

Cognitive Emotion Regulation: Its Relationship to Parenting Stress

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Abstract

A child's condition not being in line with the parent's expectations can cause mothers to experience pressures that can lead to them not parenting effectively. The condition of children with special needs in particular can cause some anxiety and pressure that may induce parenting stress. This research aims to understand the correlation between cognitive emotion regulation and parenting stress, as moderated by the need to belong. A quantitative approach was employed in this research, whose participants comprised 428 mothers of children with special needs. The data were collected using the Parenting Stress Index–Short Form, the Cognitive Emotion Regulation Questionnaire, and the Need to Belong Scale. The data were then analyzed using the PROCESS Macro Analysis moderation method. The results reveal a significant negative correlation between cognitive emotion regulation and parenting stress ($\beta = -0.55$; $p = 0.00$), while the need to belong significantly weakened the relationship between cognitive emotion regulation and parenting stress ($\beta = -0.29$; $p = 0.04$).

Keywords: Parenting stress, cognitive emotion regulation, need to belong

Introduction

Children's development can result in stress for the parents raising them, especially when a child has special needs. Children with special needs are assumed to cause more stress and unhappiness in families due to the greater burden when compared to an average child (Hassall, Rose & McDonald, 2005; Hodapp, 2007). The challenges experienced by children with special needs may contribute to the stress that their parents experience.

Parenting stress can lead to psychological and physiological harm, and it arises from efforts to adapt to the demands of parenthood (Matthew, 2006). Research into parenting stress has shown that the parents of children with special needs experience a higher level of stress than those with average children. Indeed, parents of children with special needs have to deal with issues like disabilities, learning difficulties, and limited social skills in the situations that their children experience (Oelofsen & Richardson, 2006). Previous research has indicated that the severity of a

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child's disability and characteristics such as hyper activity are related to greater parenting stress (Yousefia, Far & Abdolahian, 2011).

There are different challenges to development for each disability, so they induce differing levels of parenting stress. For example, research has revealed that the parents of children with autism tend to experience a greater level of stress than parents of children with down syndrome (Pisula, 2007; Cuzzocrea et al., 2016). Likewise, parents of children with behavioral development problems experience a greater level of stress than those whose children have a chronic medical condition like asthma, HIV, or other general medical disease (Gupta, 2007).

The high number of children with special needs is accompanied by the level of care they need. Based on data from the Central Bureau of Statistics (BPS), as cited by the Ministry of Education (2017), the number of children with special needs in Indonesia reached 1.6 million in 2017, yet schools for such children are inadequately provided, with only 18% of these children being served. The data show how a great number of children with special needs are not being provided suitable education services, and there is limited information available to help parents deal with their children.

Some effects arise when parents experience stress due to a child's disability, and these may lead to less effective parenting and possibly violence or abandonment (Gupta, Mehrotra & Mehrotra, 2012). It may cause depression in some parents and degrade their behavior resulting in suffering for the children (MacInnes, 2009). It may cause conflict between the father and the mother, possibly leading to marriage disputes and divorce (Singer & Floyd, 2006). Parenting stress develops differently among parents, however, with mothers usually experiencing a higher level of stress than fathers (Theule, Wiener, Tannock & Jenkins, 2013). Women are more likely to bear a greater psychological burden and have disturbing thoughts than fathers (Scott, Doolan, Harry & Cartwright, 2012). This is thought to occur because women exhibit a different response pattern on encountering stressful situations, and they tend to associate more with the stress they experience (Taylor et al., 2000).

Various disabilities may also involve challenges that further contribute to parents' differing stress levels (MacInnes, 2009). Stress can also trigger a feeling of being unwanted (Abbeduto et al., 2004). When someone experiences pressure, emotions, and stress, that person will often try to apply some method to solve the problem. Such methods differ, and they may be effective or ineffective (Jenaabadi, 2017). Cognitive Emotion Regulation (henceforth, CER) is such a

strategy that is rooted in the cognitive domain, and it may control help unwanted the emotions and feelings arising from a problem (Garland, Gaylord & Park, 2009; Lazarus, 1991; Inn, Holtzman & DeLongis, 2007).

