Northern Illinois University

The use of COM-B to evaluate a medical provider breastfeeding support training

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Background

Known

Breastfeeding support from medical providers positively impacts mother's breastfeeding outcomes

Gap

Lack of knowledge and skills needed to support breastfeeding[1-6]

Purpose

Evaluate the effectiveness of this training using a survey informed by COM-B implementation theory

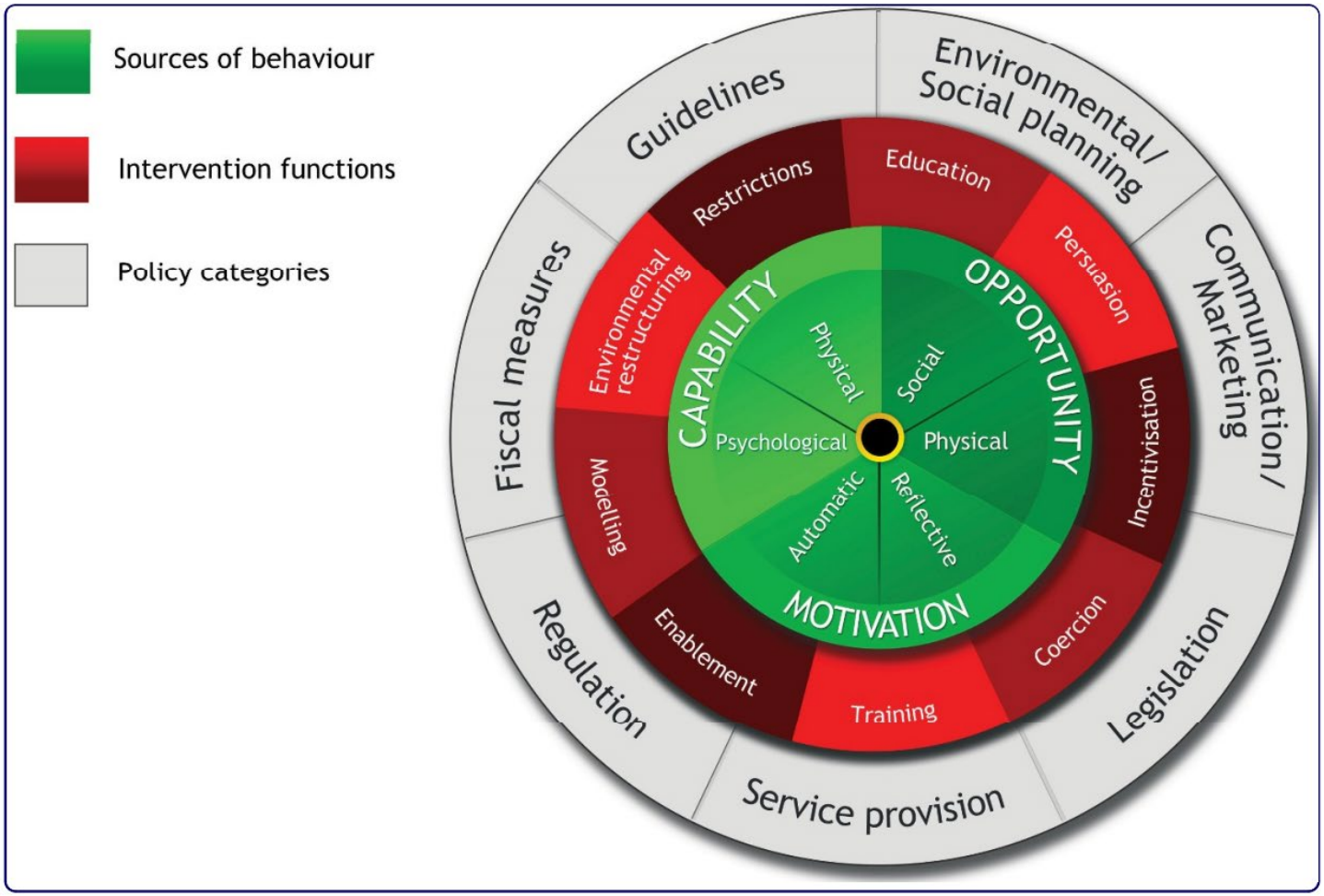
1. Johnson et al. (2016), 2. Marks (2015), 3. Gary et al. (2017), 4. Yang et al. (2018), 5. Ramos et al. (2019), 6. Cross-Barnet et al. (2012)

