



**STONEGIRL**

The  
WALT DISNEY  
Company

**SPELLCHECK FOR BIAS**

# STUDY OVERVIEW

Spellcheck for Bias is based on inventions and software developed at the USC Viterbi School of Engineering. It measures representations of six identities in the *Stonegirl* script:

1. Gender
2. Race
3. LGBTQ+
4. Disability
5. Age
6. Body Size

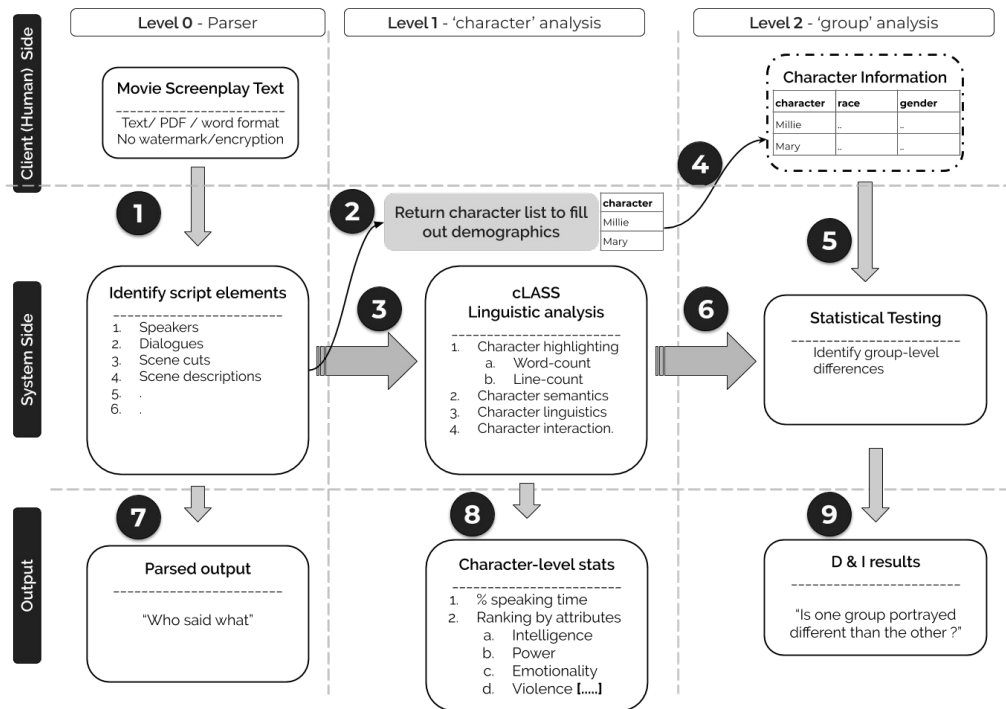
The logo for The Walt Disney Company, featuring the word "The" in a simple serif font, "WALT DISNEY" in the iconic Disney script font, and "Company" in a serif font. The entire logo is white and centered within a black rectangular frame.

# METHODOLOGY

## Automated Processing Workflow

- From text document to
- Language analytics to
- D&I findings

Supported by Human coding



# METHODOLOGY

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- Characters must speak 5+ lines for analysis.
- 32 characters in the *Stonegirl* book met this threshold.

Character Name	Word Count
Evie Quimby	8466
Lulu Mannheim	6154
Win Langley/Scout	2875
Chloe Quimby	1625
Dill/Sheriff Colson	1529
Ida DuBorg	1420
Buddy Quimby	1222
Flo Quimby	1124
Nick Radetzky	975
Peter Shandley	783
Ken Strauss	710
Ephraim Tenenbaum	635
Tom Reynolds	560
Porter Moran	512
Cal Dolenz	502
Nina Apple	501

Character Name	Word Count
Clare Loughton	468
Gerber	324
Trevor Knox	284
Sheriff Dunn/Uncle Billy	250
Walter Morrissey	201
Jacques Clement	188
George Tillman	165
Andy DuBorg	160
Mary Dolenz	151
Charlie Radetzky	134
Morris Clinger	115
Hank Clinger	114
Bissie Strauss	110
Dot	79
Kevin Dolby	75
Evie's attorney	73

