



Compassionate love parenting training to reduce stress in caregivers of children with special needs: An experimental study

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Abstract: Caregivers of children with special needs experience a high workload, which causes stress and low quality of life. A compassionate love attitude amongst caregivers is needed to improve the quality of parenting. This study aims to develop a compassionate love parenting training program to reduce stress among children with special needs caregivers. The method employed was Pre-experimental Design, with One-group Pre-test-Post-test. The research participants were 40 caregivers identified using the purposive sampling technique. In the pre-test, the stress level of the caregivers was measured using the Parental Stress Scale with 24 items ($\alpha = .828$). The data were analyzed using the Wilcoxon test to observe the differences between the pre-test and post-test of two dependent samples. The results show that the stress score decreased significantly, with $Z = -2.023$ and with a significance level of $.043 < .05$. It is demonstrated that regular training in compassionate love parenting reduced the stress felt by caregivers of children with special needs. The implementation of compassionate love parenting training in special needs therapeutic centers is important, as it is one of the intervention methods that has been proven to reduce the level of stress to optimize the growth of the child.

Keywords: caregiver; compassionate love training; parenting stress; special needs children

Abstrak: Pengasuh anak berkebutuhan khusus memiliki beban kerja tinggi yang menyebabkan stres dan kualitas hidup yang rendah. Dibutuhkan sikap cinta kasih terhadap pengasuh untuk meningkatkan kualitas pengasuhan. Penelitian ini bertujuan mengimplementasikan program pelatihan pengasuhan cinta kasih untuk mengurangi stres bagi pengasuh anak berkebutuhan khusus. Metode yang diterapkan dalam penelitian ini adalah *Pre-experimental Design*, dengan *One-group Pre-test-Post-test*. Partisipan penelitian adalah 40 pengasuh yang diperoleh melalui teknik *purposive sampling*. Pada *pre-test*, tingkat stres pengasuh diukur dengan menggunakan *Parental Stress Scale* dengan 24 item ($\alpha = 0,828$). Data dianalisis menggunakan *Wilcoxon Test* untuk melihat perbedaan antara *pre-test* dan *post-test* dari dua sampel dependen. Hasil penelitian menunjukkan bahwa skor stres menurun secara signifikan, dengan nilai $Z = -2,023$ dan tingkat signifikansi $0,043 < 0,05$. Hasil tersebut berarti bahwa pelatihan pola asuh cinta kasih yang dilakukan secara rutin telah menurunkan stres pengasuh bagi anak berkebutuhan khusus. Penerapan pelatihan *Compassionate Love Parenting* di pusat-pusat terapi berkebutuhan khusus penting dilakukan, karena merupakan salah satu metode intervensi yang terbukti dapat mengurangi tingkat stres untuk optimalisasi tumbuh kembang anak.

Kata Kunci: caregiver; pelatihan compassionate love; stres pengasuhan; anak berkebutuhan khusus

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Introduction

Children with special needs (CSN) need treatment because of their developmental disorders and abnormalities. In terms of disability, such children face limitations in one or several abilities, either physical, such as being blind and/or deaf; or psychological, such as autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) (Desiningrum, 2016). This research aims to assess parents' situation, regardless of the type of special needs involved.

Children with special needs are also described as having special characteristics that are different from those of children in general (Heward & Orlansky, 1988). These can manifest as physical and/or intellectual mental limitations, which mean CSN cannot lead their lives independently. They, therefore, need caregivers to provide care and help them perform their daily activities. Help can include therapy, provision of appropriate education, and medication; even daily activities could require full or partial assistance from a caregiver.

Khomarun et al. (2006) conducted research on the level of the burden experienced by caregivers of children with special needs at Surakarta Disabled Child Development Foundation (YPAC). They found that 44% of the respondents occasionally experienced a physical burden and 64% a financial burden, while 88% did not experience a social burden. It can therefore be assumed that the remaining 12% of respondents did experience a social burden. Several studies on caregivers of children with special needs in Ghana suggest that they often face rejection, stigmatization, and discrimination, especially from friends and family (Ae-Ngibise et al., 2015; Nyante & Carpenter, 2019; Oti-Boadi et al., 2020). Social protection for children with disabilities and their families is vital because they often face higher living costs (UNICEF, 2013).

