International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Bidirectional Influence Between Parental Mental Health and ADHD Behavior in Children

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ABSTRACT
Attention-Deficit/Hyperactivity Disorder (ADHD) is a prevalent neurodevelopmental condition that significantly affects not only children but also their families. The present study aimed to examine the relationship between ADHD behavioral symptoms in children and parental mental health, as well as the bidirectional influence between these variables. A quantitative research design was employed, and data were collected from 75 parents. ADHD behaviors were assessed using the Conners' Parent Rating Scale (CPRS), while parental mental health was measured using the Depression Anxiety Stress Scales (DASS-21).Descriptive statistics indicated moderate to high levels of ADHD symptoms in children and moderate levels of depression, anxiety, and stress among parents. Pearson correlation analysis revealed significant positive relationships between ADHD behaviour and parental depression, anxiety, and stress. Regression analyses further demonstrated that ADHD behavioral symptoms significantly predicted parental psychological distress. Conversely, parental mental health variables also significantly predicted ADHD behavioral severity, confirming a bidirectional relationship.The findings support the Transactional Model of Development and Family Systems Theory, emphasizing reciprocal influences between children and parents. The study highlights the importance of family-centered interventions that address both child behavioral symptoms and parental psychological well-being.

KEYWORDS: ADHD, parental mental health, depression, anxiety, stress, bidirectional influence, child behavior

1. INTRODUCTION

Attention-Deficit/Hyperactivity Disorder (ADHD) is one of the most common neurodevelopmental disorders characterized by persistent patterns of inattention, hyperactivity, and impulsivity. These symptoms often interfere with academic performance, social functioning, and emotional regulation. While much research has focused on the individual child, increasing attention has been given to the broader family context, particularly the psychological well-being of parents.

Parenting a child with ADHD can be challenging due to the persistent and demanding nature of behavioral symptoms. Parents are often required to provide constant supervision, manage behavioral difficulties, and support academic functioning. These responsibilities may contribute to increased levels of stress, anxiety, and depression among caregivers.

Recent theoretical perspectives emphasize that the relationship between child behaviour and parental mental health is not unidirectional. Instead, it is dynamic and reciprocal, where child behaviour influences parental well-being, and parental psychological functioning, in turn, affects child behaviour. This bidirectional relationship highlights the importance of understanding ADHD within a family systems framework.The present study aims to explore this reciprocal relationship and provide empirical evidence supporting the interaction between parental mental health and ADHD behavioral symptoms in children.

2. REVIEW OF LITERATURE

Previous research has consistently demonstrated that parents of children with ADHD experience higher levels of psychological distress compared to parents of typically developing children. Studies have reported increased levels of stress, anxiety, and depression among caregivers, primarily due to the challenges associated with managing ADHD-related behaviours.

Theule et al. (2013) conducted a meta-analysis and found significantly higher parenting stress among families of children with ADHD. Similarly, Podolski and Nigg (2001) reported that increased ADHD symptom severity is associated with higher levels of parental emotional distress.

Research has also highlighted the influence of parental mental health on child behaviour. Chronis-Tuscano et al. (2008) found that parental depression and stress are associated with inconsistent parenting practices, which may contribute to worsening behavioural problems in children.

The Transactional Model of Development suggests that children and parents continuously influence each other's behaviors over time. Likewise, Family Systems Theory emphasizes that the functioning of one family member affects the entire system.

Despite extensive research, there remains a need for studies that simultaneously examine both directions of influence, which the present study aims to address.

3. METHODOLOGY

3.1 Aim

To examine the bidirectional relationship between parental mental health and ADHD behavioral symptoms in children.

3.2 Objectives

- To assess ADHD behavioral symptoms in children.
- To assess parental depression, anxiety, and stress.
- To examine the relationship between ADHD behaviour and parental mental health.
- To analyze the bidirectional influence between these variables.

Research Design

A quantitative, cross-sectional research design was used.

3.3 Sample Design and Sample Size

The target sample for this study consists of 75 parents. This sample size was determined to ensure sufficient statistical power for correlation and regression analyses. The study utilizes a Purposive Sampling Technique, a type of non-probability sampling. This method was chosen because the study requires a specific, "information-rich" group: parents whose children have a confirmed clinical diagnosis of ADHD. Participants are recruited from specialized environments, including child guidance clinics,

pediatric departments of hospitals, and special education centers in urban areas, ensuring the data reflects the authentic experiences of families currently seeking or receiving professional support.

