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## The Relationship between caregiver burden, perceived social support, Loneliness and Psychological Distress among mothers of Children with Intellectual Disability

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### Abstract

The present study aimed to explore the relationship between caregiver burden, perceived social support, loneliness and psychological distress among mothers of children with intellectual disability. A correlational research design was employed. The sample of mothers of children (N=150) with intellectual disabilities was drawn into the current study through the use of purposive sampling technique, where the age of mothers ranged between 30 and 40 years old and children were included from 6 to 12 years of age. The instruments used in this study are informed consent form, demographic sheet, Zarit Caregiver Burden Interview (ZBI), Kessler Psychological Distress scale (k-10) Loneliness Scale, and Perceived Social Support Scale. The mothers of children with intellectual disabilities were given the scales in their translated Urdu forms. The results indicated significant positive relationship between Caregiver Burden and Psychological Distress. Perceived Social Support non-significantly predicts Loneliness, whereas Caregiver Burden significantly predicted Psychological Distress, Perceived social support significantly predicted Psychological Distress. Results also indicated that working mothers face more psychological distress as compared to non-working mothers, mothers in nuclear family system have more psychological Distress as compared to joint family system, joint family system has more caregiver burden as compared to nuclear family system, Widow and divorced mothers face more caregiver burden and psychological distress than married mothers.

**Keywords.** caregiver burden, perceived social support, loneliness, psychological distress, intellectual disability

### Introduction

The term "intellectual disability" is a childhood-onset neurodevelopmental disorder. As a result, parents confront numerous problems in providing brief care for a kid with a handicap, and these difficulties could have a severe influence on the health and happiness of the parents

(Kanthasamy et al., 2024). DSM-5 defined intellectual disability as a group of impairments generally mental capacities that influence three domains. These areas establish how well a human does everyday duties like cooking and cleaning the conceptual realm provides reasoning, learning, composing, mathematics, thinking, understanding, and remembrance. The social domain provides social reasoning, interpersonal skill, the capacity to establish and have some, and other social aptitudes (American Psychiatric Association, 2022).

A family with a kid with an intellectual handicap faces a great deal of physical, mental, and financial stress. Having a mentally impaired child in the household brings up plenty of challenges. The concerns are primarily associated with social criticism and stigma (Dunn & Burbine, 2001). Both patients and their caretaker are affected by mental issues. Psychiatric patients require assistance or supervision in their daily activities, which frequently causes great stress for their caretakers; as a result, caregivers commonly suffer from mental and physical health issues (Hastings et al., 2005). Raising children with ID presents parents with severe psychological difficulties that frequently manifest as bodily symptoms like depression and anxiety (Cramm & Nieboer, 2011)

Caregiver burden has been defined as a stress experienced by a person who is providing care for a family member who is unwell, disabled, or elderly (Mourya & Singh, 2016). It has been seen that providing care is a significant issue in the treatment of people with severe disorders. It becomes chaotic when families learn about the psychological problem because usually, families are unaware and not prepared to handle the disorder (Fomebonne, 2009). Acute stress is mostly anticipated by the caregivers while taking care of the mentally ill family member. However, it also disturbs the regular functioning of the family and causes family stress. A primary stressor is caused due to activities required to care for the struggling family member whereas, the secondary stressor is a disruption in caregivers' roles and relationships because of taking care of the struggling family member (Janardhana et al., 2015).

It has been shown that carers who have access to informal social support report less depression and are in better physical health (Shiba et al., 2016). According to Leonard et al. (2003), family caregivers of disabled loved ones who were living in challenging socioeconomic conditions but had in comparison to individuals with less social support, those with reasonably significant social support did better. Lack of social support causes people to stop participating in strain social activities, which negatively affects caregivers and families (Meral & Cavkaytar, 2012).

Lack of social support leads towards loneliness, which can have a variety of detrimental repercussions on someone's physical and mental health (Hawkley & Cacioppo, 2010). They claimed that loneliness was linked to more severe depressive symptoms, suicidal ideation, anxiety, and rage. Additionally, they discovered that loneliness reduced optimism and self-worth despite being linked to higher felt stress.

Numerous studies concentrate on the ecological, parental, and child aspects that affect parents with intellectually challenged children's psychological distress. Psychological is mostly used as a term for undifferentiabilities, behavioral issues, and personality traits. In addition, the symptoms may be snarled with somatic symptoms that may vary across cultures (Drapeau et al., 2012). According to the studies, there are no variations in anxiety levels among mothers and fathers of children with ID. In a research by Hastings et al. (2006), further exploratory analysis established a causal link between the mothers' stress and maternal depression. The results also

shown that this stress was unique from that brought on by caring for a child with significant behavioral problems.