Caregivers play a central role in caring for children with special needs, as without such care they could experience developmental barriers or obstacles in performing their daily activities. Although CSN caregivers improve the quality of life and welfare of parents and children (Bekhet, 2017; Ji et al., 2014), their psychological condition can reduce their ability to care for children (Lovell et al., 2014), coping abilities, and emotional support for care recipients (Liu et al., 2020). Furthermore, Chou (2000) explains that children's health condition (both physical and mental) is influenced by the physical and mental state of their parents (caregivers) and their perceptions of their child's condition.

Caregiver burdens can cause stress and lead to a low quality of life, affecting mental health, which if prolonged can result in depression. Moreover, there can also be a loss of memory in daily activities (Lovell et al., 2014) and health problems. Caregivers for children with special needs are at risk of experiencing low welfare, given that family caregivers are recognized as vital social resources in caring for other family members (Rahman et al., 2002). On the other hand, caregivers are always expected to be able to provide attention and care, as well as compassionate assistance to children with special needs. Based on a meta-analysis (Sallim et al., 2015) of 17 studies, the prevalence of caregiver depression was shown to be 34%, of anxiety 43.6%, and of psychotropic use 27.2%. The analysis suggested that the likelihood of experiencing depression was 1.53 times higher for female nurses, 1.86 times higher for patient caregivers, and 2.51 times higher for married nurses. Other studies have concluded that the burden is more elevated in caregivers with economic or financial problems (Liu et al., 2020).

The World Health Organization identified the key risk factors for child maltreatment, including the child being unwanted or not living up to

parental expectations and having special needs or abnormal physical features. Research has also suggested that some parents of children with special needs do not accept their child's condition, so may be inattentive and consider their children to be a burden (Dieleman et al., 2018), including a care burden and a burden in terms of therapy costs (Donnelly et al., 2015; Russell & McCloskey, 2016). Caregivers who consider caring for children with special needs a burden will find it challenging to establish closeness with them (Moreira et al., 2015); be unable to develop a warm relationship with them (Benson, 2006; Pottie et al., 2009); and ignore their child's development (Greenlee et al., 2018). Some parents may even commit violence against CSM motivated by the effects of parenting stress (Chan & Lam, 2016; Duan et al., 2015; Osborne et al., 2008; Ozturk et al., 2014). It shows that parents or caregivers may have negative attitudes toward children with special needs. In contrast, positive parenting can stimulate the child's development and support the welfare of children and all family members (Martínez-González et al., 2016).

Parenting stress results from dysfunctions in the role of parents in their interactions with children due to inappropriate parental responses to conflicts with children with special needs, which hinder their safety (Deater-Deckard, 2004). In parents of children with ADHD, stressors can be for non-family reasons (low socioeconomic status, unemployment, stressful life events); parental reasons (single parent, marital conflict); and child-related ones (difficult temperament, behavioral problems), which disrupt effective parenting, thereby creating children who are more likely to develop behavioral disturbances (Abidin, 1992; Webster-Stratton, 1990). Baldwin et al. (1995) found that younger caregivers of children with ADHD reported higher levels of cognitive impairment in their children and more significant problems related to delinquency. In

parents of children with ASD, caregiving may present additional stressors related to the child's unpredictable behavior (Nik Adib et al., 2019); several studies (Ludlow et al., 2012; Weitlauf et al., 2014) have found that caregivers of children with ASD have higher levels of physical complaints, sadness, anxiety, and lower family cohesiveness than caregivers of children with other developmental problems.

Parents' gentle and loving attitude in raising their children should be present in families of children with special needs. Such an attitude also strengthens the desire to help children and understand their limitations (Altimier, 2015). Sprecher and Fehr (2005) defined compassionate love as an attitude towards other people, those who are close, strangers, or all of humanity, which involves feelings, cognition, and behavior that focuses on attention, caring, tenderness, and supporting, helping, and understanding others, especially when they are suffering or need help. Compassionate love involves parents taking an approach with gentle and loving care toward their children, which will directly affect parental stress. Some research has found that compassion for others improves mental health and reduces stress (Altimier, 2015; Cosley et al., 2010; Gilbert et al., 2017). A compassionate attitude in caring for children with special needs has also been shown to improve children's development and the welfare of both children and mothers (Aydın, 2015; Conti, 2015; Neff & Faso, 2015; Timmons & Ekas, 2018). Miller et al. (2015) examined the relationship between mothers' compassionate love for their children, autonomic nervous system activity, and parenting behavior during challenging mother-child interactions. Miller et al. (2015) also explained that compassionate love helps mothers, particularly those with high levels of physiological arousal during challenging parenting situations, create favorable socialization settings for their children and avoid stress-

induced adverse parenting. On the other hand, a longitudinal study conducted by Ironson et al. (2017) found that giving compassionate love and having compassionate love for oneself predicted more prolonged survival among people living with HIV.