The strategy someone adopts on encountering a problem plays a vital role in avoiding stress and determining one's wellbeing and quality of life (Jenaabadi, 2017). CER is divided into two approaches, namely maladaptive and adaptive (Garnefski & Kraaji, 2001). A person develops a strategy in line with his or her condition. A stressful condition may be remedied using this chosen strategy, but this also determines whether the strategy will reduce or increase the level of stress on encountering a number of problematic situations (Garland, Gaylord & Fredrickson, 2011).

Research into dealing with parenting stress and CER among the parents of children with down syndrome over an eight-month period showed that high levels of maladaptive strategies were related to high parenting stress. After eight months, however, something changed, and despite maladaptive strategies being continuously employed, the parenting stress decreased (Veek, Kraj & Garnefski, 2009). This finding is supported by another previous study that found that when a maladaptive strategy is employed by parents after their children are diagnosed for the first time as having special needs, this strategy may change over time, with a maladaptive strategy gradually turning into an adaptive strategy as the child ages and develops (Miklosi, Szabo, Martos, Galambosi & Forintos, 2013). This means that as time passes and children develop, it influences the way in which people determine strategies.

In the case of parenting stress, besides CER, support can also play an important role in making mothers of children with special needs better able to adapt to caring for, and parenting, their children. One study found that the levels of stress that parents experience is associated with support, with a higher level of support reducing the stress that parents experience (Bannink, Idro & van Hove, 2016; Hassall et al., 2005; Huang, Costeines, Kaufman & Ayala, 2014; Lima, Cardoso & Silva, 2016). Feeling *supported* in turn creates a sense of *belonging* and helps begin a process of *acceptance* (Ballew, 2005; Camara, Bacigalupe & Padilla, 2017).

Support in the form of *belonging* is one of the better predictors, more so than social support, when addressing stress and depression (Choenarom, Williams & Hagerty, 2005). Such support plays a significant role in reducing parenting stress and helping individuals to form relationships with others, because a person feels respected, accepted, needed, and connected to the

environment (Turner & McLaren, 2011). The *need to belong* results in searching to meet one's needs by receiving acceptance, attention, and support from a group (Baumeister & Leary, 1995). When a parent is strongly supported, he or she will not feel alone when facing and solving problems. When such support is available, a situation that may normally be considered stressful can instead be managed well (Skok, Harvey & Reddihough, 2006).

Previous research has explained that strong support in the form of feeling accepted helps deal with parenting stress, and greater support may contribute to decreasing levels of parenting stress (Ayala-Nunes et al., 2017; Lima et al., 2016; Long, 2009). Another study concluded that support in the form of belonging is one of the more notable aids in resolving any stress experienced by parents (Bannink et al., 2016). In addition, a stronger sense of belonging will significantly decrease parenting stress and depression (Choenarom et al., 2005; Tomlin, 2014).

Research Questions

The research questions for this study are formulated as follows:

1. Is there any relationship between cognitive emotion regulation and parenting stress among the mothers of children with special needs?
2. Can the need to belong moderate the relationship between cognitive emotion regulation and parenting stress?

Literature Review

Cognitive Emotion Regulation and Parenting Stress

Some researchers have stated that mothers experience a higher level of parenting stress than fathers (Theule, Wiener, Tannock & Jenkins, 2013; Ricci & Hodaap, 2003). Mothers often experience greater pressure and stress when facing problematic situations (Longest & Thoits, 2012). Psychologically, a mother loses hope in her "abnormal" child, but she should accept the fact that her child is not perfect (Lam & Mackenzie, 2002). The long-term certainty about the development and condition of a child with special needs causes specific challenges for a mother, and the level of stress is greater when there is less support from her spouse, family, or other relatives, so she will find it difficult to manage the characteristics of her child's behavior (Galkiene & Puskorienė, 2020; Gupta, Mehrotra & Mehrotra, 2012).

