PSYCHOSOCIAL PREDICTORS OF MATERNAL DEPRESSION: THE PROTECTIVE ROLE OF FRIEND SUPPORT IN CONTEXTS OF ATTENTION DEFICIT HYPERACTIVITY DISORDER AND INTELLECTUAL DISABILITY

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Abstract

Purpose: The friends support plays a crucial role in determining the depression of mothers who care for children with Attention Deficit Hyperactivity Disorder (ADHD) and Intellectual Disability (ID). This study aims to explore the mediating role of friends support in the relationship between maternal stress and depression.

Design/Methodology/Approach: Correlational design with a purposive sampling was used to collect the data from mothers of ADHD and ID diagnosed children. Standardized psychometric scales were employed for quantifying maternal stress, friends support, and depression.

Findings: There is a significant association between maternal stress and depression. Friends support acts as a mediator in maternal stress and depression.

Research Limitations/Implications: The study establishes the significance of psychosocial predictors in playing a crucial role in preventing stress in mothers with children who have special needs. Findings and implications highlight the requirement to implement community-based interventions that provide enabling support networks to mothers as well as build social connection. Longitudinal approaches and other specific contextual factors including socio-economic status and cultural influences must be considered in future studies.

Originality/Value: This article adds to the expanding body of research into the topic of maternal mental health and explores how psychosocial factors can combine in relation to mothers who have children diagnosed with ADHD and ID.

INTRODUCTION

Background

The glad and gratifying experience of being a parent is frequently accompanied by high levels of stress due to the obstacles, frustrations, and problems that parents encounter on a daily basis. A childhood is an era between the ages of birth and puberty, or between the formative years of infancy and puberty, is referred to as a child or children (Rathus, 2006).

The rights and obligations of children are typically less than those of adults (Quaye et al., 2019). Through interactions with peers, instructors, and family, a child's social skills often develop naturally. Through everyday interactions, they learn about social cues and conventions as well as how to share, communicate, and take turns (Vygotsky, 1978). Vast



range developmental milestones are part of a child growth.

If developmental milestones are delayed in child, then we called a child with special needs, including those with Attention Deficit Hyperactivity Disorder (ADHD), Intellectual Disability (ID), autism spectrum disorder (ASD), or other developmental problems (American Psychiatric Association [APA], 2013). A disability refers to a physical or mental deficiency that has a diverse and long-term harmful consequence on child's capacity to bring out every day routine activities (WHO, 2011). A child with ID for example, might experience delayed language and speech development, motor skill issues, and cognitive impairments that interfere with their ability to learn at the same rate as their classmates (Schalock et al., 2010).

Special need children require tailored support to navigate their daily lives, educational environments, and social interactions. Children with special needs frequently required individualized educational plans (or IEPs) in order to fulfil their desires and preferences for learning. Specialized teaching techniques that take into account each child's individual learning needs, such as visual aids for visually impaired students or multimodal methods for dyslexic children (Smith, 2001). Children with disabilities encounter multiple barriers when engaging in daily activities such as health pursuing education (shea, 2011) and developing social skills (Pesonen et al., 2008) and executing daily life task (Yuen, 2023).

Researches have shown that all disabilities require extensive effort, time and resource to manage the child daily functioning like Children suffering from ADHD are said to have a long-lasting disorder (Washington, 2002). It is estimated that 5% of school-aged children worldwide suffer from ADHD, one of the most common behavioral disorders identified in children (Polanczyk et al., 2007). ADHD is a neuropsychological disorder with brain and neurological roots is one of the most prevalent conditions affecting school-age children and young people (Mahone et al., 2011). The initial anatomical MRI research on ADHD child abnormalities in the frontal (cortical) regions of the brain (Durston et al., 2010) as well as in the basal ganglia and subcortical brain areas (Valera et al.,

2007). According to recent studies children with ADHD exhibit impaired small interval cortical inhibition, which may indicate primary dopamine problems (Gilbert et al., 2011). According to Durston et al. (2010) motor intentional systems, motor coordination, and reaction regulation are all impacted by ADHD (Jackson & Choi, 2018).). Podolski and Nigg (2001) revealed that ADHD children exhibit hyperactive activity, making their upbringing a laborious effort. Moreover, it can be rather challenging to satisfy hyperactive children because they are typically stubborn by nature and adamant about getting what they want.

