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Personality and temperament types and stress coping strategies of mothers of children diagnosed with autism spectrum disorder

Typy osobowości i temperamentu a style radzenia sobie ze stresem matek dzieci z zaburzeniami ze spektrum autyzmu

Abstract

Introduction. Parents raising a child diagnosed with autism experience numerous challenges related to caring for the child, which impact the levels of stress they undergo.

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Aim. The aim of the study was to analyse the relationship between personality and temperament traits in mothers raising children diagnosed with disorders within the autism spectrum (ASD) and their stress coping strategies. The study also sought answers to the question of whether examined mothers, differing in personality and temperament types, significantly differ in their preferred stress coping strategies.

Materials and methods. The study involved 58 women raising children with a medical diagnosis of disorders within the autism spectrum (acc. to DSM-5). Various research tools were applied in the study, such as a custom survey, the Coping Inventory for Stressful Situations (CISS), the adult version of the EAS-D Temperament Questionnaire, and the Polish adaptation of the 10-item Big Five Personality Inventory (TIPI-PL).

Results and conclusion. The results of statistical analyses indicate the presence of statistically significant negative correlations between mothers' personality factors such as extraversion and emotional stability and stress coping emotions-oriented strategies. Positive correlations were found between the temperament traits of the examined mothers – negative emotionality and stress coping strategies focused on emotions and avoidance. Based on the cluster analysis, two groups of mothers were identified: those with introverted/emotionally unstable/negative emotionality personality type and those with extraverted/emotionally stable/positive emotionality personality type, significantly differing in their preferred stress coping strategies. Personality traits of the examined women, such as increased introversion, shyness, and neuroticism are significantly correlated with a preference for stress coping strategies focused on emotions. Temperament traits of the examined women, such as a tendency to react with dissatisfaction, anger, and aggression (*i.e.*, negative emotionality) are correlated with stress coping strategies focused on emotions and avoidance. Women with an introverted/emotionally unstable/negative emotionality personality type significantly more often employ stress coping strategies focused on emotions in stressful situations than do women with an extraverted/emotionally stable personality type.

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Keywords: autism spectrum disorder, personality traits, types of mother's temperament, coping with stress, mothers.

Abstrakt

Wprowadzenie. Rodzice wychowujący dziecko z diagnozą autyzmu doświadczają wielu wyzwań związanych z opieką nad nim, które wpływają na poziom doświadczanego przez nich stresu.

Cel. Celem pracy była analiza zależności między cechami osobowości i temperamentu matek wychowujących dzieci z diagnozą zaburzeń należących do spektrum autyzmu (ASD) a stylami radzenia sobie ze stresem.

Materiały i metody. Badaniami objęto 58 kobiet wychowujących dzieci z diagnozą lekarską zaburzeń należących do spektrum autyzmu (według DSM-5). W pracy zastosowano różne narzędzia badawcze, takie jak: własna ankieta, Kwestionariusz Radzenia Sobie w Sytuacjach Stresowych CISS, Kwestionariusz Temperamentu EAS-D w wersji dla dorosłych oraz polską adaptację 10-punktowego Inwentarza Osobowości TIPI-PL.

Wyniki i wnioski. Wyniki analiz statystycznych informują o występowaniu znaczących ujemnych korelacji między czynnikami osobowości matek: ekstrawersją i stabilnością emocjonalną, a stylem radzenia sobie ze stresem zorientowanym na emocjach. Dodatkowo korelacje otrzymano między cechami temperamentu badanych – negatywną emocjonalnością a stylem radzenia sobie ze stresem zorientowanym na emocjach i unikaniu. Na podstawie analizy skupień wyodrębniono dwie grupy matek: z typem osobowości i temperamentu introwertywnym/niestabilnym emocjonalnie/z negatywną emocjonalnością oraz typem ekstrawertywnym/stabilnym emocjonalnie/z pozytywną emocjonalnością, które różnią się istotnie preferowanymi stylami radzenia sobie ze stresem. Cechy osobowości badanych kobiet: nasilona introwersja, nieśmiałość i neurotyczność łączą się istotnie z preferowaniem stylu radzenia sobie ze stresem skoncentrowanego na emocjach. Cechy temperamentu badanych kobiet: tendencja do reagowania niezadowolaniem, złością, agresją, czyli negatywną emocjonalnością, łączy się ze stylem radzenia sobie ze stresem skoncentrowanym na emocjach oraz na unikaniu. Kobiety z typem osobowości introwertywnym/niestabilnym emocjonalnie/z negatywną emocjonalnością istotnie częściej niż kobiety z typem osobowości ekstrawertywnym/stabilnym emocjonalnie stosują w sytuacji stresu styl skoncentrowany na emocjach.

