

Framing ADHD: How Instagram Reels Portray ADHD and its Effect on Adolescents

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Abstract

Social media has become a widespread tool for connection, advice, and information, particularly among adolescents. Individuals with Attention Deficit/Hyperactivity Disorder (ADHD) may be especially influenced by the content they consume online. This study analyzed 100 Instagram Reels to examine the sentiment of content related to ADHD and assessed how adolescents respond to the media. The results from the content analysis demonstrated that 62% of the Reels portrayed ADHD negatively. Additionally, survey responses from students described the Reels as “confusing” or “neutral,” suggesting a lack of clarity or positive representation. These findings highlight the need for content creators to be more intentional about how they depict ADHD, and for adolescents to approach such content with a critical perspective.

Keywords: *ADHD, Instagram, Social Media, Adolescents, representation, sentiment*

Literature Review

Over the past 25 years, the conversation around Attention-deficit/hyperactivity disorder (ADHD) has grown significantly, reshaping how we understand and manage the diagnosis. In 1994, the DSM-IV, that diagnostic manual at the time for mental disorders, expanded how physicians could diagnose patients with ADHD by identifying different subtypes, or symptoms, of the disorder. This meant that many people, typically younger individuals at the time, would be treated and recognized after many years of being ostracized for their hyperactive/inattentive or “disruptive” behaviors caused by ADHD. While 25 years may be a short span in the scientific world, the progress made has helped shift ADHD from a stigmatized, 'taboo' subject to something adolescents have increasingly embraced as part of their identity. With ADHD being one of the most common mental disorders now among children, it has become “one of the best-researched disorders in medicine” as mentioned by the American Medical Association (Goldman et al., 1998). The outreach of information has also been able to grow rapidly over the past 20 years as well, spreading exponentially over online platforms. This change has been particularly evident among younger generations, especially teens, who have found ways to connect with others through social media, sharing their struggles, victories, and questions about living with ADHD.

As mentioned before, a key component of this growth has been the rise of social media. According to a report by Backlinko, drawing on data from eMarketer, TikTok, and Statista, TikTok has experienced a dramatic surge in downloads—rising from 55 million in 2018 to 1.5 billion over the last six years, a 27-fold increase (*Backlinko*, 2024). However, global technology editor of *The Guardian*, Dan Milmo, wrote that Instagram, with its new “Reels” feature, has

surpassed TikTok's benchmark of downloads in March 2024. When Instagram's Reels launched in 2020, it was discussed as an "imitation of TikTok[s]" (Milmo, 2024) short videos. This addition has been so effective that Nasdaq (2024), a trusted stock marketplace that reports on business data, reported that Instagram users spend 50% of their Instagram time now on Reels ("Thuzump Launches Video..., 2024"). The data from these sources begin to show evidence that Instagram's reach through new strategies has made the platform essential to analyze. That being said, applications like Instagram and TikTok have given billions of users, especially teenagers, the opportunity to share personal experiences with a global audience. This connection has been transformative, not just in terms of creating community but also in developing how ADHD is viewed, especially among U.S. teens. According to the Pew Research Center, 47% of teenagers visit Instagram at least daily (Anderson et al., 2023). As we come to understand how social media is a major part of adolescents' routines, it is imperative to research how certain content has adjusted the stigma on ADHD. Not only does it heavily impact the general population's ideas, but it also heavily exacerbates the symptoms of ADHD. In a study conducted on Lebanese Adults in 2022, Farchakh et al. discovered a clear correlation from social media use to anxiety and ADHD symptoms. The "constant stimulation provided" (Farchakh et al., 2022) by social media has shown to decrease attention spans. Therefore, analyzing the impacts of social media is extremely important for a widespread audience and some might be particularly more susceptible to changes in behavior because of it.

