

# Assessing the Art of Social Determinant Competencies: Utilization of Clinical Vignettes as a Method for Assessing Medical Students Within a Social

## Determinants of Health Elective

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Drs. Carter, Giudice, Kersten and Black have disclosed no financial relationships relevant to this poster. This commentary does not contain a discussion of an unapproved/investigative use of a commercial product/device.

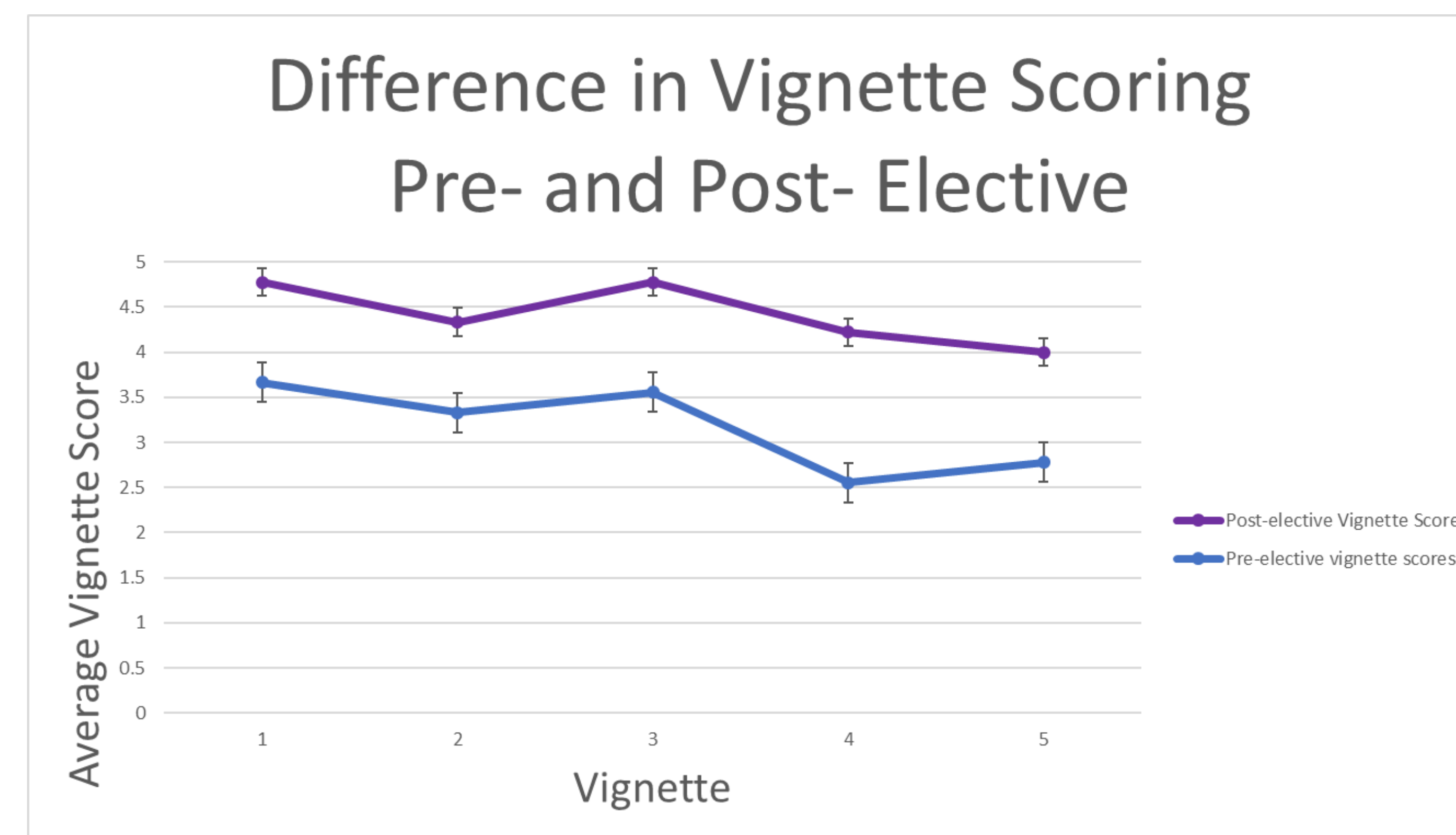


### INTRODUCTION

- Medical Student Social Determinants of Health (SDoH) electives are increasingly imperative as schools seek to improve competencies around these skills[i].
- Few tools are available to evaluate the skills achieved during these rotations
- We developed clinical vignettes for medical students to complete before and after their SDoH elective, and other students complete during their Sub-Internship
- The objectives, based on Kirkpatrick Model of Learning Evaluation, are:
  - 1) to determine if the vignettes demonstrate skill building via the completion of a focused rotation
  - 2) to compare response of those who electively participate in an SDoH rotation with other students pursuing pediatric residency