### **LITERATURE REVIEW**

Several pieces of research explored the relationship between caregiver burden, perceived social support, loneliness and psychological distress with an intellectual disability. This section includes the knowledge of existing studies. In Karachi, Habib et al. (2016) examined the relationship between perceived social support and life satisfaction among parents of kids with intellectual disability. The findings revealed that a person's self-evaluation, or fulfillment, is linked to the support they receive from others. Pandey and Dubey (2019) the influence of social support and socioeconomic demography on mothers' feelings of anxiety in children who had intellectual disabilities was examined. The results showed that socio-demographic traits like wealth, education, and gender all significantly contributed to stress variations and had a negative connection with stress.

Mohammed & Mkabile (2015) carried out a study with three primary goals, assessing the psychological distress of parents of children with intellectual disability, identifying the link between socio-demographic characteristics of parents and psychological discomfort, and identifying a link between socio-demographic characteristics of children and parents' distress. The findings revealed a link between several of the children's sociodemographic characteristics and the stress experienced by their parents. Sharma and Sharma (2019) also investigated whether working and non-working moms of children with intellectual disability experience parenting-related stress and depression. The results showed that working mothers of children with ID had higher levels of stress and anxiety than non-working mothers.

In a research by Hastings et al. (2006), further exploratory analysis established a causal link between the mothers' stress and maternal depression. The results also shown that this stress was unique from that brought on by caring for a child with significant behavioral problems. This study discovered that parents of disabled children have higher levels of stress than other mothers due to the additional daily responsibilities that prevent them from taking care of oneself. According to research by Trivette et al., (2010), mothers with challenged children reported poorer emotional and physical health as well as a sense that the child demanded more of their attention. The majority of research on caring for kids with disabilities emphasizes the detrimental impact on the physical and emotional health of caregivers.

### **Rationale of the Study**

The present study provides a clear picture to psychologist and health professionals to understand how caregiver burden, perceived social support, loneliness and mothers of disabled children experience psychological distress. Moreover, the understanding of these aspects will help to develop better health programs. There is a need of therapy which can heal the mothers from her daily life stressors as well as help to teach them how they handle child with intellectual disability.

### **Hypotheses**

The Hypotheses of the present study are:

H1: There will be a significant relationship between caregiver burden, loneliness, psychological distress, and perceived social support among mothers of children with intellectual disability.

H2: Perceived social support will be the predictor of loneliness among mothers of children with intellectual disability.

H3: Caregiver burden will be the predictor of psychological distress among mothers of children with intellectual disability.

H4: Loneliness will be the predictor of psychological distress among mothers of children with intellectual disability.

H5: Working mothers will face more psychological distress than non-working mothers of children with intellectual disability.

H6: Mothers of children with intellectual disability living in nuclear family system would face more psychological distress and caregiver burden as compare to joint family system.

## METHODOLOGY

### Research design

In the current study, a correlational research design was employed.

### Sampling technique

Purposive sampling was used to get information from mothers of children who had intellectual disabilities.

### Sample

The sample of 150 mothers of children with intellectual disabilities was drawn into the current study through the use of purposive sampling technique. Mothers of children with intellectual disability ranged in age from 30 to 40 years old and children were included from 6 to 12 years of age.

### Inclusion criteria

- The current study included mothers of children who had intellectual disabilities.
- Only families having one or more than one child with neurodevelopmental disorder which is intellectual disability were included in the study.
- Working and non-working mothers were included.
- Mothers having education at least matric were included.
- Mothers of age range 30-40 and child age 6-12 were included.

### Exclusion criteria

- Fathers and any other care giver except mother were excluded.
- Mothers with children with any form of physical handicap were not eligible.
- Widowed / divorced were excluded.
- Mothers having any physical disability were excluded.

**Demographic statistics**

The demographic characteristics of the participant are presented below in Table 1.

