



The Role of Coping Strategies as a Mediator Between Parenting Daily Hassles and Quality of Life Among Parents of Children with Neurodevelopmental Disorders

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Abstract

The study's purpose was to analyze the mediating role of coping strategies between parenting daily hassles (PDH), and quality of life (QoL) in a sample of Kurdish parents of children with neurodevelopmental disorders (NDDs). A non-experimental research design with a quantitative type, a correlative research strategy, and a purposive sampling technique was used to recruit a sample of 206 parents. Three self-report questionnaires were used to collect data, PDH, Brief-Cope, and WHOQOL brief. Independent-Samples t-test, and Process macro procedure were used to analyze the data. Results showed that "problem-focused coping" (PFC), and "avoidant coping" (AC) partially mediated the relationship between PDH, and QoL, while Emotion-focused coping (EFC) didn't mediate the relationship. As it gathered in the conclusion, two types of coping, PFC and AC strategies were partially mediated the relationship between PDH and parents' QoL. PFC positively mediated the relationship, while AC negatively mediated the relationship. It means that the more the PFC will be used, the lesser hassles and the better QoL will be perceived, whereas the reverse is true for AC strategy.



About the Journal

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1.Introduction

Parenthood could be described as one of the most challenging tasks in the life of a couple (Jambekar et al., 2018). With the birth of any child, the whole family dynamics and its atmosphere will be affected in many ways. The couples and other children may undergo many different changes in an attempt to cope with the pressure of a new-born member (Gray, 2006; Hussain and Juyal, 2007). With a special needs child, the demands and changes become much more difficult and complicated (Jambekar et al., 2018). Nowadays, the incidence of children with special needs rises very fast, according to the newest report by UNICEF (2021), which is based on a subset of more than 100 countries, approximately 240 million children between the ages of (0-17 years) have disabilities, its equal to 1 in 10 of all children in the entire world. It means that nearly (240) million families are taking care of children with special needs. It's worth saying that, most of these children (64.4 million) are living in South Asia (United Nations Children's Fund, 2021). Regarding neurodevelopmental disorders (NDDs), according to the newest literature review, the prevalence rates of NDDs in people under the age of 18 years old were as follows: "attention-deficit and hyperactivity disorder" (ADHD), 5–11%; "specific learning disorder" (SLD), 3–10%; "motor disorders" (MDs), 0.76–17%; "autism spectrum disorder" (ASD), 0.70–3%; "communication disorders" (CDs), 1–3.42%; and "intellectual disability" (ID), 0.63% (Francés et al., 2022)

2. Literature review

Historically, the whole focuses of stress research were on the destructive effects of shocking life events, such as losing/death of a loved one, job firing, or divorce, on individuals and families (Holmes and Rahe, 1967; Nesteruk, 2003). Nowadays, researchers come to believe that the tiny stressors like those frequent small, repeated, and frustrating daily parenting duties and responsibilities are a salient key cause of parental stress as well as more influential predictors of mental health challenges than are major life events (Anita *et al.*, 1982; Kanner *et al.*, 1981; Lazarus *et al.*, 1985; Lazarus and Susan, 1984). In reverse to major life events, daily hassles are common and frequently occurs (Crnic and Greenberg, 1990). The routine of parenting, child-rearing duties, challenges, or abnormal child behaviors and interfering of these demands with parents' daily routines are considered parenting daily hassles (Bornstein, 2002). In addition, permanent hassles negatively impact their capacity to care for their children, the stress also affects their own physical and mental health, as well as the quality of their daily life (Gamarra *et al.*, 2020; Peer and Hillman, 2014). Based on this, parents of children with NDDs are the most suitable population in which daily hassles and their coping strategies must be examined (Almond, Caroline, 2004; Craig *et al.*, 2016; Dardas *et al.*, 2021).

