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The role of coping strategies in the relationship between attachment style and psychological well-being in mothers of children with autism

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Abstract

This study aims to evaluate the relationship between attachment style and psychological well-being in mothers of children with autism, as well as the mediating role of maternal coping in this relationship. The pragmatic aim of the research was to provide theoretical and practical information regarding the attachment style, coping, and well-being of families who have children with autism especially mothers, as they are most often involved in the care and upbringing of these children. The present study is a correlational, cross-sectional study conducted on a sample of 113 mothers of autistic children aged between 22 and 51 years, $M = 39.78$, $SD = 4.89$. The children's ages ranged between three and 14 years, $M = 10.61$, $SD = 2.65$. A number of 66 children were boys (58%) and 47 were girls (42%). The instruments used were the Psychological Well-being Scale (PWBS), Adult Attachment Scale (AAS), Brief COPE. The multiple linear regression showed that only the secure attachment of mothers is a significant predictor of well-being. Mediation analyses showed that neither adaptive nor maladaptive coping mediates the relationship between attachment style and well-being. In conclusion, we discussed the limitations and future research direction and also the importance of preserving higher well-being in mothers of children with autism.

Keywords: mothers, children with autism, attachment styles, well-being, coping strategies

Introduction

The birth of a child in any family is an occasion of joy and happiness, representing perhaps one of the most important moments, but in the family where a child with various disabilities appears, it becomes at the same time a source of joy as well as a possible source of stress (Revenco et al., 2019). Jurma (2008) describes how parents raising a child with a disability or chronic illness must deal with many uncertainties about the child's health (prognosis, repeated medical visits and special care needs). When coping strategies are not adequate, these challenges can affect couple and family relationships, the physical and mental health of parents, with an increase in the incidence of depressive disorders, anxiety, stress, also having an influence on the parental role (Jurma, 2008). The literature identifies that mothers of children with autism present more psychological consequences, have a higher level of distress and lower psychological well-being, even developing various pathologies (depressive disorders, anxiety, stress), all these leading to difficulties in managing the relationship with the child and to serious consequences in terms of his symptoms (Clauser et al., 2021; Dabrowska & Pisula, 2010; Neff & Faso, 2015; Pisula, 2002). A clear determinant of mental health is mothers' inability to set limits on children's behavior, a predictive factor for depression being the aggression shown by some children towards the adults around them, as well as mothers' idea that the blame for the child's illness is external (external locus of control), which leads to feelings of helplessness and loss of control and direct influence over the child's situation (Cappe et al., 2011; Falk, 2014, cited in Hățiș, 2021). However, it has

been found that not all mothers of autistic children experience psychological well-being consequences (Costa et al., 2017; Hastings & Taund, 2002; Jurma, 2008) so the question arises as to why there is this variation among the mothers of these children. Thus, a potential answer, based on Shtayermman and Zhang's (2021) study, could be their attachment style. In their study, Shtayermman and Zhang demonstrate that parents of children with autism who have a secure attachment style present lower levels of stress and have fewer mental health problems, compared to parents who have an insecure attachment style and who present more distress and therefore less psychological well-being.

A study carried out in Romania (Iacob & Gherguț, 2017) shows that there are some differences in the adoption of coping mechanisms by approaching parental self-efficacy according to the attachment style of mothers of children with autism. Thus, higher perceived parental self-efficacy and a secure attachment style are associated with the adoption of adaptive coping mechanisms, while lower self-efficacy and an ambivalent attachment style are associated with maladaptive coping mechanisms.

Considering that we have identified certain consequences on the maternal psychological well-being of caring for a child with autism, but also that these may vary according to certain parental characteristics. In the present research we will focus on exploring the relationship between maternal psychological well-being, attachment style and the use of coping strategies in mothers of children with autism.

Autistic spectrum disorder

Autistic spectrum disorder is characterized by a triad of deficiencies in terms of social interaction, communication, and flexible behavior, with manifestations that vary according to the level of development and chronological age of the child, and which may include hyperactivity, impulsivity, aggression, self-injurious behavior, tantrums, and delayed toilet training (Duarte et al., 2005, cited in Neff & Faso, 2015).