**Table 1**  
*Frequency and Percentage of Demographic Characteristics of Sample (N = 150)*

<b>Variables</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Female	150	100
<b>Age of mother</b>		
30-35	93	58.5
35-40	57	35.8
<b>Age of child</b>		
6-9	109	68.6
10-12	41	25.8
<b>Education</b>		
Matric	59	37.1
Intermediate	28	17.6
Bachelor	40	25.2
Master	23	14.5
<b>Marital status</b>		
Married	131	82.4
Widow	10	6.3
Divorced	9	5.7
<b>Occupation</b>		
Non-working	113	71.1
Working	37	23.3
<b>Monthly income</b>		
20-35	60	37.7
35-60	32	20.1
above 60	57	35.8
<b>Family system</b>		
Nuclear	87	54.7
Joint	63	39.6
<b>Gender of child</b>		
Boy	93	58.5
Girl	57	35.8

The demographic features of the sample are shown in this table. A total of 150 mothers of intellectual disabled children took part in the study. Among those, 58.5% were from the 30-35 age groups, and 35.8% were from the 36-40 age group. The table shows that more mothers had done matric 37.1%, intermediate 17.6% whereas mothers who had done bachelors 25.2% and master's 14.5% level of education were reported. The table also demonstrated that mothers were non-working 71.1 % with higher frequency and working others were 23.3 %. 37.7% female reported monthly income often 25k to 35k, 20.1% female reported the monthly income of 35k to 60k, 35.8% participants reported monthly income 60k and above. 57.9% of females had only one earning member to run their houses, 23.9% females had two earning members, 9.4% females reported three earning members, and 3.1% females claimed to have four earning members to

spend for the expense.

The table also reported that mothers who were married 82.4 %, widow 6.3% and divorced 5.7% with lowest frequency. The table also shows that there were more male children 58.5 % as compared to female children 35.8 %. The table demonstrated that children age range 6-9 has high frequency with 68.6% and 10-12 ages 25.8%. The family system of mothers was reportedly higher frequency in nuclear family system 54.7 % whereas joint family system has 39.6%.

### **Instruments**

The measuring scales that were used in this study are informed consent form, demographic sheet, Zarit Caregiver Burden Interview (ZBI), Kessler Psychological Distress scale (k-10) Loneliness Scale (Perlman & Pepleu, 1984) and Perceived Social Support Scale (Zimet, 1988). The mothers of children with intellectual disabilities were given the scales in their translated Urdu forms.

#### ***Caregiver Burden Interview***

The brief version of Zarit Burden Interview Scale (Gratão et al., 2019), was used to gauge the degree of burden experienced by parents of children who had intellectual disabilities, which was initially created in 1980 by Zarit, Reever, and Bach-Peterson. This scale consists of 22 elements. A five-point Likert scale was used. On this scale, 0 indicates never, 1 indicates rarely, 2 indicates occasionally, 3 indicates quite frequently, and 4 indicates almost always. The range of a person's score is 0 to 88.

#### ***Kessler Psychological Distress Scale (K10)***

A 10-item scale called the Kessler Psychological Distress Scale (Andrews & Slade, 2001) is used to gauge psychological distress. There is a five-point scale for responding, with 1 denoting never, 2 denoting occasionally, 3 denoting occasionally, 4 denoting mostly, and 5 denoting often. The score on this scale ranges from 10 to 50, with 50 being the highest. Scores between 10 and 19 are considered to be favorable. An individual is likely to have a mild ailment if they receive a score of 20 to 24. A moderate disorder is likely to be present if the range is between 25 and 29, but a severe disorder is likely to be present if the range is between 30 and 50.

#### ***Perceived Social Support Scale (Zimet, 1988)***

The Multidimensional Scale of Perceived Social Support (MSPSS) is a quick research tool created to assess how family, friends, and a significant other are perceived as providing support. There are four items in each subscale for a total of 12 items on the scale. Using a Likert scale with five points (0 for strongly disagree and 5 for strongly agree),

#### ***Loneliness Scale (Perlman & Peplau, 1984)***

A 20-item scale intended to assess one's subjective emotions of social isolation and loneliness. On a scale of O ("I often feel this way"), S ("I occasionally feel this way"), R ("I rarely feel this way"), and N ("I never feel this way"), participants rate each item.

**Procedure**

In this study, four common metrics were employed to determine the association between particular variables. Both the institute and the subjects gave their consent for the data gathering. Participants received the questionnaire in a personalized manner.

We collected the data from public and private centers. The consent form fills the first portion and the demographic information form were the second portion of the questionnaire. Demographic information of the respondents in terms of 150 participants were obtained from mothers. They were working or non-working. After the completion of the questionnaire, the researcher will recheck for any left item. At the conclusion, the institute's participants and administrators received sincere gratitude for their collaboration. Then the collected data were analyzed through SPSS 22 to draw results.

