

2-23-2023

## Is Vision Essential to Physical Therapist Practice? Perceptions of Interested Parties in DPT Education

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### Recommended Citation

Flores, M., Sawyer, K., Manella, K., Demers, K., Ferreira, G., Campbell, D. F., Besselink, A., & Domenech, M. A. (2023). Is Vision Essential to Physical Therapist Practice? Perceptions of Interested Parties in DPT Education. *American Physical Therapy Association Combined Sections Meeting* Retrieved from <https://soar.usa.edu/education/38>

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# Is Vision Essential to Physical Therapist Practice? Perceptions of Interested Parties in DPT Education

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## PURPOSE / HYPOTHESIS:

To explore the perceptions of students, faculty, staff, and clinicians regarding visual impairment, developed through interaction with a Doctor of Physical Therapy (DPT) student with visual impairment.

## SUBJECTS: 36 Participants

(20 students, 11 faculty, 2 staff, 3 clinical instructors)

## MATERIALS & METHODS:

- JM is currently a licensed PT who practices in an outpatient orthopedic clinic.
- A retrospective survey was sent to 74 people who interacted with JM as a DPT student.
- 36 participants rated their perceptions before, during, and after interactions with JM on 10 statements, using a 5-point Likert scale (1= strongly disagree, 5 = strongly agree)
- Open-ended questions asked participants to elaborate on their experiences with JM.

## RESULTS: Differences between Ratings

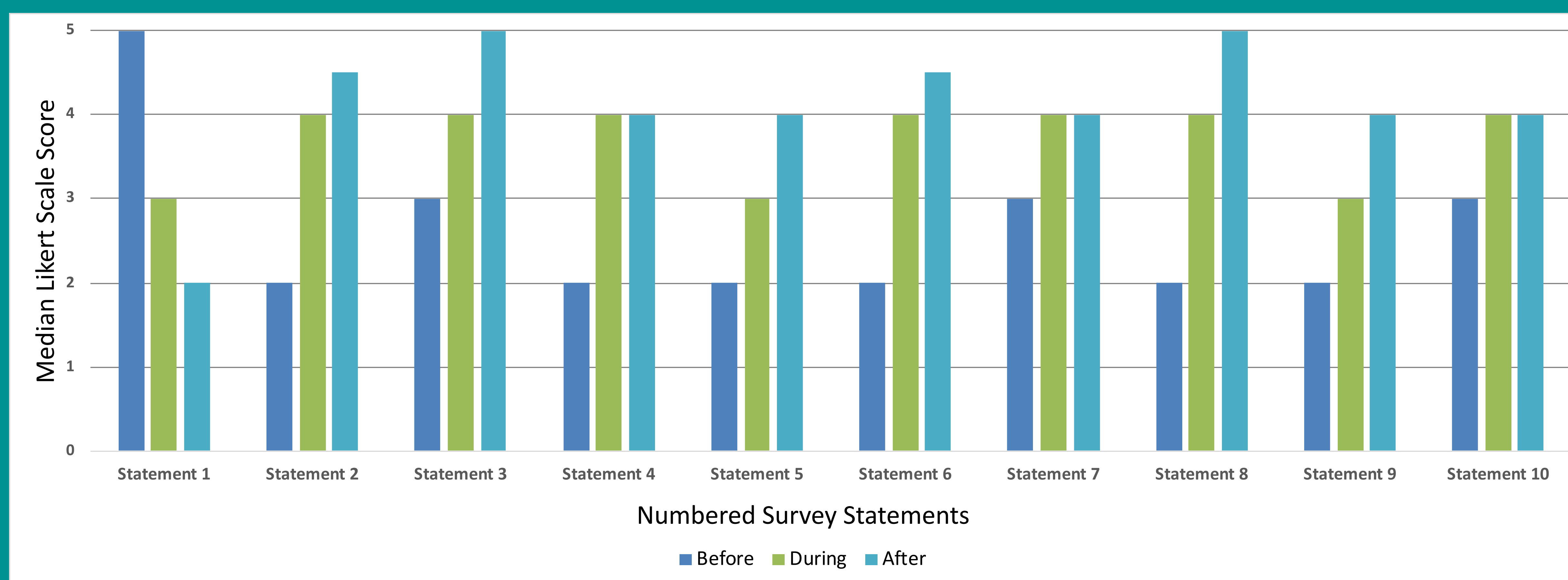
There was a significant increase in all 10 of the Likert scale questions,  $X^2(2) = 38.00$  to  $59.42$ ,  $p < 0.001$ .

