

Caregivers' Insights Concerning  
Visual Efficiency Skills of Their Child Diagnosed  
as a Fetus Exposed to Noxious Substances  
in Relation to Early Childhood Development

Patricia Myers  
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# Qualitative Study

- An Embedded Collective Case Study
- Employed Literal Replication Logic

# Purpose Statement

- Explore Family Caregivers' and Practitioner Caregivers' Perceptions
- Visual Efficiency Skills of their child (9-36 months old)
- Diagnosed with FENS
- Four regions of the REUS Birth-to-Three System
- The context of five early childhood developmental domains

# Visual Efficiency Skills

13 visual skills needed to access  
Daily Routines, Exploration, and Play.

- Acuity/Focal Length
- Depth
- Figure Ground
- Oculomotor
- Social Gaze
- Spatial Relationships/  
Eye-Hand Integration
- Visual Association
- Visual Closure
- Visual Discrimination
- Visual Memory
- Visual Sequencing
- Visual Pursuit
- Visual Attention

# Central Research Question

What are the insights of caregivers in three regions of the REUS Birth-to-Three system concerning how visual efficiency skills affect early childhood development in motor, communication, cognitive, adaptive, and personal-social domains for their child diagnosed with FENS?

# Sub Questions

1. What are the insights of caregivers in four regions of the REUS Birth-to-Three system concerning how visual efficiency skills affect early childhood **motor** development for their child diagnosed with FENS?