The Diagnostic and Statistical Manual of Mental Disorders DSM-5 (2013) defines autism spectrum disorder (ASD) as a neurodevelopmental disorder with onset in early childhood, characterized by deficits in communication and social interaction, restrictive behavior patterns, and repetitive and through limited interests or activities, all this varying depending on characteristics of the individual and his living environment, as well as the severity of the condition, the level of development and chronological age, hence the term "spectrum". ASD includes the disorders formerly known as infantile autism, childhood autism, Kanner autism, high-functioning autism, atypical autism, pervasive developmental disorder, childhood disintegrative disorder and Asperger's disorder.

Autism spectrum disorder is frequently associated with a range of impairments in different areas of neurological, mental, or behavioral development: attention deficit/hyperactivity disorder; developmental disorder of coordination; disruptive behavior; conduct or impulse control disorder; anxiety, depressive or bipolar disorder; epilepsy; tics or Tourette's disorder; self-harm; eating, defecation or sleep disturbances. This disorder is also associated with impairment of thinking, attention, feelings, language, and interaction with other people. Adaptation, mood and learning difficulties can also be affected. Intellectual functioning may be more or less affected (DSM-5, 2013).

According to the WHO (World Health Organization), it is estimated that around one in 100 children worldwide suffers from autism, with some studies showing that the incidence of ASD could reach 2%. Prevalence estimates have increased over time and have varied widely within and

across sociodemographic groups, reflecting changes in the definition of autism and differences in the methodology and contexts of prevalence studies (Zeidan et al., 2022).

Parents of children with autism

Parents of children with autism face unique and difficult stressors associated with their child's disorder, but their personal characteristics may influence how they relate to stressful life events and can help them cope with some of the harmful effects associated with external stress (Costa et al., 2017; Duarte, 2005; Jurma, 2008; Neff & Faso, 2015).

Given that there are some negative consequences for mothers of autistic children (from anger, physical and mental exhaustion, increased stress to various pathologies, such as anxiety, depressive disorders, affective and adjustment disorders) (Clauser et al., 2021; Dabrowska & Pisula, 2010; Gray, 1992; Hățiș, 2021; Neff & Faso, 2015; Pisula, 2002; Yu et al., 2016), it is important to find which strategies reduce these consequences in order to increase the level of perceived psychological well-being of mothers, mothers who, in turn, will have positive effects on the development, behavior and adaptability of children with autism, because it has been found that interventions addressed to parents improve their mental state and general well-being, thus being essential for achieving optimal outcomes for their children with ASD (Cachia et al., 2016).

The impact of the diagnosis of autism on family relationships is very great. The existence of such a diagnosis involves long-term available emotional and financial resources, which alters the quality of life and mental well-being of family members. Parents of children with ASD generally experience higher levels of stress and report poorer emotional well-being and family functioning compared to parents of children with other disabilities, and they also tend to rely more on emotional coping strategies than problem-focused coping, as shown in several studies (Gray, 2006; Hayes & Watson, 2013; Samadi et al., 2012).

Upon learning of the diagnosis, parents described a range of feelings (e.g., relief, devastation, and guilt) feeling blamed by their own family as well as the community. The reactions described were complex, with the parents going through all kinds of feelings, from shock, fear, regret, anger, denial, pain, sadness and even anxiety, along with feelings of relief, acceptance, and confirmation of the suspected diagnosis. Many parents described a "genuine grieving process", ending with acceptance of the situation (Hățiș, 2021).

In a society where stigma is attached to children with autism, parents have to fight a real war to face the inherent challenges (Hățiș, 2021). In a study held in Bangladesh it was shown that autism was felt as an epidemic within the family, as all family members are affected by the diagnosis of the child with ASD. There are also interaction problems with the neighbors, who sometimes refuse to integrate the family into social and community events, which leads to isolation (Khanam, 2018, cited in Hățiș, 2021).

The results of studies on parents of autistic children have shown that these parents, and especially mothers, are at high risk of mental health problems, the main cause being the stress they face (Piven & Palmer, 1999; Ryde-Brant, 1990, cited in Duarte et al., 2005).