Breast/chest-feeding Support Training Program

Developed by the Institute for the Advancement of Breastfeeding & Lactation Education (IABLE)

Components of breastmilk	Risks of not breastfeeding	Current policies and recommendations	Preconception and prenatal counseling	Anatomy and physiology of breastfeeding
Positioning, latch and infant instinctive feeding behaviors	Breastfeeding in the immediate postpartum period	Supporting the breastfeeding dyad during the first week postpartum	Nipple and breast pain	Low milk supply
The slow gaining infant	Medications during lactation	Breast pump technology	Hyperlactation	Weaning strategies

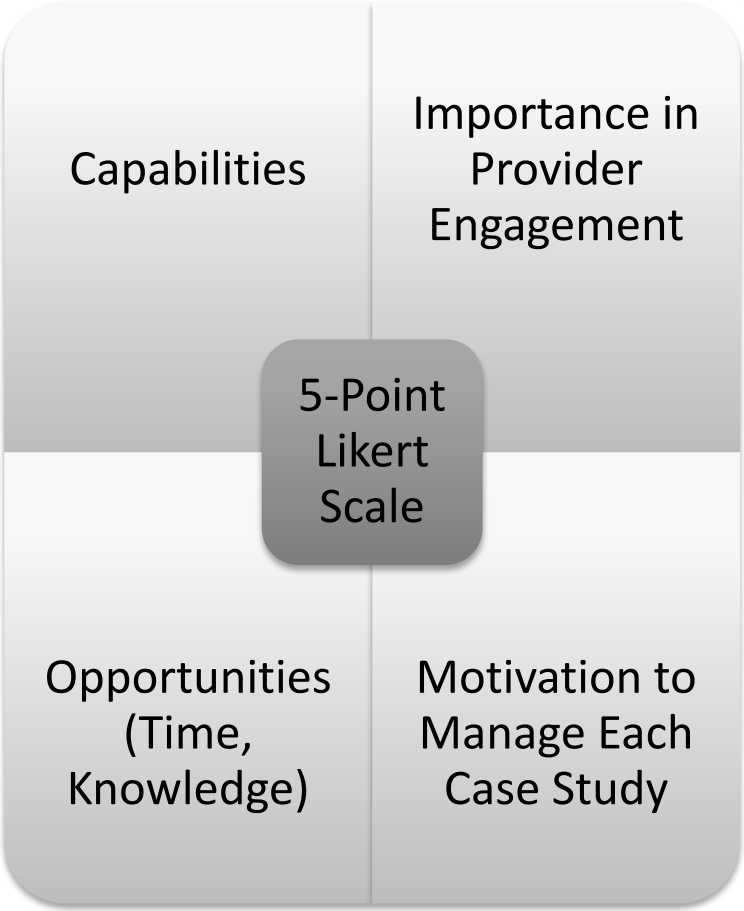
Instrument



The behaviour change wheel: A new method for characterizing and designing behaviour change interventions (Michie et al., 2011)