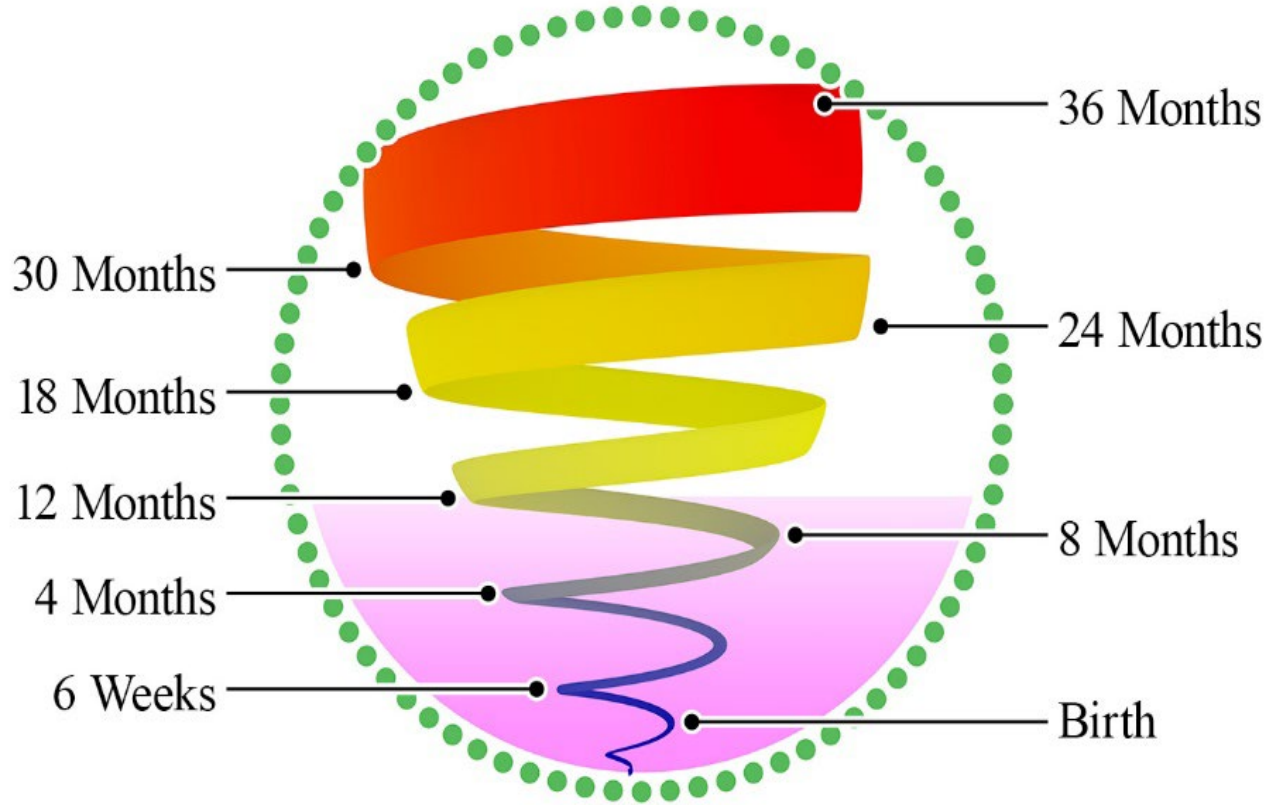
2. **Communication**

3. **Cognitive**

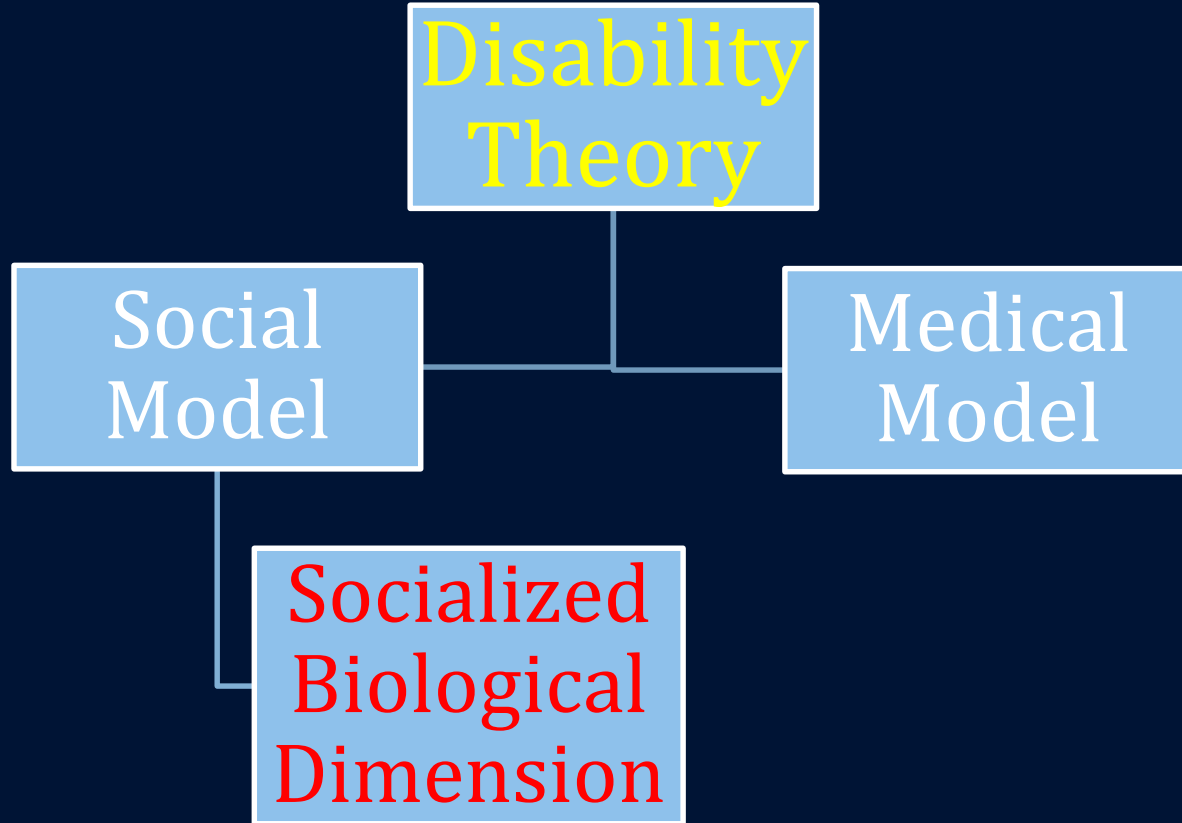
4. **Adaptive**

5. **Personal-Social**

The Dynamic  
Spiral of  
Development  
and Visual  
Efficiency Skills



# Theoretical Framework





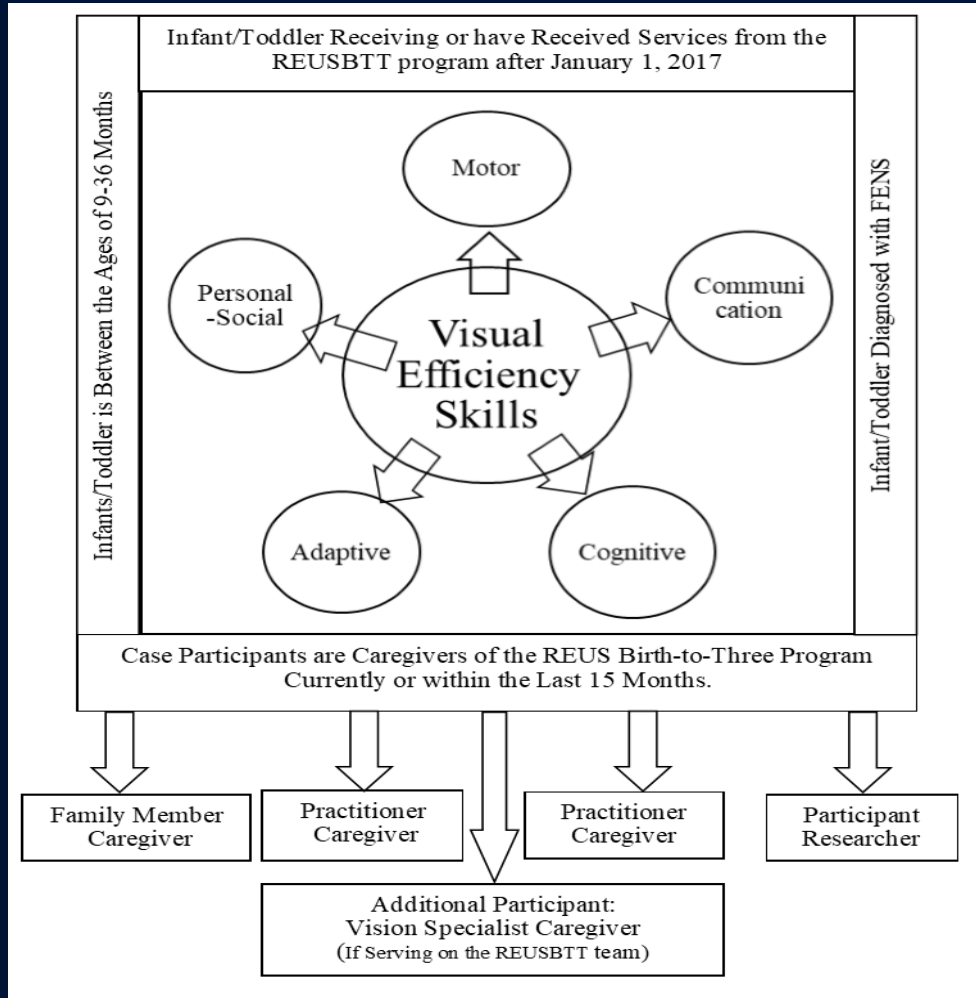
# Socialized Biological Dimension

- Anastasiou and Kauffman (2013)
- Recognizes Brain Function/Dysfunction
- Accounts for the biological influence without allowing the biologic insult to overpower barriers, attitudes, and exclusions
- Ensures that the child's authentic abilities are evidenced and not stifled by the impairment

# Related Literature

- Medical Research
- The Assumption of Visual Efficiency skills in Developmental Assessments
- Visual Resolution Needs