A considerable number of research links stress and coping strategies with QoL (Carona, 2014; Santos and Cardoso, 2010). According to studies, stress management and coping in order to prevent and diminish the effects of daily hassles may be a vital way of the intervention to improve the quality of parent's and caregivers' life (Fairfax *et al.*, 2019). According to the cognitive model of stress and coping, coping is conceptualized as "a buffer that can defend the effects of the stressor and enhance the QoL" (Lazarus, 1999). To effectively cope, Lazarus and Folkman identified two major coping strategies which includes: "approach coping", and "avoidant coping" (Atasoy and Sevim, 2018; Lazarus and Susan, 1984; Lazarus *et al.*, 1985). In case of studying PDH, strategies of coping, and QoL amongst parents of NDDs children, we may outline three major study gaps: (1) The majority of previous studies on this field have been carried out in western countries. (2) Most of the studies were targeted one parent (mostly mothers), and (3) several studies were examined the effects of coping on stress and/or QoL among those parents, little were addressed the mediating role of coping on daily hassles and QoL

among the mentioned population. Regarding the aforementioned gaps, the purpose of this study is to explore the mediating role of coping strategies between PDH and QoL in Kurdistan Regional of Iraq (KR-I).

3. Methodology

3.1. Research Design: A non-experimental design, with a quantitative type and a correlative research strategy aims to assess the predictive relationship between three variables, an independent, a dependent and a mediator variable.

3.2. Population and Participants: The target population was parents of children with neurodevelopmental disorders in Sulaymaniyah governorate. In this study, "Parents" was categorized as the biological fathers and mothers of the disabled child, neither adopters nor babysitters. The population consisted of those children who admitted in governmental and non-governmental centres and/or governmental kindergartens or schools which is specified for children with neurodevelopmental disorders. The parents within this sample divided into different governmental and non-governmental centres in Sulaymaniyah governorate. There was a total of 206 parents, (103 mothers, and 103 fathers) composed via purposive sampling which is a non-random sampling technique. Each parent had (one or more) child between the ages of (2 – 14 years) with a neurodevelopmental disorder. (Table 1 for more descriptive statistics).

Table 1: Demographics of the participants (n= 206).

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Demographics		Participants/children	Frequency (n)	Percent (%)
Diagnosis	Down syndrome		27	25.2
	Autism		27	25.2
	ADHD		20	18.7
	Intellectual Disability		9	8.4
	Learning difficulty		5	3.7
	Motor and tic disorder		4	3.7
	Language disorders		11	10.3
Literacy	Illiterate		13	6.1
	Primary		42	19.6
	Secondary		40	18.7
	Diploma		36	16.8
	BCs		64	29.9
	Higher		11	5.1
Economic status	Bad		18	8.4
	Middle		140	65.4
	Good		46	21.5
	Very good		2	.9

□

3.3. Instruments: To measuring the interested variables, researcher used a demographic survey, the ‘Parenting Daily Hassles scale’ (PDH), the ‘Brief-Cope Scale’ (B-FS), and the ‘Quality of Life scale’ (QoL).

3.3.1. Demographic part: The demographic part of the survey was evaluated some general information related to the family. Questions were assessed maternal age, child gender, child age, parental education level, socio-economic status, and parental occupation. Finally, the child disability type, which possibly linked to the ways in which parents experience daily hassles, implement coping strategies and their life quality.

3.3.2. PDH scale: Crnic and Greenberg developed the scale in 1990 to measure how frequently and seriously problems arise for parents. It is a 20-item assessment of common daily parenting tasks and interactions between parents and children. In response to every item, the frequency occurrence rated by the parent on a 4-point Likert scale (rarely, sometimes, a lot, and constantly). In addition, on a scale of 1 to 5, where no hassle equals 1, huge hassle equals 5, the degree or intensity of hassles was evaluated.

Higher ratings on the intensity axis indicate more intense hassles, while higher scores on the frequency scale indicate more frequently happening hassles. In the present sample, the PDH “Frequency subscale” had the same “alpha Cronbach” of .81 as the original article, and the “Intensity subscale” had an alpha of .84 which indicates a very good reliability (Crnic and Greenberg, 1990)

3.3.3. Brief-Cope scale: The effectiveness of coping strategies for stressful life situations was evaluated using a 28-item self-report questionnaire known as the “Brief-COPE”. The measure can be used to determine if one’s main coping strategies are either approach or avoidant. The scale was developed as a short version of the original 60-item COPE scale (Charles S. Carver, 1997). The scale can determine an individual’s main coping strategy based on their results on the three subscales include: PFC, EFC, and AC. Three main coping strategies’ average scores obtained displays how frequently each coping mechanism is used by the responder. The parent gave each item a 5-point Likert rating. The current samples “internal consistency reliability” (Cronbach alpha) were found for the whole scale, ($\alpha = .73$) which indicates an acceptable reliability.