Having a child with autism is an important factor that generates stress, but the presence of several factors combined increases the stress level even more. Duarte et al. (2005) mention among these factors: personal factors (mothers' affective and interpersonal difficulties) and socio-demographic factors (mother's and child's age, mother's education, number of children, mother's marital status, family income). Thus, mothers who feel an increased level of stress present lower affectivity and greater difficulties in managing interpersonal relationships, and in terms of socio-demographic

variables, stress was associated, at a marginal level, with the advanced age of the mother, with the young age of the child and the large number of children of the mother (Duarte et al., 2005).

Mothers of children with ASD experience greater distress during their child's preschool years due to their child's behavioral problems, care dependency, anxiety, and poor communication skills (Knussen & Sloper, 1992, cited in Dabrowsca & Pisula, 2010). The results of a study (Yu, 2016) that aimed to assess the prevalence of affective disorders and identify their associated factors among mothers of preschool children with ASD in China, showed that of the 121 participants, the point prevalence of affective disorders as a group was 29.8%, and the point prevalence of major depressive disorders, adjustment disorders, anxiety disorders, and bipolar affective disorders was 14.9%, 10.7%, 3.3% and 0.8% respectively. Factors associated with a higher level of these conditions were: children's disruptive and self-injurious behaviors, affiliate stigmatization and a history of maternal psychiatric disorders.

We therefore conclude that mental disorders, predominantly affective disorders, are common among mothers of children with ASD. Identifying factors associated with maternal pathological disorders can help early detection of cases and planning of early intervention programs to respond to the psychological needs of both mother and child.

Maternal psychological well-being

The psychology of well-being is a very well-known notion, similar to a positive mental state, to happiness (hedonic perspective) or to one's own well-being (eudemonic perspective), so psychological well-being has a significant relationship with physical and mental health (Lungu, 2021). The multidimensional model of psychological well-being proposed by Ryff (1995) defined psychological well-being as a concept of self-realization that consists of six dimensions: self-acceptance, environmental control, positive relationships, personal development, purpose in life and autonomy.

There are many conceptualizations for this notion, and it is important to follow which factors contribute to the development and maintenance of the psychological well-being of parents of children with special needs. According to Costa et al. (2017) these protective factors are: parents' belief systems about their children, such as parents' perception of children's problems, especially their lability and negativity; parents' emotional regulation capacity and strategies; their ability to reassess the situation they are facing.

Regarding the mothers of children with ASD there are studies that show that not all mothers are affected by the child's illness (Costa et al., 2017; Hastings & Taund, 2002; Iacob & Gherguț, 2017; Jurma, 2008) and we therefore infer that there are certain protective factors for which not all mothers develop pathologies, factors that influence the psychological well-being and stress in mothers of children with ASD (Costa et al., 2017).

Some findings suggest that greater psychological well-being (especially in terms of self-acceptance, autonomy, purpose in life and environmental control) may be protective in the context of high parental stress and specifically for metabolic health of middle-aged women affected by the chronic stress of caring for a child with autism (Crosswell et al., 2022). For example, higher levels of individual characteristics (such as a sense of control over the environment and a sense of purpose in life) are associated with a lower risk of clinical health problems, being protective factors against stress (Kim et al., 2013, cited in Crosswell et al., 2022; Roylan & Ryff, 2015). Also, environmental control, positive social relationships and purpose in life help to increase persistence in positive tasks (Burrow et al., 2016, cited in Crosswell et al., 2022) and increased self-acceptance improves emotion regulation (Kivity et al., 2016, cited in Crosswell et al., 2022). The study by

Crosswell et al. (2022) showed that mothers who reported higher psychological well-being were protected from the negative effects of perceived parenting stress, concluding that psychological resources (and especially self-acceptance, environmental control, autonomy, purpose in life) can protect women from the wear of chronic parental stress, these resources each being indicators of biological health in middle-adult women.

Attachment style

Attachment is, in fact, "the feeling that connects one person to another", this connection is based on the belief that one person can satisfy the needs of the other person (Iacob & Gherguț, 2017). Attachment behavior means any form of behavior that causes a person to come to or remain in the vicinity of another person identified as clearly better able to adapt to the environment (Bowlby, 1988).

Attachment theory was stated by John Bowlby (1988) and nuanced by Mary Ainsworth (1970), both of whom said that the formation from the beginning of life of a healthy relationship between the child and his caregiver (the first attachment figure) is the first condition that will determine further development of an individual's personality and character. Bowlby has repeatedly highlighted the fact that the child knows the external world with the help of the main caregiver (which is usually the mother) since the child's relationship with the external environment is formed in relation to it.