Słowa kluczowe: zaburzenia ze spektrum autyzmu, cechy osobowości, typy temperamentu matki, radzenie sobie ze stresem, matki.

Introduction

Stress is defined by Richard Lazarus (1986) as a relation between a person and the environment, which the person evaluates as burdening or exceeding that person's resources and which threatens his or her well-being. The decisive factor in recognising a situation as stressful is the subjective evaluation of its significance for the person. A coping mechanism, taken as a strategy or style, refers to the overall activity undertaken by a person in a specific situation. The author mentioned above distinguished between basic coping strategies: problem-oriented, called instrumental or task-oriented, emotion-oriented (used to regulate unpleasant emotions) and oriented to avoid difficult situations and escape from problems.

Parents of a child with a disorder belonging to autism spectrum disorder (ASD) are at risk of experiencing chronic stress, and the coping styles and strategies they use to cope with stress play an important role in their constructive adaptation to this difficult life situation and the resulting tasks and problems (Hastings, Taunt, 2002; Hastings et al., 2005; Baxter, Cummins, & Yiolitis, 2000). These parents experience a range of challenges in caring for their children that affect the level of stress they experience (Ooi, Ong, Jacob, & Khan, 2016). Approximately 77% of parents of children with disorders belonging to the autism spectrum have significantly higher levels of stress than parents of children who are developing properly and parents of children with other neurodevelopmental disorders, e.g., ADHD (Barroso, Mendez, Graziano, & Bagner, 2018; Watson, Coons, & Hayes, 2013; Craig et al., 2016; Daulay, Ramdhani, & Hadjam, 2020).

Daniel Shepherd, Jason Landon, Steve Taylor, and Sonja Goedeke (2018), as well as Kartini Ilias, Kim Cornish, Aurette Kummar, Miriam Sang-Ah Park, and Karen Golden (2018), believe that how parents raising a child with ASD will respond to stress depends on the level of social support they receive, their understanding and perception of their difficulties, their anxiety about their child's future and development, their religious beliefs, and the severity of their child's autism symptoms. According to many authors (Tehee, Honan, & Hevey, 2009; McStay, Dissanayake, Scheeren, Koot, & Begeer, 2014; Rivard, Terroux, Parent-Boursier, & Mercier, 2014; Banasiak, 2017; Craig et al., 2016; Batool, Khurshid, 2015; Kiami, Goodgold, 2017; Giovagnoli et al., 2015; Enea, Rusu, 2020) significant predictors of the severity of stress experienced by parents are problematic behaviour, sensory impairment, communication difficulties in the child, the child's level of cognitive, physical, emotional and social functioning and development. In situations in which a child with ASD does not have other comorbidities and does not exhibit increased aggressive behaviour, parents

are better able to cope with their child's difficulties and thus experience lower levels of stress (Xue, Ooh, & Magiati, 2014). Ji Lee and Hsu-Min Chiang (2018) highlight that factors significantly associated with the level of stress reported by parents are the child's behavioural disorder, the child's age and severity of autism symptoms, and the mother's use of mental health professionals. Angela Sim et al. (2018) connect the higher levels of stress experienced by parents of children with ASD with a reduction in their social relationships, lack of access to therapy, negative marital relationships, and material difficulties. Kristin Strauss et al. (2022) argue that the level of stress felt by fathers resulting from behavioural and emotional problems in children with an ASD diagnosis modifies self-efficacy. Mieczysław Dudek (2017) compared the stress coping styles used by mothers and fathers of children with autism. He found that mothers were more likely than fathers to use an avoidance-focused stress coping style and to engage in vicarious activities. Maria Efstratopoulou, Maria Sofologi, Sofia Giannoglou, and Eleni Bonti (2022) described significant relationships between the severity of autism spectrum symptoms in a child and high levels of anxiety and stress in parents. Stress experienced by parents negatively affects their quality of life and mental health (Enea, Rusu, 2020). Low levels of stress experienced by parents were associated with their active involvement in coping, with average or higher levels of education, a sense of social support, lower levels of ASD symptoms, and better self-regulation skills in the child (Efstratopoulou, Sofologi, Giannoglou, & Bonti, 2022). Furthermore, M. Efstratopoulou et al. (2022) emphasise that the level of stress experienced by parents of a child with an ASD diagnosis is influenced by their personality traits, temperament, the coping styles they use to cope with stress, the severity and frequency of behavioural difficulties present in the child, social relationships, and emotional reactions.