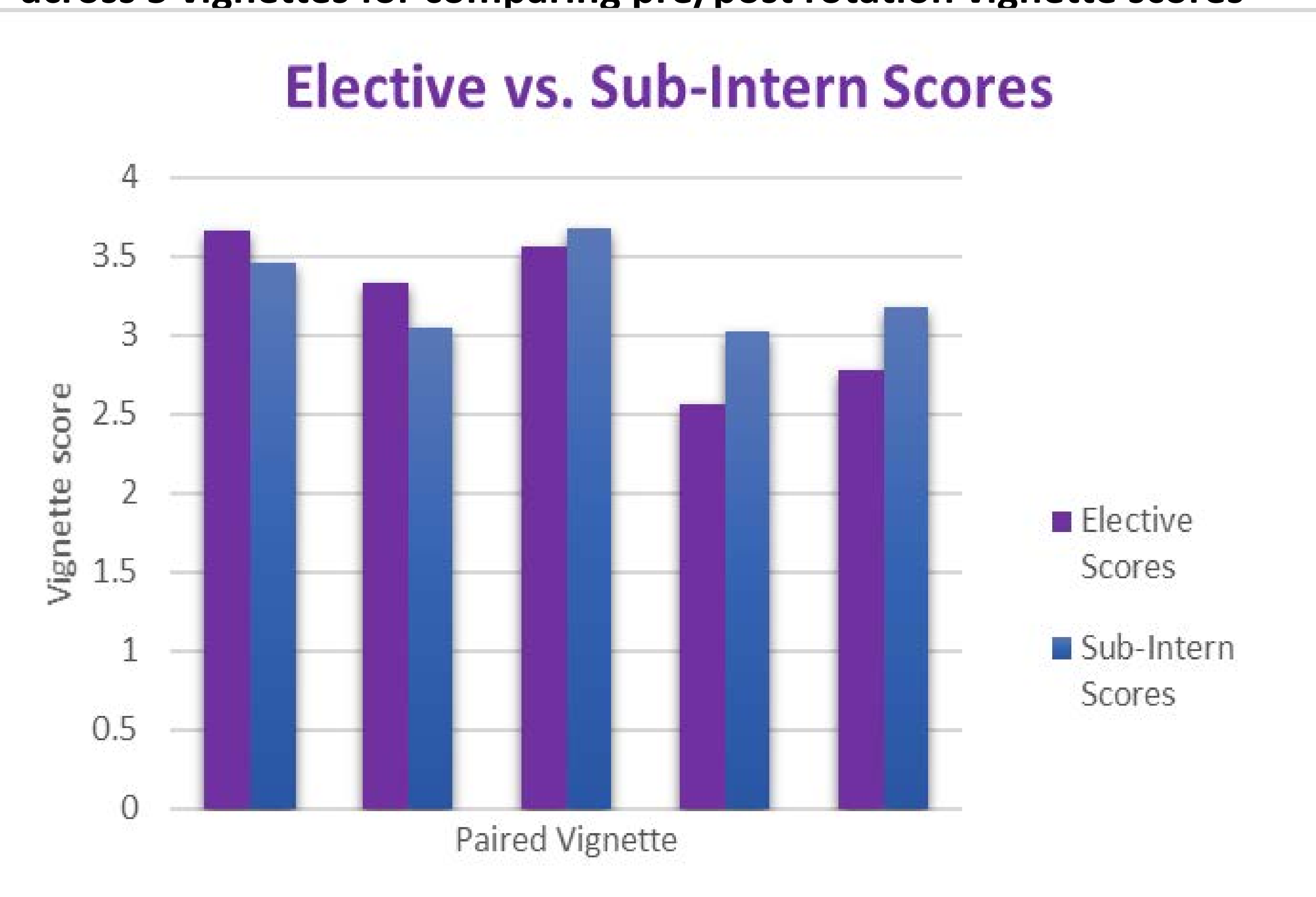
- Wilcoxon signed-rank test used to compare pre- and post- elective scores and the Mann Whitney test to compare the unpaired pre-elective and sub-intern scores as a control group

### RESULTS



Vignette	Vignette	Vignette	Vignette	Vignette
1	2	3	4	5
0.015	0.011	0.009	0.010	0.005

Table 1: Significance values of One-sample Wilcoxon Signed Rank test across 5 vignettes for comparing pre/post rotation vignette scores



### METHODS

- The elective uses a “reflection-in-action” conceptual framework
- Five vignettes serving as active reflection tool to assess responses to clinical scenarios
- Data collected from two years of students, participating in the elective (N=9) and in pediatric sub-internship rotations (2020-2022; N = 41)
- Vignette completion occurred once during sub-internships, and before and after the elective
- Iterative Delphi process used for vignette and scoring rubric content validation using content experts pilot-tested on chief-residents to determine if skillful responses would highlight rotation objectives (aligned with scoring rubric)

### DISCUSSION

The results demonstrate that the vignettes capture learner progression along Kirkpatrick’s model by demonstrating that students score higher post-rotation in all identified objectives of:

- Identification
- Screening strategies
- Empathy
- Resources building
- Ability to respond in clinical context
- A lack of difference between sub-interns and elective students suggests that a focused rotation may be needed to further develop these competencies with a lack of identified differences between those who select the elective and other students pursuing pediatrics
- Limitations include: small sample size of elective participants and single-institution study and need for further validation if vignettes measure skills

### CONCLUSION

- With difficulty standardizing student exposures to SDoH in patient care, clinical vignettes may serve as a useful tool to evaluate skills in preparation for pediatric practice.
- Future research will examine the reliability and validity of the clinical vignettes, with a focus on inter-rater reliability.

### REFERENCES

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