Building upon the relevancy of social media, it has been notorious for its widespread misinformation. On these social media platforms, there are no set guidelines for posting accurate information, just typical regulations on the maturity level of the content. With the short videos providing information on any given topic, people have been more inclined to opt for a quicker

answer to life's questions. Grace Niewijck, a science senior writer at UChicago Medicine, noted that a multitude of people "prefer to use social media in place of traditional search engines" (Niewijck, 2024) like Google or Yahoo!. This shift towards relying on social platforms for information amplifies the risks identified by researchers Yeung et al. at *Can J Psychiatry*, who found that over half (52%) of TikTok's most viewed videos on ADHD were misleading (Yeung et al., 2022). These quick, 15-second to minute-long videos likely give false information about treatment, symptoms, and other essential information about medical conditions. As researchers trying to understand the conversation being held online about ADHD started to emerge, preliminary studies conducted by Erica Igere aimed to address how TikTok content changed perceptions about ADHD to determine the stigma on ADHD. As a result, Igere (2024) found that post-perception scores after watching "mental-health-related content on social media" were lower than pre-perception scores, indicating a negative change from viewing the videos. Igere's findings raise concerns about how social media might be increasing the stigma of ADHD, therefore generalizing or invalidating ADHD. Igere and Yeung et al. both suggest the importance of analyzing the sentiment around ADHD through social media and how this contributes to the conversation being held today.

This idea of social media being a cornerstone for the conversations of ADHD and other mental disorders or illnesses is strengthened through Tudehope et al.'s work discovering "[w]hat methods are used to determine representation of mental ill-health on social media" (Tudehope et al., 2024). While analyzing the methods of various studies, they found that over 77.8% of the body of knowledge was focused on Twitter and a similar application, Sina Weibo. Tudehope et al. made the conclusion that most of the studies being conducted on social media from the years 2013-2022 focused on text-based data. To this aspect, my analysis will be focusing on videos

which include different factors such as various tones and visual methods to convey a message. This multi-faceted approach to delivering information is essential to investigate because the conversation of ADHD is now heavily influenced through platforms such as Instagram and TikTok, especially among younger generations. Because Igere and Yeung et al.'s work have displayed a more negative view of the portrayal of ADHD on social media, Tudehope et al.'s research prompts me to look further into social media because of the lack of perspective from another dominating social media application.

As mentioned previously, researchers such as Igere and Yeung et al. have explored the stigma and content surrounding ADHD on TikTok, but there has been no investigation into Instagram contributing to these discussions. My research will examine how users engage with this content, offering knowledge into how the conversation around ADHD has evolved. This exploration is especially significant for adolescents, who spend much of their time on social media and may unknowingly absorb content that shapes their perceptions and understanding of mental health disorders. The current gap in understanding how social media impacts ADHD stigma inspired my research question: Do Instagram Reels about Attention Deficit/Hyperactivity Disorder depict a “negative” or “positive” view of the disorder, and what are the implications for the perceptions of adolescents? Adding to the conversation about the portrayal of ADHD on social media my research could also benefit future researchers as they can compare the way ADHD has been perceived throughout the years. It is important to recognize how conversations have evolved, so my study will help establish more insight into how ADHD is currently being perceived. Additionally by looking at Instagram, this also adds value to the literature by acknowledging platform-specific differences, helping scholars and practitioners better understand how varying formats and audiences impact the perception of ADHD. My refined

focus on Instagram could further aid in creating more effective, platform-tailored educational content or interventions, which is currently an under-explored area in ADHD research on social media. Concluding from the results from Yeung et al. and Igere, I hypothesize that Instagram will carry on the trend of portraying negative videos, possibly also due to a lack of factual information.

Methodology

I incorporated a mixed-methods approach to conduct my study. First, I did a content analysis to collect data from Instagram. I scored these Reels based on criteria I developed to determine if they portrayed a positive, neutral, or negative message. The second part of my method included a survey to answer the second part of my research question: how do these Reels affect the perceptions of adolescents? The survey required participants to watch three Reels and answer about how each Reel informed them about ADHD.

Content Analysis

To gather content, I created a new Instagram account named @avelozapresearch to avoid the algorithms of a personal account. Similar to Yeung et al.'s method of saving 100 videos and using the “#adhd” to gather her samples, I searched “adhd” on Instagram’s search engine and saved 100 Reels based on the order Instagram recommended these Reels to me. To ensure a current and unbiased evaluation, I searched “adhd” rather than using a hashtag. A sample of 100 Reels was selected to ensure sufficient representation while avoiding algorithmic redundancy. The Reels I discounted were as follows: ones in a language other than English, duplicates, ones without any type of audio, and ones that had no connection to ADHD. For my criteria, I focused on queues that would not change no matter what Reels I watched to ensure there was no bias within my scores. Figure 1 displays the criteria with examples of what would get the following

numerical values: 1= Positive, 2=Neutral, and 3=Negative. The Reels were scored based on their average rating on each of the following categories in Figure 1.

