

Gender Inequality in Popular Animated Films

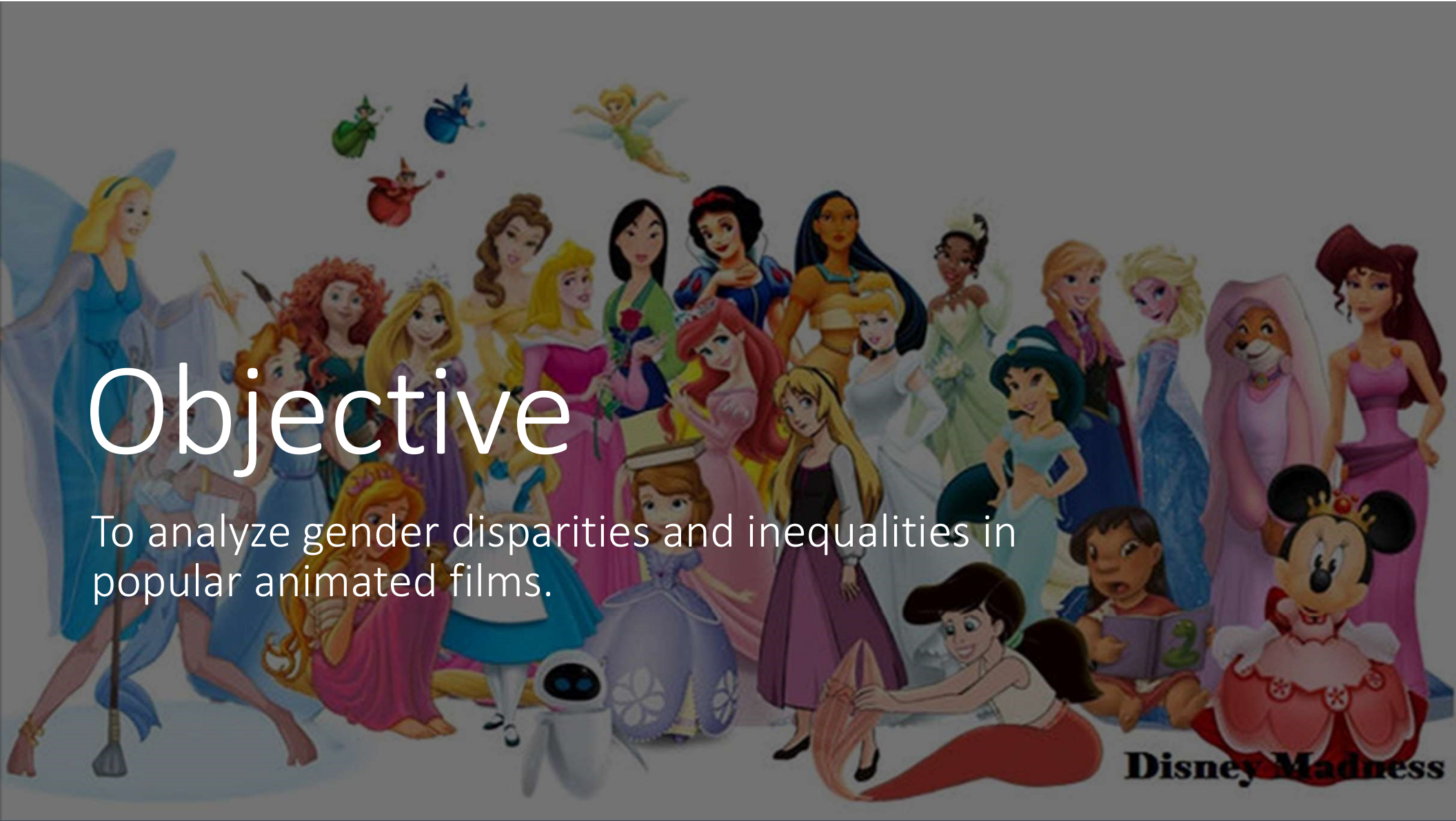
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Objective

To analyze gender disparities and inequalities in popular animated films.