Instrument

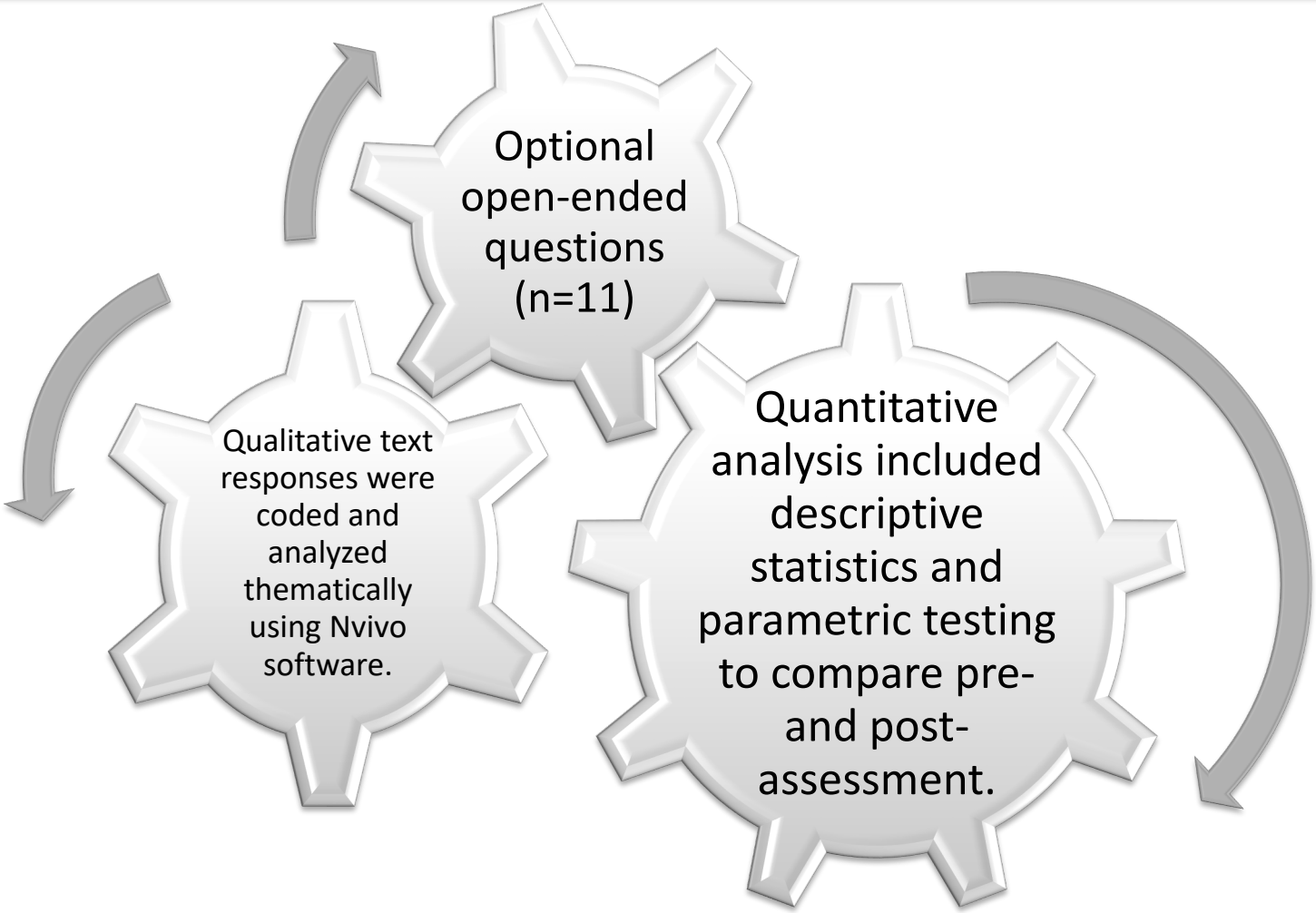
- 55-item survey instrument using COM-B utilizing 11 case study scenarios
- Example case study
  - You are seeing a breastfeeding mother/infant dyad in your office, and mother is concerned that her infant is not gaining well at 3 weeks postpartum.