3.3.1 Inclusion Criteria:

- Parents of children diagnosed with ADHD
- Children aged between 6–12 years
- Parents willing to participate

3.3.2 Exclusion Criteria:

- Children with severe comorbid psychiatric disorders
- Parents with diagnosed severe mental illness

Ethical Considerations

The study was conducted in accordance with established ethical guidelines to ensure the protection and well-being of all participants. Informed consent was obtained from all participating parents prior to data collection, ensuring that they were fully aware of the purpose of the study, the procedures involved, and their rights as participants. Confidentiality of the participants was strictly maintained by ensuring that all personal information and responses were kept anonymous and used solely for research purposes. Additionally, participation in the study was entirely voluntary, and participants were informed that they had the right to withdraw from the study at any point without any consequences.

Statistical Analysis

Statistical analysis was conducted using appropriate quantitative methods to examine the relationships between the study variables. Descriptive statistics, including mean and standard deviation, were calculated to summarize the central tendency and variability of ADHD behavioural symptoms and parental mental health variables. Pearson product–moment correlation analysis was performed to assess the strength and direction of the relationship between ADHD behaviour and parental depression, anxiety, and stress. Furthermore, regression analysis was employed to determine the predictive influence of ADHD behavioural symptoms on parental mental health, as well as the reverse influence of parental psychological distress on child ADHD behaviour, thereby examining the bidirectional relationship between the variables.

4. RESULTS

Table 4.1 Descriptive Statistics

Descriptive Statistics of Study Variables

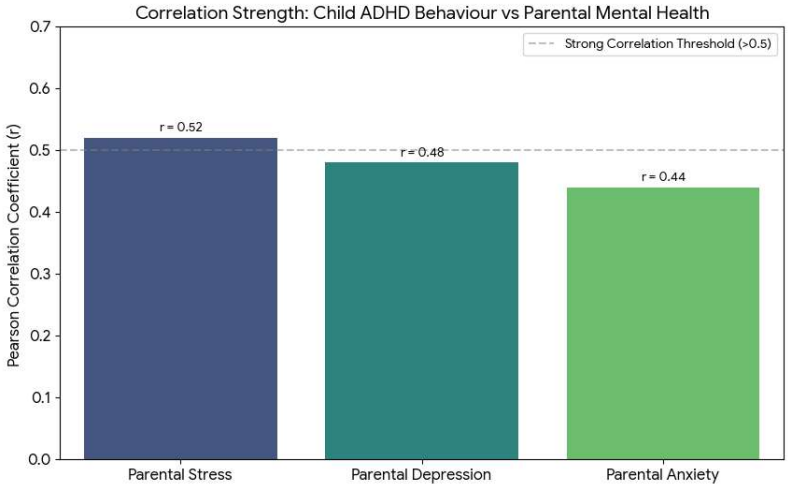
Variable	Mean	SD
ADHD Behaviour Score	65.32	10.45
Parental Depression	12.41	5.28
Parental Anxiety	13.62	5.74
Parental Stress	15.84	6.10

Table 4.2

Pearson Correlation between ADHD Behavior and Parental Mental Health

Variables	ADHD Behavior	Depression	Anxiety	Stress
ADHD Behavior	1			
Depression	.48	1		

Anxiety	.44	.59	1	
Stress	.52	.61	.63	1



4.3. Regression Analysis

ADHD Behavior Predicting Parental Mental Health

Table 4.3

Regression Analysis

Predictor	β	t	p
ADHD Behaviour → Depression	.48	4.72	.001
ADHD Behaviour → Anxiety	.44	4.11	.002
ADHD Behaviour → Stress	.52	5.03	.001

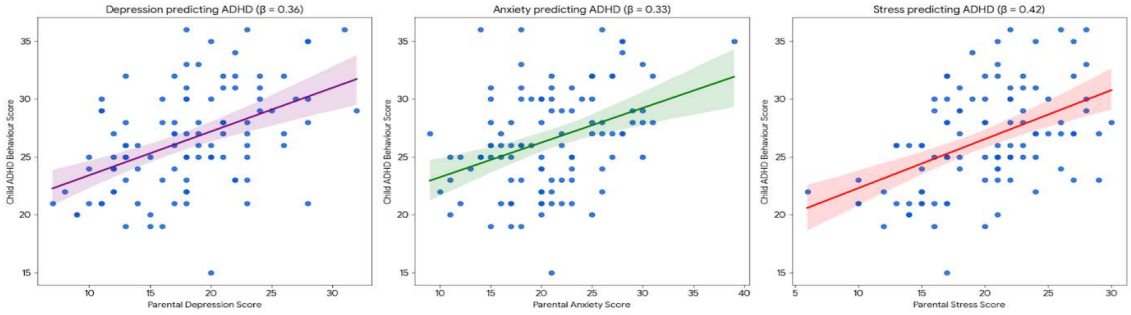
4.4 Reverse Analysis (Parent → Child Influence)