# FINDINGS

***Stonegirl***

# CHARACTER TRAITS

- **Analytic Thinking**: Measures the degree to which the characters use language that is formal and logical. Especially important for gender representations given stereotypes of men being rational thinkers and women being more emotional. (e.g., Win Langley “Under one condition,” versus Evie Quimby: “Try to remember”)
- **Intelligence**: Measures intelligence by examining the age of language acquisition for the vocabulary level of each character. (e.g., “sad” vs. “lugubrious”)
- **Authenticity**: Measures the extent to which people reveal themselves in an authentic or honest way. (e.g., Flo Quimby: “We met in a library and fell in love without meaning to.”)
- **Power**: Measures the extent to which the character references status, dominance, and social hierarchies in their language. (e.g., Dill/Sheriff Colson: “No, Mam”)

# CHARACTER RANKINGS: Gender

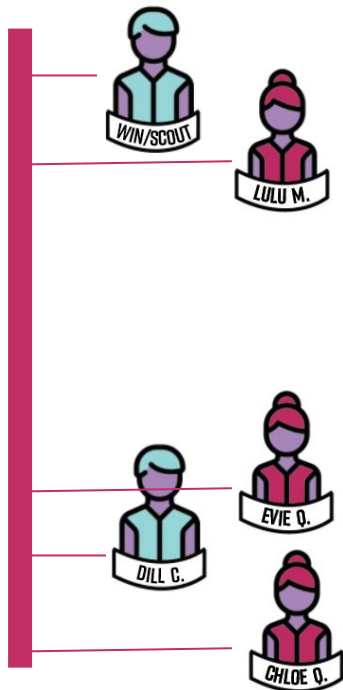
Female | Male

RANKING	ANALYTICAL THINKING	INTELLIGENCE	AUTHENTICITY	POWER
1	Win Langley	Win Langley	Sheriff Colson	Win Langley
2	Lulu Mannheim	Evie Quimby	Win Langley	Sheriff Colson
3	Evie Quimby	Chloe Quimby	Evie Quimby	Lulu Mannheim
4	Sheriff Colson	Lulu Mannheim	Lulu Mannheim	Evie Quimby
5	Chloe Quimby	Sheriff Colson	Chloe Quimby	Chloe Quimby

