

Burden of Care and Subjective Well-Being Mediated by Empathy and Hardiness Among Parents of Physically Challenged Children

**Samina Rashid, Habiba Shaheen, and
Maria Muzaffar Janjua**

University of Wah

Current study is aimed to investigate the link between caregiving burden and subjective well-being (SWB) and to further find out whether both empathy and hardiness mediate this link in parents of physically challenged children. Sample ($N = 120$) consists of parents of physically challenged children (Fathers $n = 60$) and (Mothers $n = 60$) by using purposive sampling technique. The main instruments utilized in the study were The Burden Scale for Family Caregivers (Graessel et al., 2014), Tornoto Empathy Questionnaire (Spreng et al., 2009), Psychological Well-Being Scale (Ryff & Keyes, 1995), and Dispositional Resilience Scale (Bartone, 1995). Literature suggested a negative association between burden of care and subjective wellbeing. However, there is a lack of knowledge whether hardiness as well as empathy mediates this relationship between these two variables. Findings of the current study confirmed an inverse correlation between caregiving burden and SWB. Results also revealed that both empathy and hardiness mediated the correlation between caregiving burden and SWB. Findings also indicated that mothers were more empathetic as compared to fathers. Findings further showed a high level of SWB among male/father caregivers as compared to female/mother caregivers. Implications of the study were discussed.

Keywords. Burden of care, subjective well-being (SWB), psychological hardiness, empathy

Being a parent means that one is bound to certain responsibilities such as caring for the child and assuring that the child's needs are properly met. Kinetics of a family are significantly affected by the birth

Samina Rashid, Habiba Shaheen, and Maria Muzaffar Janjua, Department of Psychology, University of Wah, Wah Cantt, Pakistan.

Maria Muzaffar Janjua is now at, Department of Psychology, Rawalpindi Women University, Pakistan.

Correspondence concerning this article should be addressed to Maria Muzaffar Janjua, Department of Psychology, Rawalpindi Women University, Pakistan.
Email: mariamuzaffar1592@gmail.com

of any child. To adjust in the family with the arrival of newborn results in many variations in the parents and other children. Birth of a physically challenged child even more intensely affects the family.

Most physically challenged children who need special care are cared at home by their families. Caregiving of physically challenged child becomes burdensome because of many associated features of disability such as nature of disability, behavioral issues, emotional state, lack of social support and demanding circumstances. Such types of encounters confronted by the caregiver is known as the caregiver burden. Jeong et al., (2015) described burden of care as corporal, passionate, public and economic issues faced by a caregiver in order to adjust the demanding situation of assisting physically challenged child. *Caregiver burden* is defined as the psychological, physical, social, and economical effects of caring for those with illnesses and impairments (Diameta et al., 2018).

Caregiving burden is the stress or pressure experienced by a family member who provides caregiving services to physically challenged child. There are two dimensions of burden of care such as objective burden and subjective burden. The emotional and psychological effect on caregivers while performing different tasks related with caregiving accompanied by negative or positive sentiments are categorized as subjective burden whereas time spent number of tasks and investments devoted to care fall under the category of objective burden. Burden of care is composed of three aspects such as multidimensional stress, self-perception, and overtime (Ofovwé & Osasona, 2022).

Caregivers of physically challenged children experience psychological distress because of heavy demands on caregivers to perform many tasks which disturb social and interpersonal relationships as well as economic upsets. This psychological distress adversely affects psychological well-being and results in impairment of SWB of caregivers (Zhou et al., 2021).

Subjective well-being (SWB) can be defined as general state encompassing affective, somatic, and psychological wellbeing as well as perception and evaluation of a person about his or her pleasure and life contentment (Park et al., 2023). One way to conceptualize SWB is as a wide term that includes affect, happiness, and life satisfaction. Three dimensions are examined while examining SWB. Affect (mood and emotions), cognitive assessments of overall life satisfaction, and assessments of particular life domains. The second domain of SWB examines an individual's satisfaction with their life as a whole. This evaluation of general life satisfaction is linked with the third domain that is evaluation of specific life domains such as standard of living,

health, life achievement, and personal relationships (Hablado & Clark, 2020).

