s10803-017-3447-z>
- Hara, H. (2007). Autism and epilepsy: Retrospective follow-up study. *Brain and Development*, 29(8), 486–490. <https://doi.org/10.1016/j.braindev.2006.12.012>
- Heiman, T. (2002). Parents of children with disabilities: resilience, coping, and future expectations. *Journal of Developmental and Physical Disabilities*, 14(2), 159–171. <https://doi.org/10.1023/A:1015219514621>
- Horton, T.V., Wallander, J.L. (2001). Hope and social support as resilience factors against psychological distress of mothers who care for children with chronic physical conditions. *Rehabilitation Psychology*, 46(4), 382–399. <https://doi.org/10.1037/0090-5550.46.4.382>
- International Classification of Functioning, Disability and Health, ICF. (2001). World Health Organization.

- Kapp, L., Brown, O. (2011). Resilience in families adapting to autism spectrum disorder. *Journal of Psychology in Africa*, 21(3), 459–464. <https://doi.org/10.1080/14330237.2011.10820482>
- Kavaliotis, P. (2017). Resilience of parents with a child with autism spectrum disorders and factors for its potential enhancement: family income and educational level. *Journal of Educational and Developmental Psychology*, 7(1), 188–199. <https://doi.org/10.5539/JEDP.V7N1P188>
- Keenan, M., Dillenburger, K., Doherty, A., Byrne, T., Gallagher, S. (2010). The experiences of parents during diagnosis and forward planning for children with autism spectrum disorder. *Journal of Applied Research in Intellectual Disabilities*, 23(4), 390–397. <https://doi.org/10.1111/j.1468-3148.2010.00555.x>
- Khan, M.A., Kamran, R., Ashraf, S. (2017). Resilience, perceived social support and locus of control in mothers of children with autism vs those having normal children. *Pakistan Journal of Professional Psychology: Research and Practice*, 8(1), 1–13.
- Landry, O., Chouinard, P.A. (2016). Why we should study the broader autism phenotype in typically developing populations. *Journal of Cognition and Development*, 17(4), 584–595. <https://doi.org/10.1080/15248372.2016.1200046>
- Lee, I., Lee, E.-O., Kim, H.S., Park, Y.S., Song, M., Park, Y.H. (2004). Concept development of family resilience: A study of Korean families with a chronically ill child. *Journal of Clinical Nursing*, 13, 636–645. <https://doi.org/10.1111/j.1365-2702.2004.00845.x>
- Leone, E., Dorstyn, D., Ward, L. (2016). Defining resilience in families living with neurodevelopmental disorder: A preliminary examination of Walsh's framework. *Journal of Developmental and Physical Disabilities*, 28, 595–608. <https://doi.org/10.1007/s10882-016-9497-x>
- Luthar, S.S. (2006). Resilience in development: A synthesis of research across five decades. In D. Cicchetti, D.J. Cohen (Eds.), *Developmental Psychopathology: Risk, Disorder and Adaptation* (pp. 739–795). Wiley.
- Łuszczynska, A., Kowalska, M., Schwarzer, R., Schutz, U. (2006). Berlińskie Skale Wsparcia Społecznego (BSSS): Wyniki wstępnych badań nad adaptacją skal i ich właściwościami psychometrycznymi. *Studia Psychologiczne*, 3(44), 17–27.
- Masten, A.S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist*, 56(3), 227–238. <https://doi.org/10.1037//0003-066x.56.3.227>
- Meral, B.F., Cavkaytar, A. (2012). A study on social support perception of parents who have children with autism. *International Journal on New Trends in Education and Their Implications*, 3(3), 124–135.
- Mohammadi, F., Rakhshan, M., Molazem, Z., Gillespie, M. (2019). Parental competence in parents of children with autism spectrum disorder: A systematic review. *Investigacion y Educacion Enfermeria*, 37(3), 1–15. <https://doi.org/10.17533/udea.iee.v37n3e03>
- Ogińska-Bulik, N., Juczyński, Z. (2008). Skala pomiaru prężności SPP-25. *Nowiny Psychologiczne*, 3, 39–55.