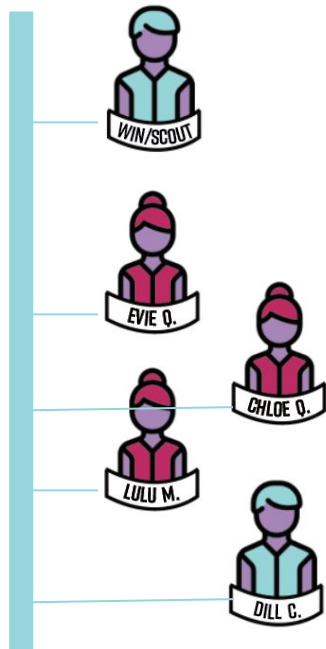


# CHARACTER RANKINGS

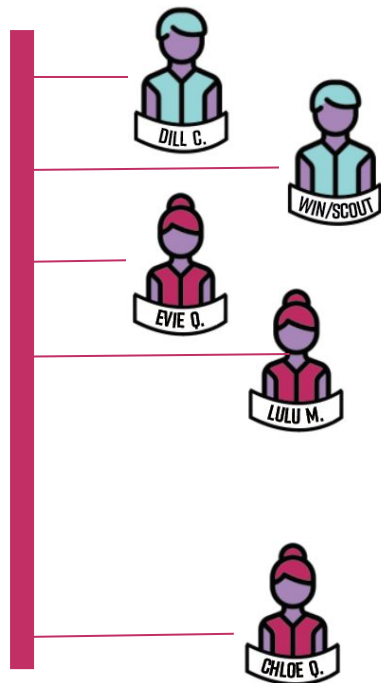
## Analytic Thinking



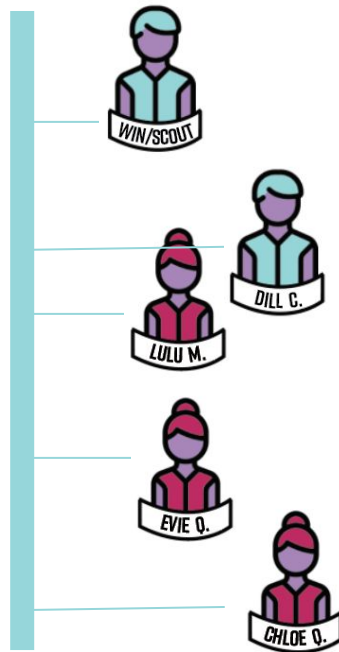
## Intelligence



## Authenticity



## Power



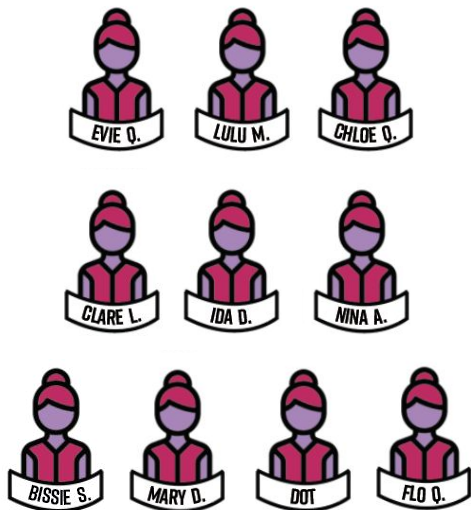
# GENDER ANALYSIS

**BASELINE: Women comprise 51% of the U.S. population.**

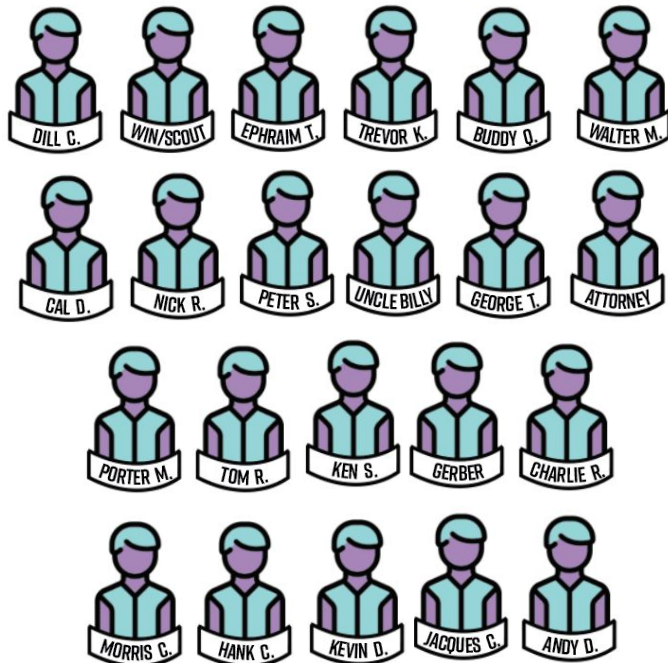
- Male characters outnumber female characters **two-to-one** (71.8% compared with 28.1%).
- **3 of the top 5** prominent characters are women, including a female lead (“Evie”).
- Male characters speak **3.6Xs** more words *on average* than female characters (2,010 compared with 563).
- No gender differences found with character traits (analytical thinking, intelligence, authenticity, power).

