

TRAJECTORY OF PARENTING CONFIDENCE AMONG PARENTS OF INFANTS WITH COMPLEX CHRONIC CONDITIONS

Ashlee J. Vance, Ph.D., MA, RN, RNC-NIC

*Assistant Scientist: Center for Health Policy & Health Services Research, Henry Ford Health
Assistant Professor: College of Nursing & College of Human Medicine, Michigan State University*

FANNP's National Neonatal Nurse Practitioner Symposium: Clinical Update and Review, 2025 ©



1

DISCLOSURE

Dissertation funding provided by NIH/NINR F31, NANN Small Grant award, & FANNP grant award.

FANNP's National Neonatal Nurse Practitioner Symposium: Clinical Update and Review, 2025 ©



2

OBJECTIVES

1. Describe the prevalence and family impacts of infants with complex chronic conditions (i.e., medical complexity).
2. Explain the concept of parent confidence and relationship to infant outcomes, family functioning, & parental well-being.
3. Identify patterns and predictors of parent confidence trajectories among parents of infants with complex chronic conditions.

FANNP's National Neonatal Nurse Practitioner Symposium: Clinical Update and Review, 2025 ©



3

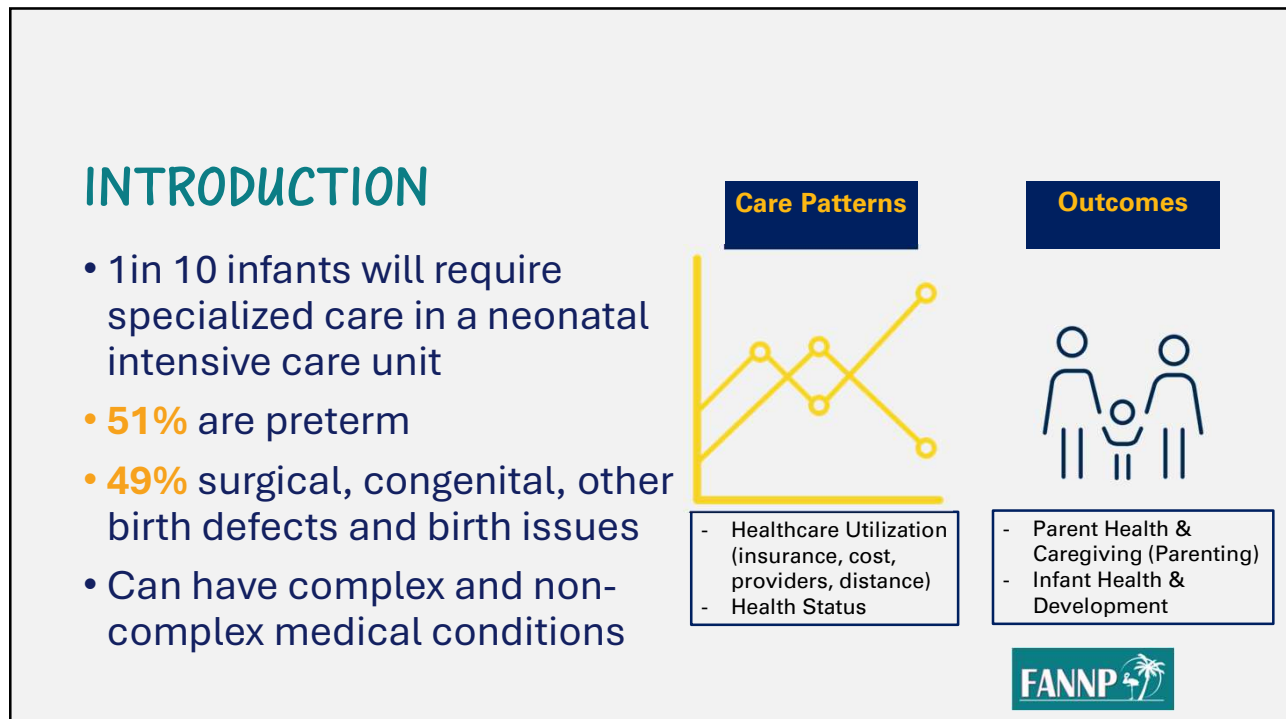
SOCIAL IDENTITIES



4



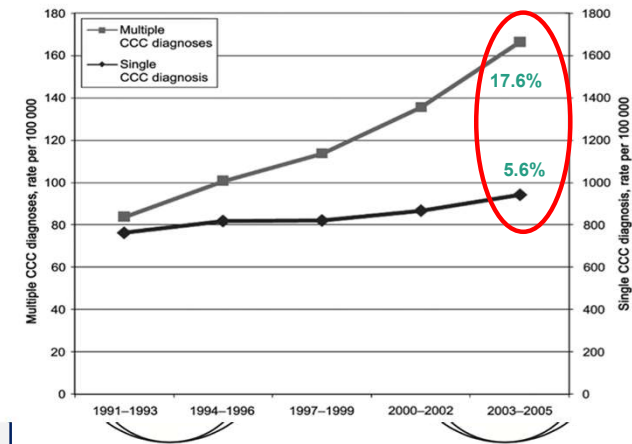
5



6

MEDICAL COMPLEXITY

- Subgroup of Children with Special Healthcare Needs
- Highest degree of medical fragility
 - 1% IMC = 34% of spending
 - ~30% of NICU discharges
 - ↑ prevalence over the last decade