A study indicated direct association between informal caregiving for a physically challenged child as well as decline in mental and physical health of caregiver (Janson et al., 2022). Parents are responsible for providing informal care to their physically challenged child and as a result these parents as well as other family members experience high levels of stress and make them vulnerable to mental disorders such as depression as well as relationship issues with other children. Burden of care negatively influence physical, psychological, and emotive health of a caretaker and also induces feelings of guilt, humiliation, self-blame, and indignity among caregivers thus causing impairment in physical, mental, and social functioning of a caregiver (Kalhovde & Kitzmüller, 2024). Literature revealed a significant relationship between different aspects of burden of care like affective engagement, frustration, and segregation and caregivers' cohesiveness and perception about health. Previous studies have demonstrated elevated rates of depression prevalent among caregivers who are burdened with providing care (Collins & Kishita, 2020). Messina et al. (2022) reported very devastating effects of burden of care on caretaker's affective, physical, and mental well being, standard of living and personal well-being making them vulnerable for serious disease like Alzheimer's or Dementia.

A comparative cross-sectional survey was conducted in Pakistan involving parents of children with hearing impairments and intellectual disabilities. The findings demonstrated that parents of children with hearing or intellectual disabilities often experience significant emotional and financial challenges when providing care for their children and these parents need more respite and other services (Syed et al., 2020). Despite all this one personality characteristic which acts as a resistance resource against such life stressor event is known as hardiness.

Hardiness is an acquired, growth-oriented personality safeguard comprised of cognitive and emotional qualities (Vinje, 2021). Kamtsios and Bartone (2021) considered hardiness as person's cognitive, emotional, and behavioural tendencies due to which a person becomes able to tolerate stress during stressful circumstances.

Sgatni and Zerzour (2021) defined psychological hardiness in terms of personality characteristic that plays a role of a barrier when encountering stressful life situations. This pattern of personality is composed of those behavioral tendencies which help a person to adjust oneself during stressful circumstances. Hardiness is, just like hope, a

cognitively based personality trait which is conceptually quite closely related to resilience (Harms et al., 2018).

Hardiness encompasses of dispositions such as control, commitment, and challenge (Khadse et al., 2024). Control defines as conviction of a person about handling and managing stressful situations. Disposition of commitment is designated as a capability of a person to perceive himself/herself as fully involved or dedicated in daily activities. Challenge is a person's disposition to take novel experiences positively and as a thrilling opportunity for personal growth (Yavuz & Dilmaç, 2020). The degree to which an individual is inclined to be resilient to the negative consequences of stressors and to be able to successfully adjust to and cope with difficult situations is referred to as their hardiness (Caza et al., 2020).

Mohamed and Hussien (2021) indicated an inverse relationship between hardiness and depression. Hardy people take stressful situations as a challenge and consider this stressful time a chance for personal development. During stressful and demanding situations, hardy people take life as worthwhile and ambitious. Hardy people consider these demanding situations as exciting and valuable, handle these situations with adaptive coping strategies, and turn potentially disastrous circumstances into learning opportunity.

Empathy is described as the ability of an individual to understand experiences of other individuals or to understand the sentiments of another person (Eklund & Meranius, 2021). Kim (2020) conceptualized empathy as a multifaceted psychological condition encompassing cognitive and emotional aspects of taking others' experiences from their point of view. Cognitive element of empathy is an ability to understand experiences of others and the causes of why individuals feel that way, while emotional aspect of empathy consists of the capability to recognize and understand the sentiments of other's individual (Fernandez & Zahavi, 2020). Empathy is a practice of judging the emotions of others from their perspectives and treating others with kindness for their well-being (Clark et al., 2019). Empathetic people are observed to be contented, self-satisfied, delighted and have positive emotions. Vinayak and Judge (2018) revealed that empathy and wellbeing are positively related to each other.