Parents' attachment style is an important variable in the child-parent dyad (Rutgers et al. 2007) with their attachment style having an important impact on how the parent interacts with the child with ASD (Shtayermman & Zhang, 2021). Parental attachment occurs when there is a warm, intimate, and ongoing relationship between a child and their primary caregiver, from which both can find satisfaction and pleasure (Ainsworth & Bell, 1981, cited in Shtayermman & Zhang, 2021). Variations in early caregiver–infant interaction, particularly those related to caregiver availability when the child is stressed, lead to differences in attachment security (Bowlby, 1973, cited in Shtayermman & Zhang, 2021).

The parent's insecure attachment style may be an additional stressor related to the developmental and long-term caregiving particularities of the child with ASD, as the parent's attachment style also affects those with whom the parent interacts, and communication problems and interaction specific to ASD can represent a great challenge for parents in terms of their appropriate response to the child's needs (Shtayermman & Zhang, 2021).

The impact of stress on parents of children with ASD is very high, resulting in poorer physical health and reduced emotional well-being, leading over time to parental anxiety and depression (Samadi, McConkey, & Kelly, 2012). The study by Iacob and Gherghuț (2017) that investigated the link between stress and coping in the case of parents with children with ASD, postulated the idea that the parents' attachment style is one of the factors that contribute to children's behavioral training and their emotional configuration, as well as the quality of the parent-child relationship. Therefore, a parent's attachment style can mediate or complicate the parent-child dynamic and mitigate or exacerbate the stress experienced in caring for a child with ASD (Iacob & Gherguț, 2017).

Coping strategies

Coping strategies are an individual's cognitive, affective, and behavioral attempts to reconcile the discrepancy between situational demands and his or her personal ability or competence (Lazarus & Folkman, 1984). Coping strategies have been postulated as a mechanism by which individuals respond to stressors. Based on Lazarus and Folkman's model of stress and coping (1984),

researchers have often grouped coping methods into two general types, problem-focused coping (adaptive coping): strategies aimed at solving the problem or reducing stress (e.g., planning) and emotion-focused coping (maladaptive coping): strategies aimed at reducing or managing feelings of distress (e.g., denial) (Benson, 2010).

Regarding the adaptation structure of parents of children with autism, Hasting et al. (2005) used exploratory factor analysis to classify the coping methods used by 135 parents of children with autism in the UK and, based on their responses to items on the Brief COPE subscale (Carver, 1997), extracted four dimensions of coping, which they called: active avoidant coping, problem-focused coping, positive coping and religious/denial coping, which are commonly associated with parenting a child with autism or another disability.

Benson (2010, 2014) demonstrated that the psychological state in mothers of children with autism may differ depending on the specific type of coping strategy used. Thus, the use of avoidant coping strategies amplifies maternal distress, while the use of positive coping strategies (such as engagement, cognitive reappraisal) can increase feelings of parental happiness and well-being (Benson, 2010). At times when children's maladaptive behaviors were increasing, mothers who used engagement as a way of coping with their child's illness had significantly higher levels of psychological well-being (Benson, 2010). When they find out about the child's diagnosis, the parent's resort to different ways of coping (denial, anger, guilt, negotiation and finally acceptance) thus moving from coping based on solving the problem to one with an emotional focus, increasing over time the importance of religion and focusing on the child's qualities (Simelane, 2015, cited in Hățiș 2021). Also, differences were observed between the coping mechanisms chosen by mothers and those chosen by fathers, but both used both problems-focused coping methods and emotional coping methods (Benson 2010; Craig, 2015, cited in Hățiș, 2021; Hasting, 2005).

But, before establishing which coping strategy the mothers used, it is necessary to determine their stress level, stress being one of the determining factors of the coping style addressed, in addition to personality traits and situational factors. The uncertainty of the etiology of autism spectrum disorder can be considered the first source of parental stress (Muntean, 2007).