Cohen, et al (2011)
Berry, et al (2014)
Kieran et al (2019)
Burns, et al (2010)



7

PARENT CONFIDENCE & PARENTING SELF-EFFICACY

A parent's judgement about their ability to engage in parenting practices that influence positive growth and development of their child.

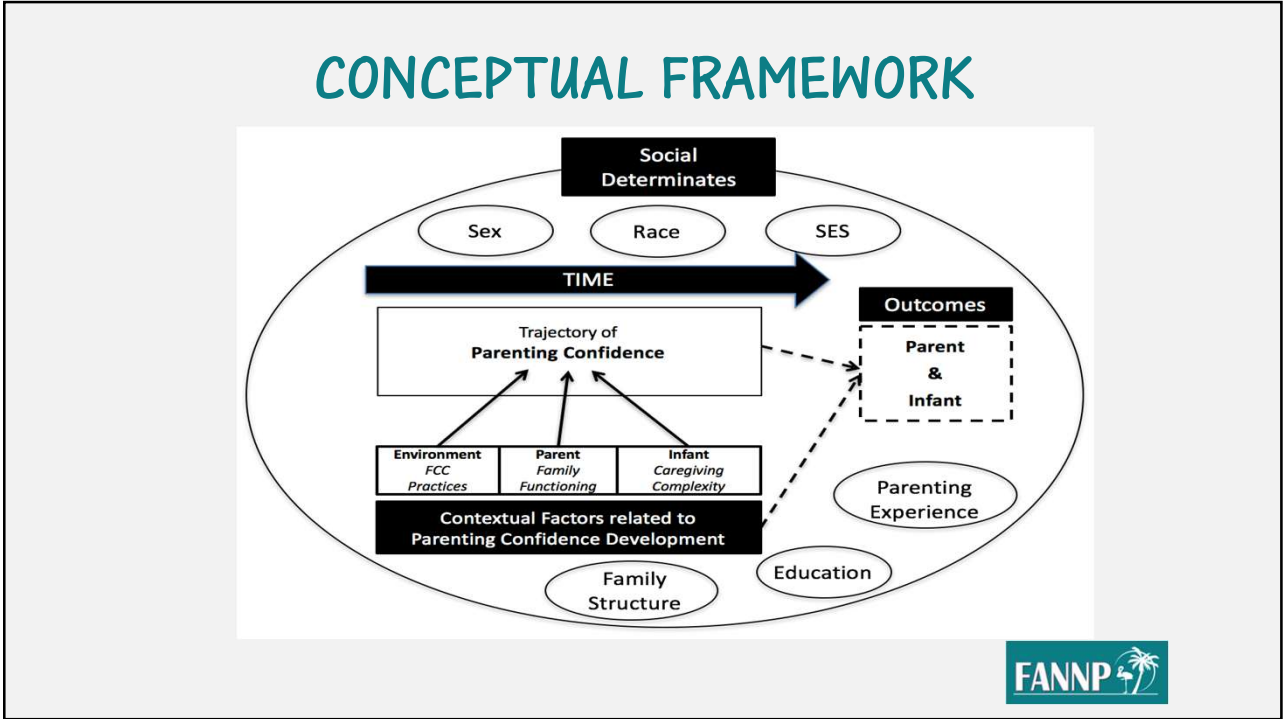
1. More resilient
2. Better equipped in challenging situations
3. More competent in play interactions
4. Associated with infant health status

1. Contributes to social isolation
2. More stress, depressive symptoms and poorer family functioning
3. Perceptions of difficult infant temperament

Jones & Prinz (2005); Benzie et al (2013); Coleman et al (2003); Kohlhoff (2013); Seigny et al (2010); Verhage et al (2015)



8



9

DESIGN

- Longitudinal, Multi-method
- Prospective survey

Birth | *LOS: 52 days* | *Discharge*

Study Length: 5-6 months

SAMPLE

- Parents (Mothers & Fathers)
- ICN & PCICU

Inclusion Criteria	Exclusion Criteria
✓ Self-Identified Parent	✓ Adoptive and adolescent parent(s)
✓ Expected to survive initial 3 weeks	✓ Multiple gestation pregnancies/births
✓ Expected discharge home with parent(s)	✓ Acute diagnoses
✓ English speaking/reading	