Transactional model of stress and coping describes that an individual's appraisal of a challenging situation and their perceived ability to cope with it leads to stress. In the context of caregiving for physically challenged children, parents may appraise the caregiving responsibilities as highly demanding, which increases their perceived burden and negatively impacts their SWB.

Previous studies revealed that empathy and SWB are positively correlated with each other as a study was conducted by [Babu and Latha \(2022\)](#) on Indian designers showed a positive association between empathy and psychological well-being. Findings of another study conducted on empathy and happiness of disaster volunteers, revealed that empathy can significantly predict the happiness of disaster volunteers ([Nuryanti, 2020](#)).

Literature suggested a strong correlation between burden of care and subjective wellbeing. These studies indicated a decline in SWB of caregivers because of burden of care. However, there is a lack of knowledge whether hardiness as well as empathy mediates this relationship between these two variables. To fill this gap, current investigation was required to inquire whether hardiness and empathy mediate the relationship burden of care and SWB.

Furthermore, there is a severe lack of empirical data on these variables among Pakistani parents. The study has its importance and was required to eradicate the difference in literature and derive consistent findings for targeted population.

The primary objective of the present investigation was to find the association between caregiving burden and subjective wellbeing and to further examine a parallel mediation model directly linking burden of care with SWB, and indirectly through both empathy and hardiness in parents of physically challenged children.

Hypotheses

Keeping in mind the objectives of the current investigation, following hypotheses were formulated:

1. Burden of care is negatively correlated with SWB.
2. Empathy mediates the relationship between caregiving burden and SWB.
3. Psychological hardiness mediates the relationship between caregiving burden and SWB.

Method

Research Design

The present study was a correlational study based on cross-sectional research design.

Sample and Procedure

Using the purposive sampling, 120 parents of physically challenged children from residential areas of Taxila and Wah Cantt,

participated in the present study. Sample consisted of 60 fathers and 60 mothers. Age range of all participants was 29-61 years with the mean age 45 years. The data was obtained only from biological or step parents of physically challenged children. Those who were unable or unwilling to engage, non-parent caregivers, and parents of children who were not challenged were not included.

Ethical Consideration

Ethical guidelines were adhered, including getting consent before using psychometric instruments. Participants gave signed informed consent after being fully told about the study's objectives. Anonymized data was used to guarantee confidentiality.

Measures

Burden Scale for Family Caregivers

The Burden Scale for Family Caregivers developed by Graessel et al. (2014) comprised of 28 items was utilized in the current study. Response categories ranged from 0 = *strongly agree*, 1 = *agree*, 2 = *disagree* and 3 = *strongly disagree*. The score of a person ranges from 0 to 84. High score indicates greater caregiver burden. Cronbach's alpha was .91 for the total scale (Brogaard et al., 2013).

Toronto Empathy Questionnaire

Empathy was measured by utilizing Toronto Empathy Questionnaire comprised of 16 items developed by Spreng et al. (2009). Each statement was responded on five-point scale ranges from *never* = 0 to *always* = 4. A total empathy score was calculated by adding up the responses after the negatively worded items were reversed. High score indicates a greater capacity for empathy; scores could vary from 0-64. Cronbach's alpha was .85 (Totan et al., 2012).

Psychological Well-being Scale

Psychological Well-Being Scale comprised of 18 items developed by Ryff and Keyes (1995) was utilized in the study. Six dimensions of well-being and happiness assessed by the scale are Autonomy, Environmental Mastery, Personal Growth, Positive Relations With Others, Purpose in Life, and Self-Acceptance. Each statement was responded on 7-point scale ranges 1 = *strongly agree* to 7 = *strongly disagree*. High score indicates high level of psychological well-being. Cronbach's alpha was .88 (Lee et al., 2019).