3.3.4. WHOQOL-Brief: The scale is a 26-item self-report questionnaire, was created to measure how people see where they are in life in relation to their goals, principles, and expectations as well as the culture and value systems in which they live. With scores on the “physical, psychological, social relationships, and environment” domains, the scale can be used to assess a person's QoL. The items are counted from 1 (lowest) to 5 (highest) score, and the higher scores indicates a better QoL. Regarding the scale’s reliability, high internal consistency reliability (Cronbach alpha) was found for the whole QoL scale which is ($\alpha = .83$).

3.3.5. Procedures: Participants were recruited through purposive sampling, they chosen from ten educational or rehabilitation institutions such as: kindergartens, special governmental and non-governmental centres for children with disability in Sulaymaniyah/KR-I. The data for the study was collected during April and June of 2022. The study met ethical standards of Koya University since the current article is part of Master thesis. In addition, permission was taken from the centers and institution principals as well. Questionnaire included an introductory part about the

purpose of the study, a demographic survey, and the research instruments. The entire questions took around 20-30 minutes to complete. The three scales were passed through four steps determined by WHO (Younan *et al.*, 2019) in order to validating the scales to our population, as a result, all scales had a high level of accuracy (above % 90).

4. The Results

Statistical Analysis: Different techniques were used from the ‘Statistical Package for Social Sciences’ (SPSS version 26) for data analysis. The reliability was assessed through Cronbach's alpha. Descriptive statistics and frequency distributions were used to analyse participant demographics. Because the study sample is between 50 – 300 samples, Skewness and Kurtosis test method was used to test normality. As the assumption of normality was accepted, the parametric tests were then used to analyse the data. The “PROCESS macro for SPSS version 4.1” was used to test the mediating effects of coping strategies (Hayes and Rockwood, 2017).

Mediation analysis: To analysing the mediation, the Baron and Kenny's recommendations was used (Baron and Kenny, 1986). Although, no statistical correlations observed between EFC with PDH and QoL, was caused to skip EFC in the final analysis, in addition, the effect of PDH on QoL increasingly diminished when coping strategies as a proposed mediator was simultaneously presented in the model. The indirect effect of PDH was (effect= .04, se= .0267, CI [.0004, .1033]) when controlling for PFC as mediator, and (effect= -.0314, se= .0203, CI [-.0799, -.1018]) when controlling AC strategy as mediator among PDH, and QoL. As the consequences presented, the effects of PDH on perceiving QoL didn't equal zero, this indicates that neither problem focused, nor avoidant coping strategies completely mediate the relationship. Nevertheless, the effect of PDH on QoL no longer remains the same, the effect was significantly decreasing when controlling for PFC, while it is increases when controlling for AC. Thus, both types of coping strategies serve as “partial mediator”. These results offer awareness that two types of coping strategies (PFC, and AC) work as a “partial mediator” between PDH, and QoL for parents of children with neurodevelopmental disorders. The final analysis data is shown in figure 1.

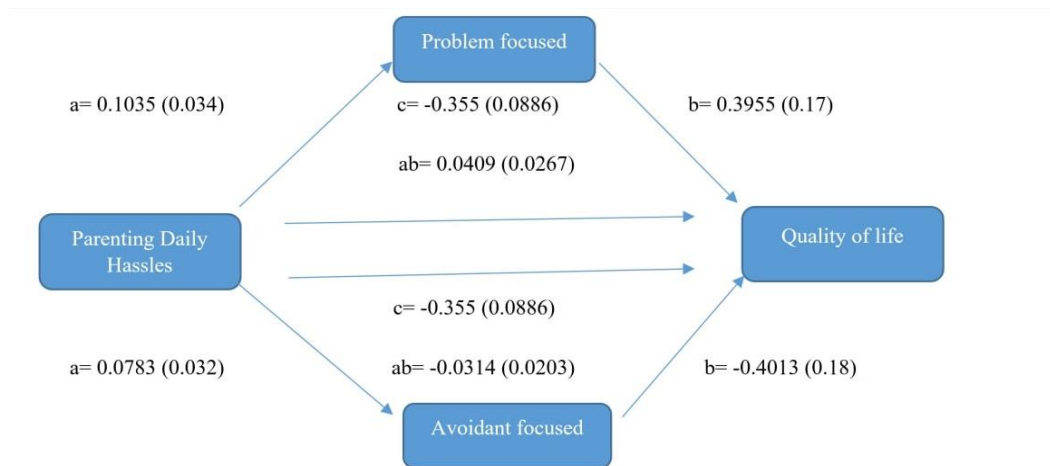


Figure 1. The role of coping strategies as a mediator on the relationship between PDH, and QoL. Coefficients (a, b, and c) are standardized with standard errors in brackets. c= “direct effect”; ab= “indirect effect”.

