

## INTRODUCTION:

Effects of adverse childhood experiences (ACEs) present a major challenge to the overall health of children even after childhood. Exposure to traumatic events is found to be a major cause of mental disorders among children and adolescents (Geddes, Dziurawiec, & Lee, 2013).

Proper screening of patients is a vital step in the prescription of the appropriate treatment.

## BACKGROUND AND SIGNIFICANCE:

Globally, more than 50% of the children experience some form of adversities (Perez, Jennings, & Baglivio 2018).

Exposure to Adverse Experience among Children/Adolescents

80% of children who received a delinquency referral in Florida (Perez, Jennings, & Baglivio 2018).

50% of children ages 10-11 in primary school in Netherlands (Vink, Pal, Eekhout, & Pannebakker, 2016).

New Jersey children, more than 40% (Less than 18 years) have a high percentage of ACEs exposure and more than 18% of the child had experienced at least two ACEs (NJ Funders ACES Collaborative [NJACES], 2019).

- Economic Burden in the U.S. for Child Abuse (Peterson, Florence & Kleven, 2018)
- Estimated cost of morbidity due to nonfatal child maltreatment: \$760,000 (2015 USD).
- Annual US population economic burden (\$428 billion to \$2.0 trillion, 2015 USD).

## PURPOSES OF THE STUDY:

(1) To educate staff and providers (via a one-hour educational training) about ACEs-Q including administration of the screening tool, result interpretation, referral process, and follow-up.

(2) To check the usages of and attitude and perceptions towards CYW ACEs-Q among pediatric primary care providers over the 8-week period.

## CLINICAL QUESTIONS:

How does the teaching of the providers on the use of CYW ACEs-Q impact their readiness in its implementation in a pediatric primary care setting over eight (8) weeks?

## METHOD:

Design:  
Descriptive quality improvement (QI) design

Setting:  
A private pediatric clinic in northern, New Jersey.

Sample:  
Five providers - two (2) pediatricians and three (3) family nurse practitioners in the project site

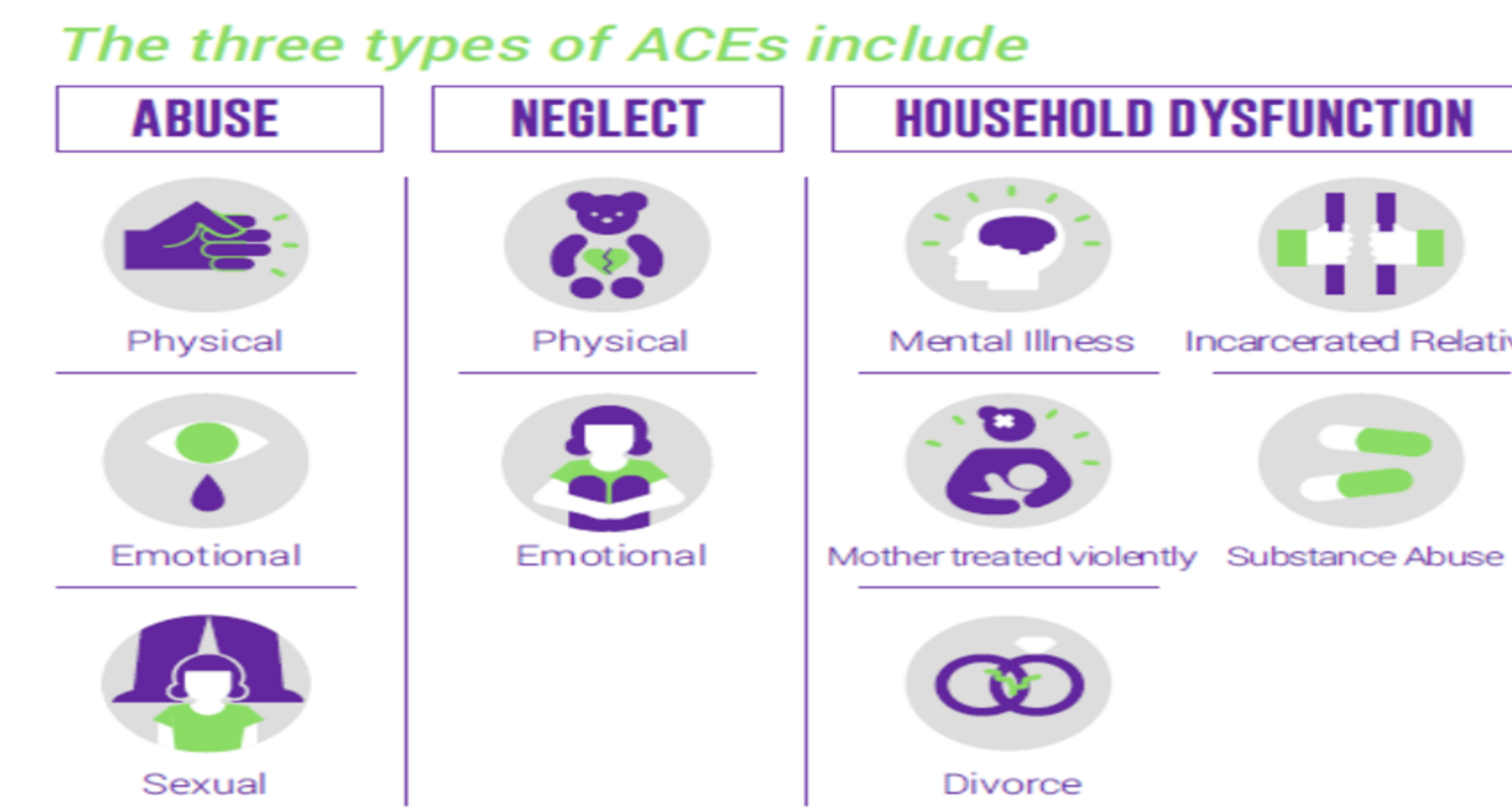
Ethical Consideration:  
IRB approved, and informed consent obtained