On the other side, ID is a condition marked by impairments in both cognitive and adaptive functioning Diagnostic and Statistical Manual (DSM 5-TR). A child with ID for example, might experience delayed language and speech development, motor skill issues, and cognitive impairments that interfere with their ability to learn at the same rate as their classmates (Schalock et al., 2010).

Over the last century, housing, work, healthcare, schooling, and recreation have all changes significantly for people with ID (World Health Organization [WHO], 2000). It has gone through several renaming and meaning in over time. In most countries, ID has changed by mental retardation, which was common all over the world until the late 20th century. The DSM- VTR has replaced ID tittle to mentally challenged child. A significant decline in one's ability to learn new or complex knowledge, to act independently (impaired social functioning), or to acquire new abilities (impaired intelligence) are all seen as components of intellectual disability. These developmental disabilities (DD) frequently start before maturity and have a permanent effect (Department of Health, 2001).

ID describes a specific functioning state that starts at the birth or diagnosed before age of 18 years and is marked by notable deficits in both adaptive behavior and intellectual functioning (American Association of Mental Retardation, 2002). About 50% of person with mild ID and 70% of people with severe ID have a biological or genetic root for their difficulty (Simonoff, 2015). As reported by Achenbach (1982) certain children's cognitive differences may just be the lower end of the normal IQ range. Functioning



is often the outcome of combination of hereditary and ecological factors. Intellectual performance has been connected with a range of psychosocial problems, such as inadequate parental participation, low levels of stimulation, abuse, neglect, and unsatisfactory parent-child relationships (Aamr, 2002). Determining the fundamental cause of ID is a difficult task. A person may be mentally impaired for a variety of causes, many of which are unknown. As it happens, only around half of all instances of ID have a known cause (Smith et al., 2006). Studies conducted in the past have examined the perinatal (around the time of birth), postnatal (after birth), and prenatal (before birth) onset periods in an attempt to determine possible biological reasons for intellectual disability in a person (Shukla & Shree, 2016).

Mothers having children with ID expressed emotions of shame because they felt responsible for their child's disabilities and social isolation, which resulted in low self-esteem, helplessness and nervousness (Gona, 2016). Due to ongoing care required for children with disabilities, many mothers are unable to participate in social gathering. This causes social alienation and detachment, which exacerbate mental health problems in mothers (Rimba et al., 2016). According to Farzanekia (1985) parents may experience isolation in addition to difficulties, stress, and frustration when raising a child with an ID.

When a child with developmental disability is born, parents are frequently unprepared for the unexpected demands and challenges that follow. The whole family experiences profound and enduring changes in life when they have a child with developmental disability (Dervishaliaj, 2013). When it comes to their child and parenting, parents of children with developmental disability have unique and particular obstacles on a daily basis. It demands the great deal of time and effort, especially for mothers and fathers, to properly care for and address the special needs of their child (Bhopti et al., 2016). Consequently, it stands to reason that these parents experience stress on a regular basis (Scheibner et al., 2024).

Mothers of children with cognitive disabilities may encounter difficulties because of their heightened inability to adjust (Bharati, 2012). According to Oshodi et al. (2014) it frequently disrupts their lives by elevating their perceived stress level. Stress intensities are greater among parents of children who have cognitive impairment. It has been discovered that a mother is more affected by her child's behavior and wellbeing (Hall & Graff, 2010). Children with ID are characterized by poor communication, poor academic performance, and poor social skills (Jennifer, 2010).