CER is an important predictor for stress, anxiety, and depression (Extremera & Rey, 2014). When someone suffers from stress, he or she adopts a certain strategy to manage the stress and regulate her or his emotions (Lazarus & Folkman, 1984). CER is one method that some people adopt to control their emotions through cognition, so they can manage their responses after a challenging experience (Garnefski, Kraaij & Spinhoven, 2001).

CER as a *coping* strategy refers to specific efforts to moderate either one's behavior or psychology in order to reduce and minimize the impact of an experienced stressful occurrence (Kumari, Gupta, Piplani, Bhatia & Upadhayay, 2011). CER can be divided into two sub-strategies: adaptive and maladaptive (Gross & John, 2003). Adaptive cognitive emotion regulation includes concepts like, among others, acceptance, positive refocus, refocused planning, positive reappraisal, and putting things into perspective. Maladaptive cognitive emotion regulation, meanwhile, comprises notions like self-blame, rumination, catastrophizing, and blaming others (Gross & John, 2003).

People tend to use different forms of CER, and there are gender differences between men and women. Previous research states that compared with men, women tend to be less adaptive when solving problems, choosing instead to employ more maladaptive strategies, such as rumination and catastrophizing, when they encounter problems (Folkman, 2013; Garnefski, Teerds, Kraaij, Legerstee & Van den Kommer, 2004).

The *Need to Belong* as a Moderator of the Relationship between Cognitive Emotion Regulation and Parenting Stress

The *need to belong* represents how a parent of a child with special needs wishes to share experiences with others and receive support that may play an important role in mitigating stress and influencing that person's evaluation of any stressful occurrences (Baumeister & Leary, 1995). The *need to belong* is a basic need of human beings, who need frequent and meaningful communication to develop an optimal state of wellbeing (Baumeister & Leary, 1995). One study states that the *need to belong* is a better predictor than social supports for realizing a good state of wellbeing in life and preventing stress and depression from occurring (Turner & McLaren, 2011).

Support develops in a context of people helping one another by belonging to a process where they realize the need for support, namely through acceptance (Ballew, 2005; Camara et al.,

2017). Such *support* can give someone a sense of social belonging as that person becomes involved in activities and interacts with other people (Wills, 1991). One study found that when people have greater access for forming relationships with others, they will have a stronger sense of belonging, so their parenting stress will be less (Tomlin, 2014). *Belonging* provides social support in the context of mutual support, where people both give and receive support (Ballew, 2005; Camara et al., 2017). Another study revealed that belonging has direct, negatively correlated effects on stress and depression, so when people experience high levels of stress and depression, if they are involved in a community and feel part of it, the degree of stress and depression may be lower (Choenarom et al., 2005).

The *need to belong* is a form of support gained by looking for help from others in order to receive attention and feel accepted (Baumeister & Leary, 1995). Some emotional problems—such as anxiety, depression, and loneliness—are often caused by an individual’s failure to satisfy his or her need for belonging (Baumeister & Leary, 1995). In other words, the *need to belong* is not focused on the individual but rather on significant social relationships where one tries to become involved in interactions, and this serves as a basis for behavior (Choenarom et al., 2005). One study found that belonging and social support have direct and indirect effects on depression (Turner & McLaren, 2011).

An important role played by the need to belong in dealing with parenting stress relates to a person’s great need to belong and be involved in relationships and feel a valued part of the environment (Choenarom et al., 2005). Fulfilling the *need to belong* can influence stress, but it also serves as a basis for establishing relationships (Leary, Kelly, Cottrell & Schreindorfer, 2013). Feeling a *need to belong* is an *antecedent* to having a *sense of belonging* (Wilczynska, Januszek & Bargiel-Matusiewicz, 2015). The word *antecedent* here refers to past occurrences that reveal one’s nature through attitudes, beliefs, and experiences that express one’s needs (Wilczynska, Januszek & Bargiel-Matusiewicz, 2015).