Justyna Świerczyńska and Beata Pawłowska (2021, 2022) report significant relationships in mothers between avoidance-focused and emotion-focused stress coping styles and low sense of coherence, increased ASD symptoms in the child, and evaluations of the child's disorder as threat, loss, meaning, and benefit. Task-focused stress coping style in mothers was associated with low severity of social deficits and communication difficulties in children (Świerczyńska, Pawłowska, 2022). Furthermore, B. Pawłowska and J. Świerczyńska (2021) show significant correlations between the task-focused coping style used by mothers of children with autism and a positive evaluation of relationships in the family, a sense of competence, treating the child's illness as a challenge, a high tolerance for failure and negative emotions, and an optimistic attitude towards life. Gülçin Bozkurt, Gülzade Uysal, and Duygu Sönmez Düzakaya (2019) note that parents of children with autism who prefer a problem-focused stress coping strategy definitely spend

more time with their children and adapt to the situation more easily.

Agnieszka Laba-Hornecka (2021) described significant correlations between a sense of life satisfaction and the coping styles and strategies used to cope with stress occurring in a group of mothers of children with ASD. The mothers' sense of life satisfaction was significantly influenced by their personality traits and tendency to respond with an emotion-focused, problem-acceptance and problem-focused response. Mothers of children with ASD showed a more intense tendency towards a task-oriented approach to the problem compared to fathers. The women surveyed were less likely to deny the existence of difficulties in their lives or downplay problems. The author (Lab-Hornecka, 2021) found that mothers raising children with ASD in stressful situations often focus on emotions and seek emotional support.

Putri Mesda Amalia and Dewi Kumalasari (2019) observe that parents' personality traits, i.e., extroversion or introversion, determine their preferred ways and methods of parenting, the quality of their interactions with their children, their activity level and sociability. Terry Chi and Stephen Hinshaw (2002) believe that parents' parenting attitudes are also significantly influenced by a personality trait called *conscientiousness*. Parents who demonstrate higher levels of conscientiousness, as well as extraversion, agreeableness and openness to new experiences, and low levels of neuroticism, find it easier to initiate and build positive interactions with their children (Smith et al., 2007). Eny Harsiwi, Endang Widyorini, and Maria Roswita (2021) and Cynthia Smith et al. (2007) believe that parents displaying the personality traits mentioned above are sensitive to their child's needs and provide a more consistent and structured parenting environment. Joanna Kobosko et al. (2022), based on the results of a study involving a group of mothers of children with central auditory processing disorder, found significant correlations between the level of stress experienced by the women studied and their personality traits. High levels of extraversion, conscientiousness, and emotional stability were associated with low levels of stress experienced by the mothers. The findings presented above provide a basis for the formulation of the research purpose.

Aim of the study

The study aimed to analyse the relationship between personality and temperament traits in mothers raising children with a diagnosis of a disorder belonging to the autism spectrum (ASD) and coping styles with stress. An answer was also sought to the question of whether the mothers studied, who differed in personality

and temperament types, differed significantly in their preferred styles of coping with stress.

Study material

The study included 58 women raising children with a diagnosis of a disorder belonging to the autism spectrum (according to DSM-5). The children with disorders belonging to the autism spectrum were between 5 and 16 years old. The mean age of the mothers surveyed was 38 years. There were 29 (50%) mothers living in both rural and urban areas. Vocational education was obtained by 10 women (17.24%), secondary education by 15 women (25.86%) and higher education by 33 women (56.89%). Twenty-six women (44.83%) were economically active, 2 (3.45%) were on pension, 18 were not working by their own choice (31.03%), and unemployed status was held by one woman (1.72%). There were 10 mothers raising the child alone (17.24%) and 48 (82.76%) together with the child's father. Sensory integration classes were provided for their children with ASD by 43 mothers (74.14%), speech therapy classes by 20 (34.48%), psychological therapy by 43 (74.14%), classes with an educator by 25 (43.10%), and motor rehabilitation by 4 (6.90%).