The Hardiness Instrument

Dispositional Resilience Scale (DRS-15) developed by [Bartone \(1995\)](#) composed of 15 items was utilized in the study to measure hardiness. It is 4-point scale ranging from 0 (*not at all true*) to 3 (*completely true*). The instrument includes positively- and negatively-keyed items covering the three conceptually important hardiness facets of Commitment, Control, and Challenge. The total score ranges from 0 to 45. A higher score represents greater psychological difficulty. Cronbach's alpha was .83 ([Bartone, 1995](#)).

Results

For data analysis SPSS (version 25.0) and PROCESS macro (version 4.00) was utilized. To measure study variables descriptive statistics were utilized. To find out relationship and differences across variables, Pearson's Product Moment correlation and t-tests were performed.

To analyze the parallel mediation model, the PROCESS macro was utilized. A 10,000- bootstrap bias-corrected procedure was utilized to find 95% confidence intervals (CIs) of the indirect effects. Data values were quoted to four decimal places. A significant indirect effect was indicated when the 95% CI of an indirect (mediation) effect did not span zero.

Table 1: *Descriptive Statistics of Study Variables (N =120)*

Variables	<i>k</i>	α	<i>M</i>	<i>SD</i>	Range		Skewness	Kurtosis
					Actual	Potential		
Burden of Care	28	.54	34.23	6.83	20-52	0-84	.26	-.11
Hardiness	15	.69	20.53	4.11	12-38	0-45	.68	1.41
Empathy	16	.75	57.67	9.37	36-80	16-80	.26	-.52
SWB	18	.84	92.38	14.91	71-120	18-126	.24	-.1.19

For all the variables under study, [Table 1](#) displays the alpha coefficient, descriptive statistics, and normalcy statistics. Cronbach's alpha illustrates the good reliability values which indicates that all scales are internally consistent. According to normality statistics, skewness and kurtosis are within permissible bounds for the assumption that the data are normal.

Table 2: *Pearson Correlation of Study Variables (N = 120)*

Variables	1	2	3	4
1. Burden of Care	-	.221 [*]	-.038	-.311 ^{**}
2. Hardiness		-	-.086 ^{**}	.632 ^{**}
3. Empathy			-	-.204 [*]
4. SWB				-

^{*} $p < .05$. ^{**} $p < .01$.

Table 2 depicts a significant negative correlation between burden of care and SWB which reveals that burden of care significantly reduces parents' SWB or vice versa. Results further reveal a significant positive correlation between hardiness and SWB.

Table 3: *Mean, Standard Deviation, and t-Value Showing Gender Differences on Burden of Care, Hardiness, Empathy, and SWB (N = 120)*

Variables	Fathers (n = 60)	Mothers (n = 60)	<i>t</i> (118)	<i>p</i>	95% CI		Cohen's d
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			LL	UL	
BOC	34.77 (9.26)	33.83 (9.14)	.55	.580	-2.39	4.26	0.10
Hardiness	21.02 (4.79)	20.03 (3.26)	1.31	.192	-.50	2.46	0.24
Empathy	50.00 (6.47)	62.33 (9.54)	-6.26	.000	-12.28	-6.38	-1.51
SWB	96.77(16.79)	87.98 (11.29)	3.36	.001	3.60	13.95	0.61

Note. CI = confidence Interval; LL = Lower Limit; UL = Upper Limit; BOC = Burden of Care; SWB = SWB.

Table 3 presents gender differences of parents across burden of care, hardiness, empathy, and SWB. Results show significant gender differences on empathy indicating that mothers are more empathetic as compared to fathers. Table 3 further shows significant gender differences on SWB indicating that fathers exhibit high level of SWB as compared to mothers. Table 3 further indicates nonsignificant gender differences across burden of care and hardiness.

Figure 1 (and Table 3) indicates that burden of care significantly predicted hardiness ($p < .01$) and nonsignificantly predict empathy ($p < .68$). While holding other variables constant, SWB exhibits significant regression with hardiness ($p = .000$) and empathy ($p = .03$). After controlling hardiness and empathy, the direct effect ($p = .013$) of burden of care on SWB is significant.