Despite the extensive knowledge of compassionate love, research which specifically focuses on reducing stress among caregivers of children with special needs remains limited. Therefore, it is vital to develop a compassionate love parenting training program to reduce caregivers' vulnerability to stress, and as caregivers who are unhappy, anxious, or under significant stress may act aggressively towards children. Hence, a compassionate love strategy is required to benefit children's and caregiver's comfort and ensure that the interaction between parents and children will be peaceful and mutual. The following hypotheses are consequently proposed:

H₀: Compassionate love training does not affect parenting stress levels.

H₁: Compassionate love training affects parenting stress levels.

Method

The method employed involved a pre-experimental design with pre-test, treatment and post-test, without a control group. Pre-experimental design is one that it is not categorized as a real experiment because random sampling has not been conducted and there is insufficient control over confounding variables that can affect the dependent variable (Cox & Reid, 2000; Creswell & Creswell, 2018). Figure 1 shows the scheme of Pre-experimental Design, with One-group Pre-test-Post-test.

The one-group pre-test and post-test strategy is used because researchers experience obstacles and limitations; for example, in determining the sample (non-random), research locations, and time constraints. The group to receive the

treatment had previously completed a pre-test. The researcher then conducted the treatment. After completing this, a post-test was administered. The effect of the treatment could be determined more accurately by comparing the results of the two tests (Cox & Reid, 2000). The research paradigm is shown below.

O1 X O2

Description:

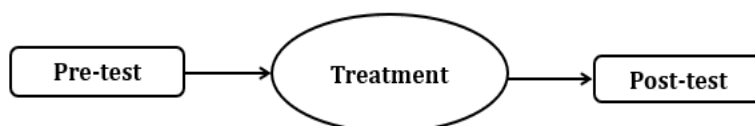
O1 = Pre-test score

O2 = Post-test score

The study population were caregivers of special needs children in Semarang. There were 132 subjects in total (97 from the State Special School community and 35 from the Yamet community), of whom 10 participated in the testing and 40 in the research, identified using the incidental-purposive sampling technique. These 40 were those who indicated their intention to participate through informed consent.

The 40 participants consisted only of mothers or fathers. The inclusion criteria were that they were parents of children from the disability's community at Yamet (Child Development Center) and State Special School; and that the children with disabilities were aged 0-20 (the age of a child with Mental Retardation (MR) is not the same as their chronological age). The exclusion criteria were caregivers other than parents, and children with multiple disabilities. The study only involved 40 subjects who indicated their availability after giving informed consent: 31 participants from the Yamet community and nine from the Semarang State Special School community. The research obtained an Ethical Clearance certificate, number 211/UN7.F11/PP/XI/2022.

The compassionate love parenting training module was tested on ten participants, who were also asked about its content. The trial of the Parenting Stress Scale (PSS) was conducted separately. Validation of the PSS was made with

Figure 1*Pre-experimental Design, with One-group Pre-test-Post-test***Table 1***Goodness of Fit Table*

No	Criteria	Cut off Value	Result	Conclusion
1	GFI	$\geq .9$	.92	Good fit
2	RMR	$\leq .05$	.023	Good fit
3	RMSEA	$\leq .08$	.00	Good fit
4	NNFI	$\geq .9$	1.00	Good fit
5	NFI	$\geq .9$	.97	Good fit
6	AGFI	$\geq .9$	.91	Good fit
7	RFI	$\geq .9$	.97	Good fit
8	IFI	$\geq .9$	1.00	Good fit
9	CFI	$\geq .9$	1.00	Good fit
10	PGFI	0 - 1	.77	Good fit
11	CMIN/df	< 5.0	0.985	Good fit
12	PNFI	0 - 1	.88	Good fit

parenting stress results from the dysfunctioning of the role of parents in interactions with children with special needs due to inappropriate parental responses to conflicts with them, which hinder their safety (Deater-Deckard, 2004). According to Deater-Deckard (2004), the dimensions of parenting stress are: 1) the parent distresses, 2) difficult children, 3) dysfunctional parent-child interaction.