- Ostaszewski, K. (2017). Czynniki społeczno-ekologiczne warunkujące zdrowie i dobre przystosowanie. In B. Woynarowska (Ed.), *Edukacja zdrowotna. Podstawy teoretyczne – metodyka – praktyka* (pp. 71–78). PWN.
- Padden, C., James, J.E. (2017). Stress among parents of children with and without autism spectrum disorder: A comparison involving physiological indicators and parent self-reports. *Journal of Developmental and Physical Disabilities*, 29, 567–586. <https://doi.org/10.1007/s10882-017-9547-z>
- Papadopoulos, D. (2021). Mothers' experiences and challenges raising a child with autism spectrum disorder: A qualitative study. *Brain Sciences*, 11, 309, 1–16. <https://doi.org/10.3390/brainsci11030309>
- Pearson, N., Charman, T., Happé, F., Bolton, P.F., McEwen, F.S. (2018). Regression in autism spectrum disorder: Reconciling findings from retrospective and prospective research. *Autism Research*, 11(12), 1602–1620. <https://doi.org/10.1002/aur.2035>
- Peer, J.W., Hillman, S.B. (2014). Stress and resilience for parents of children with intellectual and developmental disabilities: a review of key factors and recommendations for practitioners. *Journal of Policy and Practice in Intellectual Disabilities*, 11, 92–98. <https://doi.org/10.1111/jppi.12072>
- Pisula, E. (2007). A comparative study of stress profiles in mothers of children with autism and those of children with Down's syndrome. *Journal of Applied Research in Intellectual Disabilities*, 20(3), 274–278. <https://doi.org/10.1111/j.1468-3148.2006.00342.x>
- Rattaz, C., Michelon, C., Munir, K., Baghdadli, A. (2018). Challenging behaviours at early adulthood in autism spectrum disorders: Topography, risk factors and evolution. *Journal of Intellectual Disability Research*, 62(7), 637–649. <https://doi.org/10.1111/jir.12503>
- Ruiz-Robledilloa, N., De Andrés-Garcíaa, S., Pérez-Blascob, J., González-Bonoa, E., Moya-Albiola, L. (2014). Highly resilient coping entails better perceived health, high social support and low morning cortisol levels in parents of children with autism spectrum disorder. *Research in Developmental Disabilities*, 35(3), 686–695. <https://doi.org/10.1016/j.ridd.2013.12.007>
- Sekułowicz, M., Kaczmarek, E. (2014). Ścieżki radzenia sobie matek dzieci z autyzmem – pomiędzy wypaleniem a prężnością. *Niepełnosprawność. Dyskursy Pedagogiki Specjalnej*, 13, 9–23.
- Seltzer, M.M., Greenberg, J.G., Hong, J., Smith, L.E., Almeida, D.M., Coe, Ch., Stawski, R. S. (2010). Maternal cortisol levels and behavior problems in adolescents and adults with ASD. *Journal of Autism and Developmental Disorders*, 40(4), 457–469. <https://doi.org/10.1007/s10803-009-0887-0>
- Sieber, J.E. (1998). Planning ethically responsible research. In L. Bickman, D.J. Rog (Eds.), *Handbook of applied social research methods* (pp. 127–156). Sage.

