

Linguistic Analysis of Comments on Fitness Influencers' Instagram Reels by Gender



George Elasmarr¹, Avery Salerno, BA², Kyle Palmberg, BA², Dr. Megan A. Moreno, MD, MEd, MPH²

¹Brookline High School, ²University of Wisconsin-Madison Department of Pediatrics

Introduction

Literature

- Women are **more likely to be sexualized** in 'fitspiration' content (fitness inspiration) than men.
- Men predominantly view content by **athletes and bodybuilders** for **gaining muscle/strength**; women focus on **weight loss, diet plans, and celebrities**.
- Women are more likely than men to **compare their bodies** to those on social media and **feel negatively** about their own bodies.

Gap:

Most fitness-related content analysis studies have traditionally focused on Instagram posts themselves and the umbrella of "fitspiration" content.

Purpose:

The purpose of this study was to analyze types of language within the comments on specifically exercise-related Instagram Reels made by fitness influencers, and compare this language between male and female influencers.

Methods

Design:

→ A content analysis of comments on English exercise-related Instagram Reels made by fitness influencers was conducted.

Subjects:

- Reels were sampled from the immediate results after searching '#exercise', screened for inclusion criteria. 15 Reels sampled from female-presenting influencers and 15 from male-presenting influencers.
- Five comments selected from top 20 of each Reel using a random number generator.

Reel Inclusion Criteria

- Created by individual influencer
- At least 20 eligible comments
- English captions & embedded text

Comment Inclusion Criteria

- Must include text
- From external viewers (not influencer)
- In English
- Not a reply

Measures:

- Variables (Linguistic Inquiry and Word Count (LIWC)):
 - Positive Emotion
 - Negative Emotion
 - Sexualization
 - Comparison
- Demographics (Like Count, Comment Count, Date, Comment Likes)

Analyses:

- Comments categorized using LIWC
- Descriptives for demographic information
- Percentage of each category (total)
- Percentage of each category (male/female)

Results

Demographics:

- 150 total comments analyzed from 30 Reels
- Reel dates ranged from November of 2023 to July of 2024

Variable	n	M	SD
Reel Likes*	28	255379.32	566480.32
Reel Comments	30	1492.43	4873.24
Comment Likes	150	547.2	2197.69

*Two Reels hid their like count, excluded from calculations.

Example Comments:

Comparison

- *Female*: "Oh this was me at 17 😭 I wish I had taken better care of my knees, hips and ankles. Two back surgeries. Take care of yourself. Dancing will always be fun and then the joints will wear out." (2.63)
- *Male*: "Bro we both got the same goal in mind, let's GOOOO 🍌🍌" (9.09)

