Insight: Jurnal Ilmiah Psikologi,
Vol. 25 No. 2, August 2023, pp. 105-119

e-ISSN: 2548–1800
p-ISSN: 1693–2552

Mindful parenting and parental bonding as protective factors of parenting stress in mothers of children with cerebral palsy

Nurul Hidayah[1], Sheila Zulfiani Putri[2]
[12]Universitas Ahmad Dahlan, Yogyakarta, Indonesia
[1]nurul.hidayah@psy.uad.ac.id, [2]sheila1900013265@webmail.uad.ac.id

Artikel history

Received	*Revised*	*Accepted*	*Published*
2023-07-04	*2023-07-16*	*2023-08-03*	*2023-08-30*

Keywords :

mindful parenting, parental bonding, parenting stress

Abstract

This study examines the effect of mindful parenting and parenting bonding simultaneously or partially in decreasing parenting stress in mothers of children with cerebral palsy in Yogyakarta. This study used a quantitative survey method by utilizing three psychological scales: the Parenting Stress Scale, the Mindful Parenting Scale, and the Parenting Bonding Scale. The study population consisted of women who were members of the cerebral palsy community in Yogyakarta. A total of 38 samples were obtained using a simple random sampling technique. Multiple linear regression analysis was used to test the hypothesis. The findings revealed that (1) mindful parenting and parenting bonding significantly affected parenting stress ($F = 9.890$; $R = 0.601$; $p < 0.01$); (2) there was a significant negative effect of mindful parenting on parenting stress ($t = -2.745$; partial $r = -0.115$; $p < 0.01$); and (3) parental bonding did not significantly affect parenting stress ($t = -0.684$; r partial $= -0.684$; $p > 0.05$). Together, mindful parenting and parenting bonding can help decrease parenting stress by 36.1%, with mindful parenting contributing 30.15% to decreasing stress. These results suggest that mindful parenting and parenting bonding are highly protective factors against parenting stress for mothers raising children with cerebral palsy in Yogyakarta.

How to cite: Hidayah, N., & Putri, S. Z. (2023). Mindful parenting and parental bonding as protective factors of parenting stress in mothers of children with cerebral palsy. *Insight: Jurnal Ilmiah Psikologi, 25*(2), 105-119. doi: https://doi.org/10.26486/psikologi.v25i2.3440

INTRODUCTION

Every parent hopes that their child will be born under normal conditions. However, not all children are born with the expected physical and mental conditions; some are born with disorders, such as cerebral palsy. Cerebral palsy (CP) is a chronic developmental condition that affects movement and posture during growth and development. It can arise from non-progressive brain abnormalities or damage, which may occur during the formation of one or more brain regions, leading to movement control disorders (Panteliadis, 2018). Cerebral palsy can result from brain damage that occurs before birth (prenatal), during delivery (perinatal), or after birth (postnatal) (Fidan & Baysal, 2014).

The prevalence of CP in Asia was 2.19 per 1000 children and adolescents (95% CI), which was not significantly different from that in Europe or even the global prevalence of CP (Andromeda et al., 2023). Annually, cerebral palsy affects approximately 1.5-4 out of every 1,000 live births, with Indonesia experiencing a predicted incidence of 1-5 cases per 1,000 live births (Salfi et al., 2019). In terms of gender, boys have a higher risk of developing cerebral palsy compared to girls, with a ratio of approximately 1.33:1 (Mcintyre et al., 2022).

e-ISSN: 2548–1800
p-ISSN: 1693–2552

The severity of physical impairment in children with cerebral palsy varies depending on the extent of the condition. Typically, these children face limitations in movement and physical activities, such as difficulties in grasping objects, crawling, and walking, in comparison to typically developing children. Additionally, children with cerebral palsy may encounter various challenges, including muscular weakness in the throat, mouth, and tongue, which can result in drooling and difficulties in eating and swallowing (Maimunah, 2013). Consequently, children with cerebral palsy require comprehensive care to address their special needs and limitations.

Children who have cerebral palsy may also experience other comorbidities, including issues with cognitive function, communication, behavior, and musculoskeletal pain (Colver et al., 2014). Therefore, children with cerebral palsy will always need assistance in performing daily activities, also known as Activity Daily Living (ADL), such as walking, eating, drinking, taking a bath, and getting dressed. These conditions require parents to provide more attention and support to children with cerebral palsy.

Raising children with special needs is a challenge for parents (Sari, 2020). Taking care of children with cerebral palsy can affect various aspects such as physical health, social welfare, mental state, finances, and family life (Olawale et al., 2013; Chen et al., 2014; Pate, 2016; Vadivelan et al., 2020; & Kouther et al., 2022). The ability to cope, exercise self-control, and promote togetherness and cohesiveness within the family can significantly impact how well one manages stress while caring for a child with cerebral palsy (Moe et al., 2018 & Wuryaningsih, 2018). Psychological impacts that can arise in mothers of children with cerebral palsy include low resilience (Asyifa & Yusuf, 2017), parenting stress (Suwoto, 2023), decreased quality of life (Dwiyani & Nurhastuti, 2023), and a long process of self-acceptance (Faisyahril et al., 2023; Fitriani et al., 2023).