The relationship between attachment, coping and psychological well-being

In attachment theory there are some predictions about how we function in adulthood and how coping mechanisms influence our adaptation to a specific lifestyle, and our study comes to help us identify concretely how attachment style it is associated with the use of a coping strategy and the mechanism by which it helps us adapt to the stressful life situation. Overall, maternal use of adaptive coping was found to be associated with higher levels of maternal psychological well-being, and mothers using a secure attachment style also reported higher levels of psychological well-being. Thus, following the present research, we expect that the coping strategies used by mothers mediate the relationship between their attachment style and perceived psychological well-being.

The impact of ASD is felt quite acutely by mothers of children with ASD, but its consequences on maternal psychological well-being vary depending on certain factors, and one of these factors may be the mother's attachment style (Iacob & Gherguț, 2017; Zhang & Shtayermman, 2021). From the study of Iacob and Gherguț (2017), it appears that parents of children with autism feel a certain distress and develop a certain pathology, but mothers who have a secure attachment style use certain adaptive coping strategies and thus present a level of lower stress, compared to mothers who have an insecure attachment style and who show higher levels of stress. Also, mothers who

have a secure attachment style, compared to those with an insecure attachment style, have lower levels of stress and better mental health, and therefore show higher levels of well-being psychological (Shtayermman & Zhang, 2021).

As we have seen, in the study of Iacob and Gherguț (2017) it is stated that a person's attachment style influences the adoption of different coping mechanisms, but this hypothesis was not fully confirmed because the study was limited due to the very small number by participants in the categories: anxious and avoidant attachment style. However, people with a secure attachment style have a positive view of problems and use more effective coping strategies, preferring to adopt strategies focused on solving the problem rather than avoiding it (Iacob & Gherguț, 2017). Also, the correlational results of the study suggest the existence of a relationship between parental self-efficacy, coping style and maternal attachment style. More specifically, a high level of perceived parental self-efficacy and a secure attachment style are associated with the adoption of adaptive coping mechanisms, while an ambivalent attachment style and low level of self-efficacy are associated with maladaptive coping mechanisms. According to another hypothesis confirmed by the study, participants with high levels of perceived parental self-efficacy predominantly adopted coping mechanisms oriented towards self-sufficiency and social support, and a low level of perceived parental self-efficacy was associated with the adoption of avoidance coping (Iacob & Gherguț, 2017).

Benson's (2010) study identified engagement coping as one of the significant predictors of maternal psychological well-being, with two significant interactions emerging in the regressions predicting maternal psychological well-being, the first interaction between engagement coping and symptoms of autism in the child and, secondly, between engagement coping and maladaptive behavior of the child. Thus, when the child's autism symptoms were less severe, maternal involvement was unrelated to their psychological well-being, but when symptoms were more severe, involvement had a significant positive effect on maternal psychological well-being. Similarly, when the child's maladaptive behavior was less severe, involvement was unrelated to psychological well-being, but when the child's maladaptive behavior was more severe, mothers who reported greater involvement had significantly higher levels of psychological well-being compared to mothers who reported less use of their involvement as a coping strategy used in the relationship with their child with autism (Benson, 2010).

As a conclusion of this section, based on the available data, we state that, in the case of mothers of children with ASD, there is an association between the attachment style and the use of coping strategies (Iacob & Gherguț, 2017), between the attachment style and the maternal psychological well-being (Shtayermman & Zhang, 2021), as well as between coping strategies and the psychological well-being of these mothers (Benson, 2010).

Based on these data, we believe that the coping strategies used by mothers may mediate the relationship between their attachment style and maternal psychological well-being and establish the following hypotheses:

H1. Attachment style is a significant predictor of the psychological well-being in mothers of children with autism.

H2. Maternal coping mediates the relationship between attachment style and psychological well-being in mothers of children with autism.

Participants and procedure

For the present study we recruited 113 mothers of children with ASD, aged between 22 and 51 years, $M = 39.78$, $SD = 4.89$. Of their total, 93 have secondary education (82%) and 20 have higher education (18%), 35 are single (31%) and 78 are in a relationship (69%), 56 have incomes below 2500 lei (50%) and 57 have incomes over 2500 lei. Regarding children with ASD, 113 children participated, aged between three and 14 years, $M = 10.61$, $SD = 2.65$, of which 66 were boys (58%) and 47 were girls (42%). The number of children in the family was between one and four, $M = 1.49$, $SD = .71$. Regarding the duration since finding out the diagnosis, it was between one and 12 years, $M = 5.26$, $SD = 2.20$. The method of recruitment of the mothers was on a voluntary basis. Mothers who wanted to participate in the study were informed about the purpose of the research and the conditions of participation and, before receiving the self-report questionnaires to answer the items, they gave their informed consent to participate. The three questionnaires were applied in a classic paper-pencil form and administered in turn, to be completed, the maximum duration for informing the participants and completing the questionnaires being approximately 30 minutes.