Cerebral hemorrhage at birth	P10.0, P10.1, P10.4, P52.4, P52.8	Subdural hemorrhage due to birth injuryCerebral hemorrhage due to birth injury Intracerebral (nontraumatic) hemorrhage of
------------------------------	-----------------------------------	---

10

DATA COLLECTION

1. Karitane Parenting Confidence Scale (**Confidence**) (x3)
2. Family Assessment Device (**Family Health**) (x3)
3. Helpgiving Practices Scale (**FCC**) (x1)
4. General Psychological Well-Being Index (**Wellbeing**) (x2)
5. Technology Dependence Scale (**Caregiving Complexity**) (x3)

11

Maternal Variables	Mean	SD
Age	30.05	5.43
Number of Children	1.91	1.16
Education in Years	6.27	3.18
	n	%
Race		
non-Hispanic White	42	63
non-Hispanic Black	13	19
non-Hispanic Other	6	9
Hispanic	6	9
Marital Status		
Married	40	60
Single/Never Married	16	24
Living with Partner	9	14
Divorced/Separated	2	3
Income		
< 25,000	18	28
25,000 – 50,000	21	32
50,000 – 100,000	14	21
> 100,000	12	18
Private Insurance	36	55

N=67

DEMOGRAPHICS

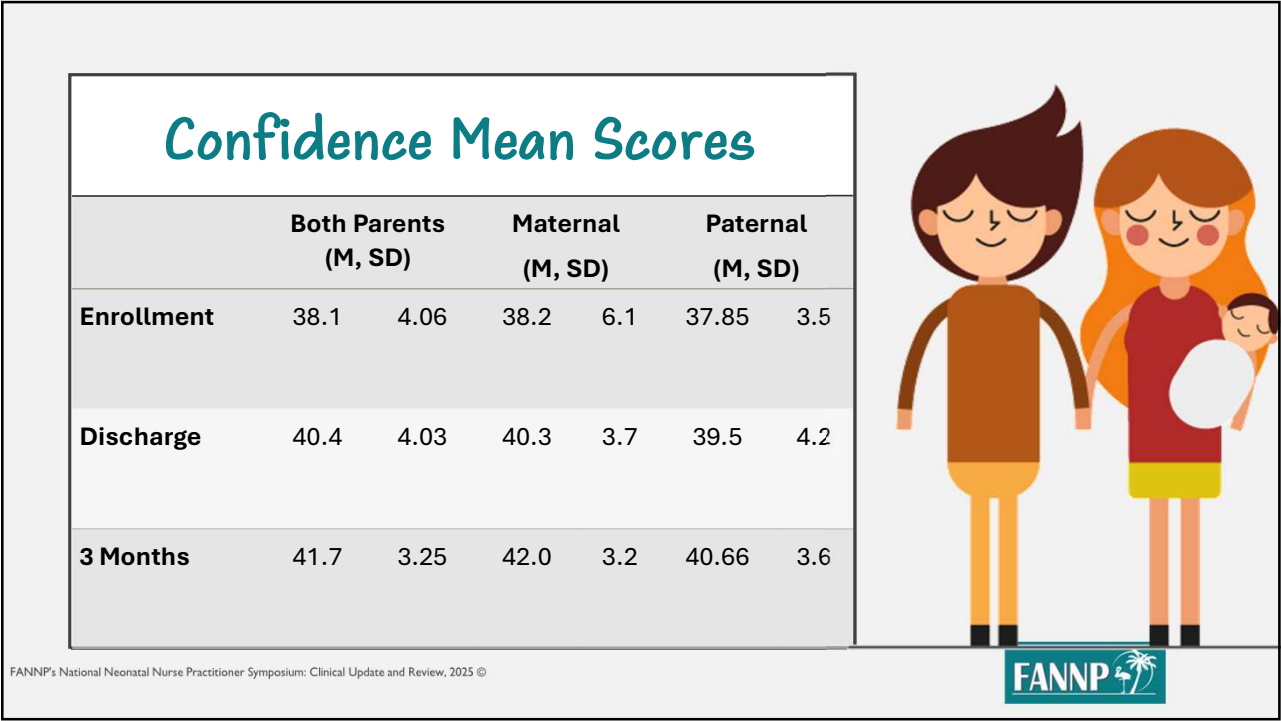
Paternal Variables	Mean	SD
Age	33.8	6.3
Number of Children ¹	1.9	1.2
	n	%
Race		
non-Hispanic White	20	74
non-Hispanic Black	3	11
Hispanic	4	15
Marital Status		
Married/Living Together	23	85
Single/Divorced	4	15
Income		
< 25,000	5	18.5
25,000 – 50,000	4	15.5
50,000 – 100,000	9	33
> 100,000	9	33

