



# Caring for Autistic Children Based on the Development of a Family Stress Coping Model

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## Abstract

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**BACKGROUND:** The limitations of social interaction, communication, cognitive abilities, behavior patterns, and activities in autistic children are sources of stress for parents. Parents' negative stress assessment of autistic children causes maladaptive coping and has an impact on inappropriate caring behavior.

**AIM:** Caring of autistic children based on the development of family stress coping models

**METHODS:** This research was observational research by utilizing a cross-sectional approach. Participants of parents of autistic children at the Surabaya Autism Therapy Center. The determination of the amount using the rule of thumb formula in SEM is determined by  $7 \times 15$  parameters of 105. Data collection uses a multi-stage random technique. Test the model reliability using the Structural Equation model - Partial Least Square (SEM - PLS), the structure using R Square, and evaluate using Q-square.

**RESULT:** A significant influence occurred toward stress assessment against stress coping and stress coping against parental behavior in caring for children with autism.

**CONCLUSION:** Parents' positive assessment of stressors and energy adequacy and good health will make parents able to control themselves and make themselves an important psychological resource in developing adaptive coping. The development of adaptive coping for parents can increase togetherness among family members, maintain and reduce physiological and psychological reactions to stressors, and manage family support and professional staff to obtain comfort, attention, or assistance in improving behavior in caring for autistic children.

## Introduction

Limitations of social interaction, communication, cognitive abilities, behavior patterns, and activities [24].

To the children with autism are stressors for parents, especially for mothers. Stressors toward parents can cause maladaptive family coping [22] and impact inappropriate treatment behavior for children with autism [7]. Inappropriate behavior in caring for children with autism can impact the failure of growth and physical, psychological, and mental development of children with autism [11].

Data from the World Health Organization in 2013 showed the prevalence of autism in Indonesia was 8/1000 population which exceeded the world average which 6/1000 population. Data from the Ministry of Women Empowerment and Child Protection in the Republic of Indonesia showed that were 12,000 children with autism in 2015 and 135,000 children with autism spectrum disorder [3], [17]. Prediction in 2018, children with autism would reach 2.5 million. Data from the Department of Education in East Java Province, Indonesia, in 2009 stated that 15% of 1.476 students in special education schools were students with autism [9]. The behavior of rejecting the presence of other people,

behaving strangely, and deteriorating language and social skills of children with autism appear at the age of 1.5–3 years [20].

For parents, the condition of developmental failure and strange behavior of children with autism [12] is a stressor [1]. Stress arises from demands, challenges, threats, and efforts to overcome unrealistic expectations from the environment [4]. The negative effect of the parent's stress response impacts maladaptive family coping, thus, the ability to care for children is not optimal [12]. Strategies that focus on overcoming problems (problem-focused coping) and focus on emotions (emotional-focused coping) [22] will reduce negative emotional reactions against stress [9]. Providing early intervention and parental involvement in educational services will make stressor assessments more positive [23]. Positive assessment against stress impacts the increase of comfort, knowledge, attention, or assistance which are accepted by parents [9], thus, the family coping becomes adaptive [5]. However, adaptive family coping can increase affection and attention in caring for children with autism [11].

The study aimed to determine caring of autistic children based on the development of family stress coping models.

## Coping stress models

Coping with stress is a constantly changing process, where at a certain time individuals will rely more on one form of coping with stress called defensive coping strategies and on other occasions choose to use problem-solving strategies [14], [22] call it problem focus coping and emotional focus coping.

### Problem focus coping

This coping strategy includes motivational and cognitive changes such as changing appraisal levels, reducing ego involvement, finding other alternatives, developing new standards or behaviors, and also learning new skills. This strategy has two forms; planful problem-solving and confrontative coping. Planful problem-solving; a strategy in which individuals try to change circumstances carefully by analyzing, planning, and selecting alternative solutions to the problems they face. Confrontative coping; a strategy in which the individual actively seeks ways to overcome stressful situations [13], [22].

### Emotional focus coping

Emotional focus coping is a form of stress coping that is directed at reducing, reducing, limiting, or tolerating the emotional stress generated by the stressor.

Forms of emotional focus coping are seeking social support, distancing, avoidance, positive appraisal, self-control, and accepting responsibility [13], [22].

## Methods

The ethical clearance was obtained from the Ethics Committee Health Polytechnic of the Ministry of Health, Surabaya with ID number EA/016/KEPK-Poltekkes\_Sby/V/2019.

The design: Observational cross-sectional approach. Population and sample; parents of autistic children at the Surabaya Autism Therapy Center, use the rule of thumb in SEM;  $7 \times 15$  parameters were measured, amounting to 105 [19]. Sampling: Multi-stage random sampling. The model reliability test using the structural equation model-partial least square is said to be good if it has a value of  $>0.6$ . Test the structure of the model using R-square well if the value is 0–1 and evaluate the model using Q-square, relevant if the value of  $Q^2 > 0$  [2].

## Results

1. Test of significance of the influence between factors toward a beginning inner model (Table 1)

The test result of the correlation between a factor of stress assessment and stress coping, stress assessment and behavior in caring for children with autism, and stress coping and behavior in caring for children with autism which had a significant influence.