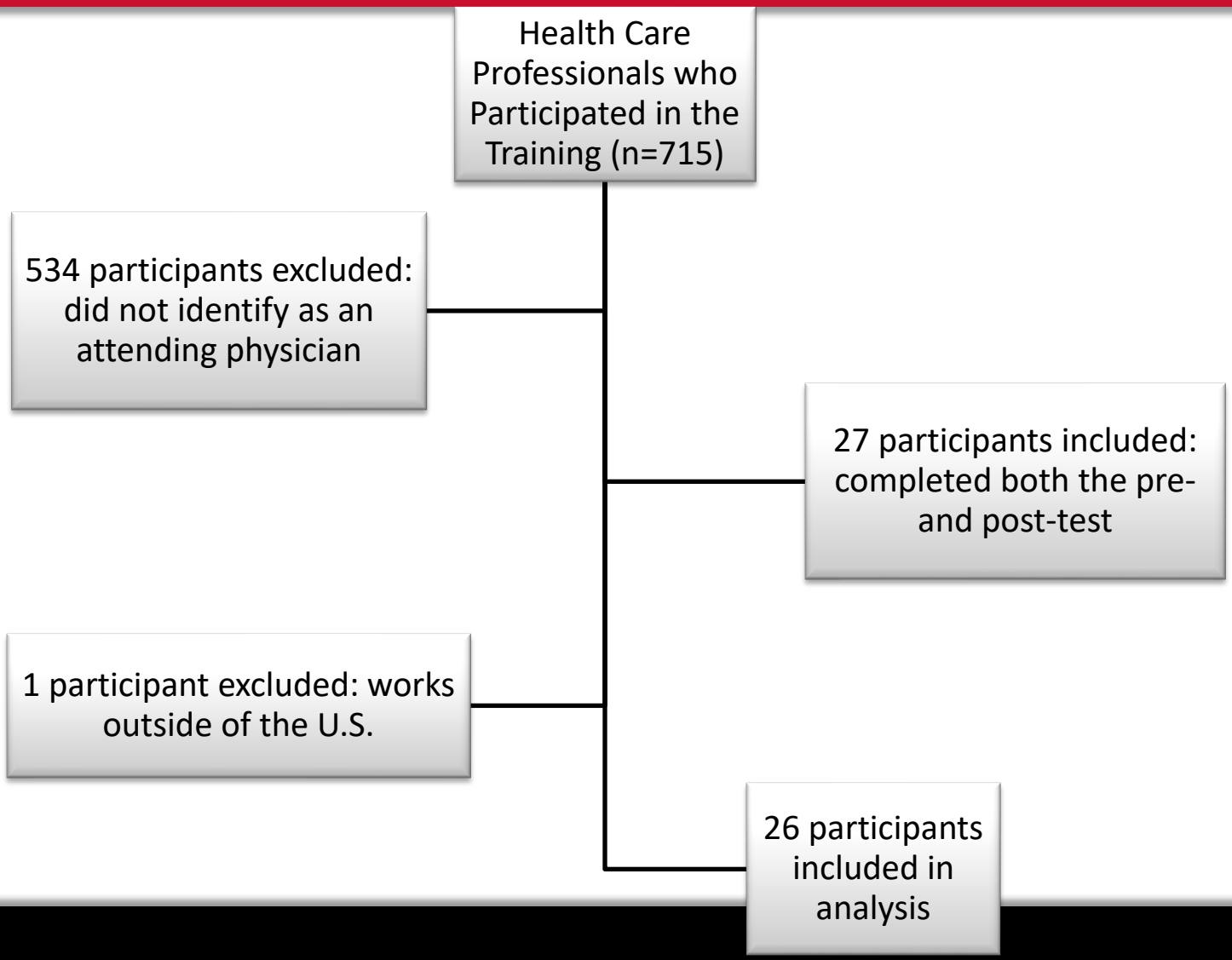
Instrument

- Capabilities
  - How confident are you in managing this problem?
- Responsibility
  - Whose responsibility is it to evaluate this feeding situation?
- Importance in Provider Engagement
  - How important is it for a physician or advanced practice provider to manage this problem (vs going to a lactation consultant)?
- Opportunity
  - Do you have resources available (time, knowledge resources, access to patients, etc.) to manage this problem?
- Motivation to Manage Each Case Study
  - Do you want to be able to manage this breastfeeding problem?

Methods


Optional open-ended questions (n=11)
Qualitative text responses were coded and analyzed thematically using Nvivo software.
Quantitative analysis included descriptive statistics and parametric testing to compare pre- and post-assessment.