The factors influencing stress in an individual are numerous, and they affect the behaviors and strategies that will be employed (Ochsner & Gross, 2008). Theoretically, CER contributes to changes in parenting stress for the mothers of children with special needs (Fink, 2016). A stressful situation arises when those special needs become a threat or a source of problems. CER functions by helping people to cope in solving problems and manage their emotions in the face of the stress experienced (Garnefski et al., 2001). When person is unable to accept any stressors

when dealing with parenting a child with special needs, the need for support should be recognized and action taken to improve the child's condition (Hayes & Watson, 2013).

Based on the descriptions in the theoretical reviews, a framework of the correlation between CER and parenting stress, as well as the moderating role of the need to belong, for the mothers of children with special needs can be established (Figure1).

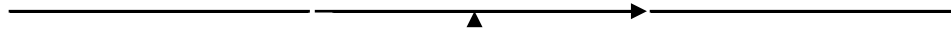


Fig. 1. Framework

Research Hypotheses

H1: There is a negative correlation between cognitive emotion regulation and parenting stress.

H2: The need to belong weakens the relationship between cognitive emotion regulation and parenting stress.

Methods

Research Design

This study applied a quantitative method to examine the correlation between independent variables, dependent variables, and variables as moderators. This research measured the strength of the correlation among variables and the contribution that the moderating variable makes to the correlation between the independent and dependent variables (Winarsunu, 2015). This quantitative research aims to explain variations in the variables based on the correlation coefficient (Sarwono, 2006).

Research Subject

The subject of this research is the mothers of children with special needs. A judgment sampling technique was adopted where the sample was chosen based on the researchers' evaluation of which subjects were most appropriate for the research (Darmawan, 2013). The participants were all mothers who had birthed and raised children who had been diagnosed with a disability or having special needs.

These children were all studying at special schools (SLB) in Malang city and Malang regency, with there being a total of 428 children spread over 13 such schools. A detailed description of the characteristics of the research participants is presented in Table 1.

Table 1.
Description of the Research Participants (N=428)

Characteristics	F	Percentage (%)
Special Needs in Children		
Intellectual Disability	219	51.1%
Autistic	46	10.7%
ADHD	5	1.2%
Cerebral Palsy	36	8.4%
Specific Learning Disorder	3	0.7%
Blind	19	4.4%
Deaf	59	13.8%
Speech Impaired	7	1.7%
No Explanation	34	7.9%
Child Age		
3 - 10 years	149	34.8%
10 - 15 years	155	36.2%
15 - 17 years	92	21.5%
No Explanation	32	7.5%
Mother Age		
21- 30 years	33	7.7%
31- 40 years	154	36%
41- 50 years	148	34.6%
51 - 65 years	40	9.3%
No Explanation	53	12.4%
Mothers' Recent Education		
Not graduated from elementary school	13	3%
Elementary school	73	17%
Junior high school	228	53.3%
Higher education	61	14.3%
No Explanation	53	12.4%

The Variables and Research Instruments

Three instruments were used in this research. Parenting stress was measured using the Parenting Stress Index–Short Form (PSI–SF) of Abidin (1990), which is based upon (i) Parent Distress, (ii) Difficult Child, and (iii) The Parent-Child Dysfunctional Interaction. The measure comprises 36 items and has a reliability of 0.925 and a validity index of 0.24–0.75. Some examples of the items in this tool include (i) “I often feel that I cannot attain something well enough” (Parent Distress), (ii) “My child rarely does something that makes me happy” (Difficult Child), and (iii) Dysfunctional Interaction “There are several things done by my child that bother me” (The Parent-Child Dysfunctional Interaction). Each item has five possible answers with different scores: 5 for “very appropriate,” 4 for “appropriate,” 3 for “between appropriate and inappropriate/neutral,” 2 for “inappropriate,” and 1 for “very inappropriate.” The higher the

score, the greater the parenting stress is. Based on the results, the established parenting stress has a reliability index $\alpha = 0.91$ where all items are valid.

