

# DEPICTIONS OF DENTAL DIFFERENCES ON THE SILVER SCREEN

## INTRODUCTION

Dentition and dental appearance hold social importance; deviations from the ideal straight, white smile have been associated with bullying and low self esteem.

## OBJECTIVE

The aim of this study was to evaluate how dental differences are portrayed in animated films.

## METHODOLOGY

Twenty-eight full length films produced by Pixar from 1995 to 2024 were reviewed. Four were excluded due to the absence of characters with anthropomorphic teeth. Characters were screened for “dental differences” by student raters and then confirmed by a dentist. Character trait analysis was conducted by four independent raters using a 16-question scale.

## ANALYSIS

Figure I. Movies with Characters with Dental Differences

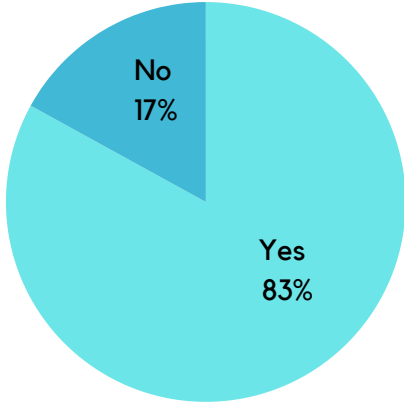


Figure II. Roles of Characters with Dental Differences

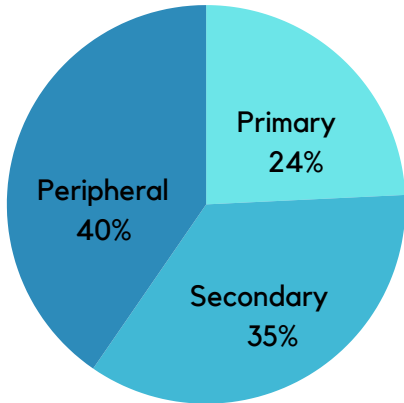


Figure III. Overall Perception of Characters with Dental Differences

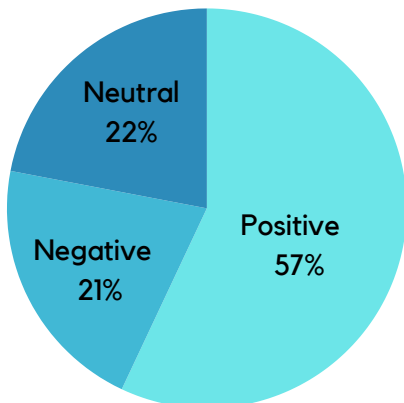


Figure IV. Characters with Dental Differences as Sources of Humor

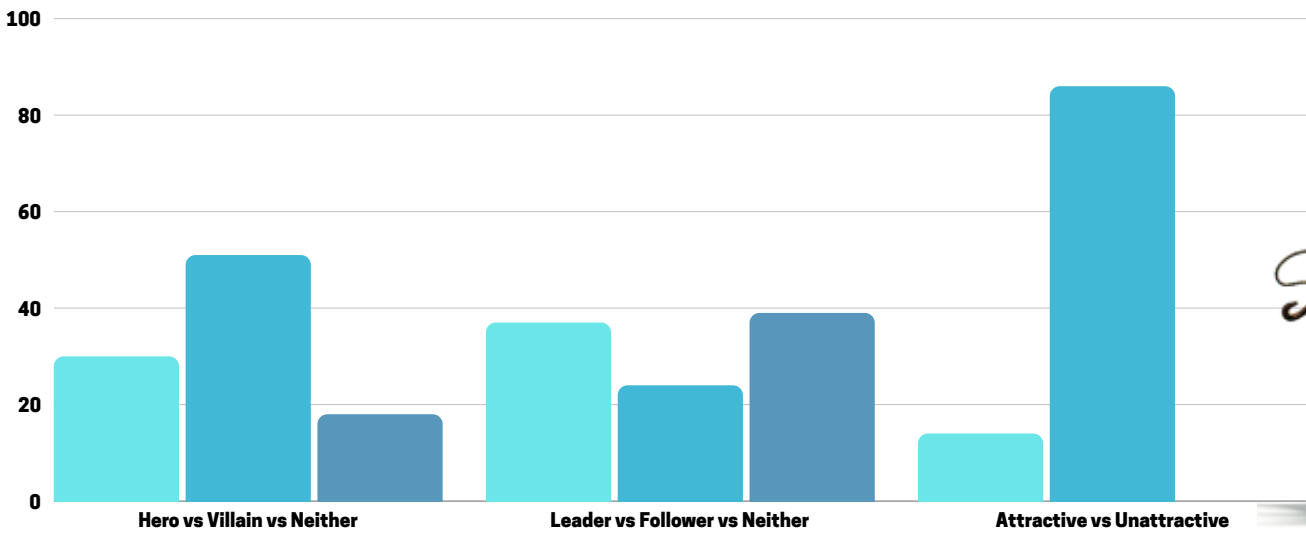
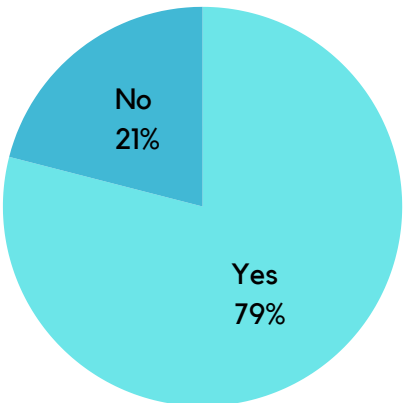


Figure V. Selected Qualities of Characters with Dental Differences



Figure VI. Examples of Characters with Dental Differences with positive and negative associations and qualities.

## RESULTS

Twenty movies (83%) had at least one character determined to have a dental difference, with 76 unique characters identified. Characters with dental differences were less likely to be portrayed in primary (24%) compared to secondary or peripheral roles, less likely as leaders (37%) compared to followers or neither, and less likely as heroes (30%) compared to villains or morally ambiguous figures. Over half of these characters (56%) were ultimately perceived positively and 56% served as sources of humor in the plot. Eleven (14%) were rated as conventionally attractive. The inter-rater reliability by Fleiss’ Kappa was moderate to substantial (0.44-0.74).

## CONCLUSION

While animated characters with dental differences were not portrayed negatively across the board, they were associated with traits that may promote bias. Future analysis stratifying by specific dental difference and including more film houses will expand on the depiction of teeth in popular media, which may shape the perceptions of young viewers on their own smiles and those around them.

### AUTHORS

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