Methods

The following research methods were used in this study:

1. A self-constructed questionnaire that made it possible to collect information on the age of the women surveyed and the age of their children, their level of education, place of residence, marital status, professional activity, and the medical diagnosis that their children had received.
2. *Coping Inventory for Stressful Situations* (CISS) by Norman Endler and James Parker. It consists of 48 sentences that describe different ways of coping with stress. These can be divided into three categories: task style, emotional style, and avoidant style (McWilliams, Cox, & Enns, 2003).
3. *The Emotionality, Activity and Sociability Temperament Questionnaire* (EAS) is a research tool developed by Arnold Buss and Robert Plomin to measure temperament in adults. The Polish version of this tool was devised by Włodzimierz Oniszczenko in 1997. According to research conducted by A. Buss and R. Plomin (Onishchenko, 1997), tempera-

ment can be divided into three main components: emotionality, activity and sociability. The questionnaire consists of twenty questions, which are formulated as statements and the respondent assesses their truthfulness on a five-point scale.

4. The *TIPI-PL* is a test that was developed in Poland based on the Ten Item Personality Inventory (TIPI) test, created by Agnieszka Sorokowska, Aleksandra Słowińska, Anita Zbieg, and Piotr Sorokowski in 2014 (Sorokowska, Słowińska, Zbieg, & Sorokowski, 2014). It is a brief method for measuring five personality traits – extraversion, conscientiousness, agreeableness, emotional stability, and openness to new experiences. The method is based on the theory of the so-called “Big Five” (McCrae, Costa, 2008). The test consists of 10 questions to which respondents answer by responding to statements on a seven-point scale. The scale has good psychometric properties.

Study procedure

Approval number KE-0254/3/2020 for the study was obtained from the Bioethics Committee at the Medical University of Lublin. Participants who agreed to take part in the study were given a packet of questionnaires. Women undergoing the study had the opportunity to complete the questionnaires individually at the counselling centre or their place of residence. Each participant was given materials including instructions, a demographic questionnaire and the questionnaires mentioned earlier. Participation in the study was entirely voluntary. The participants also had the opportunity to receive psychological support if such support was needed.

Statistical methods

The results obtained were statistically analysed using STATISTICA 10.0 PL software. Relations between interval variables were determined by calculating r-Pearson correlation coefficients. The normality of the distribution was tested using the Kolmogorov-Smirnov test with Lilliefors correction and the Shapiro-Wilk W test. Skewed distributions were obtained for the following TIPI scales: Extraversion, Agreeableness, Conscientiousness, Neuroticism. The remaining variables (scores on the EAS-D and CISS questionnaire scales) had a normal distribution. Correlations between scores on the TIPI and CISS scales were

calculated using both parametric and non-parametric tests and the same results were obtained. Therefore, the results of parametric tests are included in the paper because of the higher power of these tests. To separate individuals differing in personality traits and temperament, non-hierarchical cluster analysis was used. Cluster analysis leads to the grouping of objects based on their mathematically determined similarity. The technique used is called the *k-means method*. It is based on creating clusters in such a way that the average distance between all cases in the resulting cluster is as small as possible, i.e., it aims to minimise the variance within clusters and maximise the variance between clusters (Statistica Pl, 1997, p. 3175). Differences between separate personality and temperament types in terms of selected criterion variables and coping styles were determined using the t-test for independent groups. A value of 0.05 was taken as statistically significant.

Results

The first stage of the study attempted to answer the research question: Are there and what are the correlations between temperament traits and stress coping styles in the mothers surveyed? To do this, r-Pearson correlation coefficients were calculated between the scores obtained by the mothers studied on the scales of the EAS-D Questionnaire and the scales of the CISS Questionnaire (Table 1).

Table 1

Correlation coefficients between scores on the CISS scales and EAS-D

EAS-D	CISS		
	Task-focused style	Emotion-focused style	Avoidance-focused style
Activity	0.19	-0.02	0.01
Sociability	0.16	-0.09	0.08
Dissatisfaction	-0.05	0.54***	0.36**
Fear	-0.11	0.39***	0.14
Anger	0.01	0.45***	0.30*

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Source: Authors' own study.

The results obtained report the existence of statistically significant relationships between the temperamental traits of the mothers studied: an increased tendency to react with anxiety, dissatisfaction, anger, and aggression and their preference for an emotion-focused and avoidance style in stressful situations.

