



Parenting Stress

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Abstract

Parenting Stress relates to stressors that are a function of being in and executing the parenting role. It is a construct that relates to both psychological phenomena and to the human body's physiological state as a parent or caretaker of a child. This article serves as a brief narrative review of the construct.

Keywords: Parenting stress

Introduction

Parenting Stress relates to stressors that are a function of being in and executing the parenting role. Unlike many stressful situations and events, parenting stressors tend to be long-term, repetitive, and can create chronic stress that manifests both in psychological and physiological ways. Extensive cross-cultural research has found that parenting stress is associated with parenting and child behaviors, various parenting-related cognitions, and the parent's and child's physiological states. Abidin^[2] has presented a non-exhaustive model and a measure that attempts to define the major components of parenting stress, and the impact of these stressors on parenting behavior and their child's development.^{[3][4][5]} The model concentrates on proximal variables related to the execution of the parenting role: the perceived behavioral characteristics of the child, the parent's self-cognitions, and their perceptions of the familial and friend support available to them. These proximal factors in turn connect with other aspects of the child's and the parent's interpersonal milieu. There are several operational definitions and ways of measuring aspects of parenting stress.^[6] Many of these have shown good reliability and criterion validity across a range of different samples, establishing evidence of generalizability. The Parenting Stress Index (PSI),^[7] the most widely used measure of parenting stress, has shown associations with a wide range of parenting behaviors and child

outcomes (see research reference list containing hundreds of published studies at this link). Since the fourth edition of the PSI has been translated in over 30 languages,^[8] cross-cultural replications of the PSI factor structure have been published using normative samples from several countries. Copies of these measures and their test manuals may be obtained from the respective publisher. The goal of this article is to provide a brief overview of the construct of parenting stress for a broader audience, given that the topic is likely to be of interest and importance across a wide range of medical and research contexts. Parenting is a human universal across time and culture, and the construct connects with psychological development, socialization of children, education, health (including when either person in the parent-child dyad experiences other illness or injury), and a wealth of other issues. The overview concludes with links to resources for learning more, or for incorporating measures into other programs of research. For a recent and comprehensive review of the available parenting stress-related evidence-based measures, see Holly et al.^[6]

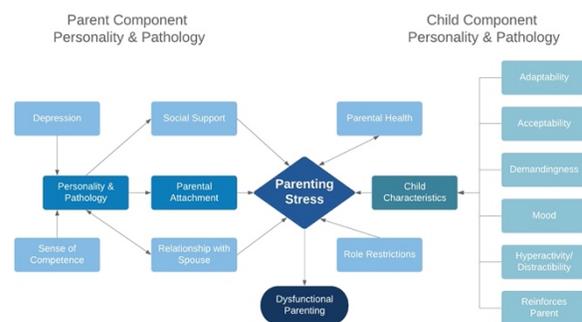


Figure 1 | Parent and child personality and pathology factors that contribute to parenting stress. *Hannah Kim, CC-BY 3.0^[1]*

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The Nature of Parenting Stress

The construct of parenting stress builds on the seminal works of both Selye^[9] and Lazarus.^[10] Selye demonstrated that a physiological response occurred in the body by phenomenological events like physical environmental stimuli. Although not always maladaptive, the stress in parenting is more likely to be maladaptive, especially when the stress is severe or chronic. Further, he demonstrated that, regardless of the sources of stress, the greater the number of stressors, the larger the body's physiological response. That finding suggested that parenting stress would need to be understood and measured by considering multiple variables. Lazarus articulated the connection of perceptions to emotions and subsequently to both the physiological response and the likely behavioral responses of individuals. Parenting stress thus conceived is not simply a reaction to observable events but the interpretations and other cognitions of the parent relative to the events. The Lazarus model suggests four stages of the stress reaction:

1. Recognition of an environmental demand,
2. The perception of the demand in terms of whether it is perceived as a threat,
3. Whether or not the individual believes they have the resources to cope with the event. This process is instantaneous and is essentially an unconscious response.
4. Based on stage three, the nervous system responds by either relaxing or preparing to flee or fight.

Thus, the works of Selye and Lazarus provide conceptual frameworks for understanding the links between emotion perception, stress, and coping. For a review of the available evidence-based measures of parenting stress, see Holly et al. (2019).^[6]

Overview of Research on Parenting Stress

Kirby Deater-Deckard, in the volume *Parenting Stress*, presented the first comprehensive articulation of the research on parenting stress concerning the characteristics of parents, the parent-child relationship, and parents' coping behaviors.^[11] Since Deater-Deckard's work, there has been a rapid expansion of research documenting the linkage between parenting stress and a wide variety of important issues related to family functioning and child development and behavior. The summary below provides a brief sampling to illustrate the breadth of impact parenting stress has on members of the core family system. It is a illustrative review

extracting some examples from a recent more comprehensive review (with its own formal literature review search and extraction process) to concisely introduce a range of topics.