Sampling Frame

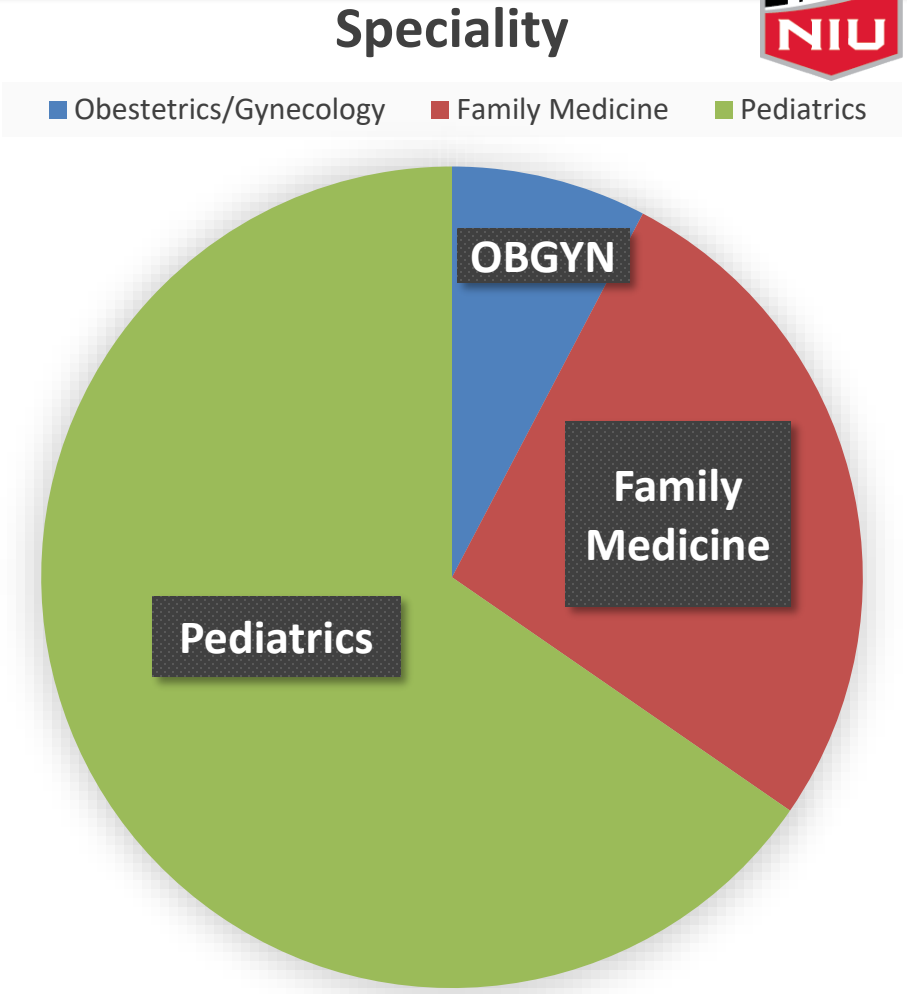


Results

Demographics	N=26
Attending Physician	26
Age (years)	30-39: 69.2% (18)
	40-49: 7.7% (2)
	50-59: 7.7% (2)
	70+: 15.4% (4)
Race/Ethnicity	White: 61.5% (16)
	Black or African American: 11.5% (3)
	Asian: 19.2% (5)
	Hispanic or Latino: 3.8% (1)
	Other: 3.8% (1)