Following this, an answer was sought to the question: Are there, and what are, the correlations between the personality traits of the mothers surveyed, as captured by the Big Five concept, and coping styles with stress? For this purpose, r-Pearson correlation coefficients were calculated between the mothers' scores on the scales of the TIPI Questionnaire and the scales of the CISS Questionnaire (Table 2).

Table 2

Correlation coefficients between scores on the CISS scales and TIPI

TIPI	CISS		
	Task-focused style	Emotion-focused style	Avoidance-focused style
Extraversion	0.23	-0.39**	-0.14
Agreeableness	0.22	0.00	0.00
Conscientiousness	0.11	-0.11	0.03
Emotional stability	0.22	-0.57***	-0.23
Openness to new experiences	0.16	-0.17	0.10

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Source: Authors' own study.

The results report the presence of statistically significant positive correlations between the personality traits of the women surveyed: introversion, shyness, lack of optimism, preference for solitude, impulsivity and neuroticism, frequent concentration on negative emotional experiences in stressful situations, reacting with aggression, self-aggression and feelings of guilt. In the study population of women, there were significant correlations between high levels of extraversion, friendliness, sociability and emotional stability, high control of emotions and drives, and infrequent use of an emotion-focused style in stressful situations.

In the final stage of the study, based on cluster analysis, two groups of mothers were distinguished, which were characterised by a distinctive pattern of EAS-D and TIPI Questionnaire scale scores. The division into two subgroups is justified by statistical and substantive arguments: the size of the subgroups allowing them to be compared in terms of specific variables and the clear psychological significance of the personality types and temperament revealed (Figure 1). Using the Student’s t-test, the two separate groups of women were compared in terms of criterion variables (scores on the EAS-D and TIPI scales) (Table 3) and stress coping styles (Table 4).

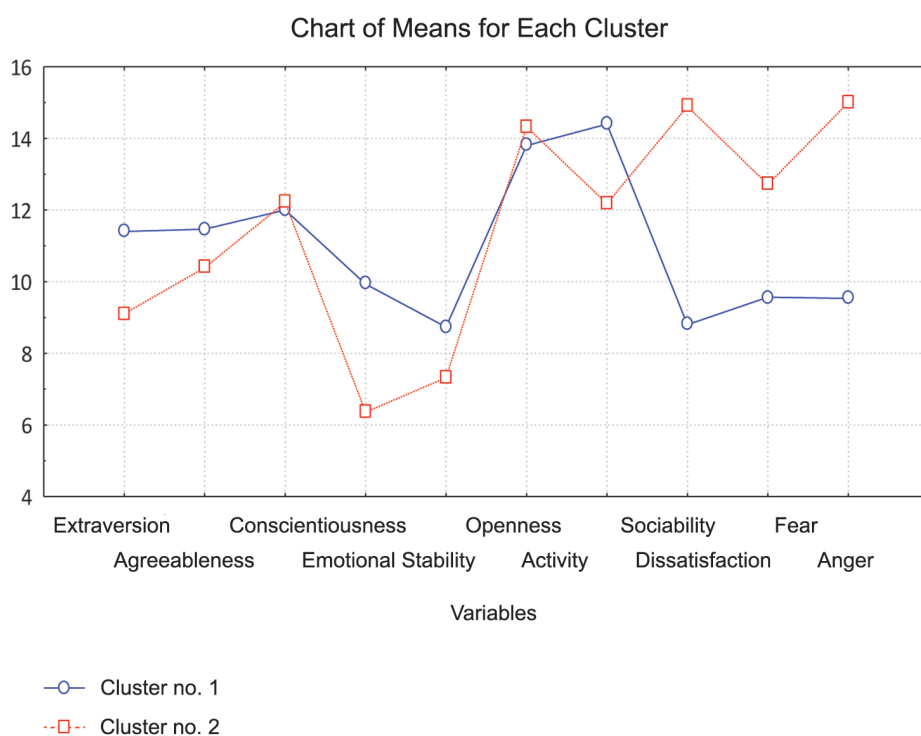


Figure 1. Distinct groups of mothers of children with ASD with two personality and temperament types: type/focus 1 and type/focus 2. Note: “Wykres średnich każdego skupienia” – Graph of the averages of each cluster; “Skupien. Nr” – Focus no. Source: Authors’ own study.

