

## Research Article

# Parenting and Coping Strategies among Parents of Children with and without Autism: The Role of Anxiety and Emotional Expressiveness in the Family

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## Abstract

The present study examines the associations between anxiety, emotional expressiveness in the family, coping strategies and parenting styles among 50 parents of children on the autism spectrum and 50 parents of typically developing children (*M* parental age = 41.2 years, *SD* = 5.4). Self-reported measures were administered. Parents of children on the autism spectrum reported greater negative emotional expressiveness, higher levels of anxiety and described themselves as less authoritative in their rearing practices when compared to parents of children with typical development. No differences in coping strategies were found between the two groups of parents. Low levels of anxiety and positive emotional expressiveness in the family were found to predict effective coping strategies and supportive parenting styles for both groups of parents. Findings highlight the need for family psychosocial provision, especially for parents who bring up children on the autism spectrum.

**Keywords:** Anxiety; Emotional expressiveness, Coping strategies; Parenting; Autism

## Introduction

A number of studies has shown that parents of children on the autism spectrum are more likely than parents of typically developing children or children with other developmental or medical conditions to exhibit various psychosocial difficulties including anxiety, emotional discomfort, low levels of emotional well-being and quality of family life, as well as adjustment problems and strained marital relationships [1-18]. Possible causes include medical and financial issues in relation to the child's condition [19], lack of flexibility in family life, job and career adjustments in order to care for the autistic child, little time left for personal and social activities [20], child behaviour, socialization and communication challenges [21-24], the permanency of autistic condition, the insufficient provision of social and professional support [25], together with the frequent lack of adequate child education facilities [26].

Many of the aforementioned studies have focused on the examination of how parental anxiety affects family functioning [6,10] in families experiencing an imbalance in demands and resources due to child autism [27-28] and relate parental anxiety to various factors, namely the experience of parenthood and the responsibilities of child upbringing [23,29], harsh, inconsistent and ineffective parenting practices [30] or negative coping strategies use [22,31,32]. More specifically, studies have repeatedly evidenced parents' proneness to authoritarian and punitive measures of autistic child discipline, attributed to, among other factors, the high levels of anxiety experienced by these parents and, also, the lack of parental psycho-emotional support [33-36]. Furthermore, when parents of children on the autism spectrum manage to regulate their anxiety and to develop a positive sense of family cohesion and support, they tend to adopt

supportive and less directive parenting styles trying to stimulate the development of their children [20], or generally are likely to adhere to the authoritative and supportive parenting style [25,37-40].

High levels of anxiety have been proven to, also, relate to negative coping strategies such as escape-avoidance in families of children on the autism spectrum, while high levels of well-being and family resilience are likely to evoke positive coping behaviours such as positive reappraisal or social support seeking [31]. [41] point out that in these families the most popular coping mechanism is withdrawal from other family relatives, friends, and the community to avoid the social stigma [22]. As a result, parents are likely to suffer increased anxiety and the emergence of various psychological problems [32].

As discussed earlier, parental anxiety, coping strategies and parenting style have been studied in parents of typically developing children and of children on the autism spectrum in a number of studies, each addressing separately the above characteristics in parental behavior. An additional, however, aspect of parent emotional response to family interaction, namely, parental emotional expressiveness in the family, has not been widely examined in relation to parental behaviours. Emotional self-expressiveness in the family reflects an individual's patterns of positive or negative emotion expressions within the family context [42]. Research on parental self-expressiveness in the family focuses on its relation to various aspects, both positive and negative, of child development, such as social and emotional competence [43], behavioural adjustment [44] or social anxiety [45]. Extant literature has shown a lower prevalence of expressed emotions in mothers of children with autism, compared to mothers of children with personality disorders [46] or with intellectual disabilities [47].

Only a few studies examine possible associations between parental emotional expressiveness in the family, coping strategies and parenting style in families of typically developing children and children on the autism spectrum. For example, it has been found that parents' ability to cope with stressful events is positively linked to the way they express their positive emotions in their families [48]. [49] supported that family self-expressivity and parenting style, although distinct constructs, jointly affect children's social adjustment skills and play an important role in the whole family system. Similarly, [25] point out that emotional closeness and reduced parental stress in parent-child interaction can improve family climate as well as parents' ability to manage their autistic children's behaviour.