N=27

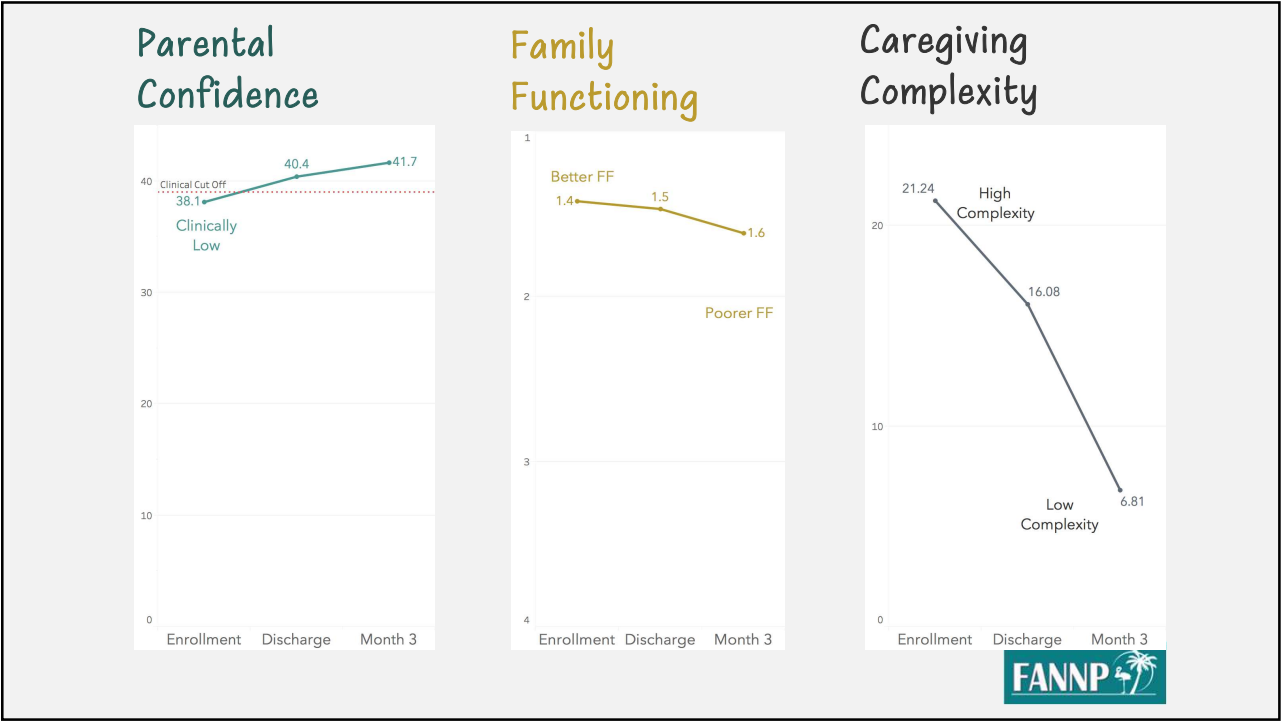
Infant Variables	Mean	SD
Gestational Age (weeks)	33.81	5.74
Length of Stay (days)	62.62	45.58
Complex Chronic Conditions	3.31	1.60
Medications at Discharge	3.47	2.84
	n	%
Male	37	56
Sibling Rank		
1 st child	33	50
2 nd child	16	24
3 or more	18	26
Diagnosis Category		
Congenital Birth Defects	19	28.3
Extremely Premature	18	26.1
Complex Heart	16	24.6
Other	14	21.5
Prenatal Diagnosis (Yes)	38	57.5

¹Number of children includes infant enrolled in study

12




13



14


Parenting Confidence Changes in 67 Mothers of High-Risk Infants, Followed Longitudinally

Confidence increased over time




Moms who were older or had >1 child were more likely to have increase in confidence.

Married moms had lower confidence




Moms with stressful family environments also had lower confidence.


As confidence rose, so did mental wellbeing




A mom's better psychological state may mean better care for the sick infant.