Observed Parenting Behavior

Parenting stress has been demonstrated to be predictive of abusive mother's behavior towards their children during free play and task situations, parents' verbal harshness, demanding and controlling behaviors, and parents' level of warmth and engagement with their child.^{[12][13][14][15][16][17]}

Child Development and Outcomes

Parents' level of stress has been found to be predictive of the development of problem behaviors in children, children's aggressiveness, callous-unemotional traits in children, and children's coping competence.^{[12][18][19][20][21]} Barroso et al. conducted a major review and meta-analysis of the parenting stress literature, which revealed that parenting stress is a major factor with parents coping with their children's behavior.^{[22][23]}

Child Academic Functioning

Children whose parents exhibit high levels of parenting stress display difficulties in executive functioning, lower levels of academic competence, and other behavioral problems in school.^{[24][25][23][22]}

Physical Health and Physiological Issues

Parenting stress has been associated with elevated cortisol and oxytocin levels both in parents and their children.^{[24][26][23]} These are well-established chemical markers of an individual's mental and physical health. Mothers who exhibit high levels of parenting stress also display a failure to care for their own health needs while also overusing pediatric healthcare services for their children.^{[22][27]} Parenting stress has also been associated with parental brain functioning, epigenetic DNA methylation, and parent-child behavioral synchrony, and brain synchrony.^{[28][29][30]}

Compliance with Medical and Psychological Treatment

Parents with elevated stress levels have significantly higher non-compliance rates for their treatment and the medically necessary care of their children. They also are early terminators of psychological treatments for their children.^{[31][32][33]}



The Parenting Partner Relationship

The quality of the parents' relationship is a central variable in terms of child outcomes. The level of parenting stress experienced by parenting partners is associated with the child's physical and mental health.^{[34][35][36]}

Future Directions

This article serves only as a brief review and does not present an analytical approach to the concept of parenting stress. Future work should build on this review by incorporating statistical techniques to provide a quantitatively focused review of the topic. This analysis could include multi-group confirmatory factor analyses and differential item functioning to examine the extent to which parenting stress is consistent across societies and settings, as well as meta-analyses of the growing literature about associations with various aspects of parent and youth functioning.

Summary

Parenting stress as a construct is a relatively young idea in psychology, but research has quickly proliferated. Several instruments are available that measure aspects of parenting stress with good reliability and validity across a wide range of settings and samples. Parenting stress appears associated with a wide range of correlates and outcomes in both youths and the parents, emphasizing its vital role in family functioning.