**Table 1: Test of significance of the influence between factors toward a beginning inner model**

Between endogenous factors	Original sample (O)	t-statistik	p-value	Test results
Stress assessment to stress coping models	0.199	2.134	0.033	Significant
Stress assessment to parenting	0.120	2.055	0.040	Significant
Stress coping models to parenting	0.601	8.953	0.000	Significant

2. Test of significance of the influence between factors toward a final inner model (Table 2)

The test result of the influence of exogenous factors against endogenous factors on the final inner model. The result of hypothesis calculation by utilizing a t-test was obtained that stress assessment influenced significantly family coping. Stress coping influenced significantly parental behavior in caring for children with autism, which meant that low-stress levels increased stress coping and the ability to care for children with autism.

**Table 2: Test of significance of the influence between factors toward a final inner model**

Between endogenous factors	Original sample (O)	t-statistik	p-value	Test results
Stress assessment to stress coping	0.199	2.090	0.037	Significant
Stress coping to parental behavior in caring for children with autism	0.601	8.630	0.000	Significant

3. Test of goodness of fit (Table 3)

The results of the R-square stress assessment test were 0.139, meaning 13.9% were affected by coping stress and 86.1% by other variables. Coping stress R-square test of 0.04 means 4% of coping stress affects caring and 96% by other variables. The R-square test for caring for autistic children is 0.361, meaning 36.1%, influenced by stress assessment and coping stress variables and 63.9% by other variables.

**Table 3: R-square value family coping, stress assessment and parenting for children with autism**

Endogenous variables	R-square	R-square adjusted
Stress assessment	0.139	0.104
Stress coping models	0.040	0.030
Parenting	0.361	0.355

### Predictive relevance ( $Q^2$ ) and goodness of fit index (GoF)

The q-square value was 0.173 ( $Q^2 > 0$ ) and it could be explained that family coping variables and stress assessment against behavior in caring for children with autism had good predictions.  $R^2 = 0.573$  and GOF value = 0.626 were categorized as having large goodness of fit.

## Discussion

### ***Stress assessment affects the development of stress coping***

Conditions of developmental failure and strange behavior of autistic children [16] for parents are stressors [1]. Stress arises from demands, challenges, threats, and efforts to overcome unrealistic expectations from the environment [17] and is a personal stressor that lasts a long time and affects the individual. These stressors are often more difficult to deal with than cataclysmic stressors due to a lack of support from other individuals who have the same fate.

Increased understanding of parents that the abilities of autistic children are more difficult to stimulate, stimulation must be structured and it takes longer than normal children also increases. Parents have a lot of time to reflect on the presence of an autistic child at home, thereby reducing stress. This is to the theory which states that stress arises as a reaction that can be caused by various demands, important challenges, threats, and having to overcome unrealistic expectations from the environment [19]. This can increase the assessment of stress to make positive stress. Positive stress increases family support, and togetherness in dealing with stressors that can make feelings, bad thoughts, and parental activities in managing stress levels more appropriate. This is consistent with the theory which states that greater togetherness results in higher family cohesion, a family attribute that has received wide attention as an attribute of the nuclear family [21] in dealing with stressors. The positive assessment of parents or not stress allows parents to control themselves and make themselves an important psychological resource in creating adaptive coping.

This is consistent with the theory that individuals with positive beliefs about justice, freedom, and God are important sources of seeing themselves positively. The theory of viewing oneself positively can be a very important psychological resource for coping with stress [22].

### ***Model of stress coping and the ability to care for children with autism***

The development of adaptive stress coping for parents will be able to increase togetherness between family members to be closer, able to maintain and manage positive stress levels and reduce stressor reactions both physical and psychological for themselves and family members in their involvement in caring for autistic children. In accordance with the theory that parents who have effective coping are able to reduce stressor reactions to passive caregivers, namely, family members to be involved in caring for autistic children [6], [7], [8] parents with developing

adaptive coping are able to seek information, analyze situations that aim to identify problems, develop and consider alternative courses of action, anticipate alternatives, and choose to implement treatment plans for autistic children [14]. Parents with developing adaptive coping are able to increase the togetherness of family members; manage stress levels; think in solving problems [13]; managing social support, especially from family and professional staff [18] to obtain comfort, attention, or assistance that individuals receive [9], [10] from the environment in caring for autistic children [25].

Improving the behavior skills of caring for autistic children is focused on the abilities of autistic children which include the ability of (1) communication; facial expressions, use of language or body signs, ability to initiate communication, ability to imitate and understand words, (2) relationships with other people and social surroundings, (3) sensory response, and (4) behavioral gaps [15].

## Conclusion

Parents' positive assessment of stressors and energy adequacy and good health will make parents able to control themselves and make themselves an important psychological resource in developing adaptive coping. The development of adaptive coping for parents is able to increase togetherness among family members, maintain and reduce physiological and psychological reactions to stressors, and manage family support and professional staff to obtain comfort, attention, or assistance in improving behavior in caring for autistic children.

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## Author Contributions

Conception and design: Hasyim Asari  
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## Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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