- Singh, P., Ghosh, S., Nandi, S. (2017). Subjective burden and depression in mothers of children with autism spectrum disorder in India: Moderating effect of social support. *Journal of Autism and Developmental Disorders*, 47, 3097–3111. <https://doi.org/10.1007/s10803-017-3233-y>
- Southwick, S. M., Sippel, L., Krystal, J., Charney, D., Mayes, L., Pietrzak, R.H. (2016). Why are some individuals more resilient than others: the role of social support. *World Psychiatry*, 15(1), 77–79. <https://doi.org/10.1002/wps.20282>
- Twoy, R., Connolly, P.M., Novak, J.M. (2007). Coping strategies used by parents of children with autism. *Journal of the American Academy of Nurse Practitioners*, 19, 251–260. <https://doi.org/10.22037/ijcn.v16i2.31518>
- Upadhyay, J., Patra, J., Tiwari, N., Salankar, N., Ansari, M.N., Ahmad, W. (2021). Dysregulation of multiple signaling neurodevelopmental pathways during embryogenesis: A possible cause of autism spectrum disorder. *Cells*, 10(4), 1–20. <https://doi.org/10.3390/cells10040958>
- Vidyasagar, N., Koshy, S. (2010). Stress and coping in mothers of autistic children. *Journal of the Indian Academy of Applied Psychology*, 36(2), 245–248. [https://doi.org/10.4103/IJPSYM.IJPSYM\\_333\\_19](https://doi.org/10.4103/IJPSYM.IJPSYM_333_19)
- Volkmar, F.R., Lord, C., Bailey, A., Schultz, R., Klin, A. (2004). Autism and pervasive developmental disorders. *Journal of Child Psychology and Psychiatry*, 45(1), 135–170. <https://doi.org/10.1046/j.0021-9630.2003.00317.x>
- Yates, K., Le Couteur, A. (2009). Diagnosing autism/autism spectrum disorders. *Paediatrics and Child Health*, 19, 55–59. <http://doi.org/10.1016/J.PAED.2016.08.004>
- Yates, T.M., Tyrell, F.F., Masten, A.S. (2015). Resilience theory and the practice of positive psychology from individuals to societies. In S. Joseph (Ed.), *Positive Psychology in Practice: Promoting Human Flourishing in Work, Health, Education, and Everyday Life* (pp. 773–788). Wiley & Sons.
- Zimmerman, M.A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, 23(5), 581–599. <https://doi.org/10.1007/BF02506983>

## PRĘŻNOŚĆ PSYCHICZNA MATEK DZIECI ZE SPEKTRUM ZABURZEŃ AUTYSTYCZNYCH (ASD) A SPOSTRZEGANE WSPARCIE SPOŁECZNE

**Wprowadzenie:** Wsparcie społeczne okazuje się być znaczącym moderatorem jakości życia matek dzieci ze spektrum zaburzeń autystycznych (ASD). Prężność psychiczna jest zasobem osobowym sprzyjającym adaptacji do wyzwań życiowych, a jej natężenie może różnicować odbiór wsparcia społecznego.

**Cel badań:** Celem badania było ustalenie związku między poziomem prężności psychicznej matek dzieci z diagnozą ASD a spostrzeganym przez nie wsparciem społecznym o charakterze formalnym. Wsparcie formalne rozumiane jest jako forma instytucjonalnej pomocy udzielanej dzieciom i matkom, w ramach korzystania z usług Ośrodka Wczesnej Interwencji.

**Metoda badań:** 143 matki dzieci z ASD zostały poddane badaniom za pomocą Skali Pomiaru Prężności (SPP-25) oraz Kwestionariusza Ankiety dla Matek Dzieci ze Spektrum Autyzmu.

Dane pozwoliły na określenie poziomu prężności psychicznej i ocenę spostrzeganego przez badane wsparcia społecznego.

**Wyniki:** Badane matki cechował wyższy poziom prężności psychicznej w stosunku do grupy normalizacyjnej. Matki o wyższym poziomie prężności psychicznej lepiej odbierały wsparcie społeczne.

**Wnioski:** Badanie podkreśla konieczność rozwijania prężności psychicznej u matek dzieci z ASD, co może wpływać na skuteczniejsze radzenie sobie z wyzwaniami macierzyństwa w obliczu niepełnosprawności dziecka.

**Słowa kluczowe:** prężność psychiczna, spektrum zaburzeń autystycznych, wsparcie społeczne, macierzyństwo

