

Perceptions of physical disabilities using eye-tracking technology

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Background:

- Our society is working to integrate people with physical disabilities more fully into sports, schools, workplaces, etc.
- Negative attitudes towards persons with physical disabilities can create obstacles when striving to fulfill roles and personal goals
- It is necessary to understand the underlying thoughts of individuals who do not have physical disabilities in order to produce a solution or solutions (Antonak & Livneh, 2000)

Purpose:

- Determine if a relationship exists between eye gaze fixation patterns and score on Interactions with Disabled Persons (IDP) scale
- Gain an understanding of how participants feel when they have contact with people who have physical disabilities



Methods:

- $N = 32$ (12M/20F, Age range: 13-44)
- Gathered information on participant exposure and history of working with people with physical disabilities
- Administered 20Q Interaction with Disabled Persons (IDP) Likert scale (scores range from 20-120)
- Showed a 15 slide PowerPoint presentation containing a variety of pictures of individuals who have physical disabilities; eye movements tracked using the GazePoint Eye Tracking Bar

Results:

- Participants that scored higher on the IDP scale (range: 53-97) showed a moderate correlation with more fixations and revisits on individuals' ambulatory aides
- As someone's discomfort with ambulatory aides increased, they were more likely to look at, look away, then revisit the assistive device, such as a wheelchair
- Spearman correlation $r(32) = .372, p = .036$
- Overall sample did not show a time difference in participants looking at faces or ambulatory aides



Discussion:

People who are less comfortable interacting with individuals with physical disabilities tend to fixate more on their ambulatory aides. It is suggested that our society continue to expand inclusive activities, thereby increasing exposure to experiences allowing individuals to become less fixated on others' differences.