Based on the above discussed research evidence, the present study aimed to compare parents of children on the autism spectrum and parents of children with typical development with regard to parental anxiety, emotional self-expressiveness, coping strategies, and parenting styles. Additionally, the possible influence of anxiety and emotional expressiveness in the family on parents' coping strategies and parenting styles was concurrently investigated.

## Method

One hundred parents ( $M$  age = 41.2 years,  $SD$  = 5.4) participated in the present study, 50 (16 fathers and 34 mothers) of whom had children on the autism spectrum and the other 50 (10 fathers and 40 mothers) had children with typical development. All participants came from the regional unit of Euboea in Central Greece and formed a convenience sample. Participants had to satisfy the following criteria: parents who had at least one child, either on the autism spectrum or with typical development, aged between 4 to 12 years attending nursery or primary school and no other children with disabilities in the family. Children on the autism spectrum had an official diagnosis from national assessment multidisciplinary centers based on the DSM-5 criteria for Autism Spectrum Disorder [50], were high functioning or diagnosed as having Asperger Syndrome, and had no comorbid disorders or any intellectual impairment.

Most parents reported being married (90% autism group, 96% typical development group), described their family as a nuclear family (64% autism group, 66% typical development group), held either post-secondary non tertiary or tertiary degrees (58% autism group, 70% typical development group), had low to medium annual income (94% autism group, 100% typical development group) and lived in urban and suburban areas (96% autism group, 100% typical development group). No significant differences in the above demographic characteristics between parents of children on the autism spectrum and parents of typically developing children were found. Both groups of parents were matched in age and number of children. The mean age of their autistic children was 7.58 years old ( $SD$ =2.1, age range: 4-12 years). Finally, most parents of children on the autism spectrum (92%) reported that their children received intensive clinic-based educational and psychological support.

## Measures

Parental anxiety was measured using the Trait subscale of the Greek version of the State-Trait Anxiety Inventory-STAI [51,52]. The STAI Trait subscale includes 20 items which assess anxiety symptoms as personality characteristic (trait anxiety). Answers defining the

degree of agreement or disagreement for each item of this subscale were given on a 4-point Likert scale (1='almost never' to 4='almost always'). Cronbach's  $\alpha$  of the Trait subscale of the STAI in this study was 0.76. Higher scores indicate lower levels of anxiety.

The Greek version of Ways of Coping [53,54], which consists of 38 questions, was used to examine how often parents use the following coping strategies: a) positive reappraisal, b) seeking social support, c) wishful thinking, d) escape-avoidance, and e) confrontive problem solving. Answers are given on a 4-point Likert scale, ranging from 0 (never) to 3 (often). Cronbach's  $\alpha$  were 0.73 for the positive reappraisal subscale, 0.74 for the social support seeking subscale, 0.76 for the wishful thinking subscale, 0.67 for the escape-avoidance subscale and 0.68 for the confrontive problem solving subscale.

The Greek version of the Parenting Styles and Dimensions Questionnaire-PSDQ [55,56] was used to examine parents' rearing practices. Participants respond to 29 questions (13 questions refer to authoritative parents, 7 questions refer to authoritarian parents, 5 questions refer to permissive parents and 4 questions refer to strict parents) on a 5-point Likert scale (1=never to 5=always). For the present study, Cronbach's  $\alpha$  was 0.89 for the authoritative type, 0.79 for the authoritarian type, 0.68 for the strict type and 0.79 for the permissive type of parent.

The Self-Expressiveness in the Family Questionnaire – SEFQ [57,58] was used to assess parents' views regarding the verbal and nonverbal expression of their emotions in the family context. It is a self-report questionnaire which comprises 40 questions grouped in two scales, the positive expressiveness scale including 23 items (e.g. 'Telling family members how happy you are'), and the negative expressiveness scale, including 17 items (e.g. 'Quarreling with a family member'). Answers were given on a 9-point Likert scale, ranging from 1 = 'not at all frequently' to 9 = 'very frequently', to indicate the frequency with which parents express a wide range of emotions in a variety of everyday situations within their family. Internal consistency of both scales in the present study was high ( $\alpha$  = 0.87).