Mothers of children with cerebral palsy are at a greater risk of parenting stress compared to other mothers because mothers who have children with cerebral palsy experience stress in pessimism due to the children's inability to care for themselves independently (Dervishaliaj, 2013; Auliya & Darmawanti, 2014; Feizi et al., 2014; & Kouther et al., 2022). Ribeiro et al. (2014), who examined 223 mothers of children with cerebral palsy, found that 43.5% of mothers had high-stress conditions with varying levels of stress depending on the severity experienced by their children. Parents who experience stress will likely demonstrate fight, flight, or freeze responses by displaying refusal, reactive behavior, and giving fewer warm responses to children. Stressful parenting can trigger negative emotions, making parents less sensitive to their children, resulting in abusive parenting (Bögels & Restifo, 2014).

Parenting stress refers to the stress parents experience while raising and caring for their children. These stressors include stress on how to behave and communicate with children (socializing, teaching), caring for the children (guarding, protecting), seeking treatment for the children, as well as the impact of this stress on personal and family life (Miranda et al., 2019). Parenting stress can be broken down into three components: parental distress, parent-child dysfunctional interaction, and difficult child. The first

e-ISSN: 2548–1800
p-ISSN: 1693–2552

component, i.e., parental distress, refers to the stress that parents experience while raising their children. This can manifest as feelings of inadequacy, social isolation, restrictions on personal freedom, strained relationships with partners, poor health, or even depression. The second component, i.e., parent-child dysfunctional interaction, refers to an unhealthy bond between parent and child. This can be indicated by a child's excessive dependence on the mother and a constant need for acceptance and closeness. Finally, the last component, i.e., difficult child, can make parenting even more challenging. This can include a child's struggles to adapt to their environment, high parental expectations, and unpredictable moods (Abidin, in Daulay et al., 2020).

The issue with parenting stress was also found in the members of a cerebral palsy community in the city of Yogyakarta. The mothers were found to be distressed with symptoms of feeling unable to provide appropriate treatment to their children and symptoms of social isolation in the form of a lack of social support due to negative stigma towards their children. In the parent-child interaction aspect, there is a less warm emotional relationship; in fact, the child often becomes the target of the mother's negative emotional expressions. In the difficult child aspect, there is a heavy burden because of the enormous amount of attention and costs needed to improve the child's development. The impact of parenting stress ranges from physical fatigue to mental health problems that require psychiatric treatment.

If parents cannot handle parenting stress, it can negatively affect their parenting skills. This can be particularly harmful to children, who may become victims of parenting maltreatment. As a consequence, children may struggle to cope with challenges and have difficulty in decision making and problem solving (Lestari, 2016). According to research conducted by Geprägs et al. (2023), parents who experience parenting stress are more likely to use violence against their children. This can negatively impact the child's personality development, social skills, emotional management, and academic achievements. Moreover, parenting stress can also adversely affect the parents' overall quality of life. Previous research revealed that high parental stress conditions could increase the risk of parents experiencing depression, anxiety disorders, relationship conflicts with partners, decreased physical condition, and substance abuse (Estes et al., 2013; Neece, 2014; Maguire-Jack & Negash, 2015; Keith & Emily, 2017).

It is necessary to have internal and external protective factors to lower the chances of experiencing stress while raising children. Among the internal protective factors is t he capacity of parents to be fully present and attentive during the parenting process, which is referred to as mindful parenting (Singh & Joy, 2020). Mindful parenting involves giving children undivided attention and affection. This approach is achieved by building a strong relationship between parents and children, focusing on the present, and avoiding making one-sided judgments (Kabat-Zinn, 2014). The main concepts of mindful parenting include: (1) prioritizing awareness of the world, feelings, and needs of children; (2) being present and listening to the child attentively; (3) recognizing and accepting both

e-ISSN: 2548–1800
p-ISSN: 1693–2552

pleasant and unpleasant children; and (4) recognizing one's own emotions and learning to respond calmly (Bögels & Restifo, 2014; Rinaldi, 2017). The aspects of mindful parenting consist of (1) parents' self-control when dealing with children's behavior (sovereignty); (2) parents' understanding of children's feelings and needs (empathy); and (3) acceptance of one's condition and that of the child (acceptance) (Kabat-Zinn, 2014). Parents who apply mindful parenting are believed to be able to decrease the level of reactivity and increase patience, flexibility in parenting, responsiveness, consistency, and parenting quality according to their respective goals (Bröning & Brandt, 2022).

Mindful parenting skills can decrease the negative impact on mothers of children with special needs, decrease negative emotions (such as bad moods, feeling guilty or anger), increase mothers' ability to care for them carefully, and not easily make judgement (Whittingham, 2014; Rinaldi, 2017; Bröning & Brandt, 2022). Mindful parenting skills to decrease parenting stress can be obtained through training, such as mindfulness-based stress decreasing (Neece, 2014) and mindfulness-based stress management (Auliani, 2020).

Another protective factor that can decrease the risk of parenting stress is a well-functioning relationship or bond between parents and children (Abidin, in Daulay et al., 2020) to prevent conflicts that cause stress (Lestari, 2016 & Shahbaz et al., 2021). Bonding is a person's emotional attachment and commitment to social relations with parents, caregivers, siblings, peers, and other living things. Bonding influences a close relationship between parents and children, so it becomes the basis of affection in the parenting process (Scharp & Thomas, 2018).

Karim & Begum (2016) identified two contrasting dimensions of parental bonding. The first dimension is parental care, which encompasses empathy, attachment, warmth, nurturing, and emotional support. The second dimension is parental control, which involves parental behaviors that can impede the child's autonomy, restrict their freedom, or limit their control. A study by Pianta (Escalante-Barrios et al., 2020) identified three significant dimensions of parental bonding: (1) conflict, referring to parents' perceptions of unhealthy relationships and conflicts with their children; (2) closeness, indicating a parent's ability to establish loving and effective communication with their children; and (3) dependence, denoting the extent to which children rely on their parents. Moreover, research conducted by De Cock et al. (2017) demonstrated a negative correlation between positive parent-child bonding and parenting stress levels.