# Case Boundaries



# Participants

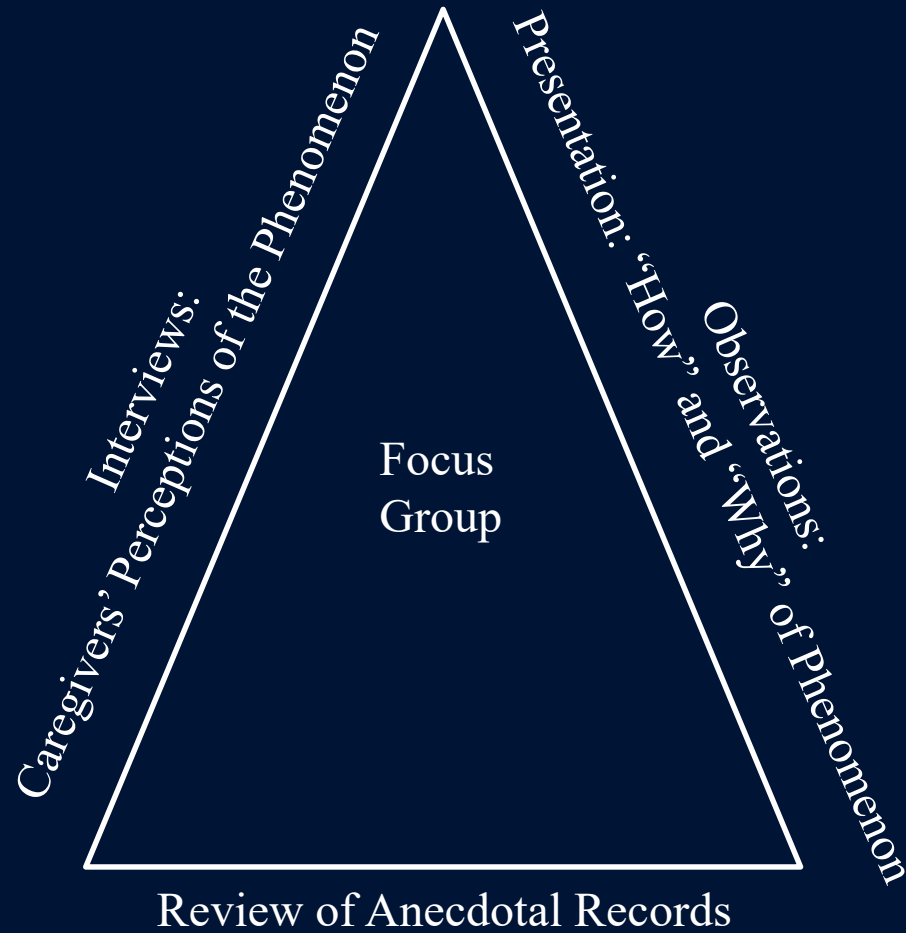
Cases from 4 REUS Regions	6
Family Caregivers	9
Practitioner Caregiver	6
Participant Researcher	1

# Settings

- 12 Interviews
  - Family Caregivers within the home setting
  - Practitioner Caregivers in a secluded public location near the work schedule
- 6 Observations within the home setting
- 6 Cases of Archived Records Review in secured private setting
- 1 Focus Group in a centralized meeting location

# Data Collection

- **Interviews** consisted of 21 questions developed by the researcher via the guidance of a 5-member expert panel
- **Observations** of the participant engaging in play with the child diagnosed with FENS
- **Archived Records Review** to further “corroborate & augment” (Yin, 2014, p. 107) the breadth and depth of the interviews and discoveries from observations
- **Focus Group** to present the preliminary findings represent the voices of this study