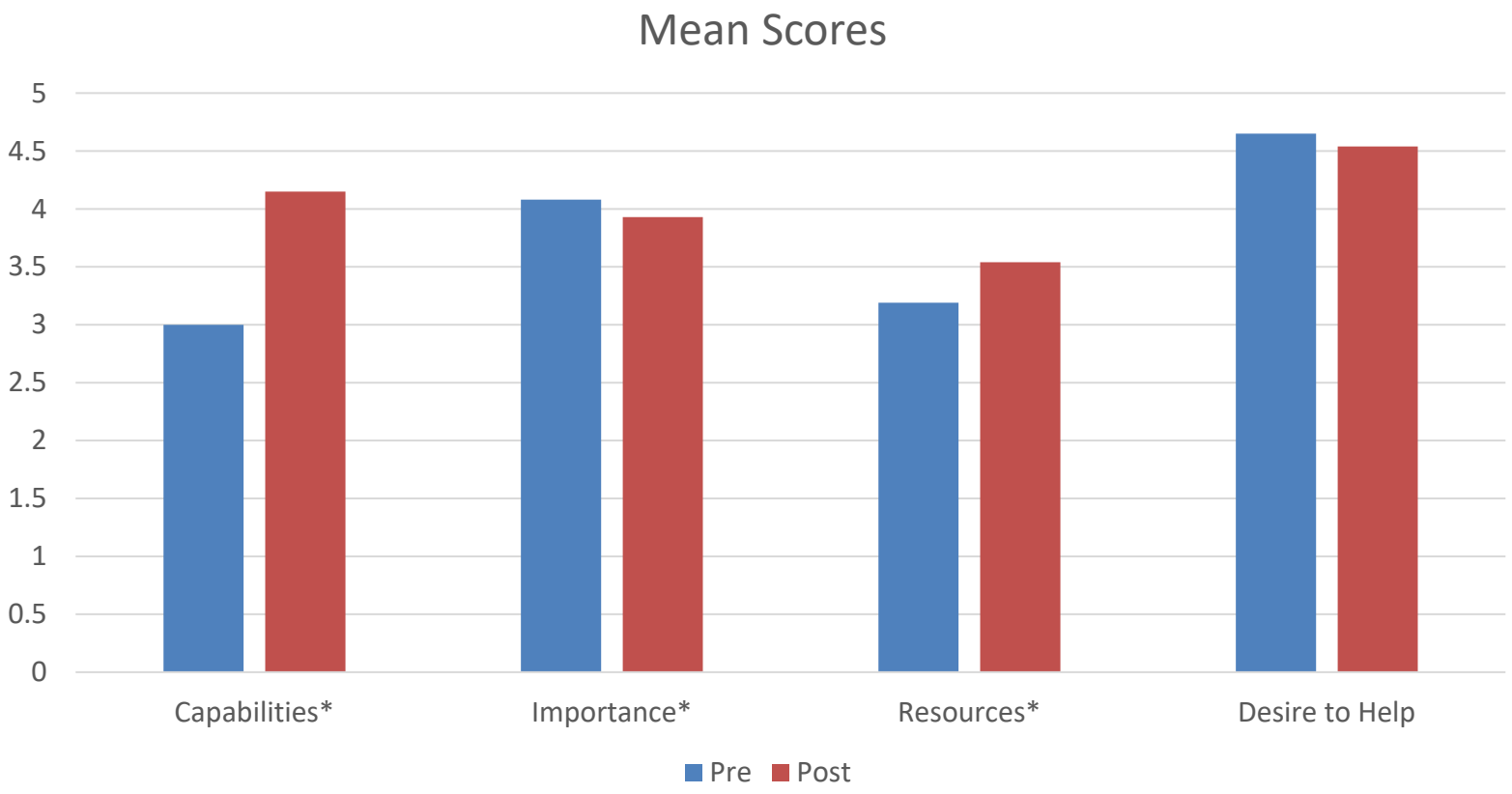
Results

Demographics	N=26	
Gender	Female: 92.3% (24)	
	Male: 7.7% (2)	
Have children	Yes: 73.1% (19)	No: 26.9% (7)
Ever Breastfed	Yes: 65.4% (17)	
	No: 3.8% (1)	
Experience Breastfeeding (mean)	4.71	