While some studies in Indonesia support the role of mindful parenting in decreasing parenting stress, existing research primarily focuses on parents with typically developing children, such as those in middle childhood (Afaf et al., 2019) and early childhood (Kumalasari & Fourianalistyawati, 2020), or children with special needs and developmental disabilities (Lunsky et al., 2015), including those with multiple disabilities (Nurhamidah & Retnowati, 2018). Research on parenting stress in mothers of children with cerebral palsy is associated with personality factors of hardiness (Auliya & Darmawanti,

e-ISSN: 2548–1800
p-ISSN: 1693–2552

2014, emotional regulation (Ikasari & Kristiana, 2018), and group therapy based on mindful parenting (Hardika & Retnoningtias, 2020). However, not many research has investigated parenting bonding as a predictor of parenting stress, such as longitudinal studies exploring the association between parental bonding, parenting stress, and children's executive function (De Cock et al., 2017). Therefore, the aim of this study was to examine the effect of mindful parenting and parenting bonding simultaneously or partially on decreasing parenting stress in mothers of children with cerebral palsy in Yogyakarta.

METHOD

This study employed a quantitative survey approach, with parenting stress as the dependent variable while mindful parenting and parental bonding as the independent variables. The target population for this research consisted of mothers who had children diagnosed with cerebral palsy and were affiliated with a cerebral palsy community in Yogyakarta. The participants in this study volunteered to be part of the research sample, and a sample size of 38 individuals was obtained using a simple random sampling technique.

Data collection for this study utilized three psychological scales. To measure parenting stress, a modified version of the Parenting Stress Scale (Auliani, 2020) was employed. This scale was developed based on the Parenting Stress Index–Short Form (Abidin, in Daulay et al., 2020) focusing on the aspects of parental distress, parent-child dysfunctional interaction, and difficult child. Modifications were made to adjust the sentences or statements according to the characteristics of the research sample, and the number of statements was increased to match the estimated number of items desired. Following the scale testing, a set of 21 valid items was derived, with item differential index (r_{it}) ranging from 0.286 to 0.707 and alpha reliability (r_{tt}) of 0.904. The following are examples of items from the Parenting Stress Scale: "I find caring for a child much more difficult than I imagined" (item 1); "My family and friends keep their distance because they don't understand my child's condition" (item 10); and "I often give up easily because I feel tired from taking care of my children" (item 19).

The Mindful Parenting Scale was developed by the researchers based on the mindful parenting aspects from Kabat-Zinn (2014), namely control *(sovereignty), empathy, and acceptance*. After testing the scale, 21 valid items were obtained with a differential item index (r_{it}) of 0.43 –0.770 and alpha reliability coefficient (r_{tt}) of 0.938. The following are some examples of the Mindful Parenting Scale items: "I understand my child's needs" (item 11); "I try to be careful and calm when responding to the child's behavior" (paragraph 15); and "I try to listen to what my child wants" (item 17).

The Parenting Bonding Scale was developed by the researchers based on the parenting bonding aspects from Pianta (Escalante-Barrios et al., 2020), namely conflict, closeness, and dependence. After testing the scale, 22 valid items were obtained with a differential item index (r_{it}) of 0.365–0.714 and alpha reliability coefficient (r_{tt}) of 0.890. The following are some examples of the Parenting Bonding

e-ISSN: 2548–1800
p-ISSN: 1693–2552

Scale items: "My child and I have a warm relationship with each other" (item 2); "My relationship with my child makes me confident in my role as a parent" (item 11); and "My child feels comfortable getting a physical touch from me" (item 20).

Multiple regression analysis techniques with two predictors were used to examine the effect of mindful parenting and parenting bonding on parenting stress. Three assumptions must be met to use multiple regression analysis, namely the normality of the distribution, the linearity of the relationship between the independent and dependent variables, and the absence of multicollinearity problems.

RESULTS AND DISCUSSION

Results

Table 1 depicts the descriptive analysis of the research variables.

Table 1. Descriptive Statistics

Variable	Hypothetical Score				Empirical Score			
	Min	**Max**	**Mean**	**SD**	**Min**	**Max**	**Mean**	**SD**
Parenting stress	21	84	52.5	10.5	22	66	41.65	10.145
Mindful parenting	21	84	52.5	10.5	60	84	72.10	8.069
Parental bonding	22	88	55	11	57	86	72.65	7.795

After the descriptive statistics, the scores were categorized to group the research sample based on the measured attributes. The categorization includes low, medium, and high (Azwar, 2015). The results of the categorization and the range of scores can be seen in Table 2.