Garnefski and Kraaij's (2001) adapted Cognition Emotion Regulation Questionnaire (CERQ) comprises 36 items based on nine types of coping strategy, divided into adaptive and maladaptive strategies (Gross & John, 2003). The score is calculated according to five answer choices ranging from "very appropriate" to "very inappropriate." The favorable aspects cover adaptive cognitive emotion regulation forms like acceptance, positive refocusing, refocus of planning, positive reappraisal, and putting things into perspective. The unfavorable aspects, meanwhile, include forms of maladaptive cognitive emotion regulation like self-blame, rumination, catastrophizing, and blaming others (Gross & John, 2003). The reliability of this questionnaire is 0.85 with a validity index of 0.75–0.87. An example from the adaptive side is "I think that I can learn something from situations that happened," while an example from the maladaptive side is "I feel that it is me who should be blamed for the occurrence of problems." Based on the results of the test for cognitive emotion regulation, it has a reliability index (α) of 0.88, and from 36 items, 30 are valid and may be used to measure cognitive emotion regulation.

The *need to belong* was measured using the *Need to Belong Scale (NTB)* of Leary, Kelly, Cottrell and Achreindorfer (2005). This scale covers the fulfillment of the need and desire to be motivated and accepted by others. This scale was adapted, and it expresses 10 items. The reliability of the questionnaire is 0.81 with a validity index of 0.78–0.87. An example item in this tool is "If other people seem not to accept me, I will not let it bother me." Answers are expressed through five choices: 5 (very appropriate), 4 (appropriate), 3 (between appropriate and inappropriate/neutral), 2 (inappropriate), and 1 (very inappropriate). Based on the result of the test of the scale, from 10 items, there were valid items with a reliability index (α) of 0.80.

Research Procedure

This research was conducted over three stages, namely preparation, data collection, and data analysis. The preparation stage started by formulating the problem and determining the variables that would be studied, as well as performing some theoretical reviews to get proper explanations for the variables studied. The next step was to determine and organize the measuring tools to be used.

The data-collection stage was conducted in 13 SLBs of Malang City and the surrounding regency, with the sampling criteria being that participants must be mothers of children with special needs whom they had birthed and raised. The researchers distributed the questionnaires in two ways: Firstly, they were given out to the schools, who then passed them onto the students' mothers, so they could complete them and return them a week later. Secondly, questionnaires were distributed to the mothers at school during the session, with the goal and instructions for completing the questionnaires being explained. The data collection then followed, and any data that was found to be incompatible with the criteria was eliminated before the remaining data were analyzed.

Data Analysis

A Hayes' *PROCESS MACRO*, applied with the aid of the IBM SPSS version 22.0 software for Windows, was used to analyze the data. This identified the correlation between the independent variable (CER) and the dependent variable (parenting stress), as well as established the role played by the moderating variable (*need to belong*) in influencing the relationship between the CER and the *parenting stress* experienced by the mothers of children with special needs (Preacher & Hayes, 2004).

Results

Description of the Research Variables

The results of the statistical test showed the mean, standard deviation, and inter-correlation values for each variable. The respondents answered the *need to belong* questionnaire with a moderately high average score (M=2.7; SD=0.39). The CER variable also had a moderately high average score (M=3.67; SD=0.36), as did the parenting stress variable (M=2.56; SD= 0.52).

Table 2 shows that the result of the inter-correlation test for the variables revealed an insignificant positive correlation between the *need to belong* variable and the CER variable ($r=0.01$; $p<0.01$). A significant positive correlation was found between the *need to belong* variable and the *parenting stress* variable ($r= 0.17$; $p<0.00$). There was also a significant negative correlation between the CER variable and the *parenting stress* variable ($r= -0.36$; $p=0.00$).