Table 3

Comparison of mean scores obtained by separate groups of women with personality type 1 and temperament type 2 on the EAS-D and TIPI scales

Variables	Type 1 (N=30)		Type 2 (N=28)		T
	M	SD	M	SD	
TIPI					
Extraversion	11.40	2.61	9.11	3.39	2.90**
Agreeableness	11.47	2.32	10.39	2.81	1.59
Conscientiousness	12.00	2.07	12.21	1.87	-0.41
Emotional stability	9.93	1.78	6.36	2.70	6.00***
Openness to new experiences	8.73	1.91	7.32	2.76	2.28*
EAS-D					
Activity	13.80	2.66	14.32	3.38	-0.66
Sociability	14.40	2.69	12.18	3.62	2.67**
Dissatisfaction	8.80	1.75	14.89	2.06	-12.16***
Fear	9.57	1.98	12.71	2.66	-5.13***
Anger	9.53	2.08	15.00	2.33	-9.45***

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Source: Authors' own study.

Based on cluster analysis, two groups of women were identified that differed significantly in the intensity of personality traits and temperament. The first group identified comprised 30 women and the second group comprised 28 respondents.

In the analysis of differences between the identified groups of women, it should be emphasised that mothers from group 1 (focus 1) are characterised by higher levels of extraversion, sociability, willingness to experience positive emotions, optimism, cordiality in social relations, higher emotional stability, better emotional adjustment, ability to cope with stress without experiencing tension, irritability,

anxiety. Women with personality type/temperament 1, compared to women with type 2, are more open to new experiences, creative, independent in judgement, unconventional, and tolerant of new life experiences. The personality type/temperament presented by the first group (focus 1) of women was called *extraverted/emotionally stable/positive emotionality*.

Mothers in group 2 (focus 2) compared to group 1 are more introverted, isolating, pessimistic, and prone to feeling negative emotions: feelings of dissatisfaction, guilt, fear, anger, aggression, tension, and anxiety. Group 2 women have a lower ability to control their urges, to cope with stress and a lower tendency to seek and positively value new life experiences and to tolerate novelty. The personality type/temperament presented by the second group (focus 2) of women was called *introverted/emotionally unstable/negative emotionality*. This personality type/temperament could also be called *introverted/neurotic*.

To answer the research question: Do the separate groups of mothers with personality type 1 and temperament type 2 differ significantly in terms of stress coping styles (as determined by the CISS), a Student's t-test was used (Table 4).

Table 4

Comparison of mean scores obtained by separate groups of women with personality types 1 and 2 on the CISS scales

CISS	Type 1 (N=30)		Type 2 (N=28)		t
	M	SD	M	SD	
Task-focused style	3.78	0.52	3.71	0.49	0.50
Emotion-focused style	2.42	0.77	3.05	0.51	-3.63***
Avoidance-focused style	2.40	0.44	2.59	0.64	-1.35

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Source: Authors' own study.

Women with type 2, i.e., introverted/emotionally unstable/negative emotionality, are significantly more likely than women with type 1, extroverted/emotionally stable/positive emotionality, to use an emotion-focused style in a stressful situation.

Discussion

The results of the analyses conducted indicate the existence of statistically significant correlations between temperament traits measured with the EAS-D Temperament Questionnaire and Big Five personality traits measured with the TIPI Personality Inventory (PL) and the stress coping styles used by mothers raising children with a diagnosis of a disorder belonging to the autism spectrum.

The results obtained in this study indicate significant correlations between the temperamental trait of the mothers studied – negative emotionality, meaning a tendency to react with anxiety, anger, hostility, and aggression – and an emotion-focused and avoidance-focused stress coping style. In addition, significant correlations were revealed between introversion, shyness, lack of optimism, preference for solitude, impulsivity and neuroticism and the frequent reaction in stressful situations to focus on negative emotions, aggression or self-aggression. Such personality traits of the mothers studied as high levels of extraversion, friendliness, openness, sociability and emotional stability as well as high control of emotions and drives were associated with infrequent use of an emotion-focused style in stressful situations.