# CHARACTERS BY GENDER

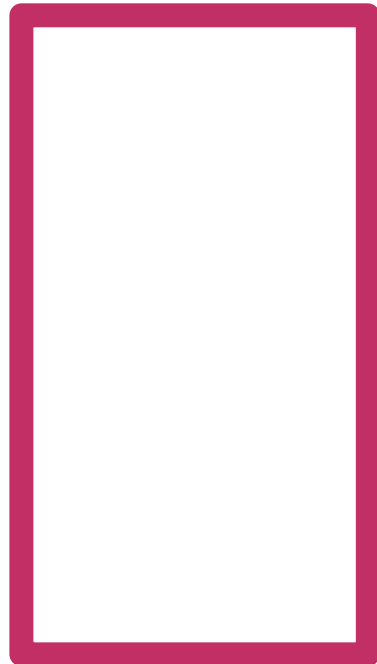
## Female Characters



## Male Characters



## Unspecified Characters



# RACE ANALYSIS

**BASELINE: People of color comprise 38% of the U.S. population.**

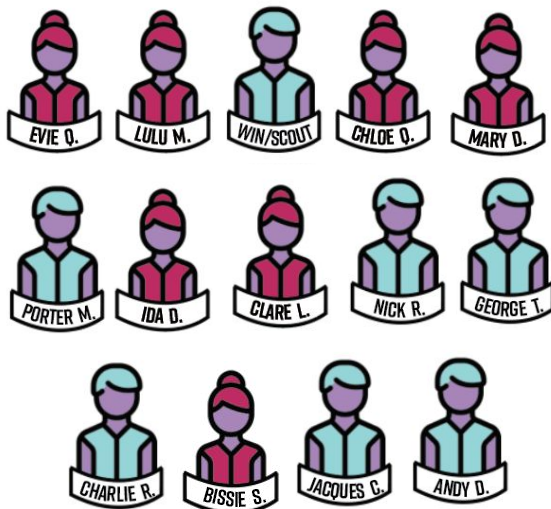
- Only **3.1%** of the prominent characters are characters of color.
- **4 out of 5** most prominent characters are indicated as white.
- White characters speak **1.7Xs** more words *on average* than characters of color in this manuscript (1,057 compared with 611).
- No racial differences found with character traits (analytical thinking, intelligence, authenticity, power).

# CHARACTERS BY RACE

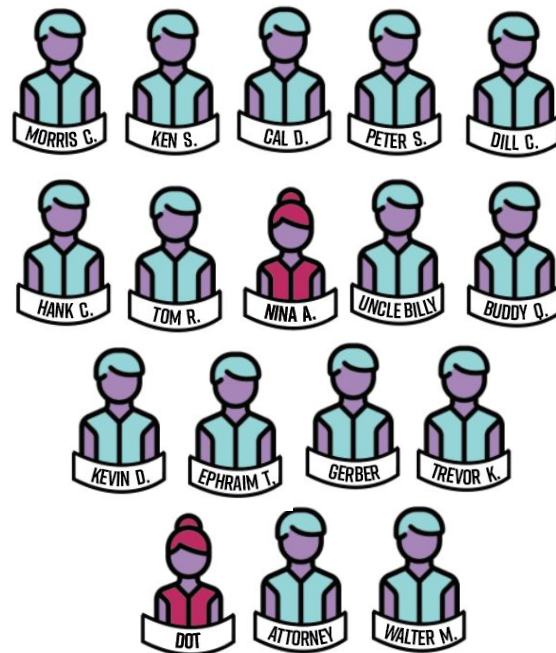
## Characters of Color



## White Characters



## Unspecified Characters



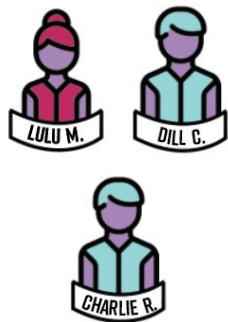
# LGBTQ+ ANALYSIS

**BASELINE: LGBTQ+ people comprise 4.5% of the U.S. population.**

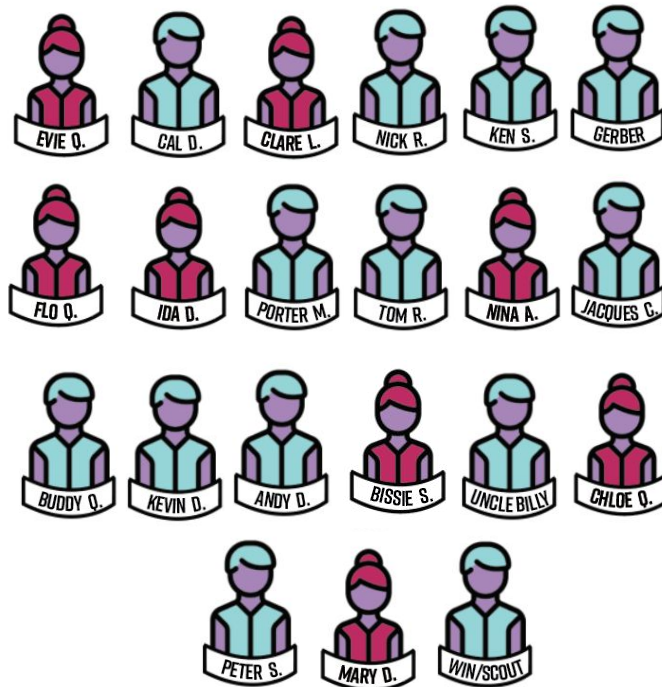
- **9.4%** of the prominent characters are LGBTQ+.
- **2 of the top 5** characters are LGBTQ+ (“Lulu Mannheim” and “Sheriff Dill”).
- LGBTQ+ characters speak **4.6Xs** more words *on average* than other characters (3,841 compared with 827).
- No LGBTQ+ differences found with character traits (analytical thinking, intelligence, authenticity, power).