### Results of 10 Survey Statements Comparing Ratings Before and During, and During and After Interactions with JM

Q #	Statement	X <sup>2</sup> (2)	Z before and during	Z during and after
Q1	Vision is an <b>essential function</b> required for physical therapy practice.	57.657 $p < 0.001^*$	-4.931 $p < 0.001^*$	-3.357 $p < 0.001^*$
Q2	A blind DPT student will be able to <b>safely evaluate and treat</b> patients.	54.618 $p < 0.001^*$	-4.934 $p < 0.001^*$	-2.707 $p = 0.007^*$
Q3	Concerning academic coursework, a blind DPT student will be able to proficiently <b>complete assignments</b> requiring reading or watching videos.	49.304 $p < 0.001^*$	-4.523 $p < 0.001^*$	-2.530 $p = 0.011^*$
Q4	A blind DPT student will be able to accurately <b>perform tests and measures</b> (i.e., blood pressure, goniometry, sensation testing).	59.418 $p < 0.001^*$	-4.945 $p < 0.001^*$	-3.358 $p < 0.001^*$
Q5	A blind DPT student will be able to accurately <b>perform analysis of movement and gait</b> that traditionally rely on visual observation.	51.979 $p < 0.001^*$	-4.707 $p < 0.001^*$	-3.500 $p < 0.001^*$
Q6	A blind DPT student will be able to competently <b>treat patients</b> throughout their treatment plan.	56.000 $p < 0.001^*$	-4.776 $p < 0.001^*$	-2.887 $p = 0.004^*$
Q7	<b>Clinicians will be willing to supervise</b> a blind student during a clinical experience.	44.963 $p < 0.001^*$	-4.522 $p < 0.001^*$	-1.890 $p = 0.059$
Q8	In the clinic, a blind DPT student will be able to proficiently <b>complete chart reviews</b> and patient documentation.	41.862 $p < 0.001^*$	-4.461 $p < 0.001^*$	-1.732 $p = 0.083$
Q9	A blind DPT graduate will be able to easily <b>find employment</b> as a physical therapist.	45.299 $p < 0.001^*$	-4.686 $p < 0.001^*$	-2.153 $p = 0.031$
Q10	In the clinic, <b>reasonable accommodations</b> for a blind DPT student will be easy to provide.	38.000 $p < 0.001^*$	-4.018 $p < 0.001^*$	-2.000 $p = 0.046$

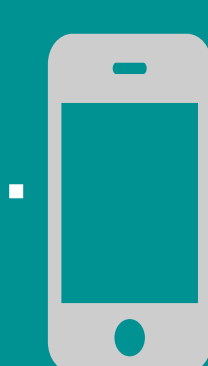
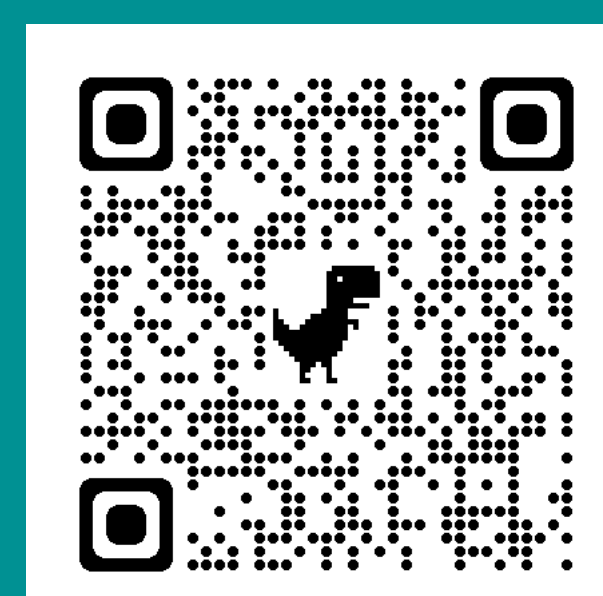
\*Indicates significance; X<sup>2</sup> = Chi-Square (Friedman test-statistic); Z = Wilcoxon signed-rank test with Bonferroni correction applied, significance level set at  $p < 0.017$

The perception that vision is essential to physical therapist practice shifted after interactions with a DPT student with visual impairment.



"As [JM] and I worked on ways to interpret a patient's movement, I have come to the understanding that while vision absolutely helps with clinical efficiency, it may not be as essential to practice PT."

"All of my perceptions changed regarding [JM] and [their] abilities. I did not understand previously how a blind person could function as a PT but [JM] flourished. I was awed at how the program accommodated [them] to promote [their] different learning style."