The results obtained in this study correspond with M. Efstratopoulou et al. (2022), who believe that the level of stress experienced by parents of children with ASD is influenced, among other things, by their personality traits, including temperament. According to Nina Ogińska-Bulik and Zygfryd Juczyński (2010), the way stress is experienced and the ability to cope with it depends on various factors related to the social support system and personality traits such as levels of extraversion, agreeableness and openness to experience. Jan Strelau (1996) believes that temperament is also a moderating factor for stressors, the effects of stress and coping strategies. Earlier studies by J. Świerczyńska and B. Pawłowska (2021, 2022) indicate relationships between the stress coping styles preferred by mothers of children with ASD and their sense of coherence. In addition, the authors showed that mothers' use of an emotion-focused and avoidance-focused stress coping style is associated with increased symptoms of autism spectrum disorders in children as well as mental health disorders in this group of women, mainly anxiety and depression, a sense of tension, and difficulties in coping with tasks of daily living. Mothers' use of a task-focused style in stressful situations correlated significantly with low levels of social and communication deficits in children. The severity of the disorder symptoms observed in a child with ASD will be significantly modified by the parents' parenting attitudes, which are significantly influenced by personality traits – extraversion and introversion (Amalia, Kumalari, 2019), conscientiousness (Chi, Hinshaw, 2002), or the level of neuroticism

(Smith et al., 2007). Furthermore, J. Kobosko et al. (2022) pointed out that high levels of extraversion, conscientiousness, and emotional stability reduce the level of stress experienced by mothers. Parents who present high levels of conscientiousness, extraversion, agreeableness and openness to new experiences, and low levels of neuroticism, have easier positive interactions with their children (Smith et al., 2007), are more sensitive to their children's needs and provide them with a more structured parenting environment (Harsiwi, Widyorini, & Roswita, 2021).

Some researchers (Dąbrowska, Pisula, 2010; Dudek, 2017; Sekułowicz, Kaczmarek, 2014) have investigated the stress coping styles preferred by parents of children with ASD. Anna Dąbrowska and Ewa Pisula (2010) described the avoidance-focused and emotion-focused stress coping styles more frequently used by mothers of ASD children, and M. Dudek (2017) conducted a study to show the stress coping styles of parents of children with ASD. He showed that mothers are more likely than fathers to use an avoidance-focused stress coping style and to engage in vicarious activities. In contrast, G. Bozkurt, G. Uysal, and D. S. Düzükaya (2019) found that parents of children with autism who are more likely to follow a task-focused stress coping strategy spent significantly more time with their children and adapted more easily to the situation.

However, it should be emphasised that the group of mothers of children with ASD is not homogeneous in terms of personality and temperament types, and at the same time, these types differ significantly in their styles of coping with stress. The results obtained in this study report that mothers characterised by an extraverted/emotionally stable/positive emotionality personality and temperament type react significantly less frequently in a difficult situation with emotions such as guilt, aggression, or self-aggression than mothers with an introverted/emotionally unstable/ dominant negative emotionality type. Analyses of the ways and styles of coping with stress used by parents of children with ASD therefore need to take into account differences in their personality types and temperament. It is possible to formulate a hypothesis that the temperament and personality type of mothers mainly determine their preferred style of coping with stress. The ways and style of coping with stress used by mothers will determine their adaptation to a difficult situation, their coping with the tasks of life, their relationships with family members, including the child with ASD, their involvement in the child's rehabilitation, therapy, the parenting attitudes they adopt towards the child, as well as their response to symptoms of mental health disorders or their assessment of quality of life, as suggested by the results of research obtained to date (Świerczyńska, Pawłowska, 2022; Pawłowska, Świerczyńska, 2021; Bozkurt, Uysal, Düzükaya, 2019; Dąbrowska, Pisula, 2010; Łaba-Hornecka, 2021; Salas, Rodríguez, Urbieto, & Cuadrado, 2017; Benson, 2014; Carter, Martínez-Pedraza, & Gray, 2009;

Dardas, Ahmad, 2015; Rayan, Ahmad, 2017). Taking into account differences in the personality types and temperaments of parents raising children with ASD and their associated preferred styles and ways of coping with stress can help to select interventions that are more responsive to their needs, and tailored to individual difficulties and problems.

Conclusion

1. Personality traits of the female respondents: increased introversion, shyness, and neuroticism, are significantly associated with a preference for an emotion-focused coping style.
2. Temperament traits of the female respondents: a tendency to react with dissatisfaction, anger, and aggression, i.e., negative emotionality is associated with an emotion-focused and avoidance-focused stress coping style.
3. Women with an introverted/emotionally unstable personality type with negative emotionality use an emotion-focused style in a stressful situation significantly more often than women with an extroverted/emotionally stable/positive emotionality personality type.

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