Figure 1: *Standardized Regression Coefficients for the Relationship Between Burden of Care and Subjective Wellbeing as Mediated by Empathy and Hardiness*

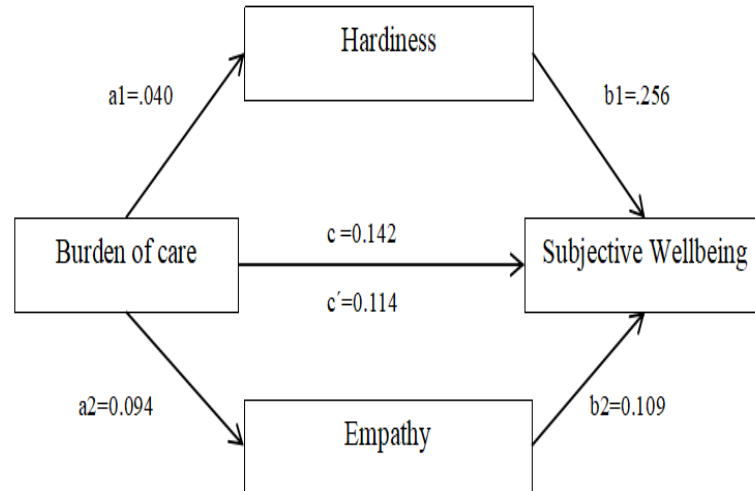


Table 4: *Indirect Effects of Burden of Care on SWB Through Hardiness and Empathy (N = 120)*

Path	B	SE	95% CI	
			LL	UL
BC → E → SWB	.208	.084	.053	.387
BC → H → SWB	.009	.025	-.042	.063
Total effect	.142	.085	.043	.379

Note. BC = Burden of Care; E = Empathy; SWB = Subjective Well Being; H = Hardiness.

Table 4 indicates that while controlling empathy, the indirect effect ($a1 \times b1 = .208$) of burden of care on SWB through hardiness is significant. This indicates while keeping empathy constant, individuals experiencing caregiving burden score 0.208 points which is higher as compared to those without burden of care on well-being due to the indirect effect through hardiness. The indirect effect ($a2 \times b2 = 0.009$) of burden of care on well-being through empathy is nonsignificant after controlling for hardiness. While comparing the magnitudes of the two indirect effects indicate a significant difference also, the total effect is significant.

Discussion

The current study intended to study the link between caregiving burden and subjective wellbeing among parents of physically challenged children. Moreover, the further aim of present study was to find out the either empathy and hardiness mediate the association between burden of care and subjective wellbeing.

The present study hypothesized that caregiving burden and subjective wellbeing are negatively correlated. Findings supported the hypothesis. Findings are consistent with the literature which showed an inverse relationship between care giver burden and SWB. A meta-analysis was conducted by [Del-Pino-Casado et al. \(2019\)](#) on the association between subjective care burden and depressive symptoms among caregivers of older relatives. Results indicated a positive correlation between care burden and SWB. It showed that subjective caregiver burden is a significant risk factor for depressive symptoms in caregivers of older people and may precipitate clinical depression. [Noguchi et al. \(2020\)](#) indicated an inverse correlation between burden of care and SWB among Japanese adults. Another study was conducted on caregiving to older adults. Results indicated lower level of SWB among care givers of older adults experiencing burden of care ([Verbakel et al., 2018](#)). [Del-Pino-Casado et al. \(2021\)](#) conducted a meta-analysis on subjective care burden and anxiety among informal care givers. Results indicated a positive association between subjective caregiver burden and anxiety symptoms which showed that subjective caregiver burden is an important risk factor for anxiety in informal caregivers. [Özdemir and Gürbüz \(2025\)](#) found a significant negative connection between spiritual well-being and caregivers' burden or strain among Turkish parents of children with tracheostomy.

