

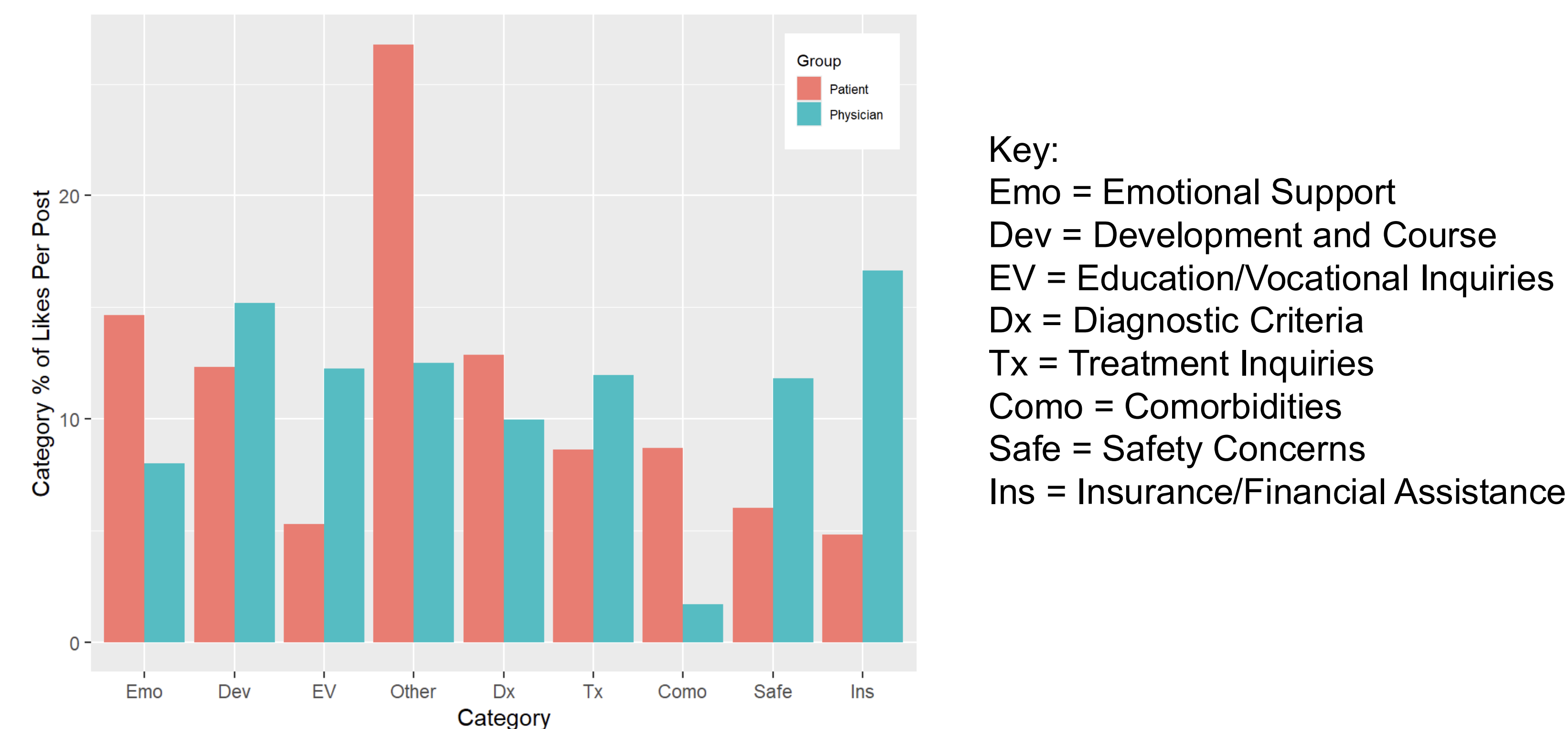
## Background:

- Autism spectrum disorder (ASD) is a widely discussed topic on various social media platforms.
- Specific areas of interest discussed across these social media platforms remain unclear.
- Social media platforms have the power to shape public opinion on these topics.
- Further research is needed to establish patterns of use for both patients with ASD and ASD providers.