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References

- Kim, Hannah (2019). "Parenting Stress". *Open Science Framework*. doi:10.17605/osf.io/9cg58.
- Abidin, Richard R. (1992-12). "The Determinants of Parenting Behavior". *Journal of Clinical Child Psychology* 21 (4): 407–412. doi:10.1207/s15374424jccp2104_12. ISSN 0047-228X.
- Abidin, Richard R. (1986). *Parenting Stress Index : manual (PSI)*. Pediatric Psychology Press. OCLC 21184758.
- Abidin, Richard R. (1995). *Parenting Stress Index : professional manual*. Psychological Assessment Resources. OCLC 55989316.
- Richard, Abidin (2017-08-10). *Parenting Stress Lecture*. Washington, D.C.
- Holly, Lindsay E.; Fenley, Alicia R.; Kritikos, Tessa K.; Merson, Rachel A.; Abidin, Richard R.; Langer, David A. (2019-09-03). "Evidence-Base Update for Parenting Stress Measures in Clinical Samples". *Journal of Clinical Child & Adolescent Psychology* 48 (5): 685–705. doi:10.1080/15374416.2019.1639515. ISSN 1537-4416. PMID 31393178.
- Abidin, Richard R. (2012) *Parenting Stress Index: 4th Ed. Manual*. Psychological Assessment Resources Inc. 987654321.
- "Parenting Stress Index, 4th Edition | PSI-4". *www.parinc.com*. Retrieved 2021-05-03.
- Selye, Hans, 1907-1982. (1978). *The stress of life* (Rev. ed.). New York: McGraw-Hill. ISBN 0070562121. OCLC 3294632.
- Lazarus, Richard S. (2006). *Stress and emotion : a new synthesis*. Springer Pub. Co. ISBN 9780826102614. OCLC 224717677.
- Deater-Deckard, Kirby (2004-08-11). *Parenting Stress*. Yale University Press. pp. 27–54. doi:10.12987/yale/9780300103939.001.0001. ISBN 9780300103939.
- Tripp, Gail; Schaugency, Elizabeth A.; Langlands, Robyn; Mouat, Kelly (2007-06-01). "Family Interactions in Children With and Without ADHD". *Journal of Child and Family Studies* 16 (3): 385–400. doi:10.1007/s10826-006-9093-2. ISSN 1573-2843.
- Wagner, Shannon L.; Cepeda, Ivan; Krieger, Denia; Maggi, Stefania; D'Angiulli, Amedeo; Weinberg, Joanne; Grunau, Ruth E. (2015-09-03). "Higher cortisol is associated with poorer executive functioning in preschool children: The role of parenting stress, parent coping and quality of daycare". *Child Neuropsychology* 22 (7): 853–869. doi:10.1080/09297049.2015.1080232. ISSN 0929-7049.
- Niu, Hua; Liu, Li; Wang, Meifang (2018-05). "Intergenerational transmission of harsh discipline: The moderating role of parenting stress and parent gender". *Child Abuse & Neglect* 79: 1–10. doi:10.1016/j.chiabu.2018.01.017. ISSN 0145-2134.
- Feldman, Ruth; Gordon, Ilanit; Zagoory-Sharon, Orna (2010-12-16). "Maternal and paternal plasma, salivary, and urinary oxytocin and parent-infant synchrony: considering stress and affiliation components of human bonding". *Developmental Science* 14 (4): 752–761. doi:10.1111/j.1467-7687.2010.01021.x. ISSN 1363-755X.
- McKay, Jessamy M.; Pickens, Jeffrey; Stewart, Anne L. (1996-09-01). "Inventoried and observed stress in parent-child interactions". *Current Psychology* 15 (3): 223–234. doi:10.1007/BF02686879. ISSN 1936-4733.
- Nelson, J. Ron; Stage, Scott; Duppong-Hurley, Kristin; Synhorst, Lori; Epstein, Michael H. (2007-04). "Risk Factors Predictive of the Problem Behavior of Children at Risk for Emotional and Behavioral Disorders". *Exceptional Children* 73 (3): 367–379. doi:10.1177/001440290707300306. ISSN 0014-4029.
- Gordon, Chanelle T.; Hinshaw, Stephen P. (2017). "Parenting Stress as a Mediator between Childhood ADHD and Early Adult Female Outcomes". *Journal of clinical child and adolescent psychology : the official journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53* 46 (4): 588–599. doi:10.1080/15374416.2015.1041595. ISSN 1537-4416. PMID 26042524. PMC 4670298.
- Cappa, Kimberly A.; Begle, Angela Moreland; Conger, Judith C.; Dumas, Jean E.; Conger, Anthony J. (2011-06-01). "Bidirectional Relationships Between Parenting Stress and Child Coping Competence: Findings From the Pace Study". *Journal of Child and Family Studies* 20 (3): 334–342. doi:10.1007/s10826-010-9397-0. ISSN 1573-2843. PMID 31320789. PMC PMC6639041.
- Joyner, Krystle B.; Silver, Cheryl H.; Stavinoha, Peter L. (2009-04-13). "Relationship Between Parenting Stress and Ratings of Executive Functioning in Children With ADHD". *Journal of Psychoeducational Assessment* 27 (6): 452–464. doi:10.1177/0734282909333945. ISSN 0734-2829
- DeCaro, Jason A.; Worthman, Carol M. (2008). "Return to school accompanied by changing associations between family ecology and cortisol". *Developmental Psychobiology* 50 (2): 183–195. doi:10.1002/dev.20255. ISSN 0012-1630.
- Raphael, J. L.; Zhang, Y.; Liu, H.; Giardino, A. P. (2010-03). "Parenting stress in US families: implications for paediatric healthcare utilization". *Child: Care, Health and Development* 36 (2): 216–224. doi:10.1111/j.1365-2214.2009.01052.x. ISSN 0305-1862.
- Barroso, Nicole E.; Mendez, Lucybel; Graziano, Paulo A.; Bagner, Daniel M. (2017-05-29). "Parenting Stress through the Lens of Different Clinical Groups: a Systematic Review & Meta-Analysis". *Journal of Abnormal Child Psychology* 46 (3): 449–461. doi:10.1007/s10802-017-0313-6. ISSN 0091-0627.
- Le, Yunying; Fredman, Steffany J.; Feinberg, Mark E. (2017-09). "Parenting stress mediates the association between negative affectivity and harsh parenting: A longitudinal dyadic analysis". *Journal of Family Psychology* 31 (6): 679–688. doi:10.1037/fam0000315. ISSN 1939-1293.
- Gerson, A. C.; Furth, S. L.; Neu, A. M.; Fivush, B. A. (2004-12). "Assessing associations between medication adherence and potentially modifiable psychosocial variables in pediatric kidney transplant recipients and their



