

Depictions of strabismus in children's animated films

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Introduction

Strabismus negatively affects self-confidence and ability to interact with society.

Yet, characters with strabismus are commonly depicted in animated films marketed to children.

We aimed to quantify how often characters with strabismus appear and how they were portrayed in animated films.

Methods

We reviewed all 125 animated movies from Pixar, DreamWorks, Studio Ghibli, and Disney (since the Little Mermaid in 1989) and identified all characters with strabismus.

Five independent researchers rated each character's personality traits. Inter-rater reliability was assessed for each personality.

Sample proportion test was used for statistical comparison of these traits.



The Boss Baby,
DreamWorks



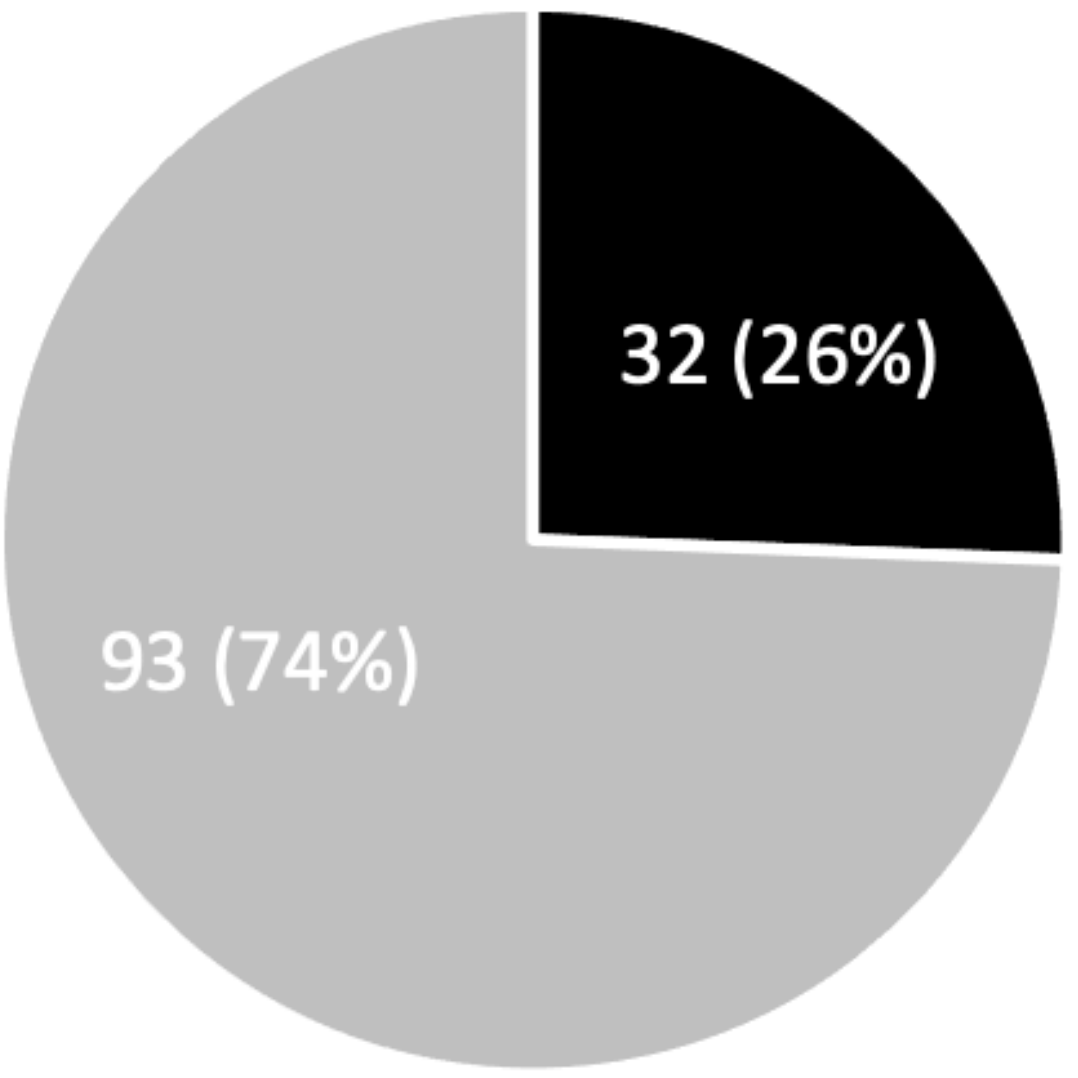
Finding Nemo, Pixar



The Little Mermaid,
Disney

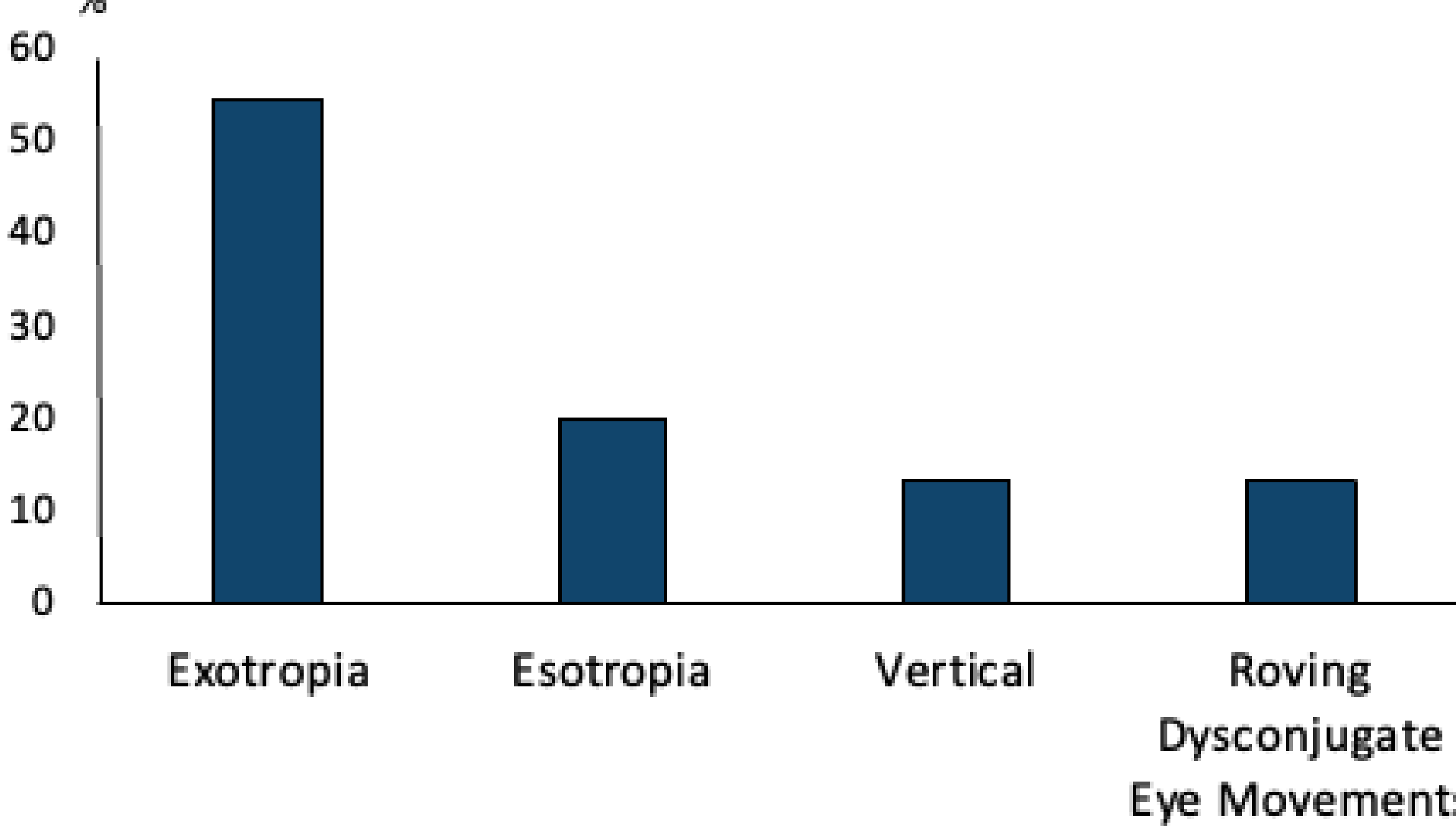
Results

Movies with Characters with Strabismus (Total = 125)