Table 2.
Statistical Description among Variables

Variable	Mean	SD	1	2	3
1. <i>Cognitive emotion regulation</i>	3.67	0.36	1	-0.36**	0.01
2. <i>Parenting stress</i>	2.56	0.52		1	0.17**
3. <i>Need to belong</i>	2.70	0.39			1

Note: N=428; ** p<0.01

Hypotheses Testing

The effect of CER on *parenting stress*

The results of the data analysis using the Hayes model revealed a significant negative correlation between CER and *parenting stress* ($\beta=-0.55$; $p= 0.00$). This implies that the greater the cognitive emotion regulation, the lower the parenting stress will be. CER was able explain 13% of the variance in the level of parenting stress experienced by the mothers of children with special needs (see Table 3).

The effect of CER on *parenting stress* with the *need to belong* as a moderating variable

The presence of the *need to belong* as a moderating variable weakened the correlation between the CER and *parenting stress* ($\beta=-0.29$; $p= 0.04$). Therefore, the greater the need to belong, the weaker the correlation there is between CER and parenting stress. The moderating variable was able to explain 17% of the variance in parenting stress among the subjects (see Table 3). The influence on the regression lines among variables is portrayed in Figure 2.

Table 3.

The results of the regression analysis of the moderating effect of the need to belong on the correlation between CER and parenting stress

Path effect	B	Se	T	Sig.	Rsquare
<i>Constant</i>	2.55	0.02	115.71	0.00	
<i>Cognitive emotion regulation</i>	-0.55	0.05	-8.71	0.00	0.13
<i>Need to belong</i>	0.31	0.07	5.55	0.00	0.16
<i>Moderating</i>	-0.29	0.14	-2.90	0.04	0.17

Note: X= *cognitive emotion regulation*; M= *need to belong*; Y= *parenting stress*

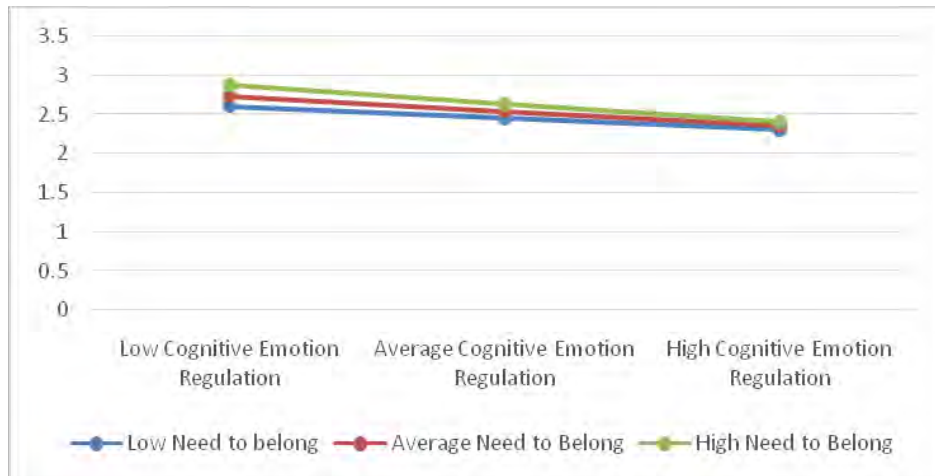


Figure 2. The regression lines of the average scores for *parenting stress* and CER for low, moderate, and high levels of the *need to belong*

Based on Figure 2, it can be deduced that a strong/weak correlation between CER and parenting stress is determined by the subject's need to belong. In a subject with a strong need to belong, the correlation between CER and parenting stress is relatively weak. In contrast, when a subject has a moderate need to belong, the same correlation becomes moderately stronger. Finally, when the subject possesses a low need to belong, the correlation becomes stronger still.

Discussion

The results of this research show that CER has a negative and significant correlation with parenting stress, meaning that the greater CER there is, the less parenting stress there is for mothers of children with special needs. Stress is viewed as something inherent in the responses of a family that faces difficult situations (Cuzzocrea, Murdaca, Costa, Filippello & Larcan, 2016), but the level of stress experienced is related to the strategies employed. One study revealed that CER refers to a process of changing one's thinking with the aim of changing one's behavior, because this can play an important role in achieving mental wellbeing because a person believes in his or her own ability to solve problems (Miklósi, Martos, Szabó, Kocsis-Bogár & Forintos, 2014).