Studies indicate that mothers of children with ADHD and ID are more prone to stress as parents than mothers of children with normal development (Yousefia et al., 2011). Another kind of stress that develops when a parent feels that they are unable to meet the duties of parenting is known as parental stress (Holley et al., 2019). Multidimensional reaction to physical, psychological, emotional, social, and financial stressors usually related with the practice of loving" is the definition of parental stress (Taylor et al., 2004). Among children with developmental delays, children with ADHD and ID have been found to have the highest levels of behavior problems and, in turn, parents of these children typically show the highest levels of stress (Eisenhower et al., 2005; Estes et al., 2009; Jang et al., 2011; Kozlowski & Matson, 2012). The relationship between stress and behavior problems appears to be reciprocal such that elevated child behavior problems lead to increases in parental stress which further exacerbate the child's behavior problems (Baker et al., 2003; Pesonen et al., 2008; Neece et al., 2012).

On the other hand, having enough psychosocial resources enable people to manage with stress and adjust to the environment (Shi, 2021). Among these psychosocial resources, friends support has been found to play an important role in explaining how people handle with stressful situations or critical life experiences (Burn & Machin, 2013). According to Ettorre (2010) there are various forms of support, including instrumental support (financial and other aid), informational support (advice and direction), and emotional support (expressions of love and caring). Cheng and Pickler (2009) reported that mother who had a support also reported being in good general health and having less symptoms of depression. However, mothers who were single, had significant others who weren't supportive, or both



had a higher likelihood of developing parental depression (Yonkers et al., 2001).

Due to its ability to reduce stress, social support is an appreciated managing mechanism for parents for children with impairment (Syrotchen, 2019). The buffering model (Cohen & Wills, 1998) states that the role of social support is controlling to lessen the unpleasant feelings that are brought on by stressful experiences. For this reason, it's referred to as a coping mechanism for handling stress and adjusting to new circumstances (Kim, 2019). In particular, people who felt they had enough social support from others who also faced stress had lower levels of depression (Park & Jang, 2013). Therefore, even if parents of children with disability suffer parental stress, their negative emotions due to parental stress may be lessened if they observe an elevated state of social support (Yang & Cho, 2019).

Mental health may be greatly boosted by a friends support. According to Keyes (2012) mental health is a combination of social, mental, and emotional wellbeing (psychological a wellbeing state to operative person functioning, emotional wellbeing denotes to the recognition of wellbeing, and social wellbeing refers to a person's capability to perform effectively in the community). Swami et al. (2011) explained achieving life pleasure is depending upon a person's mental wellbeing. WHO (2012) described mental health as a situation of happiness whereby an individual can fulfill their potential, cope with daily challenges, work productively and successfully, and give back to their community.

Depression is a common mental illness characterized by poor energy, a sad mood, concentration problems, feelings of guilt or low self-esteem, loss of interest or pleasure, and disturbed sleep or appetite (WHO, 1999). According to Olsson and Hwang (2001), mother who are caregivers often experience high rates of depression due to their unrelenting caring tasks, powerlessness, and social isolation than mothers of generally developing children (Olsson & Hwang, 2001). Depression is not just a simple term. Each type consists of different degree. There are big differences between people, in terms of their symptoms, courses, response to treatment which demonstrates the complexity of the depression (Keyes, 2002).

To conclude mothers of children with ID and ADHD experience a variety of mental health challenges, consisting of anxiety related symptoms, stress and depression related symptoms. It is essential to comprehend these problems in order to create support networks and solutions that are specific to each individual's requirements. The study emphasizes the intricate association between the responsibilities of providing attention and mental health; underscoring the significance of offering these mother full assistance to enhance their overall wellbeing.

In Pakistani culture, mothers are in charge of taking care and raising children on a daily basis because of cultural influences. Fathers spend most of their time outside the home because they support their families financially. Being a mother of a disabled child requires a massive amount of additional time and care for the child. There is a stigma in society that parents whose children require special needs must deal with. Including all aspects, these stressors have long been thought to increase the possibility of depression related symptoms and anxiety related disorder in mothers of special children.

Statistics have shown that around 93 million children the global diagnosed with impairments (WHO, 2011). An estimated 3.28 million children with various disabilities reside in Pakistan. ADHD and ID are serious issues, while the precise percentages can differ by study and location. Reports that are currently available indicate that children with disabilities make up between 10 and 12 percent of all children in the country (Meraj et al., 2023). Having an intellectually disabled child with ADHD brings special difficulties that might have a big influence on a mother's overall health. Giving these mothers focused interventions and support systems require an understanding of the interactions that exist between parental stress, social support, social connectedness, and mental health.