5. Discussion

Neurodevelopmental disorders represent a group of most complex and difficult childhood disorders that can result dramatic psychological changes in parents. For that reason, one of the most important steps toward helping parents, is conducting the scientific investigations focused to the aim of dropping the huge adverse psychological influences of daily bitter childrearing experiences. This study has been conducted as an attempt to fill a gap that is not covered at all in KR-I. It is an attempt to highlight the pathways between PDH, strategies of coping, and QoL among those Kurdish parents who have a child with neurodevelopmental disorders.

The findings revealed that AC was a partial mediator between PDH and QoL, this result may be attributed to evasive coping nature, which includes emotional venting and avoidance behaviours. Some people aren't talented to regulate their emotions, and tolerate the negative feelings they experience in parenting children with developmental disorders; thus, they tend to use AC strategies to distract themselves from stressful situations and engage themselves with something else. This can be supported by the responses of the two items (I've been turning to work or other activities to take my mind off things) and, (I've been doing something to think about it less, such as watching TV, reading, going to movies, sleeping, daydreaming, or shopping) in the AC domain which showed highest scores among other items in the same domain. Regardless of the coping strategies they depend as a buffer to decrease the effects of hassles they experience daily, if AC is the parent's dominant strategy for managing emotional, financial and physical demands of their children, they will still experience a significant amount of hassles. Inversely, parents who are oriented toward a PFC strategy will have less hassles and better QoL. These findings are reliable with earlier relevant studies (Fairfax *et al.*, 2019; Izani *et al.*, 2015; Ni'matuzahroh *et al.*, 2022; Predescu and Şipoş, 2013; Turnage, 2019; Vernhet *et al.*, 2018) in this field. As estimated, PFC strategy mediate the link between PDH, and QoL. Based on the results, QoL was weakened if PFC strategy was used to a minor amount, and the effects of hassles would affect the parents in a higher degree, whereas implementing PFC to a higher degree, parent's will experience a better life quality and lesser hassles because PFC is a strategy toward appraising problems and enhance the individual to take appropriate actions in order to managing the tough circumstances. Parents of children with developmental disorders experience major disturbances in their daily routines and activities, that's why they mostly in need to cope with role changes and suffering caused by permanent care, the stigma, and financial challenges of their child's disorder. To complete, the mediating effect of PFC and AC between PDH and QoL in the current study were in line with the expectations of Folkman and Lazarus' transactional model of stress and coping.

6. Conclusion

In the study, the mechanism by which coping may organize it's special effects were clarified which emphasized the significance of PFC for parents of children with neurodevelopmental disorders. Hereafter, applicable interventions can be applied by clinicians and counsellors at governmental, and private schools and centers to assist parents in understanding the importance and how to implement PFC to lessen the adverse effects of their hassles, and promote higher QoL.

Limitations: Few aspects need to be considered when calculating the findings; First, Since the data was collected based on purposive sampling which is non-random, restricted the findings' ability to be applied to the entire population. Second, this study only targeted those families who have children in centers and/or kindergartens. The sample of participants would be unequally distributed if it only included those parents and ignored those who didn't have the opportunity to enrol their disabled child in centers. Third, regarding the measuring tools, the use of PDH scale

which measure the severity and intensity at the same time, makes participants upset and ignoring one side of the scale. In addition, besides the demographic variables, the three scales include 74 items which is a lot and may become another source of stress for responders.

Recommendations: A. The need for financial assistance to lessen the financial strain on parents in poor socioeconomic countries with scarce resources is something that Kurdistan Regional Policy Makers must take very seriously. The provision of such support may be of special importance since approximately %9 of the families who participated in this study reported they live in bad economic status; whereas %68 was living at middle status. **B.** Since the majority of people in our country are Muslims and we still have a strong family system; more research is required to pinpoint the factors that affect parental coping and QoL. This will allow interventions to be developed and put into place that helps parents maintain balance in their lives, which will in turn improve their QoL.

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