When using the PSS, the participants were asked to respond to each statement on a scale ranging from 1 (not at all relevant to me) to 5 (very relevant to me). The scale has a loading factor of .58- and .92 ($> .5$), indicating that all indicators are valid. Based on Table 1, the fit of the PSS scale model meets the fit model criteria, with GFI= .92, RMR= .023, RMSEA= .06 and CFI=1. In

addition, from the CFA calculation results, the value of each dimension is greater than 0.6, and the AVE value of each is greater than 0.5, so the validity is accepted. The compassionate love training module is based on the compassionate love theory of Sprecher and Fehr (Sprecher & Fehr, 2005). The module contains material related to children with special needs, parenting stress, and compassionate love approaches in parenting (Bullock et al., 2020). In addition, the module also talks about factors contributing to compassionate love care, such as resilience; the father's role or co-parenting (Siswati & Desiningrum, 2019); religiosity (Desiningrum, 2020); the value of children (Aycicegi-Dinn & Kagitcibasi, 2010); and emotional competence (Desiningrum et al., 2021). The module was tested on 10 participants. The

trial results were then analyzed and revised according to the needs of the participants.

Compassionate love parenting training was given for six weeks, consisting of six 2-hour sessions each week. The duration of the training was based on objective constraints, working hour constraints, and learning outcomes, adjusted to the characteristics of the subjects (Isman, 2015).

Additional interviews for clarification were conducted with four subjects, which revealed that the training results showed that they tended to be gentler with children, more understanding, and more caring and tender. It was also felt that stress has decreased. Children become more obedient when their parents truly love them. The parents were asked if there were any changes in their attitude and stated that they realized love was needed. The attitude of understanding their child also makes parenting easier.

Data analysis was conducted using IBM SPSS 25.0 to examine the differences between the pre-test and post-test of the two dependent samples. The research data were not normally distributed, so the Wilcoxon test was used to measure the differences between two groups of paired data. Descriptive analysis was utilized to describe the sociodemographic characteristics of the caregivers. The results were given as the mean and standard deviation (SD) for normally distributed data.

Results

The training was successfully implemented over the six meetings. The results of the pre-test and post-test show that it successfully reduced the stress level of the caregivers. Evaluation of the research stages was made as follows:

First, the compassionate love parenting training module trial was conducted with ten participants, who were also asked about the module content. The module trial was performed

in two stages: 1) Preparation of the module based on a study of the literature related to the theory of compassionate love. It included the results of a review of the theory of compassionate love according to Sprecher and Fehr (Sprecher & Fehr, 2005) and a review of internationally reputable and nationally accredited journal articles. 2) A pilot test of the module was conducted with ten subjects different to the research participants. The module trial was in the form of an instruction comprehension test, a worksheet readability test, the module revision based on suggestions and input from the subjects also the literature.

The parenting stress scale used for the study was that of Deater-Deckard (Deater-Deckard, 2004), which had been tested for validity and reliability in a preliminary study of 250 participants with characteristics of parents of children with special needs from the Yamet children's therapy community, Autism Service Center Solo, Autism Service Center Yogyakarta, and Semarang State Special School. Each item are valid ($\lambda > .5$) and each dimensions are reliable ($CR > .7$; $AVE > .5$), and also met the model fit test ($RMSEA = .006$; $GFI = .92$; $NFI = .97$; $PGFI = .77$; $df = 0.98$). The test results were analyzed and evaluated to revise the module, especially regarding the test of understanding the instructions, materials and module worksheets. The module was printed and filed for copyright.

Second, a pre-test was conducted to measure parenting stress. The participants were 40 parents of children with special needs, whose characteristics can be seen in Table 2. The results of the descriptive analysis of parenting stress are shown in Table 3.

Third, the module as a treatment in the experimental research design was then implemented. All 40 participants could attend every training meeting, were active in the question-and-answer sessions, and could work on the training worksheets.