Furthermore, Nadeem et al. (2016) conducted research on parental stress among children's parents with and without disabilities. The results demonstrated that, in comparison to parents of normally developing children, parents of disabled children experience much greater levels of parental stress.



Social support as a source improves sensations of authority, a feeling of getting, and the desire to provide something back in order to boost well-being and decrease stress (Hobfoll et al., 2012). Siman and Kaniel (2011) found out that social support greatly decreased mothers pressure in a study involving mothers having children with ASD. Mak and Kwok (2010) claim that dealing with the economic, sensitive, somatic, and social challenges of raising children of autisms spectrum disorder is made easier when there is feeling of social support is strong. Larger and more supportive social systems were found near be predictive of mother well-being after 18 months in another longitudinal study (Smith et al., 2012). We think that mother's social support is a resource that both increases the positive and decreases the negative aspects of wellbeing.

Another study on social support and parental stress were investigated by Shin et al. (2006) in relation to parents having children with ID. Shin et al. (2006) discovered that fathers and mothers having children with ID differed and were comparable in the same time. Both parents of children with impairments described fewer social support networks than parents of children who were growing normally. In regarding of parental stress, children's mothers who performed worse intellectually than mothers of children who developed normally reported greater levels of stress. Conversely, however fathers whose children with intellectual impairment and fathers whose children having typical development did not contrast in terms of their stated stress levels. In general, mothers who have children having ID reported greater levels of parental stress than fathers who had the same condition. For instance, Hastings (2003) discovered that among parents having children with ASD, mothers stress levels were associated to problem behaviors in the children, but not fathers stress levels. In families with children who have disabilities, fathers may participate less in providing care, and other factors may have a greater impact on their stress levels.

Research has revealed that social support vividly lowers the stress associated with parenting (Theule et al., 2011). Taylor et al. (2011) claimed that social support is a psychological asset that will certainly improve parenting techniques. Studies on children's parents with developmental disability have shown a

direct correlation among parenting stress and social support (Riany & Ihsana, 2021). It has been discovered that social support reduces parental stress by improving physical health and the standard of family life (Nurhidayah et al., 2020). Additionally, availability and social support can improve life satisfaction and lessen stress, anxiety, and depression in mothers having children with developmental disability like ASD or ADHD (Meadan et al., 2010). According to Benson (2012) research indicated that mothers having autistic children can expressively lower their stress levels and improve their mental health when they experience good social support from peers and family. According to the study strong social networks are crucial for providing women with both emotional and practical support, which enables them to efficiently manage the obstacles of raising a child with Down syndrome.

In addition parenting stress can be effectively reduced by friends support. According to McConnell et al. (2014) study mothers who have a good support system face less parental stress, which has a positive impact on their mental health. The aforementioned discovery emphasizes the importance of social networks in handling the responsibilities of raising children with ID and ADHD.

Review of previous studies identify that parental stress higher in mothers of special children as compared to normal children and parental stress affect the overall mental health of parents like greater level of depression and anxiety symptoms. Above mention researches also revealed that friends support may a vital modulating role to overcome the stress and improve mental health of parents having special children. Mothers who have good friends support to their surrounding they cope their mental health problems.

Hypothesis

- It is hypothesized that there would be a positive relationship between parental stress and depression in mothers having children with ADHD and ID
- It is hypothesized that there would be a negative relationship between friends support with depression in mothers having children with ADHD and ID

• It is hypothesized that the effect of parental stress on depression is mediated by friends supports in mothers having children with ADHD and ID

Conceptual Framework

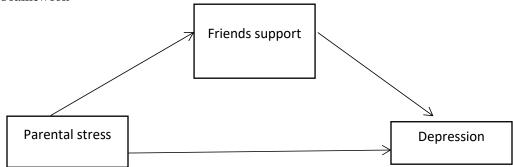


Figure 1: Showing mediation role of Friends Support in Parental Stress and Depression

Methodology

The study was conducted on a sample of 250 mothers of children with ADHD (N = 125) and ID (N = 125), aged between 25 to 40 years, selected through purposive sampling from private and government special education institutions in Lahore, Pakistan. A correlational research design was used to

explore the relationship between maternal stress and depression in these mothers. The key variables were measured with standardized scales: maternal stress scale (Mahmood, 2017), perceived social support scale (Zimet et al., 1988), and the Depression, Anxiety & Stress Scale (Lovibond, 1995).