# Data Analysis

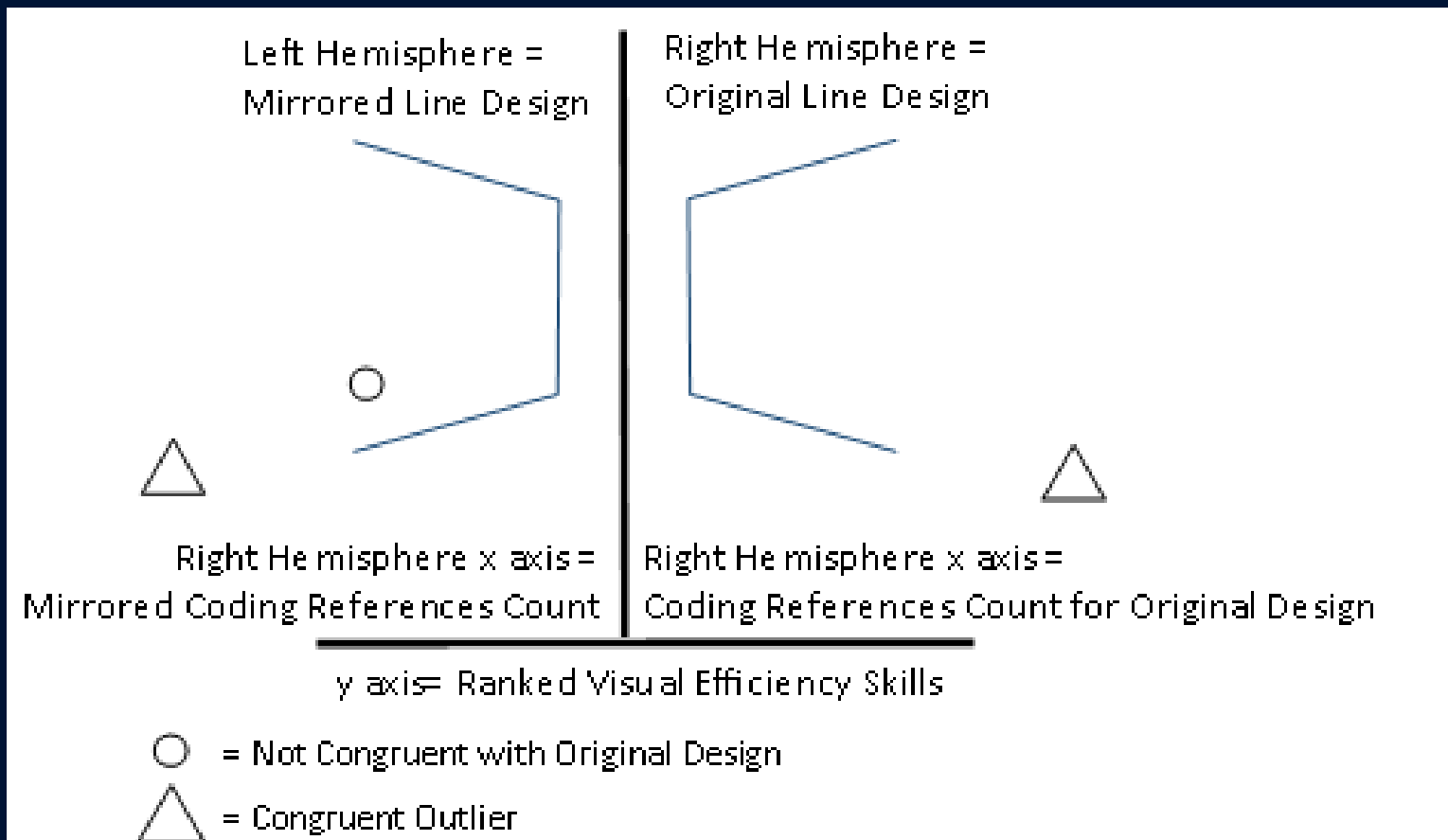
- Both within case and across case analyses (Merriam, 1998; Yin, 2014)
- Chronological time-series analyses
- Word tables
- The use of inter-scorer reliability via post hoc observations of the identical real-time observations conducted.
- Three Stages of Analysis
- Participant reviews of transcripts to ensure authentic representation of participant
- Focus groups as member checking.



# Themes

- Caregivers' Emotional Responses
- Vision Is the Hidden Culprit
- My Child's Vision Is Quirky.

# SSPCA Approach



# Sub Questions Responses

1. What are the insights of caregivers in four regions of the REUS Birth-to-Three system concerning how visual efficiency skills affect early childhood **motor** development for their child diagnosed with FENS?

2. **Communication**

3. **Cognitive**

4. **Adaptive**

5. **Personal-Social**

# Central Research Question Response

What are the insights of caregivers in three regions of the REUS Birth-to-Three system concerning how visual efficiency skills affect early childhood development in motor, communication, cognitive, adaptive, and personal-social domains for their child diagnosed with FENS?

# Discussion

- The Socialized Biological Dimension within the Social Model of Disabilities Theory
- Previous Research
- Novel Contributions

# Implications

- Theoretical Implications
- Empirical Implications
- Practical Implications

# References

- Anastasiou, D., & Kauffman, J. M. (2011). A social constructionist approach to disability: Implications for special education. *Exceptional Children*, 77(3), 367-384. doi:10.1177/001440291107700307
- Anastasiou, D., & Kauffman, J. M. (2013). The social model of disability: Dichotomy between impairment and disability. *The Journal of Medicine and Philosophy*, 38(4), 441-459. doi:10.1093/jmp/jht026
- Merriam, S. B. (1998). *Qualitative research and case study applications in education: Revised and expanded from case study research in education* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Yin, R. K. (2014). *Case study research* (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications, Inc.