Table 2*Participant Characteristics*

Characteristic		Frequency	%
Parental Role	Mother (M=38; SD=3.05)	31	77.5 %
	Father (M=42; SD=3.3)	9	22.5 %
Educational Background	SLTA	11	27.5 %
	D3	12	30.0 %
	S1	15	37.5 %
	S2	2	5.0 %
Job	Housewife	12	30.0 %
	Civil servant	10	25.0 %
	Employee	6	15.0 %
	Entrepreneur	12	30.0 %
Child's Age	1-5 years old	13	32.5 %
	6-10 years old	16	40.0 %
	11-15 years old	8	20.0 %
	16-20 years old	3	7.5 %
Type of Special Needs	Autism/ADHD	21	52.5 %
	Down's Syndrome/MR	10	25 %
	Physical (blind/deaf/CP)	9	22.5 %

Table 3*Descriptive Analysis*

	N	Mean	Std. Deviation	Min	Max
Pre-test	40	75.4000	3.1334	50.00	96.00
Post-test	40	96.6000	4.8112	72.00	115.00

The worksheet included assignments regarding self-evaluation, child development, and the parenting process and was completed both before the training and afterward. The material provided in the training had an alternative picture of solving parenting problems that the participants commonly experienced. Moreover, an evaluation was made at the end of each session, and feedback was given to the participants.

Fourth, the final step was a post-test based on the parenting stress scale to measure the changes in the scores.

The effect of compassionate love training on the parenting stress of parents of children with disabilities was calculated using Cohen's *d* effect size formula 1:

$$d = \mu_1 - \mu_2 / \sigma \quad (1)$$

$$d = 96.6 - 75.4 / 4 = 5.3$$

Description: μ_1 : Post-test average, μ_2 : Pre-test average, σ : Standard deviation.

Cohen's *d* describes the magnitude of the effect of the independent variable intervening in the treatment group on a dependent variable. The criteria for the magnitude of effect size are

classified as follows: small ($d < 0.2$), medium ($0.2 < d < 0.8$), and large ($d > 0.8$).

It can be concluded that $d = 5.3$, so is classified as having a medium effect size. The scores mean that compassionate love parenting training routinely reduced the stress of caring for children with special needs. The normality test showed that the data were not normally distributed, so the Wilcoxon test was used to observe the differences between the pre-tests and post-tests. The test results on the parenting stress scale measured on 40 participants showed a significant difference between the test scores.

The value of the difference is shown from the z value = -2.009, with a significance level of $.024 < .05$, meaning that there was a difference in the average pre-test and post-test results, with an increase in the post-test scores. Additional additional analysis was conducted to determine the differences in stress levels in the subject groups based on the categories of parental role (mother/father) and the type of child disorder, based on pre-test and post-test scores, to determine the effectiveness of the training program provided. The categorization can be seen in Table 4.

Based on Table 4, the significance value for the difference in the mean pre-test and post-test

stress level scores based on parental roles is $.001 (< .05)$. This indicates that there is a significant difference based on the role of the mother or father with mothers showing a more significant decrease in stress as a result of the training program compared to fathers. The significance value based on the type of disability was $.275 (> .05)$, which value indicates that there is no significant difference in the mean pre-test and post-test scores of the stress variable based on the role of parents of children in the three disability categories, namely autism/ADHD, Down's Syndrome/MR, and physical (blind/deaf/CP).

Discussion

Raising children with special needs is difficult for parents, with numerous challenges and obstacles in the care process. Parents are vulnerable to stress. The categorization of the pre-test results shows that most participants had high parenting stress. According to the findings of several previous studies, parents of children with special needs experience higher stress levels (Petrongolo, 2014; Weiss, 2002), anxiety, and depression (Etournaud, 2017; Hartley et al., 2010) than parents with children without disabilities. Factors contributing to increased stress levels in parents of children with special

Table 4
Variance Analysis

Group	Type of Group	N	Pre-Post Test Mean Difference	Sig.	Description
Parental Role	Father	9	8.93	.001	Significant difference
	Mother	31	12.59		
Type of special needs	Autism/ ADHD	21	12.8	.275	No significant difference
	Down's Syndrome/ Mental Retardation	10	11.0		
	Physical (blind/deaf/Cerebral Palsy)	9	10.26		

needs are related to the characteristics of the child's behavior, such as tantrums, which can cause emotional exhaustion in parents (Benson, 2006; Blacher & McIntyre, 2006). In addition, stress and depression in parents when caring for CSN can be caused by their learning difficulties or limited cognitive abilities (UNICEF, 2013), as well as poor communication skills in the parent-child relationship (Sim et al., 2019). The results of this research show that the parenting stress score decreased significantly.