A high degree of CER in mothers of children with special needs can reduce their parenting stress. This finding is supported by previous research that found that parents experienced much more stress when raising children if they tended to use maladaptive parenting styles (Hastings & Beck, 2004). This finding also agrees with research that stated that CER is associated with stress,

with maladaptive CER being applied more than adaptive CER by the parents of children with intellectual disabilities (Martin & Dahlen, 2005).

Disturbances experienced by children will lead to parenting stress, and this correlates with anxiety and depression, which may be influenced by the ineffective use of a coping strategy (Walsh, Mulder & Tudor, 2013). The contribution of CER to parenting stress is 13% in this study, meaning that there are also other factors that may contribute to parenting stress, possibly more so, in the mothers of children with special needs. These could include parenting competence, self-esteem, quality of life, and attachment (Baker, Perilla & Norris, 2001; Lubiewska & Derbis, 2016; Miklosi et al., 2013; Moreira, Gouveia, Carona, Silva & Canavarro, 2015).

This study also found that the need to belong negatively and significantly moderates the correlation between CER and parenting stress. The moderating effect of the *need to belong* means that an increasing *need to belong* decreases the predicting effect of CER on *parenting stress* (Preacher & Hayes, 2004). In other words, it weakens the correlation between CER and parenting stress. This happens because the mothers of children with special needs look for support in their surrounding environments to overcome their parental stress. Therefore, if a mother uses a high degree of CER and is supported through her need to belong, she will experience less stress when raising her child. This finding is supported by previous research that found that satisfying the need to belong also positively impacted on reducing stress, and this may lead to positive appraisal, which is an adaptive CER that is key to resolving stressful incidents (Wilczynska, Januszek & Bargiel-Matusiewicz, 2015).

This research also showed that the need to belong correlates with the variable representing negative emotions like anxiety and worry. A strong need to belong may lead to someone forming a strong relationships, and negative emotions in his or her mind will decrease in accordance with a greater need to belong and the subsequent interactions that often happen (Pillow, Malone & Hale, 2015). A need to belong develops when people invest more time in looking for, and interacting with, support from others, thus leading to a stronger sense of belonging. When someone interacts positively with another person, it improves the need to belong in the person. In contrast, when someone interacts negatively with someone else, it will reduce that person's need to belong (Baumeister & Leary, 1995). This finding supports the results of previous research that found that support is important for someone to overcome difficulties in caring for children with

special needs (Dunn, Burbine, Bowers & Tantleff-Dunn, 2001). Various types of support can be given, but it is not only the amount of support but also its quality that determine show such support may yield benefits (Dunn et al., 2001; Smith, Greenberg & Seltzer, 2012; Gibbs, 2020). As a whole, this study was conducted using scientific procedures to reach findings that answer the research questions and which are in line with previous research. This research does have some limitations, however, namely because when comparing the research variables, it did not perform a deep analysis that considered the particular characteristics of the individual children's special needs, nor did it establish how stress develops after raising children with special needs over time.

Conclusion and Implications

The results of this research show the existence of a significant negative correlation between CER and parenting stress. The greater the CER, the lower the parenting stress will be. The *need to belong* also significantly influences the correlation between CER and *parenting stress*, such that if the *need to belong* in a mother is strong, it can reduce the effect of the CER on the *parenting stress* of mothers.

It is recommended for future research to investigate moderating variables other than the one used in this research, because these may have a stronger influence on parenting stress. This could cover factors like competence, closeness, and self-esteem and the use of moderating variables from different and new perspectives. It is also recommended that future research focus more on the subject by distinguishing the particular needs of the subjects' children, so more diverse research results can be obtained about the contributions that particular special needs make.

For health workers, this study has the implication that they should give guidance and make interventions like psycho education, so the mothers of children with special needs can learn CER skills in order to reduce and minimize their parenting stress.

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