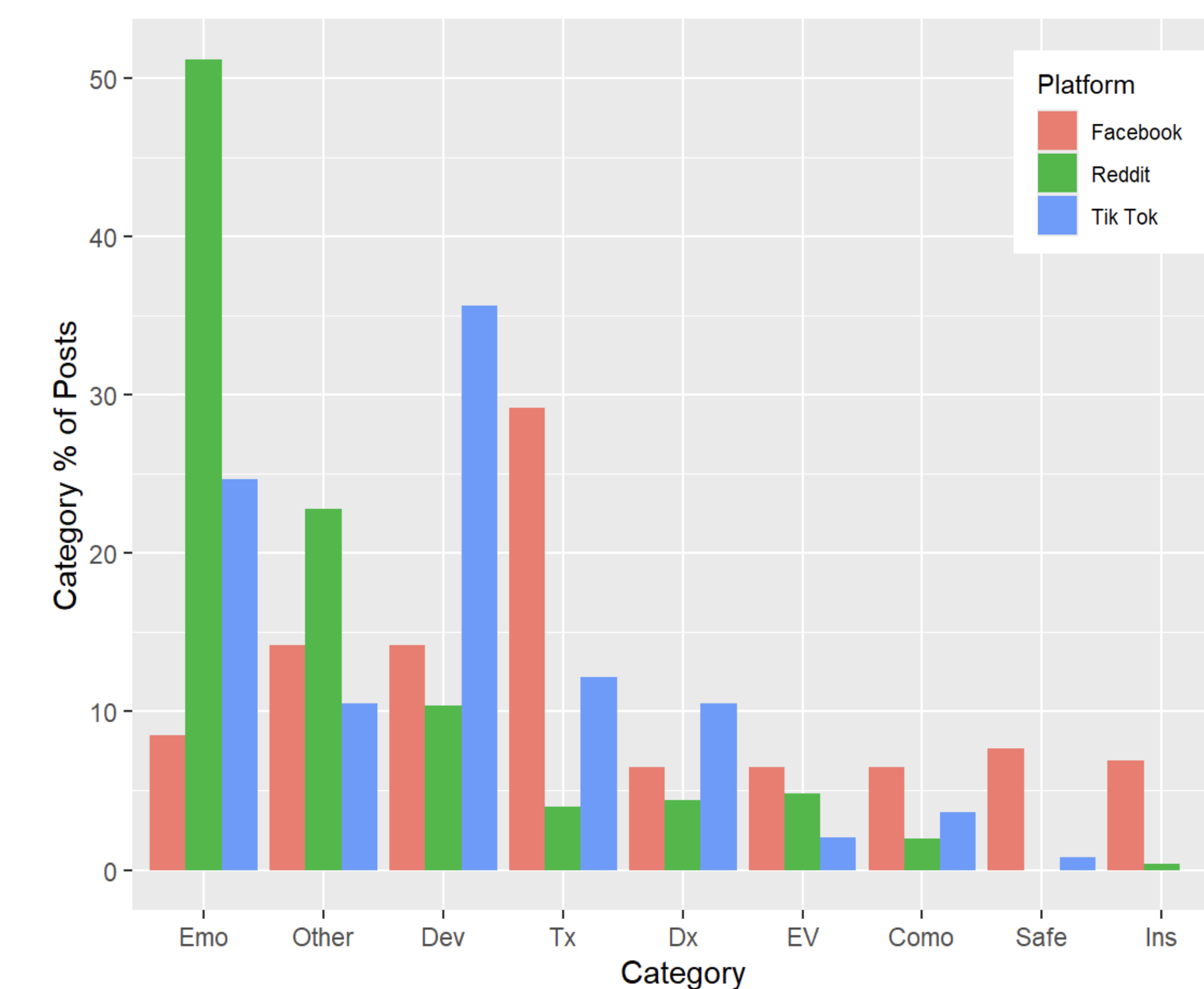
## Methods:

- A broad search identified the most commonly used ASD-related hashtags and communities across Facebook, Reddit, TikTok, and Instagram
- For each platform, the top 5 hashtags/communities were selected; the top 50 posts per hashtag/community were collected (250 posts per platform)
- Reddit, TikTok, and Facebook posts were categorized as **patient-generated content**, while Instagram posts were categorized as **provider-generated content**
- Each post was coded by content category, and engagement metrics (likes/upvotes and comments) were recorded
- Instagram posts were transcribed and analyzed using a readability calculator to determine reading level across hashtags