Disney Madness



Research Importance



Children's media consumption in past 2005-2010 (Kaiser Family Foundation Study, 2010):

- Increased by an hour and seventeen minutes daily
- Increase in every type of media use (except reading)
- Percentage of 8- to 18-year-olds with a cellphone has increased by 27%

Research Importance

Social Cognitive Theory (Bandura, 2001)

- Mass communication, such as film and media, plays a large role in people's development of their ideas on self and society
- Personal, behavioral, and environmental determinants influence each other
- Individuals form their social perceptions from information inputs



Research Importance



Potential impacts of media consumption

- Lower grades and lower levels of personal contentment (Kaiser Family Foundation Study, 2010)
- Girl's negative perception of self and world (Guo, 2016)
- Decreased self-esteem for all children except white boys (Martins & Harrison, 2011)
- Gender stereotypes of intellectual ability impact children's interests (Bian, Leslie, & Cimpian, 2017)

Previous Research

Gender Representation and Speaking Roles

The Geena Davis Institute on Gender Media

Heldman et al. (2020):

- 62.6% of children's TV episodes have a positive representation of female characters (passed the Bechdel Test)
- 45% of children's TV episodes have a female lead

Giaccardi et al. (2019):

- Female characters make up 36.6% of speaking time in children's film
- Female characters make up 39.8% of screen time

Smith et al. (2010):

- 28% of the speaking roles in the sample of children's films were female



Previous Research



Grosses by Gender-Related Variables

Gibson (2014):

- Earnings among the 50 highest-grossing films in 2013:
 - \$4.22 billion- films passing the Bechdel Test
 - \$2.66 billion- films not passing the Bechdel Test

Davis et al. (2016):

- Family films with female leads generated \$10 million (7.3%) more on average than films with male leads



Previous Research



Other Character Variables by Gender

Davis et al. (2016):

- 67.3% of supporting characters are male and only 32.7% are female

Hare (2018):

- Average size of the posse or entourage was 4.5 characters per film.
- Males held an average of 3.2 of these roles (71.9 percent)
- Females held an average of 1.3 of these roles (28.1 percent)

Methods

Sample

- 150 top-grossing animated films in North America between 1990-2020
- collected using boxofficemojo.com
- selected due to their popularity among the most influential audience: children

Data Collection

- Films were analyzed by Dr. Sara Hare and her research assistants at Indiana University Southeast
- Films were analyzed using a codebook with specific criteria for each variable
ex. Lead character, speaking role, main gang, nature of characters, Bechdel Test



Results

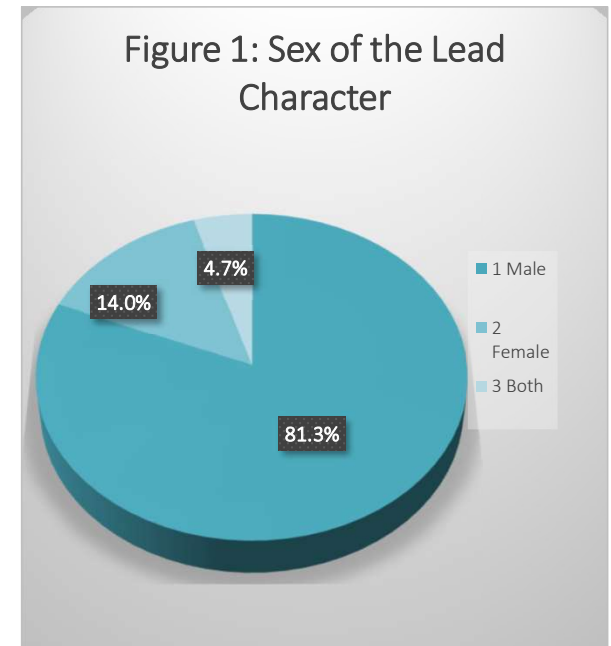
Gender Representation and Speaking Roles

H1: There are more lead male characters than female characters.

- 85.3% were male (ex. *Cars*, *Kung Fu Panda*, and *Ice Age*)
- 4.6% were female (ex. *Moana*, *Anastasia*, and *Coraline*)
- Chi-square results were highly significant ($X^2=71.336$, $df=1$, $p<.001$)



This hypothesis was supported.