Table 1: Descriptive and Reliability Analysis of Parental Stress, Family Support, and Depression (N = 250)

Variables	K	(α)	M(SD)	Range		
				Actual	Observed	
Parental Stress	21	0.86	38.56(9.38)	0-63	15- 57	
Friends Support	4	0.89	16.77(5.15)	4- 28	5-21	
Depression	14	0.84	20.72(7.68)	0-42	6-36	

Note. k= total number of items, a= Cronbach alpha, M= Mean, SD=Standard Deviation

Table 2: Correlation of Demographics with study variables (N = 250)

	<u>, </u>				
	Variable	M(SD)	1	2	3
1	Parental Stress	38.54(9.39)		37	.58
2	Friends Support	12.05(3.56)			53
3	Depression	20.80(7.63)			

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

Correlation Table 2 shows that there was a positive correlation between parental stress and depression.

Moreover, there was negative correlation between parental stress and friends support. Hence, hypothesis was approved.

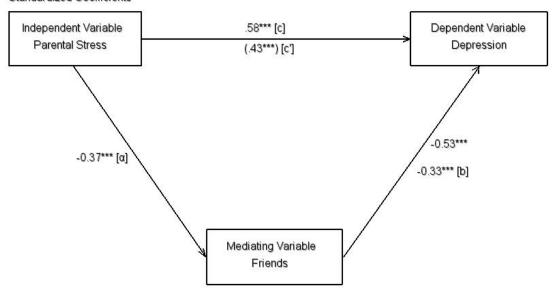
http:/fmhr.org | Bibi et al., 2025 | Page 878

Table 3: Mediation Analysis between Parental Stress, Friends and Depression in Mothers having Children with ADHD and ID

Consequences								
			M(SS)	95%CI		Y(S)		95%CI
Antecedent		В	SE	LLUL		В	SE	LLUL
Parental Stress(X)	a	11***	.02	16,07	c`	.35***	.04	.27, .43
Friends (M)					Ь	71***	.11	94,49
Constant		16.67	1.14	14.43, 81.92	2	16.21	2.78	10.73,21.69
Birth order		18	.20	57, .20		.46	.35	23, 1.15
Diagnosis		-1.56**	* .42	-2.39,74		03	.77	-1.54, 1.48
Mother education		.50*	.23	.06, .94		72	.41	-1.51, .08
Total effect		.43	.04	.35, .51				
$PS \rightarrow F \rightarrow D$.08***	.05	.11, .29				
Sobel Z 4.19***								
	R ² =		47***			$R^2 =$.68***	

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

Standardized Coefficients



NOTE: The numerical values in the parentheses are beta weights taken from the second regression and the other values are zero order correlations.

Discussion

The aims of the current study to conclude the association among parental stress, friends support and depression in mothers having children with ADHD and ID. It was hypothesized that correlations are significantly positive with one

study variable and negatively associated with another variable.

Parental stress is very strongly positively correlated with depression, indicating that high levels of depression are linked with high levels of parental stress. Prior researches have also shown that parents of children whose require special needs often suffer



from greater levels of stress, anxiety, and depression related symptoms (e.g., Dabrowska & Pisula, 2010; Dykens & Lambert, 2013; Estes et al., 2013; ; Falk et al., 2014; Hayes & Watson, 2013; Kuusikko-Gauffin et al., 2013; Stein et al., 2011; Wang et al., 2011; Weiss, 2002). Similarly, Hasting (2002) examined the impact of parental stress on parents' mental health when they had children with developmental disability, mothers having children with ID and ADHD often experience greater psychological discomfort due to the ongoing responsibilities of parenting and the behavioral challenges that go along with these disorders. Mothers having children with developmental disability report greater levels of stress, and there is a direct link between an increase in anxiety and depressive symptoms. According to the study, these mothers have significant challenges that contribute to their psychological stress and mental health difficulties.