Positive Emotion

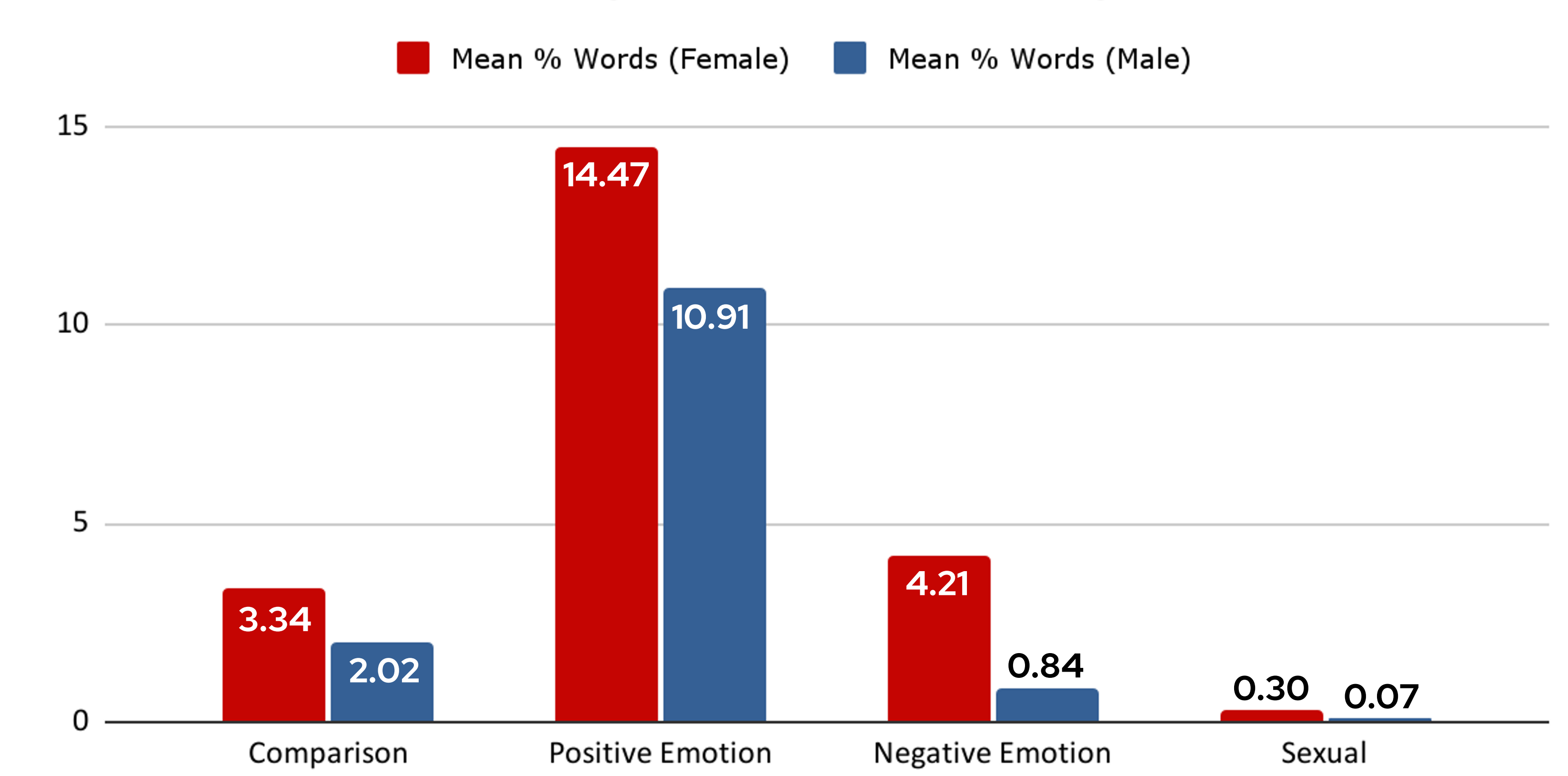
- *Female*: "Hey Thank you for that!!! So helpful" (28.57)
- *Male*: "Love the videos brother" (25)

Negative Emotion

- *Female*: "Pathetic. Go to OF" (25)
- *Male*: "You get this big you lose flexibility....alluding to his shoulders" (9.09)

- On average, of all comments on fitness influencers' Reels in this sample, LIWC detected **a higher proportion of positive words than negative words**.
- Comments on female influencers' Reels, on average, received **five times the percentage of negative words** than comments on male influencers' Reels.
- Comments on female influencers' Reels, on average, received a **higher proportion of comparative and sexual comments** than those on male influencers' Reels, aligning with previous literature.

Distribution of Mean LIWC Scores Among Comments on Female vs. Male Reels (% words/comment)



Comments LIWC Did Not Code:

Multiple comments were **not marked as sexual** by LIWC, despite being contextually sexual.

Female: "Mm love to be that bike seat 🤔🤔🤔" (Referring to a woman using an exercise bicycle)

Female: "Yoga ball 9 months later 🍌" (Referring to a woman using an exercise ball)

Male: "Jeff is getting my bday cake ready ofc 🍌" (Comment uses "cake" as slang for butt)

Male: "bro's got marshmallows instead of glutes"

Discussion

Conclusions:

- These findings indicate that audiences tend to engage with female influencers differently, often emphasizing negativity and making comparisons.
- This pattern promotes the objectification and sexualization of females in online spaces, **potentially diminishing their motivation** to share content.

Limitations:

- LIWC **does not detect tone** in comments, leading to potentially inaccurate results. Generally, there appeared to be many sexual comments that LIWC did not detect (often labeling them as positive). LIWC also could not categorize emojis, which often indicated positive, negative or sexual tone.
- Sampling of Reels was **not completely randomized**. The algorithm's effect on which #exercise posts came first could be a confounding variable.

Future Work:

- Future studies **should consider emojis and GIF comments**, which often indicated strong emotions and tones. Studies could also **consider which types of post elicit certain categories** of comments (e.g., workout tutorials, posts showing progress, fitness comedy, etc.)

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Contact us

George Elasmarr
geomelasmarr@gmail.com