Results

Gender Representation and Speaking Roles

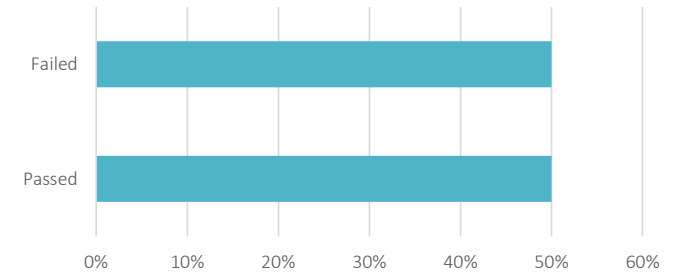
H2: Most animated films will pass the Bechdel Test.

- 50% passed, 50% failed
- Chi-square was not significant



This hypothesis was not supported.

Figure 2: Percentage of films passing/failing the Bechdel Test



Results

Gender Representation and Speaking Roles

H3: Films with female lead characters are more likely to pass the Bechdel Test than films with male leads.

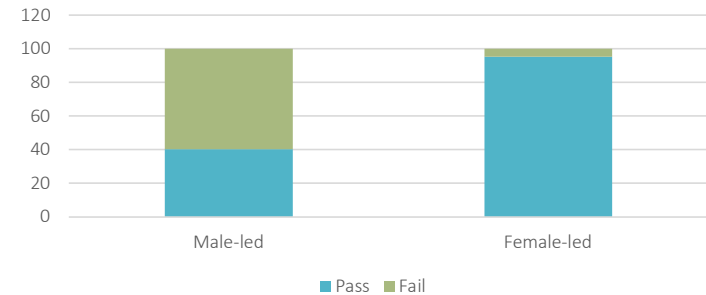
- Male-led films: 60% failed, 40% passed
- Female-led films: 5% failed, 95% passed
- Chi-square results for this test were highly significant ($X^2=21.764$, $df=1$, $p<.001$)



This hypothesis was supported.