- families". *Pediatric Transplantation* 8 (6): 543–550. doi:10.1111/j.1399-3046.2004.00215.x. ISSN 1397-3142.
26. Harmeyer, Erin; Ispa, Jean M.; Palermo, Francisco; Carlo, Gustavo (2016). "Predicting self-regulation and vocabulary and academic skills at kindergarten entry: The roles of maternal parenting stress and mother-child closeness". *Early Childhood Research Quarterly* 37: 153–164. doi:10.1016/j.ecresq.2016.05.001. ISSN 0885-2006.
27. Benzie, Karen M.; Harrison, Margaret J.; Magill-Evans, Joyce (2004-03). "Parenting Stress, Marital Quality, and Child Behavior Problems at Age 7 Years". *Public Health Nursing* 21 (2): 111–121. doi:10.1111/j.0737-1209.2004.021204.x. ISSN 0737-1209.
28. Noriuchi, Madoka; Kikuchi, Yoshiaki; Mori, Kumiko; Kamio, Yoko (2019-02-07). "The orbitofrontal cortex modulates parenting stress in the maternal brain". *Scientific Reports* 9 (1). doi:10.1038/s41598-018-38402-9. ISSN 2045-2322.
29. Wright, Michelle L.; Huang, Yunfeng; Hui, Qin; Newhall, Kevin; Crusto, Cindy; Sun, Yan V.; Taylor, Jacquelyn Y. (2017-12). "Parenting stress and DNA methylation among African Americans in the InterGEN Study". *Journal of Clinical and Translational Science* 1 (6): 328–333. doi:10.1017/cts.2018.3. ISSN 2059-8661.
30. Azhari, A.; Leck, W. O.; Gabrieli, G.; Bizzego, A.; Rigo, P.; Setoh, P.; Bornstein, M. H.; Esposito, G. (2019-08-06). "Parenting Stress Undermines Mother-Child Brain-to-Brain Synchrony: A Hyperscanning Study". *Scientific Reports* 9 (1). doi:10.1038/s41598-019-47810-4. ISSN 2045-2322.
31. McWey, Lenore; Holtrop, Kendal (2013). "Retention in a parenting intervention for parents involved with the child welfare system". *PsycEXTRA Dataset*. doi:10.1037/e635102013-004. Retrieved 2019-09-19.
32. Rostad, Whitney L.; Moreland, Angela D.; Valle, Linda Anne; Chaffin, Mark J. (2017-12-22). "Barriers to Participation in Parenting Programs: The Relationship between Parenting Stress, Perceived Barriers, and Program Completion". *Journal of Child and Family Studies* 27 (4): 1264–1274. doi:10.1007/s10826-017-0963-6. ISSN 1062-1024.
33. Mash, Eric J.; Johnston, Charlotte; Kovitz, Karen (1983-12). "A comparison of the mother-child interactions of physically abused and non-abused children during play and task situations". *Journal of Clinical Child Psychology* 12 (3): 337–346. doi:10.1080/15374418309533154. ISSN 0047-228X.
34. Kanter, Jeremy B.; Proulx, Christine M. (2019-02). "The longitudinal association between maternal parenting stress and spousal supportiveness". *Journal of family psychology: JFP: journal of the Division of Family Psychology of the American Psychological Association (Division 43)* 33 (1): 121–131. doi:10.1037/fam0000478. ISSN 1939-1293. PMID 30475003.
35. Leavitt, Chelom E.; McDaniel, Brandon T.; Maas, Megan K.; Feinberg, Mark E. (2016-04-12). "Parenting Stress and Sexual Satisfaction Among First-Time Parents: A Dyadic Approach". *Sex Roles* 76 (5-6): 346–355. doi:10.1007/s11199-016-0623-0. ISSN 0360-0025.
36. Korpa, Terpsichori; Pervanidou, Panagiota; Angeli, Eleni; Apostolakou, Folia; Papanikolaou, Katerina; Papassotiropou, Ioannis; Chrousos, George P.; Kolaitis, Gerasimos (03 2017). "Mothers' parenting stress is associated with salivary cortisol profiles in children with attention deficit hyperactivity disorder". *Stress (Amsterdam, Netherlands)* 20 (2): 149–158. doi:10.1080/10253890.2017.1303472. ISSN 1607-8888. PMID 28264636