## INTERVENTION:

Before the project begins, the participants (pediatricians/family nurse practitioners) attended a one-hour educational training including administration of the screening tool, result interpretation, referral process, and follow-up.

During the project, the participants (pediatricians/family nurse practitioners) reported how often they used CYW ACE-Q during their practice on a weekly basis (on a 5-point Likert scale ranging from never to always).

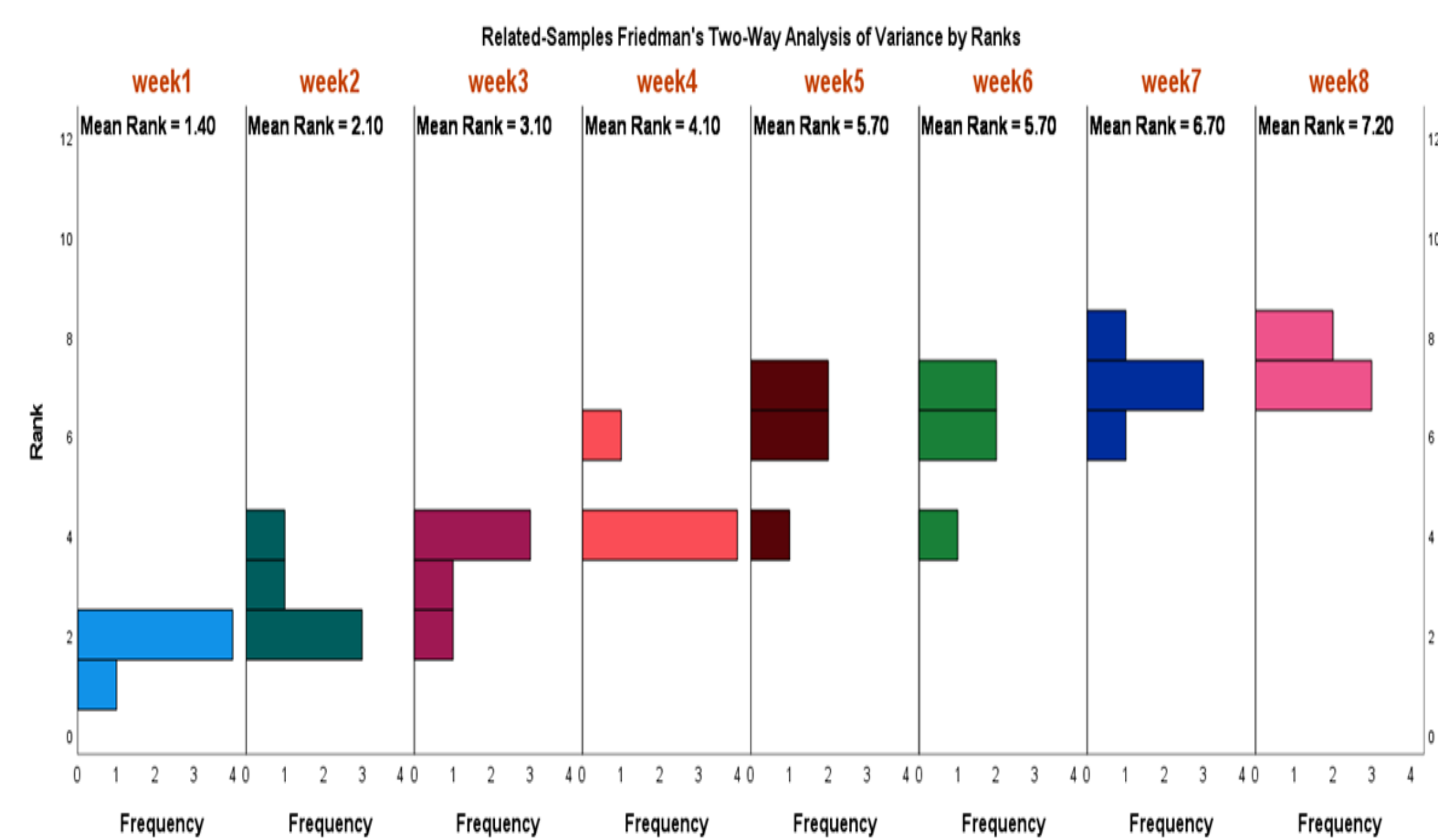
At the end of the project, the participants completed questionnaires to report their perception of having sufficient time to screen, the comfort level of screening sensitive information, barriers and resources for positive screening, satisfaction on the use of the newly implemented screening tool and willingness/readiness to introduce CYW ACEs-Q to other providers (on a 5-point Likert scale ranging from strongly disagree to strongly agree).