Table 2. Sample Categorization

Variable	Range	Category	N	Percentage (%)
Parenting stress	$X < 42$	Low	17	44.7
	$42 \leq X < 63$	Medium	20	52.6
	$63 \leq X$	High	1	2.6
	$X < 42$	Low	0	0.00
Mindful parenting	$42 \leq X < 63$	Medium	3	7.9
	$63 \leq X$	High	35	92.1
	$X < 44$	Low	0	0.00
Parenting bondi*ng*	$44 \leq X < 66$	Medium	8	21.1
	$66 \leq X$	High	30	78.9

The hypothesis in this study was tested through multiple regression analysis involving two predictors. Before conducting the hypothesis test, the researcher performed assumption tests, including tests for normality and multicollinearity. All the assumption tests met the required criteria: (1) the data had normal distribution (p unstandardized residual = 0.092 > 0.05); (2) there was no evidence of a nonlinear relationship between the variables (p deviation from linearity of mindful parenting with parenting stress = 0.826 > 0.05 and p deviation from linearity of parenting bonding with parenting stress

e-ISSN: 2548–1800
p-ISSN: 1693–2552

= 0.162 > 0.05); and (3) there was no multicollinearity (VIF = 1.871 < 10 and tolerance value of 0.534 > 0.1).

The results of the hypothesis test indicated that the major hypothesis yielded an F value of 9.890 and an R value of 0.601, with a significance level of 0.000 (p < 0.01), indicating a high level of significance. Thus, the proposed hypothesis, which suggests that mindful parenting and parental bonding have a significant effect on parenting stress, was accepted. The coefficient of determination (R-Squared) was found to be 0.361, indicating that the two predictors accounted for 36.1% of the variance in parenting stress. The remaining 63.9% of the variance was influenced by other variables not examined in this research.

The minor hypothesis test results can be seen in Table 3.

Table 3. Partial Test Result

Model	β	t	r-partial	p	Significance
mindful parenting-parenting stress	-0.507	-2.745	-0.115	0.009	Very significant
parental bonding-parenting stress	-0.126	-0.684	-0.421	0.498	Not significant

The first minor hypothesis test showed that there was a strong link between mindful parenting and parenting stress, with a t-value of -2.745 and a significance level of 0.009 (p <0.01). This indicates that mindful parenting can have a significant partial negative impact on parenting stress, thus potentially decreasing it. Therefore, the first minor hypothesis proposed can be accepted. The practical contribution of mindful parenting in decreasing parenting stress was estimated at 30.15%.

The second minor hypothesis test results showed that parenting bonding and parenting stress variables acquired a t-value of -0.684 with a significance level of 0.0498 (p> 0.05), so it was insignificant. It can be concluded that there was no partial significance of parenting bonding on parenting stress, therefore rejecting the second minor hypothesis.

Discussion

The finding that mindful parenting and parenting bonding can decrease parenting stress aligns with previous research by Kumalasari & Fourianalistyawati (2020), who found that mindful parenting significantly decreases parenting stress. Mindful parenting has been shown to have a positive impact on parenting by decreasing reactivity and increasing traits such as patience, flexibility, and consistency. It also helps parents align their parenting activities with their values and goals (Bröning & Brandt, 2022). Mindful parenting promotes trust and emotional bonding between parents and children, thereby decreasing parental stress and enhancing children's well-being. Developing mindful parenting skills enables parents to establish strong connections with their children, as mindful parenting is closely

e-ISSN: 2548–1800
p-ISSN: 1693–2552

intertwined with effective interactions and relationships between parents and children (Hardika & Retnoningtias, 2020).

The negative effect of mindful parenting on parenting stress in mothers of children with cerebral palsy is in line with research conducted by Afaf et al. (2019), which explained that mindful parenting plays a role in decreasing the risk of parenting stress. Through mindful parenting, parents will have the ability to be fully aware of the parenting process, so parents have better emotional regulation and problem-solving skills through listening, increasing internal awareness, and responding to children calmly. A mindful mother will be able to control herself in dealing with her child's behavior, understand her child's feelings and needs, and accept her own condition and her child's condition (Kabat-Zinn & Kabat-Zinn, 2014), so she is not likely to experience parental distress and parent-child dysfunctional interaction even though she has to face difficult child behavior (Abidin, in Daulay et al., 2020).

The insignificant influence of parenting bonding on parenting stress is possible due to several factors. First, there are other variables that are moderated by parental bonding, such as mother-child attachment style. The mother-child attachment style is very close to bonding (Nordahl et al., 2020). Attachment consists of three types, namely anxious attachment, avoidant attachment, and secure attachment (Smyth et al., 2015). Anxious and avoidant attachment will reduce bonding and increase parenting stress. On the other hand, secure attachment will increase bonding and decrease parenting stress (Nordahl et al., 2020). Second, bonding between mother and child may have an indirect effect on parenting stress, mediated by child development. The development of infants (as well as their social, emotional and cognitive development) depends on a loving bond or attachment with a primary caregiver, usually a parent (Winston & Chicot, 2016). Optimal child development according to their potential makes parents happy, thereby decreasing parenting stress. Third, the results of previous research on parents of non-disabled children (De Cock et al., 2017 & Shahbaz et al., 2021) are less suitable to be applied to mothers of children with cerebral palsy as the population for this study.