For the purposes of the present study, a questionnaire with demographic and personal data for both parents and children was developed. Parents had to provide personal information about their age, gender, type of family, number of family members, educational background, and income. They, also, had to provide information about their children's age, gender, and school year. The type of support provided to the child on the autism spectrum was also reported.

## Procedure

A pilot study was carried out with four parents, in order to estimate the amount of time required for the completion of all the questionnaires, as well as to verify possible ambiguous questions. There were minor changes in certain abstruse words and phrases. Subsequently, Parents of the participating children were allocated via the schools their children attended or the support services they visited. Those who volunteered to participate in the present study, after being informed of its purposes, were given all the required information in order to answer the questionnaires. The completion of the questionnaires, which lasted approximately 25 minutes, took place at the participants' houses. The anonymity and the confidentiality of their reports were ascertained.

**Table 1:** Mean scores, standard deviations and mean differences of parents' responses to the anxiety, coping strategies, parenting styles and emotional expressiveness questionnaires.

	Parents of children on the autism spectrum (N=50)		Parents of typically developing children (N=50)		Mean difference
	M	SD	M	SD	<i>t</i> <sub>98</sub>
Trait Anxiety <sup>1</sup>	2.74	0.42	2.99	0.31	3.45**
Coping strategies					
Positive reappraisal	2.06	0.42	2.19	0.36	1.73 <sub>ns</sub>
Seeking social support	2.04	0.54	2.04	0.60	-0.58 <sub>ns</sub>
Wishful thinking	1.68	0.56	1.57	0.63	-0.91 <sub>ns</sub>
Escape-avoidance	1.42	0.50	1.58	0.43	-1.65 <sub>ns</sub>
Confrontive problem solving	1.29	0.55	1.46	0.61	1.38 <sub>ns</sub>
Parenting style					
Authoritative	4.08	0.56	4.37	0.38	3.01**
Authoritarian	1.76	0.50	1.70	0.47	-0.68 <sub>ns</sub>
Permissive	2.70	0.68	2.65	0.79	-0.33 <sub>ns</sub>
Strict	3.54	0.48	3.76	0.52	2.20*
Self-expressiveness					
Positive	6.79	0.91	7.24	0.81	2.63*
Negative	4.16	1.00	4.30	1.14	0.65 <sub>ns</sub>

\*p<0.05, \*\*p<0.01, <sup>1</sup>low mean scores reflect high levels of anxiety

## Results

Parents of children on the autism spectrum reported higher levels of anxiety and higher negative emotional expressiveness in their families than did parents of typically developing children. Furthermore, parents of children with autism described themselves as being less authoritative and strict in their child rearing practices than did parents of typically developing peers. No other statistical differences were observed between the two groups of parents (Table 1).

Furthermore, parents' reports of low levels of anxiety were found to correlate with great use of positive reappraisal for both groups of parents, low use of avoidance and great use of confrontive problem solving for parents of children with autism, great use of authoritative parenting practices for parents of children with autism, low frequency of parental permissiveness for both groups of parents and little parental strictness for parents of typically developing children (Table 2).

A similar pattern of relationships was found for parents' reports of their emotional expressiveness in the family context. More specifically, high positive expressiveness was found to be related to great use of positive reappraisal and social support seeking, little use of authoritarian parenting practices for the group of autism, and high frequency of authoritative rearing methods for both groups. Further, high frequency of negative expressiveness is associated with authoritarian methods of child upbringing for both groups of parents, and low use of positive reappraisal and confrontive problem solving, great use of wishful thinking, great parental permissiveness and strictness and low use of authoritative methods for the group of typical development (Table 2).