**Statistical Analysis**

In the present study, the acquired data were statistically analyzed using SPSS 22. The correlation analysis determined the relationship between caregiver burden, perceived social support, loneliness and psychological distress among mothers of children with intellectual disability. Moreover, to make relevant predictions, regression analysis was also used in this study. Also, to analyze the demographic variables, descriptive statistics were used.

**Ethical considerations**

- Mothers of children who have intellectual disabilities gave their consent before the data was collected.
- Participants gave informed consent in order to obtain the required data.
- Prior to the study, risks and advantages were discussed.
- Participants were informed that their identities would not be linked to specific responses.
- The participant's data were collected in confidence, and that confidentiality was upheld. The statistic is calculated were the only reported.

**FINDINGS**

This current research designed to investigate the correlation between caregiver burden, psychological distress, perceived social support and loneliness among mothers of children with intellectual disability. Data analysed by SPSS-25. Caregiver burden, perceived social support and loneliness is computed as independent variable whereas psychological distress as dependent variable. The Pearson correlation, regression, independent T-test and ANOVA were used in the statistical study. The following tables show the results.

**Psychometric Properties**

**Table 2**

*Psychometric properties of the used scales*

<b>Variable</b>	<b>Number of Items</b>	<b>Alpha</b>
Kessler scale	10	0.72
Zarit scale	22	0.83
UCLA	20	0.89
Perceived social support	12	0.92

Note: ZBI, Zarit caregiver burden scale, K-10, Kesler psychological distress scale, perceived

social support and UCLA loneliness.

The reliability of Zarit caregiver burden scale, Kessler psychological distress scale, perceived social support scale and UCLA loneliness scale are acceptable and good because they are all higher than Cronbach's Alpha.

**Hypothesis testing**

**Table 3**

*Pearson-correlations between caregiver burden, loneliness, perceived social support and psychological distress (N = 150)*

Measures	1	2	3	4
1. Caregiver burden	-			
2. Psychological distress	.258**	-		
3. Perceived social support	.079	.062	-	
4. Loneliness	.073	.015	.075	-

*Note.* \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$

The correlation matrix was generated using Pearson product moment correlation to examine bivariate relationship between caregiver burden, loneliness and psychological distress. Analysis shows that there is positive relationship between caregiver burden and psychological distress. And there is a no relationship between caregiver burden and loneliness. And there is a positive relationship between loneliness and psychological distress. ( $r = 0.258$ ,  $p = ns$ ) among mothers of children with intellectual disability. And to analyze the relationship between Perceived social support and Caregiver burden. Analysis shows that Perceived social support was negatively correlate with Caregiver Burden ( $r = .079$ ,  $p = ns$ ) however the correlation was non-significant among mothers of children with intellectual disability. To analyze the relationship between perceived social support and loneliness. Analysis showed that perceived social support was negatively correlate with loneliness ( $r = -.075$ ,  $p < 0.005$ )

**Table 4**

*Regression analysis between perceived social support and loneliness*

Variables	B	B	S. E
Constant	58.178		3.368
Perceived social support	-.053	-.075	.058
R	.075		
R <sup>2</sup>	.066		

Regression analysis was used to test if Perceive social support significantly predicts Loneliness. The results of the regression analysis indicated the overall the model was non-significant ( $F(1,148) = .829$ ,  $p = ns$ ) and the predictor explained 0.6% of the variance in the outcome variable ( $R = .075$ ,  $R^2 = .066$ ). It was found that Perceived social support non-significantly predicted Loneliness ( $\beta = -.075$ ,  $p = ns$ ) among the mothers of children with intellectual disability.



**Table 5**  
*Simple linear Regression between caregiver burden and psychological distress*

Variables	B	$\beta$	S. E
Constant	22.484		2.727
Caregiver burden	0.188	0.258	0.058
R	0.258		
R <sup>2</sup>	0.060		

Regression analysis was used to test if Caregiver burden significantly predicts Psychological distress. The results of the regression analysis indicated the overall the model was significant ( $F(1,148) = 10.529, p < .005$ ) and the predictor explained 0.66% of the variance in the outcome variable ( $R = .258, R^2 = .060$ ). It was found that Caregiver burden significantly predicted Psychological Distress ( $\beta = 0.258, p < .005$ ) among mothers of children with intellectual disability.