Experts emphasize the significance of fostering a strong bond between parents and children, as it plays a crucial role in promoting healthy attachments and a sense of security. This, in turn, has a positive impact on children's emotional, social, and cognitive development (Winston & Chicot, 2016). Furthermore, establishing optimal bonding can help mothers avoid stress, which can affect their ability and adjustment to the demands of parenting (Esposito, 2018; Dagan & Sagi-Schwartz, 2020). Parenting bonding has been shown to boost children's confidence in learning, nurture their curiosity, and foster strong connections with their parents (Ansori & Abidin, 2021). Prioritizing awareness and attachment between parents and children can effectively decrease parenting stress. However, as revealed in this study, mothers need to practice mindful parenting in conjunction with bonding to effectively mitigate parenting stress.

e-ISSN: 2548–1800
p-ISSN: 1693–2552

The current study found that mindful parenting and parenting bonding accounted for 36.1% of the variance in parenting stress, indicating that these factors explained a significant portion of parenting stress. The remaining 63.9% was influenced by other factors not examined in this research. Personality factors of mothers of children with cerebral palsy, such as personality hardiness and emotional regulation, may also be protective factors for minimizing parenting stress (Auliya & Darmawanti, 2014; Ikasari & Kristiana, 2018). A social factor, namely support from the community, can help decrease the risk of parenting stress (Koamesah et al., 2021). The study sample consisted of active members of the cerebral palsy community, making it more likely for them to receive support from the community. This support can assist mothers in effectively managing parenting stressors.

The other factors include characteristics of the child, such as gender, age, abilities, and habits, as well as parental characteristics, including age, education, income, and temperament. Additionally, social support can also play a role in influencing parenting stress (Fang et al., 2022). The adult participants in the study were categorized as early adults (aged 20-39) and late adults (aged 36-45) (Cronin & Mandich, 2015). The research sample consisted of 17 early adults, 16 late adults, and five early elderly individuals (aged 45-55 years). The majority of the sample fell into the early adulthood category, and they were reported to have moderate levels of parenting stress. These findings align with research by Ramadhani et al. (2017) which highlighted a correlation between mothers' age and the level of parenting stress experienced. Young parents may lack experience in childcare, making them more susceptible to parenting stress.

Based on the demographic data and the stages of child development starting from toddlerhood (ages 0-5), childhood (ages 6-11), and early adolescence (ages 12-16) (Cronin & Mandich, 2015), the majority of the children in our study were in the childhood stage, while the mothers were reported to experience moderate levels of parenting stress. Fang et al. (2022) corroborated that parenting stress and style are influenced by the child's age and their ability to adapt to their environment. Generally, children find it more challenging to adjust to changes and their surroundings, which can increase parenting stress.

Most of the research respondents experienced moderate levels of parenting stress. This finding is in line with previous research that parents of children with cerebral palsy often experience higher stress than other parents (Olawale et al., 2013). Almost half of the parents of children with cerebral palsy, experienced high levels of parenting stress, with the highest proportion in the aspect of parental distress (Ribeiro et al., 2014 & Lima et al., 2021). For mothers of children with cerebral palsy, the main source of parenting stress lies in the daily activities when they are caring for their children. Through interviews with five participants, it was found that the biggest challenge for these mothers was to control their emotions, as it requires a great deal of patience, care, and attention. The participants expressed that they felt tired due to the constant demand for their presence and attention. They had to be vigilant about their

e-ISSN: 2548–1800
p-ISSN: 1693–2552

children's condition and needs, such as therapy sessions, medication requirements, nutritional intake, and the development of other bodily functions. A lack of knowledge among mothers in caring for children with cerebral palsy, limited economic resources, and insufficient social support are primary factors that contribute to the pressure experienced by these mothers throughout the parenting process (Auliya & Darmawanti, 2014).

The current research has limitations in terms of technical data collection. Due to the diverse activities of the research sample, a blended scale incorporating online and offline methods was utilized. However, the online distribution of the scale posed challenges for the researchers in overseeing the process of completing the research instruments. Another limitation is related to the varying conditions of cerebral palsy observed in the children involved in the study, thus making it difficult to control the study, particularly as some children had comorbidities.

CONCLUSION

Based on the findings and discussion of the research, it has been established that both mindful parenting and parenting bonding are simultaneously essential protective measures in decreasing parenting stress among mothers of children with cerebral palsy. However, only mindful parenting can have a partial effect on decreasing parenting stress.

Future researchers can investigate additional factors that might contribute to decreasing parenting stress. These factors may include social support or participation in support groups, the mother's level of education, the specific type of cerebral palsy, the child's overall health condition, the mother's level of hardiness, and the number of children in the family. By examining these factors, a comprehensive model of parenting stress in mothers of children with cerebral palsy can be developed.

Mothers of children with cerebral palsy can benefit from acquiring mindful parenting skills to reduce parenting stress. These skills can be self-taught or acquired through mindful parenting training sessions, which are often available through the cerebral palsy community. By developing these skills, mothers can enhance their ability to cope with the unique challenges of raising a child with cerebral palsy.

REFERENCES

Afaf, I., Gani, A., & Kumalasari, D. (2019). Be mindful, less stress: Studi tentang mindful parenting dan stres pengasuhan pada ibu dari anak usia middle childhood di Jakarta. *INSAN Jurnal Psikologi dan Kesehatan Mental*, *15*, 98–107. https://doi.org/10.24014/jp.v14i2.7744

Andromeda, A., Hartini, N., & Suryanto, S. (2023). Reassuring the prevalence of cerebral palsy in Asian children and adolescents. *Jurnal Kesehatan Masyarakat, 19*(1), 45-52. https://doi.org/10.15294/

Ansori, M. W., & Abidin, M. R. (2021). Perancangan board game kewania serial adventurer sebagai parental bonding. *Jurnal Barik*, *2*(2), 16–30.

e-ISSN: 2548–1800
p-ISSN: 1693–2552

Asyifa, H. N., & Yusuf, U. (2017). hubungan antara dukungan sosial dengan resiliensi ibu yang memiliki anak cerebral palsy. *Prosiding Psikologi, 3*(3), 989–996.