Figure 3: Percentage of films passing the Bechdel Test



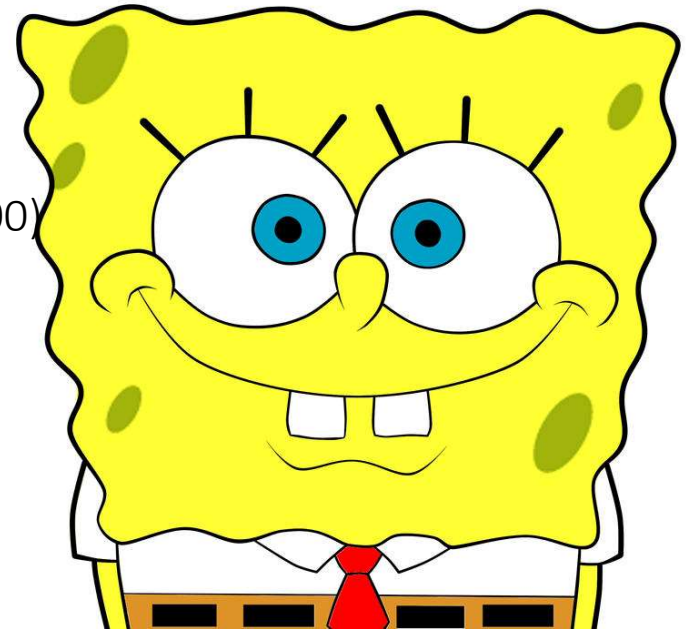
Results

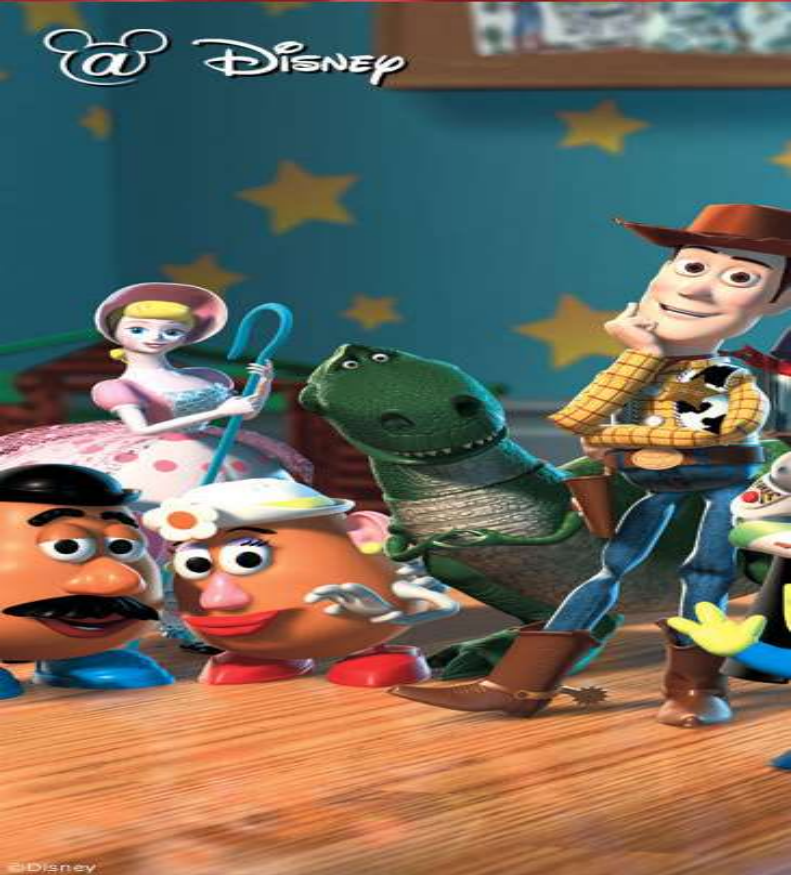
Gender Representation and Speaking Roles

H4: There are more male speaking characters than female speaking characters.

- Total average speaking roles per film:
 - females: 11.7 speaking roles
 - males: 31.5 speaking roles
- The paired sample t test was significant ($t(149)=17.98, p=.000$)

This hypothesis was supported.





Results

Grosses by Gender-Related Variables

H8: Films with more females in the main gang are higher-grossing than films with fewer females in the main gang.

- For each additional % that is female, the film grosses \$335,400 more.
- The results of the Regression were not significant.

This hypothesis was not supported.

Results

Other Character Variables by Gender

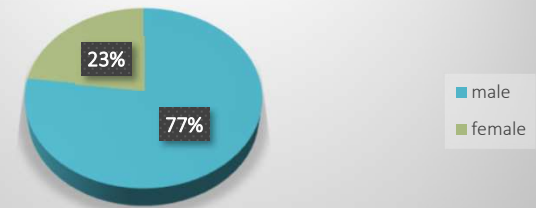
H9: Nonhuman speaking roles are more likely to be males than females.

- Percentage of nonhuman speaking roles by gender
Female- 22.8%
Male- 77.2%
- The paired samples t test was significant, ($t(141)=-19.5, p=.000$).

This hypothesis was supported.



Figure 5: Percentage of Nonhuman Speaking Roles by Gender

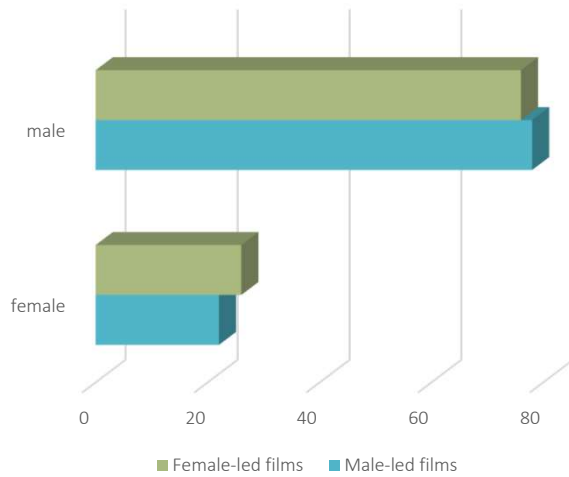


Results



Other Character Variables by Gender

Figure 6: The Percentage of Male and Female Nonhuman Characters Based on the Sex of the Lead



H10: There are more nonhuman characters in female-led films.

- Average nonhuman characters distribution
Female-led films: 39.8%
Male-led films: 51.7%
- Higher number of male nonhuman characters despite the lead of the gender.
- The independent samples t test was not significant.

This hypothesis was not supported.