Instruments

Psychological well-being was measured with Psychological Well-being Scale (PWBS) (Ryff, 1989), with the six dimensions of psychological well-being: self-acceptance, environmental control, positive relationships, personal development, purpose in life and autonomy. The instrument comprises 42 items rated on a 6-point Likert scale, where 1 – total disagree and 6 – total agree. For this study we have used the global score of all the six subscales. Item examples: "I enjoy making plans for the future and working to make them a reality.", "Some people wander aimlessly through life, but I am not one of them."

Attachment was measured with Adult Attachment Scale (AAS) (Collins, 1996). The instrument comprises 18 items rated on a 5-point Likert scale, where 1 – not at all like me and 5 – exactly like me, and measures three types of attachment: secure, avoidant, and anxious. Item examples: "I often wonder if my partners really care about me.", "I feel comfortable having close relationships with others."

Coping strategies were measured with Brief COPE (Carver, 1997). The instrument is a 28 item self-report questionnaire designed to measure effective and ineffective ways to cope with a stressful life event, rated on a 4-point Likert scale, where 1 – not at all and 4 – most of the time. Scores are presented for the two overarching coping styles: avoidant coping and approach coping. Avoidant coping, or maladaptive coping, is characterized by the subscales of denial, substance use, venting, behavioral disengagement, self-distraction, and self-blame. Approach coping, or adaptive coping, is characterized by the subscales of active coping, positive reframing, planning, acceptance, seeking emotional support, and seeking informational support. Item examples: "I've been turning to work or other activities to take my mind off things.", "I've been getting emotional support from others."

Results

Descriptives statistics

Mean scores, standard deviations, internal consistency coefficients, and correlations among variables are shown in Table 1.

Table 1. Means, standard deviations, Cronbach Alpha coefficients, correlations

	M	SD	α	WB	ATSE	ADEV	ATAX	COAD	CODE
WB	66,29	8,32	.69	1					
ATSE	18,17	2,88	.53	,20*	1				
ADEV	17,68	3,19	.53	-,05	-,13	1			
ATAX	17,63	3,19	.53	-,09	,11	,42**	1		
COAD	2,47	,30	.63	,26**	,21*	-,12	,02	1	
CODE	2,39	,36	.57	-,25**	-,19*	-,07	,19*	,11	1

Note: *. $p < .01$, **. $p < .05$

WB – psychological well-being, ATSE – secure attachment, ADEV – avoidant attachment, ATAX – anxious attachment, COAD – adaptive coping, CODE – maladaptive coping

Hypotheses testing

H1. *Attachment style is a significant predictor of the psychological well-being in mothers of children with autism.*

In order to test this hypothesis, a multiple linear regression analysis was performed, with the three types of attachment (secure, avoidant and anxious) as predictors and maternal psychological well-being as the dependent variable.

Table 2. Multiple linear regression analysis for attachment styles as predictors of maternal psychological well-being

	B	SE	β	t	p
ATSE	,63	,28	,21	2,30	,02
ADEV	,07	,28	,03	,25	,80
ATAX	-,31	,28	-,12	-1,15	,25

$R^2 = .05$

It is observed that attachment styles are responsible for only 5% of the variation in maternal psychological well-being, but the regression equation is statistically insignificant, $F(3, 109) = 2.05$, $p = .11$. However, only secure attachment is found to be significantly and positively associated with maternal psychological well-being, $\beta = .21$, $t(113) = 2.30$, $p < .05$.

H2. *Maternal coping mediates the relationship between attachment style and psychological well-being of mothers of children with autism.*

In order to test this hypothesis, two mediation analyzes were performed, with the secure attachment style as the predictor, the maternal psychological well-being as the dependent variable and, alternatively, adaptive coping and maladaptive coping as mediating variables.

Not all mediation analyzes could be performed, as there was no significant direct relationship between avoidant and anxious attachment, on the one hand, and maternal psychological well-being, on the other hand.