Auliani, A. (2020). *Manajemen distres berbasis mindfulness untuk menurunkan stres pengasuhan pada orang tua dengan anak disabilitas intelektual*. Tesis. Universitas Ahmad Dahlan.

Auliya, I. A. D., & Darmawanti, I. (2014). Hubungan antara kepribadian hardiness dengan stres pengasuhan pada ibu yang memiliki anak cerebral palsy. *Character: Jurnal Penelitian Psikologi*, *2*(3), 1–6.

Azwar, S. (2015). *Metode penelitian.* Pustaka Pelajar.

Bögels, S., & Restifo, K. (2014). *Mindful parenting: A guide for mental health practitioners*. Springer. https://doi.org/10.1007/978-1-4614-7406-7

Bröning, S., & Brandt, M. (2022). mindful parenting: Mindfulness in the parent-child relationship. *Zeitschrift fur Kinder- und Jugendpsychiatrie und Psychotherapie*, *50*(5), 395–406. https://doi.org/10.1024/1422-4917/a000853

Chen, K.-L., Tseng, M.-H., Shieh, J.-Y., Lu, L., & Huang, C.-Y. (2014). Determinants of quality of life in children with cerebral palsy: a comprehensive biopsychosocial approach. *Res Dev Disabil*, *35*(2), 520–528. https://doi.org/10.1016/j.ridd.2013.12.002

Colver, A., Fairhurst, C., & Pharoah, P. O. (2014). Cerebral palsy. *Lancet*, *393*(9924), 1240–1249. https://doi.org/10.1016/S0140-6736(13)61835-8

Cronin, A., & Mandich, M. B. (2015). *Human development and performance throughout the lifespan*. Cengage Learning. https://books.google.co.id/books?id=uhOdBQAAQBAJ

Dagan, O., & Sagi-Schwartz, A. (2020). Infant attachment (to mother and father) and its place in human development: five decades of promising research. *The Cambridge Handbook of Infant Development*. Cambridge University Press.

Daulay, N., Ramdhani, N., & M. Noor Rochman, H. (2020). Validity and reliability of parenting stress construct among mothers of children with autistic spectrum disorder. *Jurnal Psikologi*, *47*(1), 1–17. https://doi.org/10.22146/jpsi.43744

De Cock, E. S. A., Henrichs, J., Klimstra, T. A., Maas, A. J. B. M., Vreeswijk, C. M. J. M., Meeus, W. H. J., & van Bakel, H. J. A. (2017). Longitudinal associations between parental bonding, parenting stress, and executive functioning in toddlerhood. *Journal of Child and Family Studies*, *26*(6), 1723–1733. https://doi.org/10.1007/s10826-017-0679-7

Dervishaliaj, E. (2013). Parental stress in families of children with disabilities: A literature review. *Journal of Educational and Social Research*, *3*(7), 579-584. https://doi.org/10.5901/jesr.2013.v3n7p579

Dwiyani, O. R., & Nurhastuti. (2023). Study kuantitatif deskriptif kualitas hidup ibu yang memiliki anak cerebral palsy di Yayasan Rumah Gadang Cerebral Palsy Padang. *Jurnal Riset Sosial Humaniora dan Pendidikan*, *2*(3), 01–07. https://doi.org/10.56444/soshumdik.v2i3.1003

Escalante-Barrios, E. L., Suarez-Enciso, S. M., Raikes, H., Davis, D., Garcia, A., Gonen, M., Veziroglu-Celik, M., & Hazar, R. G. (2020). Child-parent interactions in American and Turkish families: Examining measurement invariance analysis of child-parent relationship scale. *PLOS ONE*,

e-ISSN: 2548–1800
p-ISSN: 1693–2552

15(4). https://doi.org/10.1371/journal.pone.0230831

Esposito, C. (2018). *The effect of infant directed lullaby on maternal attachment and parenting stress* University of the Pacific. https://scholarlycommons.pacific.edu/uop_etds/3544

Estes, A., Olson, E., Sullivan, K., Greenson, J., Winter, J., Dawson, G., & Munson, J. (2013). Parenting-related stress and psychological distress in mothers of toddlers with autism spectrum disorders. *Brain & Development*, *35*(2), 133–138. https://doi.org/10.1016/j.braindev.2012.10.004.

Faisyahril, R., Tri Raharjo, S., & Wibowo, H. (2023). Penerimaan orangtua terhadap anak penyandang disabilitas cerebral palsy di Sekolah Luar Biasa Bagian D Yayasan Pembinaan Anak Cacat Bandung. *Jurnal Indonesia Sosial Teknologi*, *4*(4), 480–496. https://doi.org/10.59141/jist.v4i4.611

Fang, Y., Luo, J., Boele, M., Windhorst, D., Van Grieken, A., & Raat, H. (2022). Parent, child, and situational factors associated with parenting stress: A systematic review. *European Child & Adolescent Psychiatry*. https://doi.org/10.1007/s00787-022-02027-1

Feizi, A., Najmi, B., Salesi, A., Chorami, M., & Hoveidafar, R. (2014). Parenting stress among mothers of children with different physical, mental, and psychological problems. *Journal of Research in Medical Sciences : The Official Journal of Isfahan University of Medical Sciences*, *19*, 145–152.