For the group of parents of children on the autism spectrum,

multiple regression analyses revealed that positive emotional expressiveness and low levels of anxiety predicted authoritative child upbringing approaches [ $R^2 = .63$ ,  $F(2, 47) = 40.32$ ,  $p < .001$ ] and the use of positive reappraisals [ $R^2 = .21$ ,  $F(2, 47) = 6.08$ ,  $p < .01$ ]. For parents of typically developing children, negative emotional expressiveness and reports of high levels of anxiety predicted predominance of permissive parenting style [ $R^2 = .33$ ,  $F(2, 47) = 11.53$ ,  $p < .001$ ]. Additionally, for both groups of parents, negative expressiveness contributed significantly to the variance for reports of authoritarian parenting style [ $R^2 = .14$ ,  $F(1, 48) = 7.75$ ,  $p < .01$  for the autism group,  $R^2 = .26$ ,  $F(1, 48) = 16.87$ ,  $p < .001$  for the TD group].

## Discussion

The present study aimed to examine the relationship between anxiety, emotional self-expressiveness, coping strategies and parenting style in parents of children on the autism spectrum and of typical development. Parents of children on the autism spectrum reported significantly higher levels of anxiety and lower positive emotional self-expressiveness in the family than did parents of typically developing children. These findings agree with previous research evidence [8,11,13,16,25,41] and can be explained by the difficulties parents of children with autism may experience as a result of the nature and the symptomatology of their children's condition. Both groups of parents reported relying on the same coping strategies, mostly positive reappraisals and seeking of social support, when having to confront difficulties related to their children's upbringing [3], also failed to find differences in the coping strategies used by parents of typically developing children and of children with autism, except from the strategy of social distraction, a sub-factor of escape-avoidance, which was mostly used by parents of children on the autism spectrum but was not explored in the present study.

Furthermore, parents of typically developing children described

**Table 2:** Correlations among anxiety, emotional expressiveness, coping strategies, and parenting styles for both groups of parents.

	Trait Anxiety <sup>1</sup>		Self-expressiveness			
			Positive		Negative	
	Autism (N= 50)	TD <sup>2</sup> (N= 50)	Autism (N= 50)	TD (N= 50)	Autism (N= 50)	TD (N= 50)
Positive reappraisal	0.34 <sup>*</sup>	0.37 <sup>**</sup>	0.39 <sup>**</sup>	0.27	-0.09	-0.32 <sup>*</sup>
Seeking social support	0.02	-0.02	0.39 <sup>**</sup>	0.24	-0.12	0.20
Wishful thinking	-0.23	-0.16	0.13	0.23	0.19	0.31 <sup>*</sup>
Escape-avoidance	-0.33 <sup>*</sup>	-0.17	-0.26	-0.15	0.16	0.07
Confrontive problem solving	0.30 <sup>*</sup>	0.06	-0.16	-0.29	-0.15	-0.44 <sup>**</sup>
Authoritative parenting style	0.39 <sup>**</sup>	0.20	0.78 <sup>**</sup>	0.42 <sup>**</sup>	-0.27	-0.32 <sup>*</sup>
Authoritarian parenting style	-0.14	-0.13	-0.43 <sup>**</sup>	-0.04	0.37 <sup>**</sup>	0.51 <sup>**</sup>
Permissive parenting style	-0.30 <sup>*</sup>	-0.49 <sup>**</sup>	-0.08	-0.09	0.21	0.46 <sup>**</sup>
Strict parenting style	0.26	-0.33 <sup>*</sup>	0.09	0.11	0.12	0.54 <sup>**</sup>

<sup>\*</sup>p<0.05, <sup>\*\*</sup>p<0.01, <sup>1</sup>low mean scores reflect high levels of anxiety, <sup>2</sup>TD = Typical Development

themselves as more authoritative and strict comparing to parents of children on the autism spectrum.[36] stated that the authoritative parenting style may induce greater levels of anxiety in parents of children with autism and other developmental disorders, such as Down syndrome, especially as their children grow older because they may have to integrate the role of coach together with their role as caretakers in order to accommodate the gradually increased needs of their offsprings. Parents realize the permanent nature of their child condition and have concerns for the future of their child [40]. On the contrary, the authoritative parenting style has been observed in parents of typically developing children and associated with lower levels of anxiety [38,39]. The fact that parents of children on the autism spectrum reported less strict parenting, comparing to parents of typically developing children, can be explained by the low expectations from the children these parents may have, mainly due to the difficulties their children confront. But, again, this issue was beyond the scope of the present study.