**Table 6**  
*Regression analysis between loneliness and psychological distress*

Variables	B	$\beta$	S. E
Constant	30.595		3.566
Loneliness	.011	.015	.064
R	.567		
R <sup>2</sup>	.848		

Regression analysis was used to test if loneliness significantly predicts Psychological distress among mothers of children with intellectual disability. The results of the regression analysis indicated the overall the model was significant ( $F(1,148) = 0.032, p < .05$ ) and the predictor explained 84.8 % of the variance in the outcome variable ( $R = 0.567, R^2 = 0.848$ ). It was found that Perceived social support significantly predicted psychological distress, ( $\beta = .015, p < .05$ ) among the mothers of children with intellectual disability.

**Table 7**  
*Independent Sample t-test measuring psychological distress differences in working mothers and non-working mothers of children with intellectual disability.*

Variable	WM	NWM	<i>t</i> (148)	95%CL		Cohen's <i>d</i>
	<i>M(SD)</i>	<i>M(SD)</i>		LL	UL	
P. D	32.54(4.03)	30.79(4.22)	-1.747**	-3.71	.22	0.3545

Note.  $N = 150$ , PD= psychological distress, WM= working mothers of children with ID, NWM= non-working mothers with ID.

T-test for independent sample was used to assess psychological distress difference

between working and non-working mothers of children with intellectual disability. Results shows that working mothers have face more psychological distress ( $M=33.88$ ,  $SD=4.03$ ) as compare to non-working mothers ( $M= 32.54$ ,  $SD= 4.22$ ), ( $t (148) = -1.747$ ,  $p=.221$ ), however the differences are not significant.

**Table 8**

*Independent Sample t-test measuring psychological distress and caregiver burden differences in nuclear and joint family system*

Variable	NFS	JFS	<i>t (148)</i>	95%CL		<i>Cohen's d</i>
	<i>M(SD)</i>	<i>M(SD)</i>		<i>LL</i>	<i>UL</i>	
PD	31.80(5.07)	30.42(5.54)	1.57	-.350	3.10	0.259
CB	46.35(7.54)	46.50(6.90)	-.126	-2.55	2.23	0.02

*Note. N = 150, PD= psychological distress, CB = caregiver burden, NFS= nuclear family system, JFS= joint family system*

T-test for independent sample was used to assess psychological distress difference between mothers of children with intellectual disability living in nuclear and joint family system. Result shows that mother in nuclear family system have more psychological Distress ( $M=31.80$ ,  $SD=5.07$ ) as compare to joint family system but the differences are not significant ( $M=30.42$ ,  $SD=5.54$ ), ( $t (148) =1.575$ ,  $p=.579$ ) and effect size was small  $d = 0.259$ . And joint family system has more caregiver burden ( $M=46.35$ ,  $SD= 7.54$ ) as compere to nuclear family system ( $M =46.50$ ,  $SD=6.90$ ), ( $t (98) =.069$ ,  $p=.641$ ) and there is no mean difference and the result is non-significant and the affect size was small  $d = 0.014$ .

**Discussion**

The current study investigated the relationship between caregiver burden, perceived social support, psychological distress and loneliness among mothers of children with intellectual disability. In addition, this research also explored how the demographic differences relate to the caregiver burden, perceived social support, psychological distress, and loneliness among mothers of children with intellectual disability. Caregiver burden, perceived social support and loneliness is computed as independent variable whereas psychological distress as dependent variable. The independent T-test, Pearson correlation, regression, and ANOVA tests were used for statistical analysis.

The study’s main objective was to investigate the relationship between caregiver burden, psychological distress, perceived social support and loneliness among mothers of children with intellectual disability and the analyses supported the first hypothesis by indicating a significant positive relationship between caregiver burden and psychological distress; caregiver burden predicts psychological distress. Previously conducted studies also supported the results. Noguchi and colleagues (2016) also stated in their study that there is an association between caregiver

burden and psychological distress; when the caregiver burden elevates, the psychological distress also increases. More recently, Udoh and colleagues (2021) reported in their study that caregivers of an individual with mental health problems are more vulnerable to psychological distress or other psychological issues. In 2014, Vitaliano and colleagues conducted a study to find out if there is any relationship between caregiver burden and psychological distress; they found that caregiving is significantly associated with psychological distress. Abreu and colleagues (2020) also stated in their study that psychological distress was high in family caregivers. On the other hand, results indicated that there is no relationship between caregiver burden and loneliness. Due to literature limitations, the researcher could not find any appropriate study to support this result.