Fidan, F., & Baysal, O. (2014). Epidemiologic characteristics of patients with cerebral palsy. *Open Journal of Therapy and Rehabilitation*, *02*, 126–132. https://doi.org/10.4236/ojtr.2014.23018

Fitriani, O., Hermawan, & Anggrellanggi, A. (2023). Dukungan keluarga dalam penerimaan diri orang tua yang memiliki anak cerebral palsy di Desa Dawu, Kecamatan Paron tahun 2022/2023. *Jurnal Penelitian Pendidikan Kebutuhan Khusus*, *11*(2), 77–84.

Geprägs, A., Bürgin, D., Fegert, J. M., Brähler, E., & Clemens, V. (2023). Parental stress and physical violence against children during the second year of the COVID-19 pandemic: Results of a population-based survey in Germany. *Child and Adolescent Psychiatry and Mental Health*, *17*(1), 25. https://doi.org/10.1186/s13034-023-00571-5

Hardika, I., & Retnoningtias, D. (2020). Pengaruh terapi kelompok berbasis mindful parenting terhadap beban psikologis ibu yang memiliki anak cerebral palsy. *Journal of Psychological Science and Profession*, *4*(3), 210-224. https://doi.org/10.24198/jpsp.v4i3.26847

Ikasari, A., & Kristiana, I. F. (2018). Hubungan antara regulasi emosi dengan stress pengasuhan ibu yang memiliki anak cerebral palsy. *Jurnal Empati*, *6*(4), 323-328. . https://ejournal3.undip.ac.id/index.php/empati/article/view/20101

Kabat-Zinn, M. (2014). *Everyday blessings: The inner work of mindful parenting*. Hachette Books. https://books.google.co.id/books?id=z3RrAwAAQBAJ

Karim, A. K. M., & Begum, T. (2016). The Parental Bonding Instrument: A psychometric measure to assess parenting practices in the homes in Bangladesh. *Asian Journal of Psychiatry*, *25*. https://doi.org/10.1016/j.ajp.2016.11.004

Keith, C., & Emily, R. (2017). Parenting stress and parenting efficacy. In K. Deater-Deckard & Panneton (Eds.), *Parental stress and early child development: Adaptive and maladaptive outcomes* (pp. 263–284). Springer International Publishing. https://psycnet.apa.org/doi/10.1007/978-3-319-55376-4_11

e-ISSN: 2548–1800
p-ISSN: 1693–2552

Koamesah, G. T., Ongkowidjojo, O., & Alvianto, D. (2021). Dinamika stres pengasuhan pada orangtua dengan anak bibir sumbing. *Psychopreneur Journal*, *5*(2), 90–107. https://doi.org/https://doi.org/10.37715/psy.v5i2.2276

Kouther, D. A., Shakir, M. O., Alhumaidah, R. A., Jamaluddin, H. A., Jaha, A. Y., Alshumrani, M. J., & Hakami, A. Y. (2022). Factors influencing the mental health of caregivers of children with cerebral palsy. *Frontiers in Pediatrics*, *10*, 1-10. https://www.frontiersin.org/articles/10.3389/fped.2022.920744

Kumalasari, D., & Fourianalistyawati, E. (2020). The role of mindful parenting to the parenting stress in mothers with children at early age. *Jurnal Psikologi*, *19*(2), 135–142. https://doi.org/10.14710/jp.19.2.135-142

Lestari, S. (2016). *Psikologi keluarga: Penanaman nilai dan penanganan konflik dalam keluarga*. Kencana.

Lima, M. B. S., Ramos, E. M. L. S., Pontes, F. A. R., & Silva, S. S. da C. (2021). Cerebral palsy: Parental stress of caregivers. *Psico-USF, Bragança Paulista, 26*(2), 357–368. https://doi.org/10.1590/1413-82712021260213

Lunsky, Y., Robinson, S., Reid, M., & Palucka, A. (2015). Development of a mindfulness-based coping with stress group for parents of adolescents and adults with developmental disabilities. *Mindfulness*, *6*(6), 1335–1344. https://doi.org/10.1007/s12671-015-0404-9

Maguire-Jack, K., & Negash, T. (2015). Parenting stress and child maltreatment: The buffering effect of neighborhood social service availability and accessibility. *Children and Youth Services Review, 60*. https://doi.org/10.1016/j.childyouth.2015.11.016

Maimunah, S. (2013). Studi eksploratif perilaku koping pada individu dengan cerebral palsy. *Jurnal Ilmiah Psikologi Terapan, 1*(1), 156–171. https://doi.org/https://doi.org/10.22219/jipt.v1i1.1365

Mcintyre, S., Goldsmith, S., Webb, A., Ehlinger, V., Hollung, S., McConnell, K., Arnaud, C., Smithers- Sheedy, H., Oskoui, M., Khandaker, G., & Himmelmann, K. (2022). Global prevalence of cerebral palsy: A systematic analysis. *Developmental Medicine & Child Neurology*, *64*. https://doi.org/10.1111/dmcn.15346

Miranda, A., Mira, A., Berenguer, C., Rosello, B., & Baixauli, I. (2019). Parenting stress in mothers of children with autism without intellectual disability. mediation of behavioral problems and coping strategies. *Frontiers in Psychology*, *10*, 1-12. https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00464

Moe, V., Soest, T., Fredriksen, E., Olafsen, K., & Smith, L. (2018). The multiple determinants of maternal parenting stress 12 months after birth: The contribution of antenatal attachment style, adverse childhood experiences, and infant temperament. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.01987

Neece, C. L. (2014). Mindfulness-based stress reduction for parents of young children with developmental delays: Implications for parental mental health and child behavior problems. *Journal of Applied Research in Intellectual Disabilities*, *27*(2), 174–186. https://doi.org/https://doi.org/10.1111/jar.12064