The reported level of anxiety of parents of typically developing children was related to positive reappraisals, and the use of permissive and strict parenting styles. It seems, that the more stressful a situation becomes for these parents, the less effort they put on the positive reappraisal of a situation and on defining a plan to successfully overcome the difficulties. Furthermore, the increase of reported parental anxiety in a particular situation may trigger the increase of either parental permissiveness or stringency. Reports of positive expressiveness in the family was related to perceptions of authoritative parenting. Negative expressiveness was found to relate positively to authoritarian, permissive and strict parenting as well as wishful thinking, and negatively to positive reappraisals, confrontive problem solving and perceptions of authoritative parenting style. Finally, the combination of parental reports of high levels of anxiety and negative expressiveness in the family were found to predict parents' perceptions of permissive parenting style, while anxiety can only predict the predominance of perceived authoritarian style. These results are in line with previous findings attesting to the link between parental rearing practices and psychoemotional factors in parents such as absence of psychosocial support, high levels of parental anxiety, problems in parent-child communication and low emotional well-being [17,25,35,37].

Regarding anxiety and coping strategies in parents of children on the autism spectrum a negative association emerged among reported anxiety and both positive reappraisals and confrontive problem solving, and a positive association between anxiety and escape-avoidance. These results indicate that with the increase of anxiety, parents of children with autism tend to abandon problem-focused coping strategies and adopt emotion-focused coping strategies. [7] pointed out that positive reappraisal and confrontive problem solving contributed to the decrease of levels of anxiety, while escape/avoidance coping strategy was associated with higher levels of anxiety, as well as incidences of mental health issues in parents of children with autism. [3] in their study reached similar conclusions stating that when parents of children with autism and Down syndrome adopt emotion-focused coping strategies, such as escape-avoidance, they are more likely to show increased levels of anxiety. [31] also, maintained that the escape-avoidance coping strategy in mothers of children on the autism spectrum is associated with increased levels of anxiety, while the selection of cognitive reappraisal as the preferred coping strategy is associated with higher levels of prosperity.

Finally, parental anxiety in families with children on the autism spectrum was found to affect and be positively associated with the permissive parenting type and negatively associated with the authoritative parenting type. Thus, the increase of anxiety in permissive parents of children with autism leads them to be even more permissive and to have difficulties at setting and adhering to rules and boundaries to which their children should obey. However, our finding regarding the negative association between anxiety and authoritative parenting style comes in contrast to previous research evidence, which claim that authoritative parenting style in parents of children with autism or Down syndrome is associated with increased levels of stress [36]. A possible explanation might be that in the present study the children with autism were high functioning, resulting in the adoption of a more authoritative style by their parents.

The present study has certain limitations, one of which is the small number of participants from a certain part of Greece and thus, the results cannot be generalized. Moreover, since the results relied solely on self-reports, they are vulnerable to informant bias. It would be useful, therefore, to obtain further information from other sources, such as from other people involved or from observations

and interviews. Finally, it has to be pointed out that the views of parents of autistic children with severe symptoms should be taken into consideration. All the above mentioned limitations provide interesting ideas for further research.

Finally, the present study provides some support for the role of parental anxiety and emotional expressiveness in the family context in the way parents respond to everyday challenges and the type of communication they develop in their relationship with their children. These findings suggest that increased feelings of anxiety and high expression of negative emotions when interacting with family members may evoke feelings of inability to cope with family problems as well as ineffective child rearing practices. Parents of children on the autism spectrum appear to be more vulnerable in terms of the anxiety associated with raising a child with disability. Moreover, the present findings can be discussed in terms of their practical implications for the public and private services supporting children on the autism spectrum and their parents. They emphasize the need for providing family counselling to parents of children on the autism spectrum in order to cope with everyday difficulties. Family support could undoubtedly ameliorate both parents' and children's quality of life. Finally, we hope that this study will spark an interest in further research examining underpinning factors in the association between emotional aspects of parent behaviour, coping and parenting style. More data is needed to expand our understanding of how family variables function and how interventions for families of children on the autism spectrum will empower parents to develop positive life-styles.

### Dedication

The preparation of this paper has been overshadowed by our esteemed colleague's Professor Maridaki-Kassotaki sudden and early loss in July 2019. In sorrow, we dedicate this work to her memory.

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