Vance, A. J., Pan, W., Malcolm, W. H., & Brandon, D. H.
Development of parenting self-efficacy in mothers of high-risk infants
Early Human Development Feb. 2020, DOI:10.1016/j.earlhumdev.2019.104946



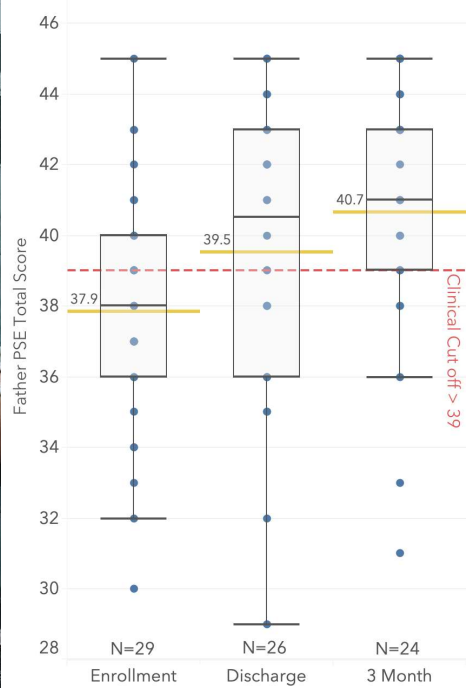
National Clinician
Scholars Program



INSTITUTE FOR
HEALTHCARE POLICY
& INNOVATION



15




Time Point	N	Median Score	Q1	Q3
Enrollment	29	37.9	36.0	40.0
Discharge	26	39.5	36.0	43.0
3 Month	24	40.7	39.0	43.0

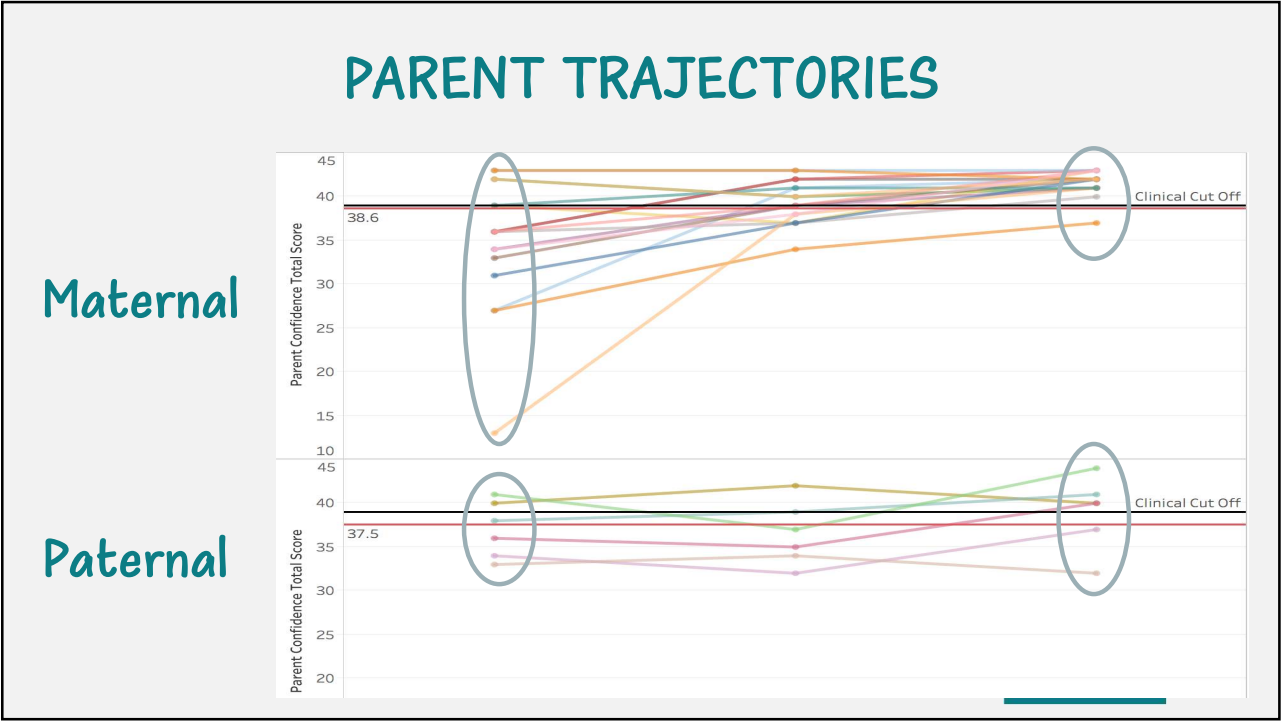
Paternal Confidence

- Confidence significantly increased over time but lower than mothers.
- Partnered fathers & those with better psychological well-being was associated with ↑ confidence scores.
- Hispanic ethnicity, number of CCC & caregiving complexity associated with ↓ confidence.