Findings showed that there is a positive relationship between loneliness and psychological distress. According to Kersh et al. (2013), loneliness may result from a lack of social connections which may lead to psychological distress and other psychological disorder. Parents of intellectual disability specifically mothers face chronic as well as acute stress can both be caused by loneliness. Numerous studies on the psychosocial consequences of stress on the neuroendocrine and immune systems have recently been conducted.

Results also supported that caregiver burden is a predictor of psychological distress. Literature supported this notion by the study of Shah et al. (2010) which shows that the duties of caring for others can increase caregivers' stress levels and have a negative impact on their general quality of life, especially their psychological health. It has been estimated that such to one-half of caregivers feel considerable psychological discomfort, and they encounter mental health issues more frequently than the general population.

It was hypothesized that there will be a positive relationship between perceived social support and loneliness among mothers of children with intellectual disability and results indicated that the hypothesis is accepted as lack of perceived social support increases loneliness among mothers of children with intellectual disability also increases. According to the findings of this study, there is a substantial inverse relationship between loneliness and perceived social support, therefore mothers of children with intellectual disability who perceive more social support will experience less loneliness. This finding suggests the perceptions of social support play a significant role in determining how lonely they are (Holt Lunstad et al., 2015). The emotional and social growth of a person is directly influenced by their families and friends. Therefore, the mothers perceived social support from the family is reduced when the emotional connection between them and members from the family and friends is reduced which may cause the mothers of children with intellectual disability to experience loneliness more frequently.

According to Tikainen and Heikkinen (2004), important causes contributing to a rise in loneliness among mothers of children with ID include the lack of friends, spousal loss, and a lack of social support networks. However, loneliness and despair were likely to affect those parents who had no stronger social networks. In addition, Kang et al. (2018), studied the connection between caregiver's perceived social support increases their level of loneliness because they feel like there is no other person or relationship from which they get their respective support and love. South Koreans' perceptions of social support and loneliness, hypothesizing that the more social support the person perceives, the less loneliness they feel.

The study's findings showed that mothers experienced more psychological anguish than fathers, who in our cultural setting reported superior perceived social support and life satisfaction

(depression, anxiety, and stress). Whereas, mothers feel more psychological distress and other psychological issues regarding lack of social support (Dukmak, 2009).

It was hypothesized that loneliness will be the predictor of psychological distress among mothers of children with intellectual disability. The result shows that loneliness have significantly predicated psychological distress. The mothers feel distress as people made them unapproachable and left them on their own. According to a study by Bumin, Günal, and Tükel (2008), most mothers' feelings of rage and melancholy were brought on by stress. The mother of children with intellectual disabilities experience anger, a sense of loneliness, and depression, which negatively affects their family life. Because they spend more time and focus on their children with intellectual disabilities. It is claimed that the mother has excessive stress because they are frequently left alone with their children. Mothers experience more stress as parents than males do since they must spend the majority of their time at home with the child who has an intellectual disability.

Additional analyses were also conducted to reveal the demographic variables in working women. It was hypothesized that working mothers would be more psychologically distressed than non-working mothers of children with intellectual disability. The results also support this hypothesis by indicating that working women were more psychologically distressed than non-working women. In a qualitative study, the mother of intellectually disabled children reported that she had to leave her studies and job to take better care of his child (Papadopoulos, 2021). Another study reported no significant difference in psychological distress between working and non- working women (Gupta & Damodar, 2020).

It was also hypothesized that mothers of children with intellectual disability living in a nuclear family system would be more psychologically distressed than the joint family system. The results have shown that those mothers who belong to the nuclear family system were more psychologically distressed as compared to women who live in the joint family system but the differences are not significant. Researchers work to pinpoint those underlying risk factors for mental health issues among caregivers of unique children while acknowledging that these issues exist. Some studies identified stress as they live in nuclear family system so that there is no immediate person other than husband or offspring they feel more distress than mothers living in joint family system (Boehm et al., 2015).

## **Conclusion**

The researchers discovered significant positive relationship between Caregiver Burden and Psychological Distress, whereas there is a no relationship between Caregiver Burden and Loneliness, positive relationship between Loneliness and Psychological Distress, Perceived Social Support was not significantly correlated with Caregiver Burden, Perceived Social Support was significantly correlated with Loneliness, Perceive Social Support non-significantly predicts Loneliness, Caregiver Burden significantly predicted Psychological Distress, Perceived social support significantly predicted Psychological Distress.