The results demonstrate that compassionate love parenting training, performed routinely, reduces the stress of caring for children with special needs.

Parental assistance for children with special needs is very important. Each child has unique needs that will differ from others. Parents are those who know their children best (Duncan et al., 2009) and can provide important input for related parties to ensure that their children receive the best education and therapy (Timmons & Ekas, 2018). In addition, all decisions related to education or therapy for children with special needs must be discussed with parents and prior approval obtained (Angell & Solomon, 2014). All CSN need guidance in their daily activities, with parents having role as caregiver (Acharya & Sharma, 2021; Lyons et al., 2010; Ulofoshio, 2017). Therefore, children with special needs must be given more attention, assistance, and affection, with the involvement of parents, which is reflected in compassionate love parenting.

According to Sprecher and Fehr (2005), compassionate love refers to an individual's ability in terms of understanding, feelings, and behavior that focuses on attention, caring tenderness, and an orientation that supports, helps, and understands other people, especially if they are suffering or need help. Compassionate love is manifested in the gentle and loving attitude of

parents/caregivers in caring for children with special needs, with parents wishing to help and understand their children (Volling et al., 2009).

However, such a parenting attitude is not easy to maintain because of the child's disability, as well as the limited ability of the parents (Crowell et al., 2019). Compassionate love can help parents focus on how to help their children prosper and discourage personal ambitions, such as becoming parents who are considered successful in providing care or ones who are successful in their careers (Conti, 2015). Furthermore, compassionate love will free people from the burden of individuality, such as the hope that their children have the same abilities as others. Parents employing a compassionate love approach will appreciate the slightest development in their children, and accept them as they are, thus avoiding stress (Huang et al., 2014). Compassionate love in raising and caring for children can benefit those with special needs, for example, in optimal growth and development, minimizing stress in parents. Ultimately, welfare will be created for individuals and families.

The compassionate parenting module is rich in material relevant to the lives of parents of children with special needs and instills readiness for parents to develop high self-efficacy, as shown in their belief in their parenting abilities (Conti, 2015). The module also provides knowledge about children with special needs (Desiningrum, 2016); an understanding of positive parenting methods for such children (Hodgetts et al., 2013); an understanding of factors that can influence the parenting process, such as the role of the father (Feinberg et al., 2009); family resilience (Kalil, 2003); religiosity (Desiningrum, 2020); and children's values, and emotional competence (Desiningrum et al., 2019). Control was performed through the preparation of modules that displayed situations adapted to the items to ensure that the provision of treatment indeed caused changes in

the dependent variable (Thyer, 2012) of parenting stress, with the hope that the subject's learning process would take place in the application of compassionate love in the caring for children with disabilities (Russell & McCloskey, 2016).

Compassionate love is mediated by internal emotions and motivation, responsible for the behavior expressed, and cognitive processes that support self-understanding (Volling et al., 2009). The emotional competence of parents influences the formation of a compassionate love parenting attitude for CSN, which is in line with the findings of other research on compassionate care (Msiska et al., 2014), that emotional involvement is one of the constructs that can influence the formation of compassion. Parents of children with special needs should be able to control their emotions, manage them, and display appropriate emotional expressions to improve the quality of parenting with compassionate love (Volling et al., 2009).

Religiosity also influences parenting quality (Huber & Huber, 2012). Research has found that this moderates the adverse effects of parenting stress on family well-being (Valiente-Barroso & Lombraña-Ruiz, 2014), while parental well-being can affect the quality of care for children with ASD (Cachia et al., 2016). Other studies have also suggested a positive relationship between the level of religiosity and the expression of compassionate love in those closest to people, with a magnitude of $r = .172$; $p = .031$ (Rindt-Hoffman, 2016). Therefore, it can be concluded that religiosity is a factor that influences the formation of compassionate love in individuals.