Results

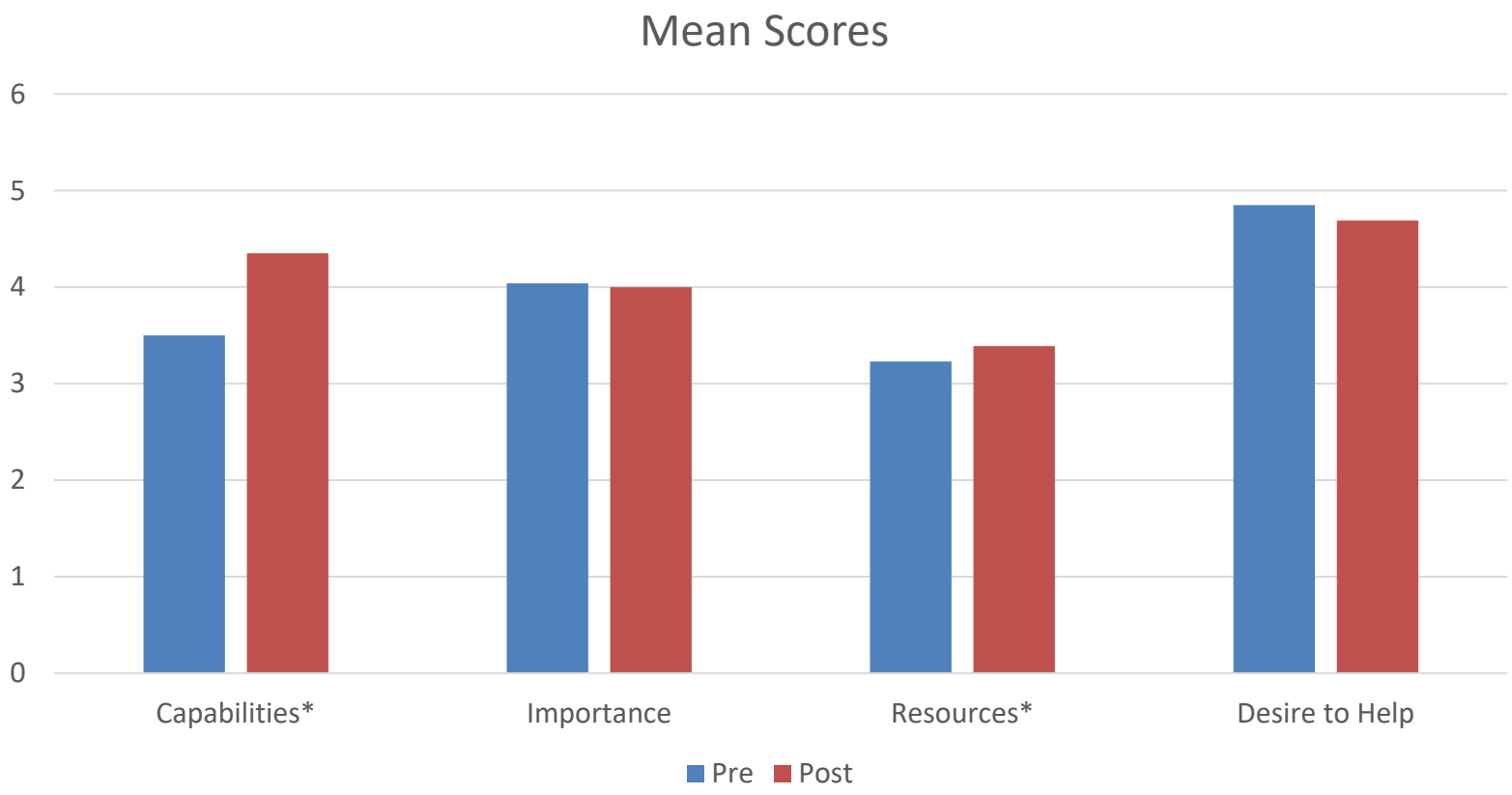
Case Study #1– Breast Pump Complications



*statistically significant (P<0.05)