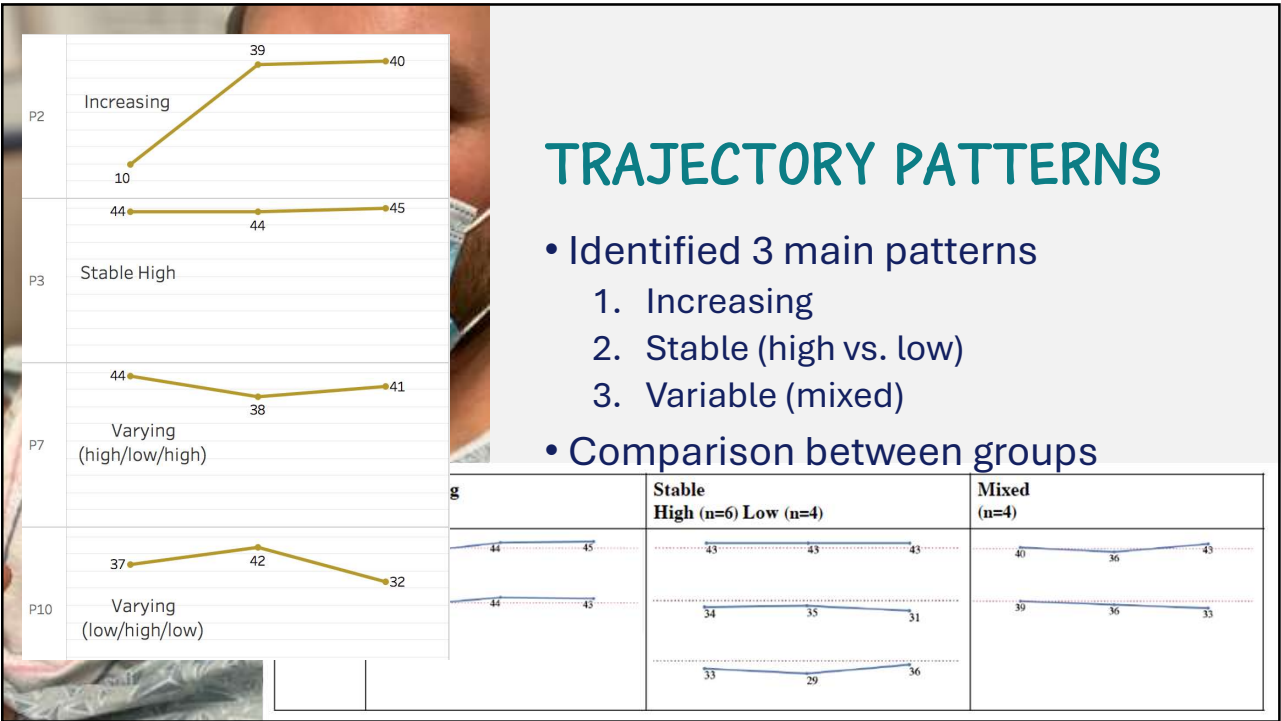
Vance, A. J., Costa, D. K., & Brandon, D. H. (2021). Parenting self-efficacy in fathers of medically complex infants: A longitudinal study. *Journal of Neonatal Nursing*, 27(6), 439-443. <https://doi.org/10.1016/j.jnn.2021.06.004>



16

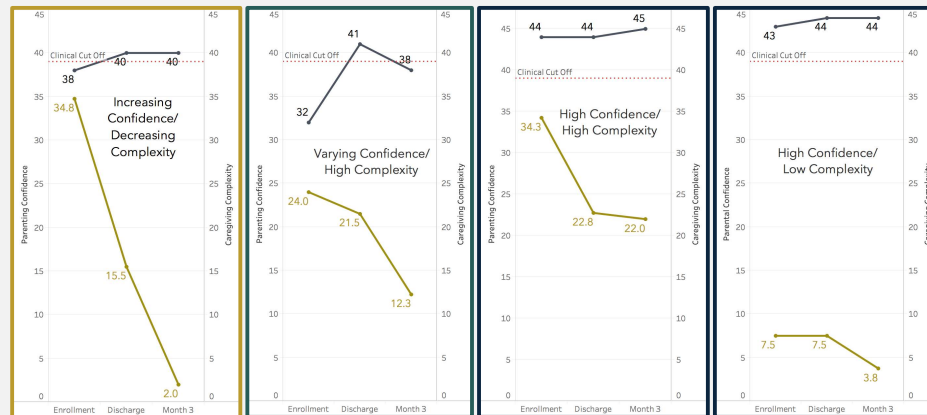


17



18

CONFIDENCE & COMPLEXITY TRAJECTORIES



Vance, A. J., Knafl, K., & Brandon, D. H. (2021). Patterns of Parenting Confidence Among Infants With Medical Complexity: A Mixed-Methods Analysis. *Advances in Neonatal Care*, 21(2), 160-168. <https://doi.org/10.1097/ANC.0000000000000754>



19

CLARIFICATION OF CONCEPT

Advances in Nursing Science
Vol. 40, No. 4, pp. E18-E37
Copyright © 2017 Wolters Kluwer Health | All rights reserved.