Nordahl, D., Rognmo, K., Bohne, A., Landsem, I. P., Moe, V., Wang, C. E. A., & Høifødt, R. S. (2020). Adult attachment style and maternal-infant bonding: the indirect path of parenting stress. *BMC Psychology*, *8*(1), 58. https://doi.org/10.1186/s40359-020-00424-2

Nurhamidah, N., & Retnowati, S. (2018). Efek program "mindful parenting" terhadap perubahan stres pengasuhan orang tua tunggal yang memiliki anak dengan disabilitas ganda. *Gadjah Mada Journal of Professional Psychology (GamaJPP)*, *4*(1), 62–72. https://doi.org/https://doi.org/10.22146/gamajpp.45672

Olawale, O., Deih, A., & Yaadar, R. (2013). Psychological impact of cerebral palsy on families: The African perspective. *Journal of Neurosciences in Rural Practice*, *4*, 159–163. https://doi.org/10.4103/0976-3147.112752

Panteliadis, C. P. (2018). *Cerebral palsy: A multidisciplinary approach* (Third). Springer International Publishing.

Pate, T. (2016). Families of children with chronic illness and the relational family model, the person and the challenges. *The Journal of Theology, Education, Canon Law and Social Studies Inspired by Pope John Paul II*, *6*, 57. https://doi.org/10.15633/pch.1892

Ramadhani, S. D., Larasati, T. A., & Soleha, T. U. (2017). Faktor-faktor yang berhubungan dengan tingkat stres pengasuhan pada ibu yang memiliki anak tunagrahita di SLB Dharma Bhakti Dharma Pertiwi. *Jurnal Kesehatan dan Agromedicine*, *4*(2), 287–292.

Ribeiro, M., Sousa, A. L., Vandenberghe, L., & Porto, C. (2014). Parental stress in mothers of children and adolescents with cerebral palsy. *Revista Latino-Americana de Enfermagem*, *22*, 440–447. https://doi.org/10.1590/0104-1169.3409.2435

Rinaldi, M. (2017). Program "mindful parenting" untuk menurunkan afek negatif pada ibu yang memiliki anak retardasi mental. *Insight: Jurnal Ilmiah Psikologi*, *19*(2), 129-140. https://doi.org/10.26486/psikologi.v19i2.604

Salfi, Q., Saharso, D., & Atika, A. (2019). Profile of cerebral palsy patients in Dr. Soetomo General Hospital Surabaya, Indonesia. *Biomolecular and Health Science Journal*, *2*, 13. https://doi.org/10.20473/bhsj.v2i1.12803

Sari, D. P. (2020). Perbandingan efikasi diri dalam pengasuhan anak pada ibu yang memilki anak disabilitas dan tidak memiliki anak disabilitas. *Insight: Jurnal Ilmiah Psikologi*, *22*(1), 39-45. https://doi.org/10.26486/psikologi.v22i1%20Feb.983

Scharp, K., & Thomas, L. (2018). Making meaning of the parent–child relationship: A dialogic analysis of parent-initiated estrangement narratives. *Journal of Family Communication*, *18*, 1–15. https://doi.org/10.1080/15267431.2018.1484747

Shahbaz, K., Amjad, S., Azhar, S., Khan, A., Mujeeb, A., Khan, A., Shahid, M., Zer, S., Hafsa, N., Shahbaz, K., Azhar, S., Mujeeb, A., & Shahid, A. (2021). *Parental bonding: A significant link to social interaction anxiety and psychological well-being among adolescents*. *12*. https://doi.org/10.14456/ITJEMAST.2021.120

Singh, N. N., & Joy, S. D. S. (2020). *Mindfulness-based interventions with children and adolescents: research and practice*. Taylor & Francis. https://books.google.co.id/books?id=5pAIEAAAQBAJ

e-ISSN: 2548–1800
p-ISSN: 1693–2552

Smyth, N., Thorn, L., Oskis, A., Hucklebridge, F., Evans, P., & Clow, A. (2015). Anxious attachment style predicts an enhanced cortisol response to group psychosocial stress. *Stress (Amsterdam, Netherlands)*, *18*,(2), 143-148. https://doi.org/10.3109/10253890.2015.1021676

Suwoto, A. (2023). Menurunkan stres pengasuhan pada ibu dengan anak berkebutuhan khusus. *Procedia : Studi Kasus dan Intervensi Psikologi*, *11*(2), 55–62. https://doi.org/10.22219/procedia.v11i2.24345

Vadivelan, K., Sekar, P., Sruthi, S. S., & Gopichandran, V. (2020). Burden of caregivers of children with cerebral palsy: An intersectional analysis of gender, poverty, stigma, and public policy. *BMC Public Health*, *20*(1), 1–8. https://doi.org/https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-08808-0

Whittingham, K. (2014). Parents of children with disabilities, mindfulness and acceptance: A review and a call for research. *Mindfulness*, *5*(6), 704–709. https://doi.org/10.1007/s12671-013-0224-8

Winston, R., & Chicot, R. (2016). The importance of early bonding on the long-term mental health and resilience of children. *London Journal of Primary Care*, *8*, 12–14. https://doi.org/10.1080/17571472.2015.1133012

Wuryaningsih, E. (2018). The mental health problems of caregivers of children with cerebral palsy at self help group. *NurseLine Journal*, *3*, 30. https://doi.org/10.19184/nlj.v3i1.7149