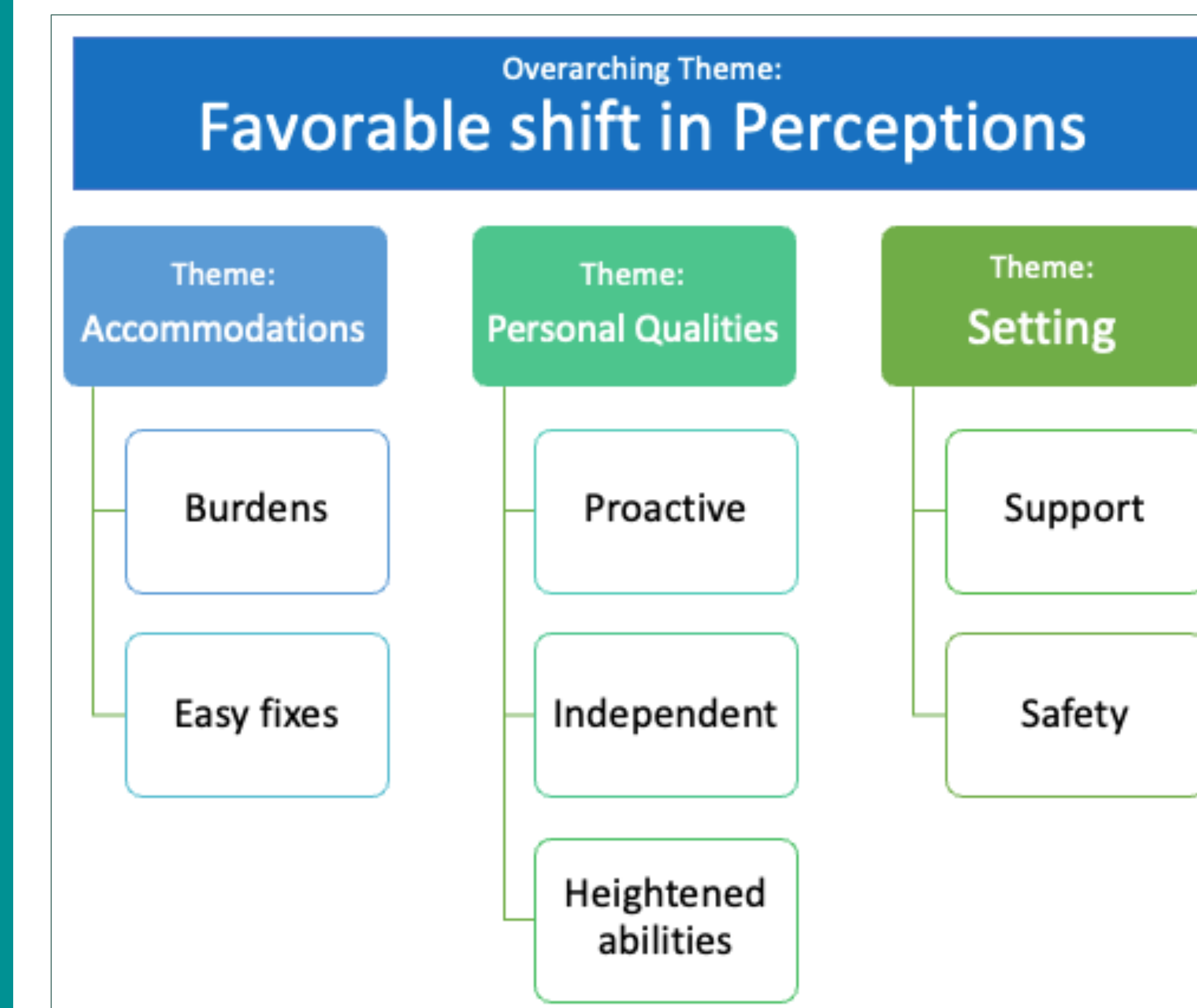
Take a picture to download the full abstract with references

Notable Quotes:

## RESULTS: Open-ended Questions

Three themes emerged : accommodations, personal qualities, and setting; with the overarching theme of shifting the perception that vision is essential to physical therapist practice.

## Qualitative Thematic Analysis



## DISCUSSION & CONCLUSION:

- The shift in perception from strongly agree to disagree that vision is essential for physical therapist practice is important.
- Through interacting with JM perceptions changed from one of inability to capability.
- Statements 2-10 ratings changed to agree or strongly agree that a person with BVI could safely examine, evaluate, and treat patients.
- Clinical Instructors were willing to supervise JM
- Clinical accommodations were not burdensome
- "Essential functions" regarding vision and physical therapist practice should be re-considered within the context of the individual's characteristics and lived experiences.

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