In short, high levels of parental stress can negatively affect mental and psychological wellbeing, resulting in higher rates of reported depression and lower ratings of wellbeing (Giallo et al., 2013).

According to the majority of research on friends support, the link between a major life stressor and poor mental health is mediated by perceived social support, which is the primary indicator that reduces stress (Dour et al., 2014; Haber et al., 2007; Lin & Margolin, 2014; Norris & Kaniasty, 1996; Russell & Cutrona, 1991; Wesley et al., 2013). According to a study conducted by Helstead et al. (2018) mothers having special children who experienced greater levels of support also reported lower levels of depression, anxiety, despair, and anger. To conclude that friends supports showed the negative correlation with depression.

Conclusion

According to the study's findings, mothers of children with developmental disabilities experience complicated interactions among friends support, parental stress, and depression outcomes. It was discovered that parental stress was favorably correlated with depression but adversely linked with friends support. These links exhibit how friends support can lessen the damaging effects of caregiving stress on depression.

Moreover, friends support mediate the plays an important role as a mediator between parental stress and depression, thereby decreasing the psychological burden of caregiving. This recommends enhancing support systems can directly decrease stress's damaging effects on mental health outcomes. This research highlights the importance of establishing support system to increase resilience and decrease depression for mothers who bear a heavy burden of caring responsibilities.

REFERENCES

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).

https://doi.org/10.1176/appi.books.9780890 425596

Benson, P. R. (2012). Network characteristics, perceived social support, and psychological adjustment in mothers of children with autism spectrum disorder. Journal of Autism and Developmental Disorders, 42(12), 2597-2610.

Durston, S., van Belle, J., & de Zeeuw, P. (2010).

Differentiating frontostriatal and frontocerebellar circuits in attention-deficit/hyperactivity disorder. Biological psychiatry, 69(12), 1178-1184. https://doi.org/10.1016/j.biopsych.2010.07.037

Giallo, R., Wood, C. E., Jellett, R., & Porter, R. (2013). Fatigue, wellbeing and parental self-efficacy in mothers of children with an Autism Spectrum Disorder. Autism, 17, 465-480. https://doi.org/10.1177/136236131141

Gilbert, D. L., Isaacs, K. M., Augusta, M., Macneil, L. K., & Mostofsky, S. H. (2011). Motor cortex inhibition: a marker of ADHD behavior and motor development in children. Neurology, 76(7), 615-621. https://doi.org/10.1212/WNL.0b013e31820c2ebd

Halstead, E. J., Griffith, G. M., & Hastings, R. P. (2018). Social support, coping, and positive perceptions as potential protective factors for the well-being of mothers of children with intellectual and developmental disabilities. International Journal of Developmental Disabilities, 64(4-5), 288-296.



- https://doi.org/10.1080/20473869.2017.132
- Hastings, R. P. (2002). Parental stress and behavior problems of children with developmental disability. Journal of Intellectual and Developmental Disability, 27(3), 149-160. https://doi.org/10.1080/1366825021000008 657
- Jackson, A. P., & Choi, J. (2018). Parenting stress, harsh parenting, and children's behavior. Journal of Family Medicine & Community Health, 5(3), 10.
- Mahone, E. M., Crocetti, D., Ranta, M. E., Gaddis, A., Cataldo, M., Slifer, K. J., ... & Mostofsky, S. H. (2011). A preliminary neuroimaging study of preschool children with ADHD. The Clinical Neuropsychologist, 25(6), 1009-1028. https://doi.org/10.1080/13854046.2011.580784
- Mak, W. W., & Kwok, Y. T. (2010). Internalization of stigma for parents of children with autism spectrum disorder in Hong Kong. Social science & medicine, 70(12), 2045-2051. https://doi.org/10.1016/j.socscimed.2010.02.023
- McConnell, D., Savage, A., & Breitkreuz, R. (2014). Resilience in families raising children with disabilities and behavior problems. Research in Developmental Disabilities, 35(4), 833-848. https://doi.org/10.1016/j.ridd.2014.01.015
- Meadan, H., Halle, J. W., & Ebata, A. T. (2010). Families with children who have autism spectrum disorders: Stress and support. Exceptional children, 77(1), 7-36. https://doi.org/10.1177/0014402910077001
- Nurhidayah, I., Alhusniati, F. A., Rafiyah, I., & Hidayati, N. O. (2020). Social Support on Parents of Children with Intellectual Disability. Indian Journal of Public Health Research & Development, 11(3).
- Pesonen, A.-K., Räikkönen, K., Heinonen, K., Komsi, N., Järvenpää, A.-L., & Strandberg, T. (2008). A Transactional model of temperamental development: Evidence of a relationship between child temperament and maternal stress over five years. Social Development,