Table 4.4

Parental Mental Health Predicting ADHD Behavior

Predictor	β	t	p
Depression → ADHD Behaviour	.36	3.88	.001
Anxiety → ADHD Behaviour	.33	3.41	.002
Stress → ADHD Behaviour	.42	4.23	.001

R^2 = **0.24**



Interpretation

The results indicate moderate to high ADHD behavioural symptoms in children and moderate psychological distress among parents. Correlation analysis showed significant positive relationships between ADHD behaviour and parental mental health variables. Regression analysis confirmed that ADHD behaviour predicts parental distress (27% variance), and parental distress predicts ADHD behaviour (24% variance), indicating a bidirectional relationship.

5. DISCUSSION

The findings of the study highlight a strong association between ADHD behavioural symptoms and parental mental health. The results suggest that increased ADHD symptom severity contributes to higher levels of parental stress, anxiety, and depression. This may be due to the continuous demands of managing behavioural difficulties and academic challenges.

At the same time, parental psychological distress was found to influence child behaviour. Parents experiencing stress or depression may struggle with consistent parenting practices, which can lead to worsening behavioural outcomes in children.

The results support the Transactional Model of Development, which emphasizes reciprocal influences between children and parents. The findings also align with previous research indicating that ADHD affects the entire family system rather than just the child.

6. CONCLUSION

The present study confirms that the relationship between ADHD behavioural symptoms and parental mental health is bidirectional and mutually reinforcing. Children with higher ADHD symptoms are associated with increased parental psychological distress, while parental distress contributes to worsening behavioural regulation in children.

These findings highlight the importance of adopting family-centered approaches in the assessment and treatment of ADHD. Addressing both child behaviour and parental mental health is essential for achieving effective and sustainable intervention outcomes.

REFERENCES

1. Abidin, R. R. (1995). *Parenting stress index* (3rd ed.). Psychological Assessment Resources.
2. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
3. Barkley, R. A. (2015). *Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment* (4th ed.). Guilford Press.
4. Chronis, A. M., Chacko, A., Fabiano, G. A., Wymbs, B. T., & Pelham, W. E. (2006). Enhancements to the behavioral parent training paradigm for families of children with ADHD: Review and future directions. *Clinical Child and Family Psychology Review, 9*(1), 1–27. https://doi.org/10.1007/s10567-006-0003-6
5. Chronis-Tuscano, A., O'Brien, K. A., Johnston, C., Jones, H. A., Clarke, T. L., Raggi, V. L., Rooney, M. E., Diaz, Y., Pian, J., & Seymour, K. E. (2008). The relation between maternal ADHD symptoms and improvement in child behavior following brief behavioral parent training. *Journal of Abnormal Child Psychology, 36*(8), 1237–1250. https://doi.org/10.1007/s10802-008-9246-0
6. Conners, C. K. (2008). *Conners 3rd edition (Conners 3)*. Multi-Health Systems.