Table 3. Mediation estimate for adaptive coping in the relationship between secure attachment and maternal psychological well-being

Effect	Label	Estimate	SE	95% CI		Z	p	% Mediation
				Lower	Upper			
Indirect	$a \times b$	.02	.03	-.04	.08	.59	.55	3.00
Direct	c	.57	.27	.05	1.09	2.14	.03	97.00
Total	$c + a \times b$	.59	.27	.07	1.11	2.21	.03	100.00

It is observed that adaptive coping fails to mediate the relationship between secure attachment and maternal psychological well-being, the mediation estimate being statistically insignificant, $b = .02$, $CI_{95\%}(-.04, .08)$, $z = .59$, $p = .55$.

Table 4. Mediation estimate for maladaptive coping in the relationship between secure attachment and maternal psychological well-being

Effect	Label	Estimate	SE	95% CI		Z	p	% Mediation
				Lower	Upper			
Indirect	$a \times b$	.01	.03	-.04	.06	.45	.65	1.93
Direct	c	.58	.27	.06	1.10	2.17	.03	98.07
Total	$c + a \times b$	.59	.27	.07	1.11	2.21	.03	100.00

It is observed that maladaptive coping fails to mediate the relationship between secure attachment and maternal psychological well-being, the mediation estimate being statistically insignificant, $b = .01$, $CI_{95\%}(-.04, .06)$, $z = .45$, $p = .65$.

Discussion

This study aims to evaluate the relationship between attachment style and psychological well-being in mothers of children with autism, as well as the role of maternal coping as a mediator in the relationship between attachment style and psychological well-being in mothers of children with autism.

We found that the scores obtained by the participants for psychological well-being are high, and in terms of attachment, the highest score was reported for secure attachment, followed by avoidant attachment and then by anxious attachment. Also, adaptive coping registers higher levels than maladaptive coping. These scores show us that the mothers in our study are psychologically balanced, being used to the child's illness and managing to adapt to the stressful situation they are in, these aspects being due to factors such as the advanced age of their children with ASD and the long time that has passed since finding out the diagnosis.

In general, mothers who use a secure attachment style show a higher degree of psychological well-being (Iacob & Gherguț, 2017; Shtayermman & Zhang, 2021) so, in order to test the first hypothesis, we performed a multiple linear regression analysis to see if the attachment style is a significant predictor of the psychological well-being of mothers of children with autism.

Multiple linear regression analysis for the three attachment styles (secure, avoidant, anxious) as predictors of maternal psychological well-being showed that only secure attachment is significantly and positively associated with maternal psychological well-being, which confirms that mothers with a secure attachment style, compared to mothers with an insecure attachment style (avoidant or anxious) have a lower level of stress and better overall mental and physical health and therefore show a higher level of psychological well-being. Taking this result into account, we can say that the first hypothesis was not fully supported by data.

In order to test the second hypothesis, we used a series of mediation analyses, to see if maternal coping mediates the relationship between attachment style and psychological well-being in mothers of children with autism. Thus, in order to estimate the extent to which coping mediates the relationship between attachment and maternal psychological well-being, two mediation analyzes were performed, with the secure attachment style as the predictor, the maternal psychological well-being as the dependent variable, and the mediating variables, alternatively, adaptive coping and maladaptive coping. Following the two mediation analyzes, it was found that the type of coping (adaptive or maladaptive) used by mothers of children with autism fails to mediate the relationship between secure attachment and maternal psychological well-being.

Considering these results, we can say that the second hypothesis of our research is not supported by the analyzed data, which shows that there is an inconsistency between the present study and other studies in the literature, such as the study by Iacob and Gherguț (2017) from which it appears that, although mothers of autistic children feel a certain distress and develop a certain pathology, those who have a secure attachment style use certain adaptive coping strategies and thus show a lower level of stress, this fact leading to a higher psychological well-being (Iacob & Gherguț, 2017).

But even if coping strategy does not affect the relationship between attachment style and maternal psychological well-being in any way, we can say that it has an important role in perceived psychological well-being, since the use of adaptive coping strategies may have the greatest impact on improving the feeling of happiness and parental well-being (Benson, 2010).