Current investigation further hypothesized that mothers are more empathetic as compared to fathers. Results of the study supported the hypothesis and in line with previous studies as [Karayiannis et al. \(2020\)](#) indicated that female have higher level of empathy as compared to males among nursing and health care students. [Hess \(2023\)](#) conducted a comparative study on empathy between male and female undergraduate Engineering students. Results indicated that female engineering students reported greater empathic concern than male students. Hence findings suggested a gendered nature of empathy in engineering students. Another study revealed that female adolescents are more empathetic as compared to male adolescents ([Trentini et al., 2022](#)). [Hojat et al., \(2020\)](#) conducted a study on empathy as related to gender, age, race, and ethnicity, academic background and career interest among osteopathic medical students. Findings of the study indicated

higher level of empathy among female osteopathic medical students as compared to male students.

Findings of the study further indicated high level of SWB among males as compared to females. Findings of the current investigation are in line with the prior studies as a study conducted by [Nemček et al. \(2019\)](#) revealed that male high school students exhibited higher level of SWB as compared to female high school students. Findings of another study also supported these findings by indicating that male university students exhibited significantly greater SWB as compared to female university students ([Zubair et al., 2018](#)). [Abdullahi et al. \(2019\)](#) revealed that males are more associated with SWB as compared to females.

Results of the present study revealed mediating role of empathy in the correlation between caregiving burden and SWB among parents of physically challenged children. Result of the study are consistent with the previous research studies as a study conducted on Chinese clinical nurses revealed that empathy mediated the association between emotional intelligence and job well-being ([Li., et al., 2021](#)). Furthermore, [Cho and Jeon \(2019\)](#) demonstrated that empathy mediated the association between burnout and mental well-being among Korean pharmacy students. A study was conducted on the relationship between stress, SWB, self-compassion, and empathy among university students. Findings revealed that empathy mediated the relationship between stress and SWB.

Study findings further demonstrated that psychological hardiness mediated the correlation of caregiving burden and SWB among parents of physically challenged children. Results of the Study are consistent with prior literature as [Shahsavar et al. \(2018\)](#) demonstrated that psychological hardiness mediated the association of spiritual intelligence and happiness in elderly women. Results of another study conducted in Hong Kong revealed that hardiness mediated the correlation between perceived loneliness and depression among older ([Ng & Lee, 2020](#)). [Zablotny \(2023\)](#) found that hardiness fully mediated the association between hope and psychological well-being.

Limitations and Suggestions

Cause and effect relationship between caregiving burden and SWB cannot be established as the study utilized correlational research design. Future researchers are suggested employ longitudinal studies to further examine this issue. Current study included parents of only physically challenged children, comparative studies are suggested for future researchers to investigate the variations in the results of two samples

that is physically challenged children and normal children. Sample of the current study is not true representative of all population of Pakistan as data was gathered from limited areas due to which there is a problem of generalizability of results. Future studies should expand the sample size covering as many areas as possible of whole country to obtain diversity. Empathy was evaluated in general in present research. For future research it is suggested to investigate both dimensions like cognitive empathy and emotional empathy to yield detailed and multidimensional findings. Textual analysis methods can be adopted to measure psychological parameters as mentioned in the previous study (Uludag, 2024). Given our study findings, it is important to consider that literature during the COVID-19 pandemic period may vary, as the outbreak has significantly impacted health systems (Uludag, 2022).

Implications

The study throw light in understanding effects of caregiving burden on parents' subjective wellbeing of physically challenged students in the context of Pakistan. Findings of the current study can aid the mental health professionals in inventing various support and self-help tactics which will provide aid to the parents to take into consideration their own health and well-being. Study findings are very beneficial for the psychoeducation of families of physically challenged children in formulating appropriate information pack to provide practical assistance. Results of the current investigation can also be useful for practitioners, counsellors, and mental health professionals to arrange training programs and intervention techniques promoting empathy as well as psychological hardiness to enhance SWB among parents of physically challenged children.

Conclusion

Burden of care is associated with poor SWB. Parents' well-being may be promoted through the strengthening of psychological hardiness and empathy.

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