Results also indicated that working mothers have face more psychological distress as compare to non-working mothers, mothers in nuclear family system have more psychological Distress as compare to joint family system, mothers in nuclear family system have more psychological Distress as compare to joint family system, joint family system has more caregiver burden as compare to nuclear family system, Widow and divorced mothers face more caregiver

burden than married mothers, Widow and divorced mothers face more psychological distress than married mothers.

### **Limitations**

The sample was only made up of 150 females; hence the findings cannot be applied generally. Since the research did not collect data from all of Pakistan's cities, the findings cannot be applied generally to Pakistan. Data gathering was challenging in the government sector, the government sector should make it easier for the researcher to get data. There is a gap in the literature that the researchers discovered, hence more research needed to be carried out in this area.

### **Recommendations and Implications**

Recognizing the requirement of mothers of children with intellectual disability would be beneficial for parents, physicians, other helpful individuals and psychologist. This study will benefit aspiring researchers. They would learn data to back up their research. The results of the study will aid in the creation of novel therapies and treatment strategies to minimize the stress of being a caregiver, the psychological suffering and the social rejection experiences by mothers of children with intellectual disability. More researches have to be done, ideally with a bigger population ratio or on a nationwide scale. Future research should also include families of children with intellectual disability or both parents. The families and parents of children with intellectual disability would benefit from family therapy techniques. The research will raise awareness of the challenges mothers of children with intellectual disability experience. The study would warn the carers to get expert help and take proper care of them as well as their ID children.

### **References**

- Abreu, W., Tolson, D., Jackson, G. A., & Costa, N. (2020). A cross-sectional study of family caregiver burden and psychological distress linked to frailty and functional dependency of a relative with advanced dementia. *Dementia*, 19(2), 301-318.
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176/appi.books.9780890425787>
- Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler psychological distress scale (K10). *Australian and New Zealand journal of public health*, 25(6), 494-497.
- Boehm, T. L., Carter, E. W., & Taylor, J. L. (2015). Family quality of life during the transition to adulthood for individuals with intellectual disability and/or autism spectrum disorders. *American journal on intellectual and developmental disabilities*, 120(5), 395-411.
- Bumin, G., Günal, A., & Tükel, Ş. (2008). Anxiety, depression and quality of life in mothers of disabled children. *SDÜ Tıp Fakültesi Dergisi*, 15(1), 6-11.
- Cramm, J. M., & Nieboer, A. (2011). Psychological well-being of caregivers of children with intellectual disabilities: Using parental stress as a mediating factor. *Journal of Intellectual Disabilities*, 15(2), 101-113.
- Drapeau, A., Marchand, A., & Beaulieu-Prevost, D. (2012). Epidemiology of psychological distress. *Mental illnesses-understanding, prediction and control*, 69(2), 105-106.

- Dukmak, S. (2009). Parent adaptation to and parenting satisfaction with children with intellectual disability in the United Arab Emirates. *Journal of Intellectual and Developmental Disability, 34*(4), 324-328.
- Dunn, M. E., Burbine, T., Bowers, C. A., & Tantleff-Dunn, S. (2001). Moderators of stress in parents of children with autism. *Community mental health journal, 37*, 39-52.
- Fombonne, E. (2009). Epidemiology of pervasive developmental disorders. *Pediatric research, 65*(6), 591-598.
- Gratão, A. C. M., Brigola, A. G., Ottaviani, A. C., Luchesi, B. M., Souza, É. N., Rossetti, E. S., ... & Pavarini, S. C. I. (2019). Brief version of Zarit Burden Interview (ZBI) for burden assessment in older caregivers. *Dementia & neuropsychologia, 13*, 122-129.
- Gupta, A., & Damodar, S. (2020). Levels of psychological distress among working and non-working women. *International Journal of Indian Psychology, 8*(4).
- Habib Ayaz, H., Alia, A., & Sabahat, N. (2016). Parental satisfaction with life and perceived social support of parents of children with intellectual disability. *International Journal of Innovation and Scientific Research, 20*(2), 398-402.
- Hastings, R. P., Daley, D., Burns, C., & Beck, A. (2006). Maternal distress and expressed emotion: Cross-sectional and longitudinal relationships with behavior problems of children with intellectual disabilities. *American Journal on Mental Retardation, 111*(1), 48-61.
- Hastings, R. P., Kovshoff, H., Brown, T., Ward, N. J., Espinosa, F. D., & Remington, B. (2005). Coping strategies in mothers and fathers of preschool and school-age children with autism. *Autism, 9*(4), 377-391.
- Hawkey, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of behavioral medicine, 40*(2), 218-227.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on psychological science, 10*(2), 227-237.
- Janardhana, N., Raghunandan, S., Naidu, D. M., Saraswathi, L., & Seshan, V. (2015). Care giving of people with severe mental illness: An Indian experience. *Indian journal of psychological medicine, 37*(2), 184-194.
- Kang, H. W., Park, M., & Wallace, J. P. (2018). The impact of perceived social support, loneliness, and physical activity on quality of life in South Korean older adults. *Journal of sport and health science, 7*(2), 237-244.
- Kanthasamy, S., Miskon, N., Barlas, J., & Marsh, N. V. (2024, January). Family Caregiver Adaptation during the Transition to Adulthood of Individuals with Intellectual Disabilities: A Scoping Review. In *Healthcare* (Vol. 12, No. 1, p. 116). MDPI.
- Kersh, J., Corona, L., & Siperstein, G. (2013). Social well-being and friendship of people with intellectual disability. *The Oxford handbook of positive psychology and disability, 60-81*.
- Meral, B. F., & Cavkaytar, A. (2012). A STUDY ON SOCIAL SUPPORT PERCEPTION OF PARENTS WHO HAVE CHILDREN WITH AUTISM. *International Journal on New Trends in Education & Their Implications (IJONTE), 3*(3).
- Mohamed, A. R., & Mkabile, S. (2015). An attachment-focused parent-child intervention for biting behaviour in a child with intellectual disability: A clinical case study. *Journal of Intellectual Disabilities, 19*(3), 251-265.