We note that not all mediation analyzes could be performed, as there was no significant direct relationship between avoidant and anxious attachment, on the one hand, and maternal psychological well-being, on the other hand, as found in the multiple linear regression analysis for the three attachment styles (secure, avoidant, anxious) as predictors of maternal psychological well-being.

Conclusions

Given the increasing prevalence of autism spectrum disorders, it has been found that this disease has a major impact not only on the person with ASD and their family, but affects the entire society, starting with public health departments and continuing with the strong impact in the plan economically, due to the increasingly high costs of medical and social assistance services, the costs of informing and re-educating parents, the costs of special therapeutic and educational interventions for the person affected by ASD, a general finding being that people with ASD and their families require higher and higher expenses (Rogge & Janssen, 2019).

Identifying factors associated with maternal pathological disorders can help in early detection of cases and planning of early intervention programs to meet the psychological needs of

both mother and child. Consideration of maternal factors in general can greatly assist in understanding and intervening in maternal stress, particularly in autism. Given recent researchers' findings that autism is more common than once thought (Kielinen, Linna, & Moilanen, 2000; Yu et al., 2016), it is critical that researchers find ways to uncover the causes of maternal stress in autism and to design ever better interventions.

Practical implications

In the present study, we aimed to investigate the relationship between attachment style and the psychological well-being in mothers who have children with autism, as well as the role of maternal coping as a mediator in the association between attachment style and maternal psychological well-being. Achieving this goal will help us identify ways to improve interventions for mothers of children with ASD, with the goal of reducing the negative consequences of raising and caring for a child with autism.

For this we hypothesized that the use of adaptive coping strategies will mediate the relationship between attachment style and psychological well-being of mothers who have children with autism. In other words, mothers who have a secure attachment will more frequently use adaptive coping strategies, compared to mothers with an insecure attachment style (avoidant or anxious), this aspect leading to a better psychological well-being of these mothers. In attachment theory there are some predictions about how we function in adulthood and how coping mechanisms influence our adaptation to a specific lifestyle, and our study comes to help us identify concretely how attachment style it is associated with the use of a coping strategy and the mechanism by which it helps us adapt to the stressful life situation.

Thus, the results obtained after testing the mediation between the three variables will help us to expand the attachment model and to concretely identify some mechanisms through which the attachment style influences the psychological well-being of the individual, in this case of mothers who have children with ASD, through the impact on the use of adaptive coping strategies to more easily overcome the challenges that come with finding out the child's diagnosis. Identifying the mechanisms by which adults can adapt to stressful life situations helps us formulate certain methods of prevention or intervention in the case of mothers who have children with ASD, to help them better adapt to the situation of caring for a child with autism. Therefore, by improving the psychological well-being of mothers, there could be benefits not only for parents, but also for children with ASD, knowing that "emotional difficulties of parents influence the emotional development of children" (Bowlby, 1988).

Limitations and future research directions

Our study addresses the mediating role of the coping strategies used by mothers of children with autism, referring to the two dimensions of coping (adaptive and maladaptive), and as a future research direction the different types of adaptive coping can be analyzed, since it is possible that they interact differently in predicting maternal psychological well-being. Because it focused on the eudaimonic dimension of psychological well-being, our study does not cover all meaningful dimensions of this construct, so other future studies should investigate the relationship between attachment, the use of coping strategies and the hedonic dimension of psychological well-being in the mothers of children with ASD, an aspect that could give a much clearer picture of the psychological well-being of these mothers.

Most of the mothers participating in the study come from rural areas and have secondary education, which means that our data can only be generalized to the statistical sample population, not to the entire population of interest targeted by the research objective. It is thus recommended that the sample of future studies include an approximately equal number of participants in terms of the environment of origin and educational level. Some mothers selected for the research were reluctant to participate in the study and fill in the questionnaires, which led to the difficulty of recruiting the number of participants required for this study, and a solution to this limitation would be to expand the geographical area of the research, which to include a larger number of subjects, differentiated by other socio-demographic characteristics than those used in our study.

Our correlational study can be a preamble to more complex experimental studies that test and truly verify the effect of interventions on maternal (even paternal) psychological well-being in families of children with ASD. Being a cross-sectional study, it does not allow us to observe sequencing, because we measure all variables at the same point in time, and thus does not help us to discern where the variables are in the chain of mediation.

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