Delineating Among Parenting Confidence, Parenting Self-Efficacy, and Competence

Ashlee J. Vance, MA, RN, RNC-NIC
Debra H. Brandon, PhD, RN, CNS, FAAN

This article examined the concepts of parenting self-efficacy, parenting confidence, and competence. Using Morse's method of concept delineation, a literature review of each concept was conducted to uncover commonalities, distinctions, and measurement overlaps between concepts and provide conceptual boundaries. Findings revealed that parenting confidence and parenting self-efficacy describe a parents' internal attribution or beliefs about their ability to engage in parenting behaviors. Both terms have similar antecedents, attributes, and consequences, whereas competence is a concept that should be used as an objective measure by someone other than the parent to assess parenting quality. **Key words:** competence, concept delineation, infant health and development, parenting, parenting confidence, parenting self-efficacy


- **Parenting Self-Efficacy & Parenting Confidence** are equal terms regarding a parent's belief in their capacity to perform the behaviors expected of them in their parental role.
 - *Confidence is the word we use to operationalize self-efficacy.*
 - *Current measures cannot distinguish between the two concepts.*
- **Competence** – an objective assessment by someone *other* than the parent assessing the quality of their parenting behavior.

Vance, A. J., & Brandon, D. H. (2017). Delineating Among Parenting Confidence, Parenting Self-Efficacy, and Competence. *ANS: Advances in Nursing Science*, 40(4), E18-E37.




20

IMPLICATIONS



- Confidence matters
- Equitable Interactions & Communication
 - Emotional support
 - Validation & Acknowledgment
- Care Delivery
 - Parenting capacity

Soghier & Short (2018)



21

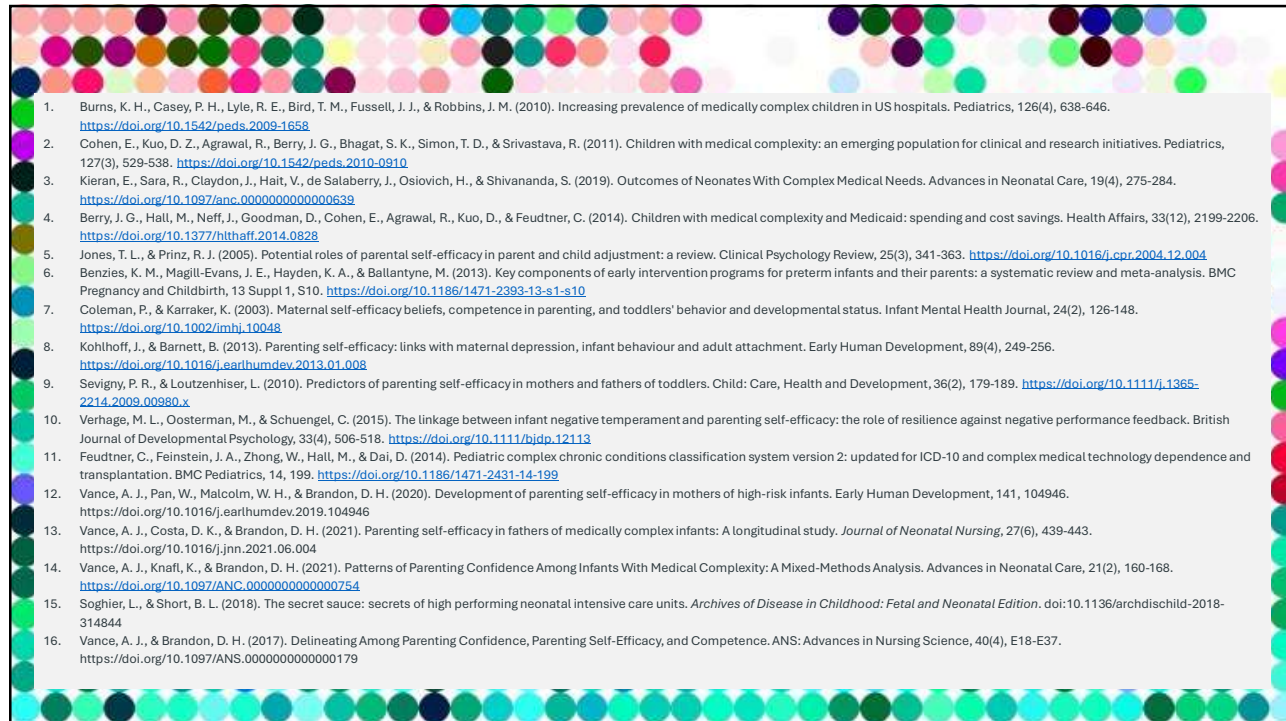
**Self-Efficacy is often a greater predictor of success
than actual abilities.**