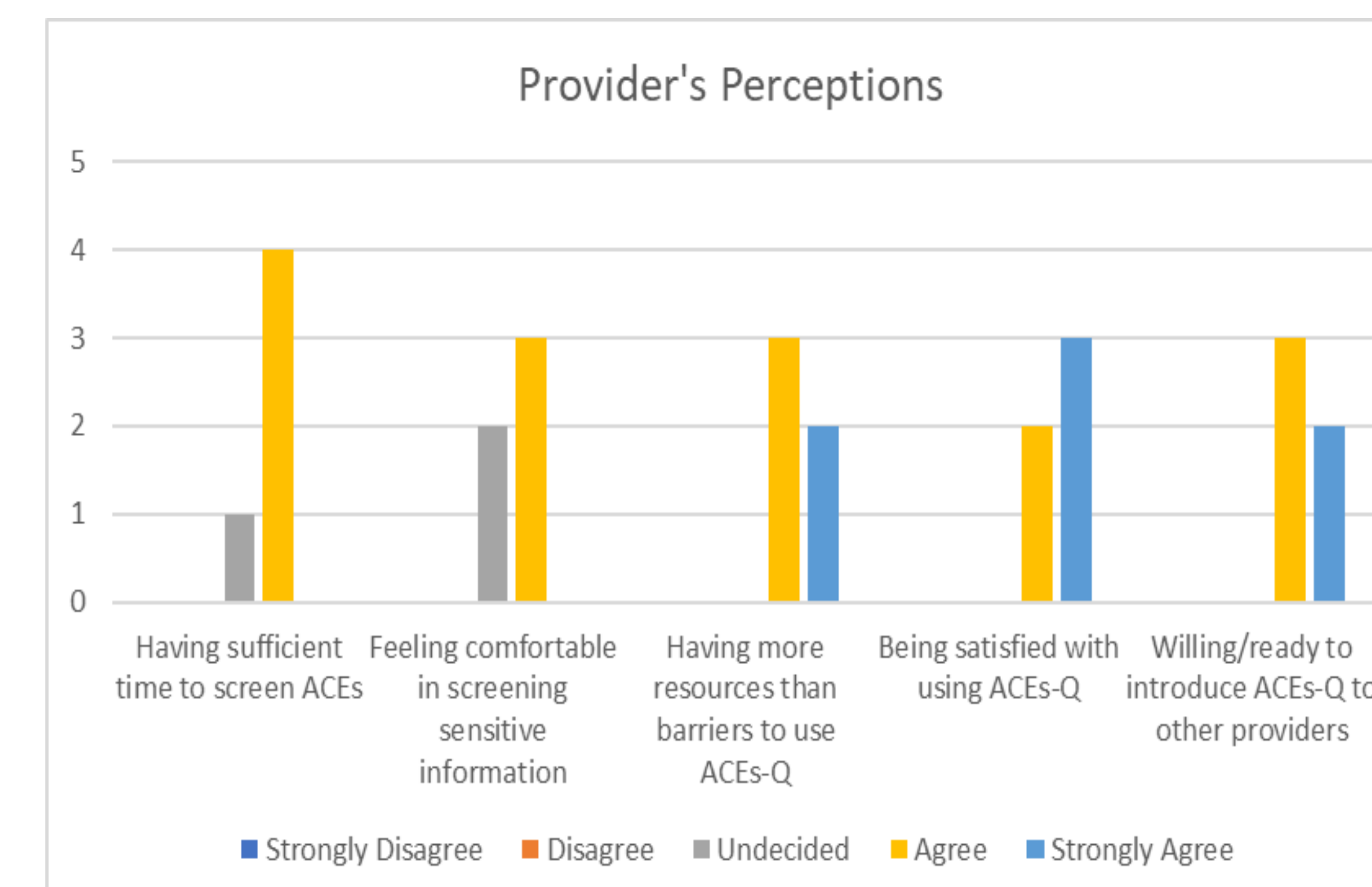
## RESULTS:

A Friedman test indicated that frequency to use ACE were significantly changed over the 8-week period ( $\chi^2(7)=30.333, p < .001$ ).

According to Ad-hoc pairwise comparisons, there were significant changes between week 1 and week 7 ( $p = .017$ ) and week 1 and week 8 ( $p = .005$ ).



There were positive responses (i.e., agree or strongly agree) to having sufficient time to screen ACEs, feeling comfortable in screening sensitive information, having more resources than barrier to use ACEs, being satisfied using ACEs and willingness to introduce ACEs to other provider.



## IMPLICATIONS:

### Economics:

- Lack of financial security for families influence intergenerational outcomes
- ACE s affects wealth of a nation, consumer spending, tax revenue and low productivity
- Increased childhood and adult healthcare cost, public expenditures on child welfare, special education and dropout

### Health policy:

- Childhood experiences impact significantly on mental stability and overall health of an individual
- Policy implication is the need for preventive programs and intervention against ACEs challenges (Downey, Gudmunson, Pang & Less, 2017)

### Quality and Safety:

- Early intervention and diagnostic therapies are vital to avoid lethality

### Education:

- Understanding implication of early childhood trauma, cost of doing nothing, available resources i.e. screening tools and appropriate referral are still limited in use.

### Clinical Practice:

- American Academy of Pediatrics recommends universal routine screening of ACEs in pediatric care (AAP, 2015)

## References

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