■ Yes ■ No

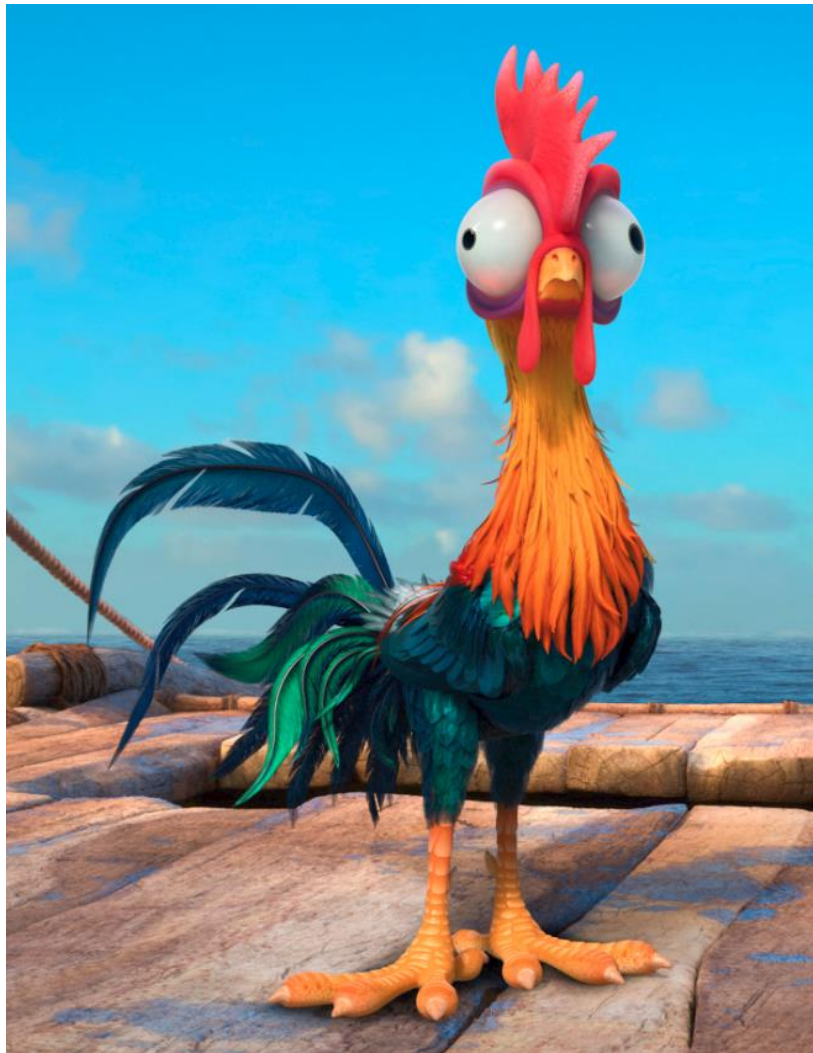
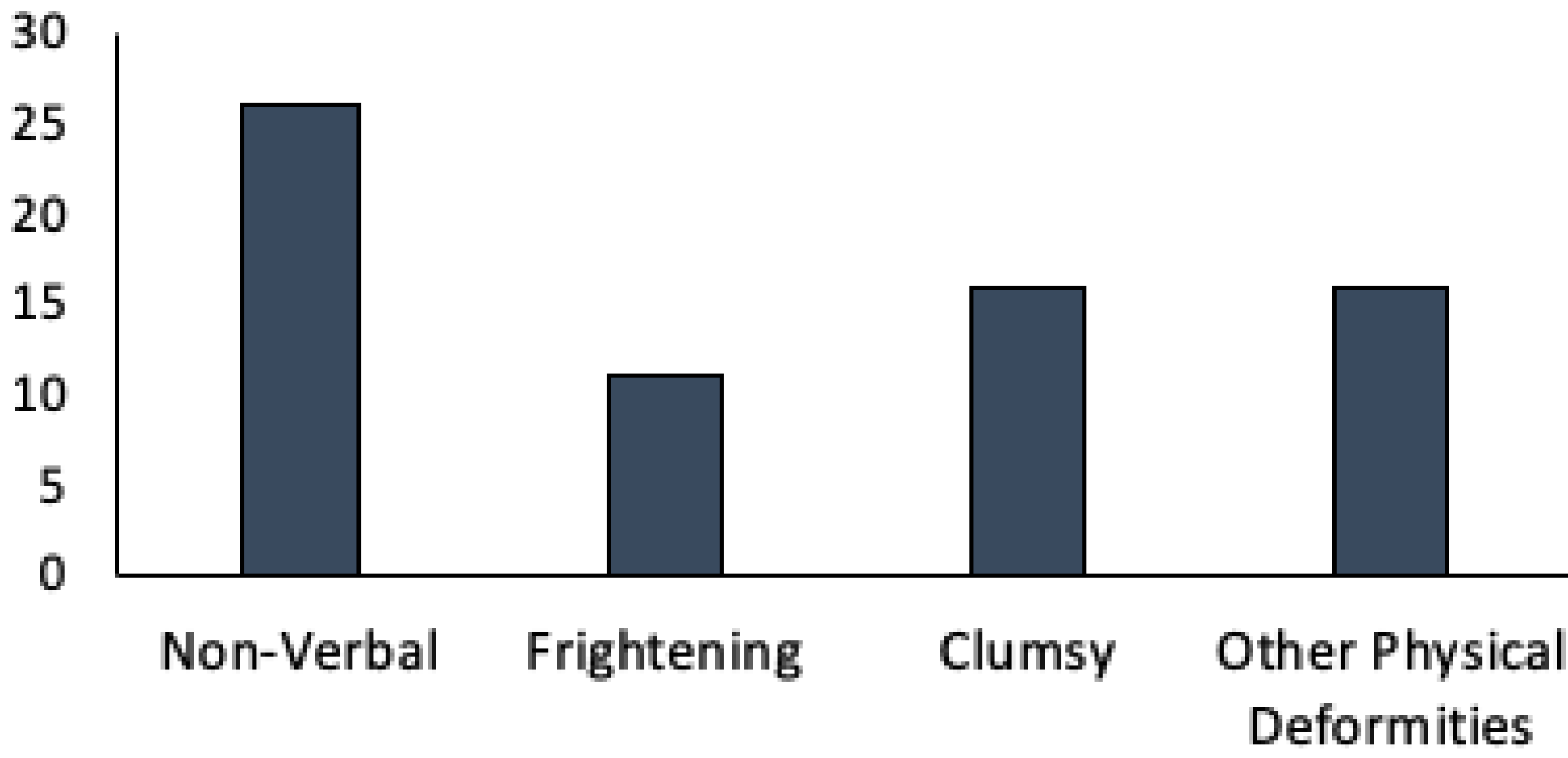
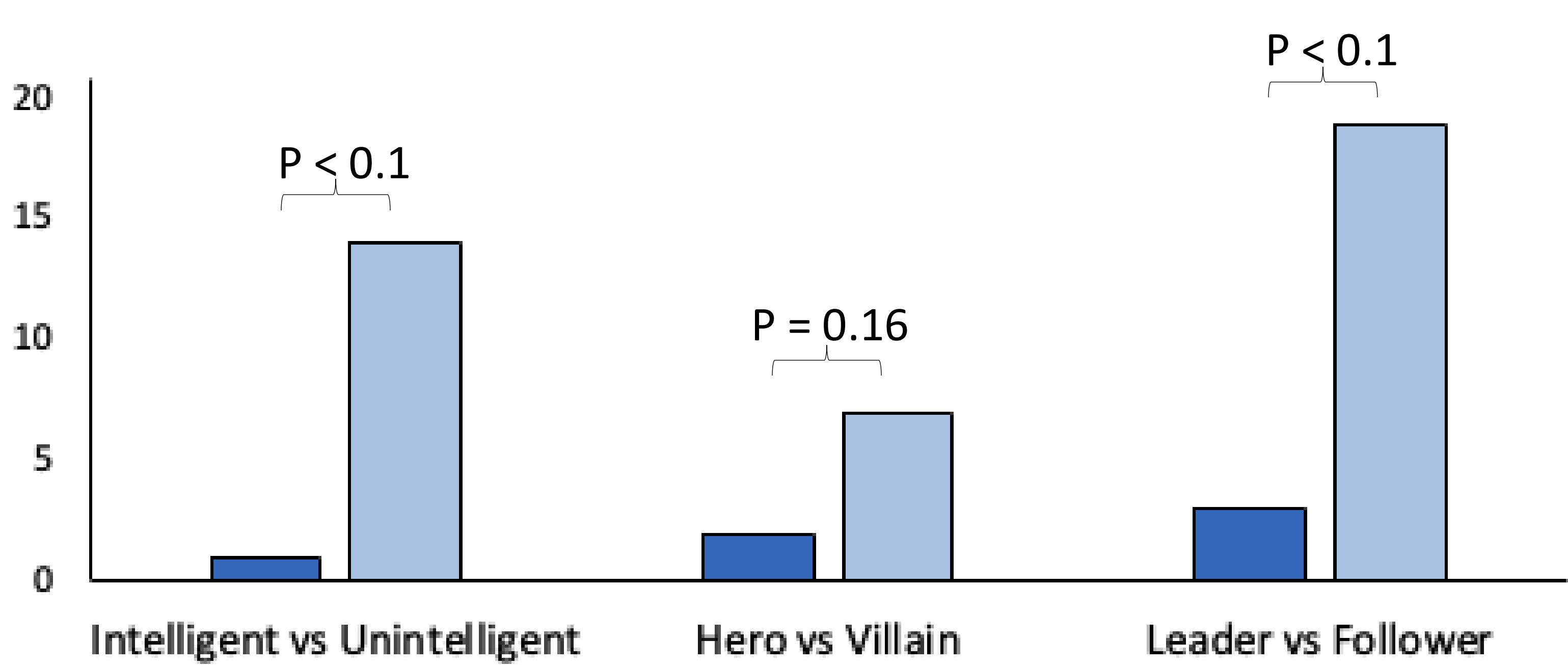
Type of Strabismus (N=46)



- 46 characters with strabismus were identified.
- 32 movies have at least one character with strabismus.
- The most common type of strabismus was exotropia (54%), followed by esotropia (20%), vertical strabismus (13%), and roving dysconjugate eye movements (13%).
- These characters were significantly more likely to be portrayed as unintelligent (30%) than intelligent (2.2%), villains (15%) than heroes (4.3%), and followers (41%) than leaders (6.5%).
- Twenty characters (43%) did not speak, 11 (24%) were portrayed as frightening, 16 (35%) were clumsy, and 16 (35%) had other physical deformities.

Results

Number of Characters with Certain Personality Traits



“Heihei...the dumbest character in the history of Disney animation”
- Ron Clements (co-director of Moana)

Moana, Disney

Conclusions

Characters with strabismus are common in animated films, where they are significantly more likely to be portrayed negatively than positively.

These films are marketed to children, and their negative depictions of strabismus are likely to exacerbate the social stigma faced by children with strabismus.

Pediatricians and ophthalmologists should advocate that animation studios refrain from using strabismus to visually convey negative character traits.

References

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Disclosures

I have no financial interests or relationships to disclose.



The Lion King, Disney



Spirited Away,
Studio Ghibli