- ISSN: (e) 3007-1607 (p) 3007-1593
- 17(2), 326-340. doi:10.1111/j.1467-9507.2007.00427.x
- Podolski, C. L., & Nigg, J. T. (2001). Parent stress and coping in relation to child ADHD severity and associated child disruptive behavior problems. Journal of clinical child psychology, 30(4), 503-513. https://doi.org/10.1207/S15374424JCCP3004
- Polanczyk, G., De Lima, M. S., Horta, B. L., Biederman, J., & Rohde, L. A. (2007). The worldwide prevalence of ADHD: a systematic review and metaregression analysis. American journal of psychiatry, 164(6), 942-948. https://doi.org/10.1176/ajp.2007.164.6.942
- Quaye, A. A., Coyne, I., Söderbäck, M., & Hallström, I. K. (2019). Children's active participation in decision-making processes during hospitalisation: An observational study. Journal of clinical nursing, 28(23-24), 4525-4537.

https://doi.org/10.1111/jocn.15042

- Rathus, S. A. (2006). Childhood and adolescence:

 Voyages in development.

 Wadsworth/Thomson Learning. social
 psychology, 44(1), 127.

 https://doi.org/10.1037/0022-3514.441.127
- Riany, Y. E., & Ihsana, A. (2021). Parenting stress, social support, self-compassion, and parenting practices among mothers of children with ASD and ADHD. Psikohumaniora: Jurnal Penelitian Psikologi, 6(1), 47-60. http://orcid.org/0000-0002-1862-284X
- Schalock, R. L., Luckasson, R., Shogren, K. A., & Borthwick-Duffy, S. (2010). The renaming of mental retardation: Understanding the change to the term intellectual disability. Intellectual and Developmental Disabilities, 48(2), 112-116. https://doi.org/10.1352/1934-9556(2007)45[116:TROMRU]2.0.CO;2
- Siman-Tov, A., & Kaniel, S. (2011). Stress and personal resource as predictors of the adjustment of parents to autistic children: A multivariate model. Journal of Autism and developmental disorders, 41, 879-890.
- Simonoff, E. (2015). Intellectual disability. Rutter's child and adolescent psychiatry, 719-737.



https://doi.org/10.1002/9781118381953.ch5

Smith, L. E., Seltzer, M. M., Tager-Flusberg, H., Greenberg, J. S., & Carter, A. S. (2012). A comparative analysis of well-being among mothers of children with ASD, ADHD, and ID. Journal of Autism and Developmental Disorders, 42(5), 801-813.

Smith, T. B., Oliver, M. N., & Innocenti, M. S. (2001). Parenting stress in families of children with disabilities. American Journal of Orthopsychiatry, 71(2), 257-261. https://doi.org/10.1037/0002-9432.71.2.257

Theule, J., Wiener, J., Rogers, M. A., & Marton, I. (2011). Predicting parenting stress in families of children with ADHD: Parent and contextual factors. Journal of Child and Family studies, 20, 640-647. https://doi.org/10.1007/s10826-010-9439-7

World Health Organization. (2011). Fact file on mental health.Retrived from www.who.int/features/factfiles/mental health/en/.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.