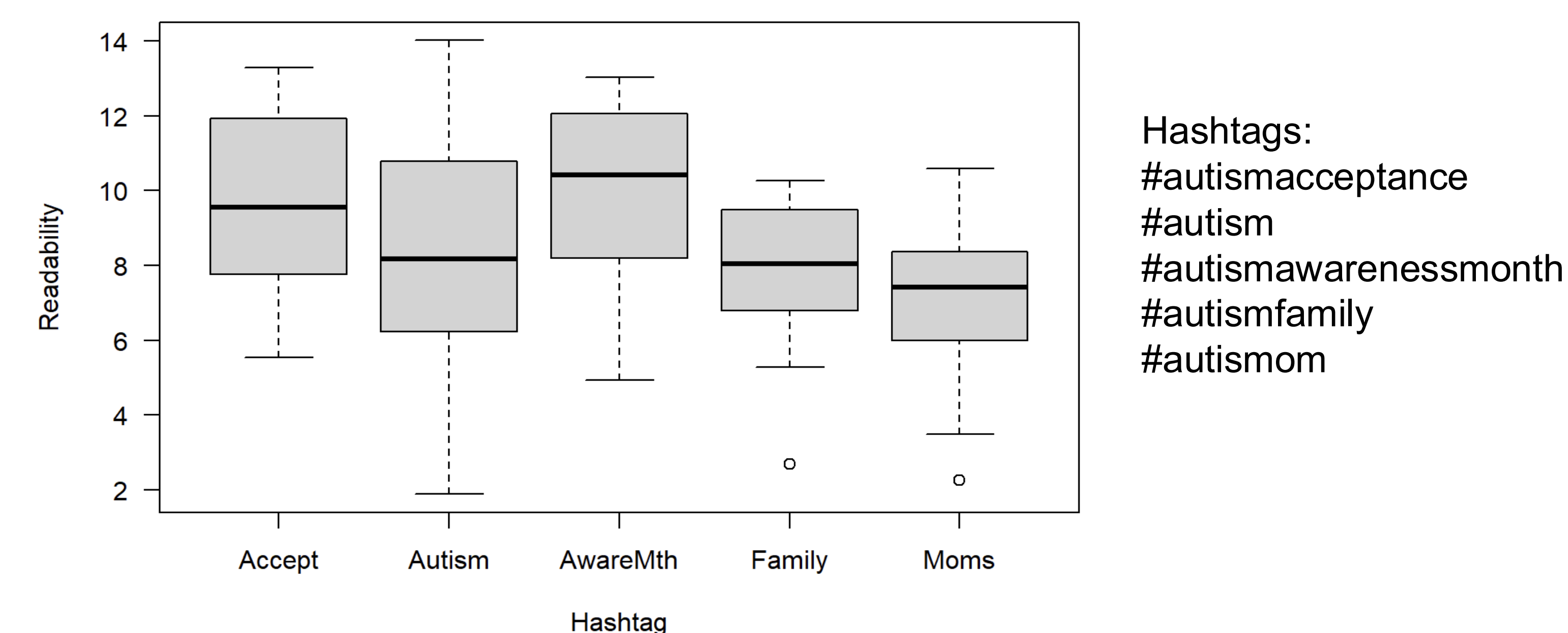
## Results:



**Figure 1.** Category Proportion of Likes Per Post by Group  
X-squared = 38.342, df = NA, p-value = 0.00002



**Figure 2.** Category Proportion of Posts by Platform (Patients only)  
X-squared = NaN, df = 24, p-value = NA



**Figure 3.** Readability of Provider Generated Content

## Discussion:

- Patients are most commonly using social media for emotional support and other reasons beyond the predetermined categories with the most engagement on Reddit.
- Physicians can correlate where they engage on social media based on where patients are most commonly engaging. For example, patients are most commonly engaging in Development and Course content on Tik Tok indicating this is where physicians should target their content on that topic.
- Mean readability for the provider hashtags range from around 7th-10th grade reading level. National average reading level is 7th-8th grade, indicating improvements could be made to match the US population.

## Limitations:

- Most common posts change every day and appear according to algorithm of account
- There is a difference in time between data collection for patient and physician posts
- Posts occasionally overlapped between categories, limiting the scope of analysis

## Future Directions:

- Collect more longitudinal data for each platform
- Aim to create social media friendly content about ASD that providers can share online
- Include survey to understand patient experience of ASD on social media