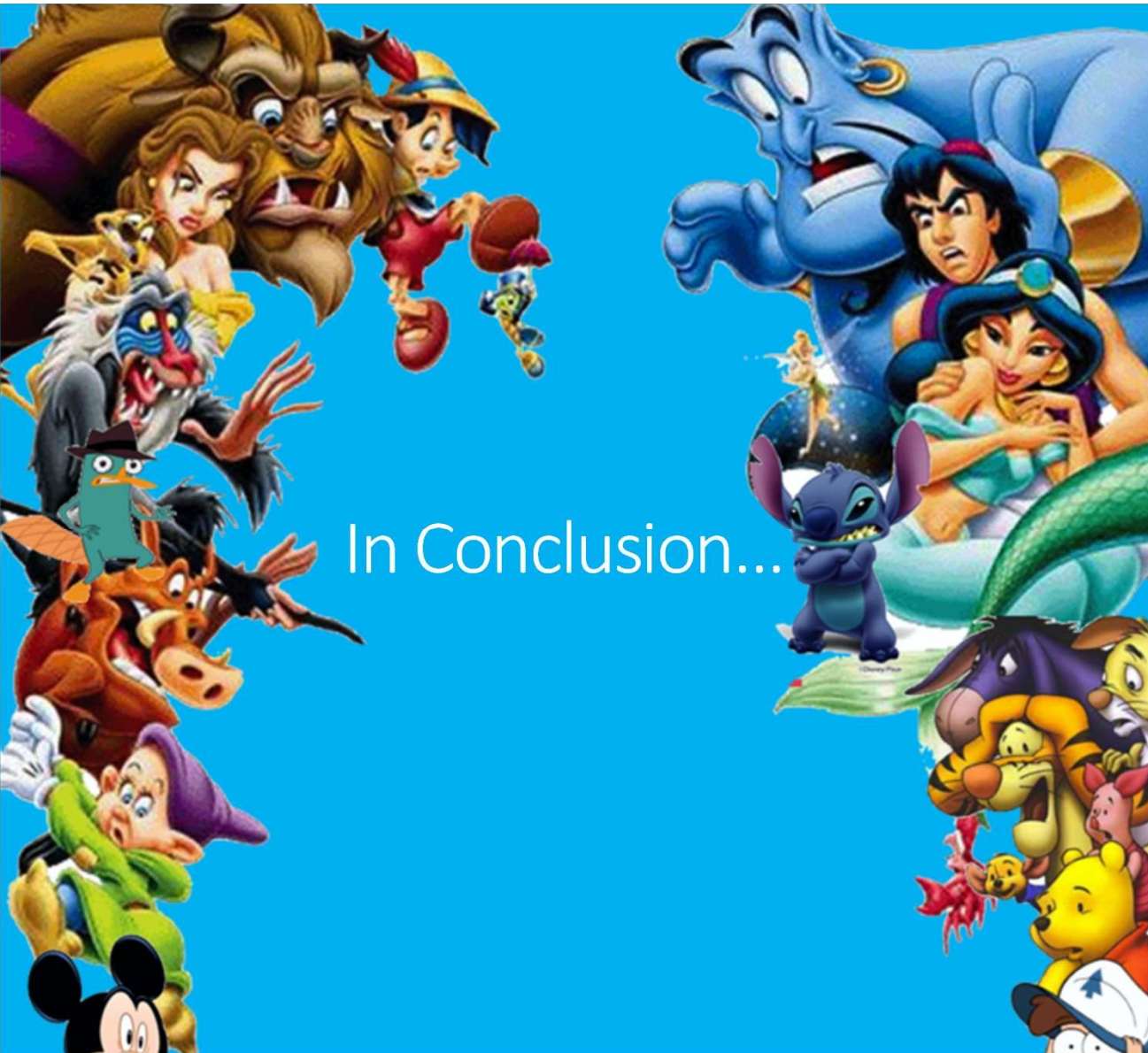
Results

Other Character Variables by Gender

H12: Female-led films have a higher percentage of males than females in the main gang.

- Percentage of males in the main gang by lead's gender
 - male-led: 74.9%
 - female-led: 60.6%
- The independent samples t test was significant ($t(141)=3.42, p=.001$).

This hypothesis was supported.



In Conclusion...

- Movement should continue to be made in this industry
- Further research should be conducted over the implications
- There are severe gender inequalities in animated film

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