- Mourya, P., Singh, P., Rastogi, R. B., & Singh, M. M. (2016). Inhibition of mild steel corrosion by 1, 4, 6-trimethyl-2-oxo-1, 2-dihydropyridine-3-carbonitrile and synergistic effect of halide ion in 0.5 M H<sub>2</sub>SO<sub>4</sub>. *Applied Surface Science*, 380, 141-150.
- Noguchi, M., Tachimori, H., Naganuma, Y., Zhao, X., Kono, T., Horii, S., & Takeshima, T. (2016). Families' opinions about caring for patients with psychiatric disorders after involuntary hospitalization in Japan. *International journal of social psychiatry*, 62(2), 167-175.
- Pandey, D., & Dubey, P. (2019). Mediating Effect of Social Support on Stress among Parents of Children with Intellectual Disability. *Indian Journal of Public Health Research & Development*, 10(2).
- Papadopoulos, D. (2021). Mothers' experiences and challenges raising a child with autism spectrum disorder: A qualitative study. *Brain sciences*, 11(3), 309.
- Perlman, D., Peplau, L. A., & Goldston, S. E. (1984). Loneliness research: A survey of empirical findings. *Preventing the harmful consequences of severe and persistent loneliness*, 13, 46.
- Shah, A. J., Wadoo, O., & Latoo, J. (2010). Psychological distress in carers of people with mental disorders. *British Journal of Medical Practitioners*, 3(3).
- Sharma, R. K., & Sharma, S. STUDY ON PARENTING RELATED STRESS AND DEPRESSION IN WORKING AND NON-WORKING MOTHERS OF CHILDREN WITH AUTISM SPECTRUM DISORDERS. *Education*, 9, 10.
- Shiba, K., Kondo, N., & Kondo, K. (2016). Informal and formal social support and caregiver burden: The AGES caregiver survey. *Journal of epidemiology*, 26(12), 622-628.
- Tiikkainen, P., & Heikkinen, R. L. (2005). Associations between loneliness, depressive symptoms and perceived togetherness in older people. *Aging & Mental Health*, 9(6), 526-534.
- Trivette, C. M., Dunst, C. J., & Hamby, D. W. (2010). Influences of family-systems intervention practices on parent-child interactions and child development. *Topics in Early Childhood Special Education*, 30(1), 3-19.
- Udoh, E. E., Omorere, D. E., Sunday, O., Osasu, O. S., & Amoo, B. A. (2021). Psychological distress and burden of care among family caregivers of patients with mental illness in a neuropsychiatric outpatient clinic in Nigeria. *Plos one*, 16(5), e0250309.
- Vitaliano, P. P., Strachan, E., Dansie, E., Goldberg, J., & Buchwald, D. (2014). Does caregiving cause psychological distress? The case for familial and genetic vulnerabilities in female twins. *Annals of Behavioral Medicine*, 47(2), 198-207.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of personality assessment*, 52(1), 30-41.