Results

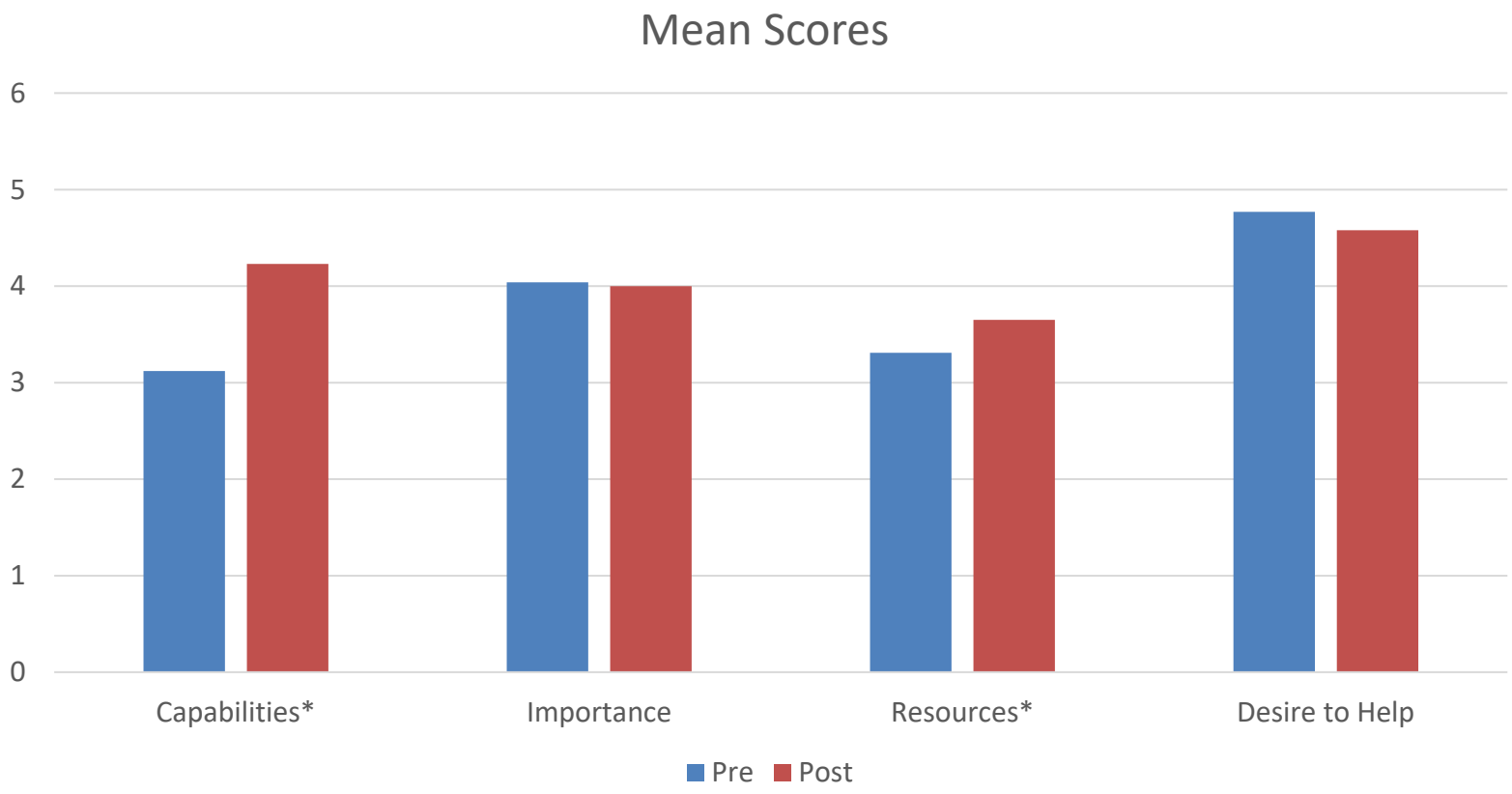
Case Study #2– Positioning and Latching



*statistically significant (P<0.05)

Results

Case Study #3– Infant Weaning



*statistically significant (P<0.05)

Case Study	Capabilities (Average)		Difference	P-Value*
	Pre	Post		
Contraindications	3.85	4.42	+0.57	0.178
Positioning and Latching	3.50	4.35	+0.85	0.009
Infant Weight Gain/Loss	4.04	4.62	+0.58	0.089
Painful Lump in Breast	4.15	4.35	+0.20	0.086
Deep Breast Pain without Signs of Inflammation	2.50	3.77	+1.27	0.132
Breast Pump Complications	3.00	4.15	+1.15	0.036
Infant Biting	3.27	3.96	+0.69	0.006
Medications & Breastfeeding	3.69	4.27	+0.58	0
Inducing Lactation	1.88	3.03	+1.15	0.028
Infant Transition from NICU	3.23	3.88	+0.65	0.0855
Infant Weaning	3.12	4.23	+1.11	0.001

*Paired samples t-test

Qualitative

- Themes included…
  - Perception of Barriers

> Barriers include ability to register mom, write a script for mom, bill mom, follow up mom.

  - Perception of Certification Requirement

> I'm a pediatrician without any lactation certification. I'd call her OB/GYN re: this issue and seek their counsel. I wouldn't feel comfortable prescribing medications to induce lactation as a pediatrician without lactation certification and without discussing with her OB/GYN and/or LC

Qualitative Analysis

- Themes included…
  - Referrals to OB/GYN or LC

I know I can manage this as a pediatrician but I do not have the mothers as my patients. So I would usually have them see their OB or their primary, even though I am comfortable with the diagnosis and treatment.

I would try to troubleshoot the pump issue, but if my lactation consultant was available I would punt this to the lactation consultant (LC).

Conclusion

Prior to the training, providers already had high motivation and perceived importance for breastfeeding support

Further research should explore barriers and facilitators to the implementation of this training program in the health care setting

Evaluation of the impact this training program had on mothers' perception of breastfeeding support and outcomes should be evaluated

Significance

- If you take away one thing from this presentation, it could be…
  - this training program positively influenced motivated provider's breastfeeding support
  - increased the perception that support should be managed through a collaborative care team

Acknowledgments

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  - Dr. Julie Patterson, PhD, MBA, RDN, LDN
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References

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