Thank you for your support

22

FANNP 36TH NATIONAL SYMPOSIUM: CLINICAL UPDATE AND REVIEW
A7: TRAJECTORY OF PARENTING CONFIDENCE AMONG PARENTS OF INFANTS WITH COMPLEX
CHRONIC CONDITIONS ©



1. Burns, K. H., Casey, P. H., Lyle, R. E., Bird, T. M., Fussell, J. J., & Robbins, J. M. (2010). Increasing prevalence of medically complex children in US hospitals. *Pediatrics*, 126(4), 638-646. <https://doi.org/10.1542/peds.2009-1658>
2. Cohen, E., Kuo, D. Z., Agrawal, R., Berry, J. G., Bhagat, S. K., Simon, T. D., & Srivastava, R. (2011). Children with medical complexity: an emerging population for clinical and research initiatives. *Pediatrics*, 127(3), 529-538. <https://doi.org/10.1542/peds.2010-0910>
3. Kieran, E., Sara, R., Claydon, J., Hail, V., de Salaberry, J., Osioviich, H., & Shivananda, S. (2019). Outcomes of Neonates With Complex Medical Needs. *Advances in Neonatal Care*, 19(4), 275-284. <https://doi.org/10.1097/anc.0000000000000639>
4. Berry, J. G., Hall, M., Neff, J., Goodman, D., Cohen, E., Agrawal, R., Kuo, D., & Feudtner, C. (2014). Children with medical complexity and Medicaid: spending and cost savings. *Health Affairs*, 33(12), 2199-2206. <https://doi.org/10.1377/hlthaff.2014.0828>
5. Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: a review. *Clinical Psychology Review*, 25(3), 341-363. <https://doi.org/10.1016/j.cpr.2004.12.004>
6. Benzies, K. M., Magill-Evans, J. E., Hayden, K. A., & Ballantyne, M. (2013). Key components of early intervention programs for preterm infants and their parents: a systematic review and meta-analysis. *BMC Pregnancy and Childbirth*, 13 Suppl 1, S10. <https://doi.org/10.1186/1471-2393-13-s1-s10>
7. Coleman, P., & Karraker, K. (2003). Maternal self-efficacy beliefs, competence in parenting, and toddlers' behavior and developmental status. *Infant Mental Health Journal*, 24(2), 126-148. <https://doi.org/10.1002/imhj.10048>
8. Kohlhoff, J., & Barnett, B. (2013). Parenting self-efficacy: links with maternal depression, infant behaviour and adult attachment. *Early Human Development*, 89(4), 249-256. <https://doi.org/10.1016/j.earlhumdev.2013.01.008>
9. Seigny, P. R., & Loutzenhiser, L. (2010). Predictors of parenting self-efficacy in mothers and fathers of toddlers. *Child: Care, Health and Development*, 36(2), 179-189. <https://doi.org/10.1111/j.1365-2214.2009.00980.x>
10. Verhage, M. L., Oosterman, M., & Schuengel, C. (2015). The linkage between infant negative temperament and parenting self-efficacy: the role of resilience against negative performance feedback. *British Journal of Developmental Psychology*, 33(4), 506-518. <https://doi.org/10.1111/bjdp.12113>
11. Feudtner, C., Feinstein, J. A., Zhong, W., Hall, M., & Dai, D. (2014). Pediatric complex chronic conditions classification system version 2: updated for ICD-10 and complex medical technology dependence and transplantation. *BMC Pediatrics*, 14, 199. <https://doi.org/10.1186/1471-2431-14-199>
12. Vance, A. J., Pan, W., Malcolm, W. H., & Brandon, D. H. (2020). Development of parenting self-efficacy in mothers of high-risk infants. *Early Human Development*, 141, 104946. <https://doi.org/10.1016/j.earlhumdev.2019.104946>
13. Vance, A. J., Costa, D. K., & Brandon, D. H. (2021). Parenting self-efficacy in fathers of medically complex infants: A longitudinal study. *Journal of Neonatal Nursing*, 27(6), 439-443. <https://doi.org/10.1016/j.jnn.2021.06.004>
14. Vance, A. J., Knaff, K., & Brandon, D. H. (2021). Patterns of Parenting Confidence Among Infants With Medical Complexity: A Mixed-Methods Analysis. *Advances in Neonatal Care*, 21(2), 160-168. <https://doi.org/10.1097/ANC.0000000000000754>
15. Soghier, L., & Short, B. L. (2018). The secret sauce: secrets of high performing neonatal intensive care units. *Archives of Disease in Childhood: Fetal and Neonatal Edition*. doi:10.1136/archdischild-2018-314844
16. Vance, A. J., & Brandon, D. H. (2017). Delineating Among Parenting Confidence, Parenting Self-Efficacy, and Competence. *ANS: Advances in Nursing Science*, 40(4), E18-E37. <https://doi.org/10.1097/ANS.0000000000000179>