7. Conners, C. K., Sitarenios, G., Parker, J. D. A., & Epstein, J. N. (1998). The revised Conners' Parent Rating Scale (CPRS-R): Factor structure, reliability, and criterion validity. *Journal of Abnormal Child Psychology, 26*(4), 257–268. https://doi.org/10.1023/A:1022602400621
8. Crnic, K., & Low, C. (2002). Everyday stresses and parenting. In M. Bornstein (Ed.), *Handbook of parenting* (2nd ed., pp. 243–267). Lawrence Erlbaum Associates.
9. Cussen, A., Sciberras, E., Ukoumunne, O., & Efron, D. (2012). Relationship between symptoms of attention-deficit/hyperactivity disorder and family functioning: A community-based study. *European Journal of Pediatrics, 171*(2), 271–280. https://doi.org/10.1007/s00431-011-1524-4
10. Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487–496. https://doi.org/10.1037/0033-2909.113.3.487
11. Deault, L. C. (2010). A systematic review of parenting in relation to the development of comorbidities and functional impairments in children with ADHD. *Child Psychiatry & Human Development, 41*(2), 168–192. https://doi.org/10.1007/s10578-009-0159-4
12. Gomez, R., Vance, A., & Gomez, R. M. (2015). ADHD in children and adolescents: A review of cross-cultural perspectives. *Clinical Child Psychology and Psychiatry, 20*(4), 669–684.
13. Harvey, E., Danforth, J. S., Ulaszek, W. R., & Eberhardt, T. L. (2001). Validity of the parenting scale for parents of children with attention-deficit/hyperactivity disorder. *Behaviour Research and Therapy, 39*(6), 731–743. https://doi.org/10.1016/S0005-7967(00)00038-2
14. Johnston, C., & Mash, E. J. (2001). Families of children with attention-deficit/hyperactivity disorder: Review and recommendations for future research. *Clinical Child and Family Psychology Review, 4*(3), 183–207. https://doi.org/10.1023/A:1017592030434
15. Johnston, C., & Chronis-Tuscano, A. (2015). Families and ADHD. In R. A. Barkley (Ed.), *Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment* (4th ed., pp. 191–209). Guilford Press.
16. Joseph, A., & Devu, B. K. (2019). Prevalence of attention deficit hyperactivity disorder among children in India: A systematic review and meta-analysis. *Indian Journal of Psychological Medicine, 41*(2), 123–130.
17. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
18. Lifford, K. J., Harold, G. T., & Thapar, A. (2008). Parent–child relationships and ADHD symptoms: A longitudinal analysis. *Journal of Abnormal Child Psychology, 36*(2), 285–296. https://doi.org/10.1007/s10802-007-9177-6
19. Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed.). Psychology Foundation.
20. Minuchin, S. (1985). Families and individual development: Provocations from the field of family therapy. *Child Development, 56*(2), 289–302. https://doi.org/10.2307/1129720
21. Neece, C. L., Green, S. A., & Baker, B. L. (2012). Parenting stress and child behavior problems: A transactional relationship across time. *American Journal on Intellectual and Developmental Disabilities, 117*(1), 48–66. https://doi.org/10.1352/1944-7558-117.1.48
22. Patterson, G. R. (2002). *The early development of coercive family process*. In J. B. Reid, G. R. Patterson, & J. Snyder (Eds.), *Antisocial behavior in children and adolescents* (pp. 25–44). American Psychological Association.

23. Podolski, C. L., & Nigg, J. T. (2001). Parent stress and coping in relation to child ADHD severity and comorbidity. *Journal of Clinical Child Psychology, 30*(4), 503–513. https://doi.org/10.1207/S15374424JCCP3004_07
24. Polanczyk, G. V., Willcutt, E. G., Salum, G. A., Kieling, C., & Rohde, L. A. (2015). ADHD prevalence estimates across three decades: An updated systematic review and meta-regression analysis. *International Journal of Epidemiology, 43*(2), 434–442. https://doi.org/10.1093/ije/dyt261
25. Rohit, M., Kumar, S., & Reddy, Y. C. J. (2020). ADHD in India: Current perspectives and challenges. *Indian Journal of Psychiatry, 62*(Suppl 2), S238–S244.
26. Sameroff, A. (2009). *The transactional model of development: How children and contexts shape each other*. American Psychological Association.
27. Selig, J. P., & Little, T. D. (2012). Autoregressive and cross-lagged panel analysis for longitudinal data. In B. Laursen, T. D. Little, & N. Card (Eds.), *Handbook of developmental research methods* (pp. 265–278). Guilford Press.
28. Slobodin, O., & Davidovitch, M. (2019). Gender differences in objective and subjective measures of ADHD among clinic-referred children. *Frontiers in Human Neuroscience, 13*, 441. https://doi.org/10.3389/fnhum.2019.00441
29. Theule, J., Wiener, J., Rogers, M. A., & Marton, I. (2010). Predicting parenting stress in families of children with ADHD: Parent and contextual factors. *Journal of Child and Family Studies, 20*(5), 640–647. https://doi.org/10.1007/s10826-010-9439-7
30. Theule, J., Wiener, J., Tannock, R., & Jenkins, J. M. (2013). Parenting stress in families of children with ADHD: A meta-analysis. *Journal of Emotional and Behavioral Disorders, 21*(1), 3–17. https://doi.org/10.1177/1063426610387433
31. World Health Organization. (2017). *Depression and other common mental disorders: Global health estimates*. World Health Organization.
32. World Health Organization. (2018). *Mental health: Strengthening our response*. World Health Organization.