Another factor influencing compassionate love's attitude is the child's value. The child's value is important in defining parents' goals and expectations regarding their children, parents' worldviews, intergenerational relationships and differences, and a few other related factors that reflect the child's presence in the family and society (Mayer & Trommsdorff, 2012). Adults'

views regarding the value of children to parents also affect childcare (Aycicegi-Dinn & Kagitcibasi, 2010). There is a correlation between children's value orientation and parenting goals and behaviors, meaning that children's values determine parents' attitudes in caring for and educating their children (Trommsdorff & Nauck, 2005).

Additional analysis results show that wives reduced their stress levels more than husbands as an effect of the compassionate love parenting training results, with differences in the pre-and post-test scores. It is supported by the research findings of Chasson and Taubman – Ben-Ari (2020) and Yousof (2016), which show that in various cultures in the world, women are still regarded as the main caregivers of their children and are always highlighted as mothers who are required to provide the best care for their children, meaning that their stress levels can be higher than those of fathers. Chasson and Taubman – Ben-Ari (2020) also found that maternal compassion is needed to lower stress levels.

Further analysis demonstrated that parents' stress levels related to different types of child needs, namely ASD/ADHD; DS/MR; and physical disabilities (blind, deaf, CP) experienced differences in stress reduction as a result of compassionate love training, although these were not significant ($.275 > .05$). It can be concluded that there was a decrease in stress levels in parents of children with disabilities, but that the type of need did not influence this. To some extent, this contradicts the results of Downey's (2016) research, which showed that each parent will have a different experience depending on the type of special needs of their child. However, this additional analysis is basically in line with the results of Ott's (2014) literature study, which revealed that there is a picture of the impact of stress on Canadian families with children with special needs (by not differentiating between specific types of children with special needs). It

was also found that an education or training system emphasizing empathy, compassion, and mutual understanding—which reflects compassionate love parenting—is needed to help empower families with children with special needs and reduce parents' stress levels.

An analysis of the factors that influence the compassionate love parenting attitude of parents of children with special needs was included in the training module as a treatment method for this experimental study. The module is expected to be implemented in the community of parents or other caregivers of children with special needs or utilized in government programs such as the National Population and Family Planning Board to provide provisions for CSN parents. The training can also be undertaken in special needs-therapy centers, including State Special School, as this is one of the proven intervention methods that can reduce stress levels for the optimization of child development. Since this research was conducted on caregivers, it may be applicable to caregivers other than parents, such as therapists, and baby-sitters who look after children with special needs.

The research has several limitations related to its design, including: 1) Internal validity is relatively lacking; 2) There is no guarantee that the differences between the pre-test and post-test are caused by treatment X.

Another limitation of the study is the limited number of participants. However, the researchers attempted to overcome this by making a cooperation agreement with the foundation of

children with special needs and guaranteed that there was no conflict of interest from the results of the study. In addition, the training period is considered to have been short, with only six meetings of two hours, due to the limited availability of the participants as they were busy raising their children and with other work activities.

Further recommendations could be made and studies conducted considering caregivers other than parents. Future researchers are suggested to conduct quantitative cross-sectional research to create a parenting model for children with special needs. Furthermore, they could conduct qualitative research related to such parenting to explore the dynamics of stress experienced by parents and unique parenting experiences. In addition, researchers should focus on data on variations in the type of children with special needs and their severity level, as to some extent these issues can affect the quality of care provided.

Conclusion

The training developed a compassionate love attitude in 40 caregivers of children with special needs. In conclusion, compassionate love in childcare can benefit children with special needs, including optimal growth and development processes, minimizing the mother's stress of caring and establishing the well-being of the child and family.[]

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Conflict of Interest

There is no conflict of interest. This research is a project of lecturers and students from three faculties collaborating with the State Special School and Yamet Central Java agencies in a cooperation

agreement containing mutual benefits for both parties in carrying out activities. In publication, the institution does not mind if it is not included in the identity of the manuscript.

Author Contribution Statement

Dinie Ratri Desiningrum: Conceptualization; Data Curation; Formal Analysis; Funding Acquisition; Investigation; Methodology; Project Administration; Resources; Validation; Visualization; Writing Original Draft; Writing, Review, Editing. **Donna Hermawati:** Conceptualization; Formal Analysis; Investigation; Validation. **Maman Somantri:** Conceptualization; Data Curation; Methodology, Project Administration. **Yeniari Indriana:** Conceptualization; Resources; Validation. **Alhimna Rusydana:** Project Administration; Visualization; Writing, Review, Editing.

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