# CHARACTERS BY LGBTQ+ STATUS

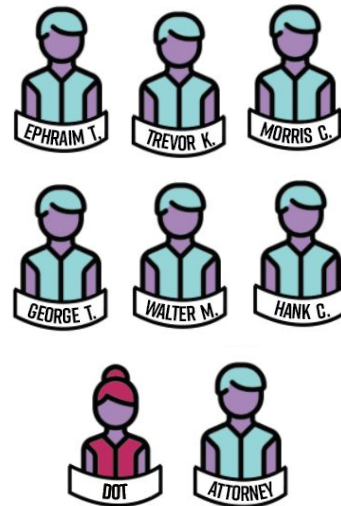
## LGBTQ+ Characters



## Heterosexual Characters



## Unspecified Characters



# DISABILITY ANALYSIS

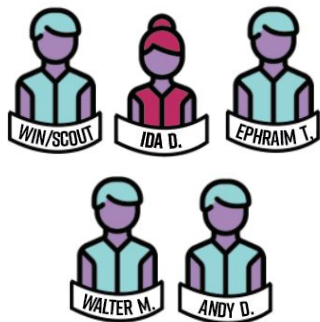
**BASELINE: People with disabilities comprise 19% of the U.S. population.**

- **1-in-5** characters are shown as having a disability (18.8%).
- **1 of the top 5** characters are shown with a disability (“Win Langley”).
- Characters with a disability speak about the same average number of words as characters without a disability (1,072 compared with 1,002).
- No ability differences found with analytical thinking, intelligence, or authenticity, but characters with disabilities have more power than other characters.



# CHARACTERS BY DISABILITY STATUS

## Characters With Disabilities



## Characters Without Disabilities

## Unspecified Characters



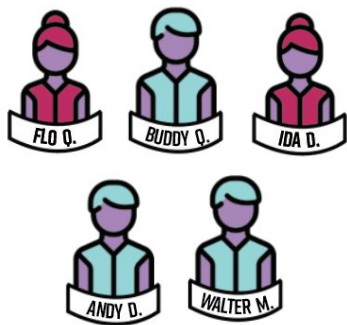
# AGE (60+) ANALYSIS

**BASELINE: People ages 60+ comprise 19% of the U.S. population.**

- **15.6%** of characters are portrayed as 60+ at some point in the story.
- **None** of the five most prominent characters are ages 60+.
- Characters under 60 speak **1.8Xs** more words *on average* than characters who are 60+ (1,050 compared with 598).
- No age differences are found with analytical thinking, intelligence, or authenticity, but characters ages 60+ have more power than other characters.

# CHARACTERS BY AGE

## Characters 60+



## Characters Under 60



## Unspecified Characters



# BODY SIZE ANALYSIS

**BASELINE: People with large body types comprise 39% of the U.S. population.**

- **6.3%** of the characters who speak at least five lines are portrayed as large.
- **None** of the 5 most prominent characters in the manuscript are large.
- Characters with non-large body types speak **3.6Xs** more words *on average* than characters with large body types (1,088 compared with 305).
- No body size differences are found with analytical thinking, intelligence, or power.

# CHARACTERS BY BODY SIZE

## Characters with Large Body Types
































## Characters with Medium or Small Body Types



## Unspecified Characters



# INTERSECTIONAL REPRESENTATION

	Female Character	Character of Color	LGBTQ+ Character	Character with a Disability	Character 60+	Character with a Large Body Type
Female Character		 YES	 YES	 YES	 YES	 YES
Character of Color	 YES		NO 	NO 	 YES	NO 
LGBTQ+ Character	 YES	NO 		NO 	NO 	NO 
Character with a Disability	 YES	NO 	NO 		 YES	NO 
Character 60+	 YES	 YES	NO 	 YES		NO 
Character with a Large Body Type	 YES	NO 	NO 	NO 	NO 