Figure 1

Criteria for Reels

Criteria for Content	Message (M)	Tone (T)	Caption (C)	Top 3 Liked Comments (Lc)
Positive (1)	Main purpose for Reel or amplifying any of the following about ADHD; creative, spontaneous, adequate problem solvers, “fun” energy, hyperfocus, multi-talented, ambitious, entrepreneurs, and productive.	Reel’s tone of speaking or audio was mostly any of the following; motivational, joyful, optimistic, compassionate, and upbeat.	Caption reflects that the content displays ADHD as beneficial to life OR the caption reflects ADHD is described as creative, spontaneous, adequate problem solvers, “fun” energy, hyperfocus, multi-talented, ambitious, entrepreneurs, and productive.	At least $\frac{2}{3}$ comments reflect that the content was; helpful, uplifting individually, positively educational, light-hearted, uplifting ADHD, creating a welcoming community, and helping people feel understood.
Neutral (2)	The main purpose of the Reel was to present information without taking a stance, educational, and/or informational.	The Reel’s tone of speaking or audio was mostly any of the following: objective, calm, factual, and informative.	Caption reflects that the content presents factual information without opinion, avoids emotional language, describes the Reel without personal interpretation, and acknowledges diversity.	At least $\frac{2}{3}$ comments use a balanced or factual tone (no emotional language), clarify language, simply acknowledge or reflect on the content, raise a question without picking a side, constructive feedback, and maintain respect for diverse

				opinions.
Negative (3)	The main purpose of the Reel was to amplify any of the following about ADHD in a way that makes life a struggle; distractive, hyperactive, impulsive, inattentive, excessive talking, impatient, struggle to follow directions, untalented, impatient, never content, difficulty remembering details, emotional dysfunction, excessive procrastination. Reinforces any of the stigmas such as not a real disorder, result of laziness/lack of discipline, result of too much screen time, only affects children, only affects boys or isn't as severe in girls, only shows hyperactivity not as inattention. (Loving, 2022)	The Reel's tone of speaking or audio was mostly any of the following: pessimistic, critical, discouraging, condescending, irritating, dismissive, dramatic music.	Caption reflects that the content portrays life as worse with ADHD or reflects that the content is an overall disappointing, weak, or sad aspect of ADHD.	At least $\frac{2}{3}$ comments reflect that people feel worse about themselves/experiences, they contain misleading, polarizing language, incite anger, or that the Reel creates worse problems.

I chose the categories in Figure 1 because they could each tell me about the goal the creator had in making the Reel or, for the comments, how the audience perceived it. See Appendix A for examples of the caption and comments that applied to the respective category.

Criteria Categories

Message (M). The message of each reel was the foremost way to gauge whether or not the Reel was positive, neutral, or negative. I centered my criteria for the positive section on whether the Reel portrays ADHD as an overall positive experience. I then focused on identifying specific words in each Reel that are commonly used to highlight the advantages of ADHD. For my neutral section, I accounted for Reels whose purpose was to simply present information without taking any stance on how they feel— this shows there is no bias in their information. For the negative section, I focused on Reels that highlighted the disadvantages of ADHD or portrayed life with ADHD as more challenging than life without it. I compiled a list of key terms used to describe ADHD unfavorably. Additionally, I referenced the stigmas identified by Nancy Lovering in her medically reviewed Healthline article (Lovering, 2022), reviewed by medical advisor Nicole Washington, DO, to compile a list of common ADHD-related stigmas. A Reel was assigned a negative score if it reinforced any of these stigmas.

Tone (T). I accounted for each Reel's tone because an important differentiation from text-based social media to video-based is that there can be underlying tones in audio or voices that influence the audiences' perceptions. To receive a positive score I focused on tones through voice and music that were optimistic, joyful, and uplifting surrounding ADHD. Reels that received a neutral score had an objective, calm, or factual tone that led to no bias. To receive a negative score, the Reel's tone had to be pessimistic, dramatic, critical, and/or discouraging.

Caption ©. The caption of each Reel was accounted for because it was important to see how each creator summarized or reflected on the information they shared. To receive a positive score, the caption would have to reflect that the Reel falls into the "positive Message" category in Figure 1. To receive a neutral score, the caption reflects that the Reel presents information that is

unbiased and takes no stance. To receive a negative score, the caption reflects that the information presented in the Reel is disappointing or falls into the “negative Message” category.

Top 3 Liked Comments (Lc). Lastly, I chose to look at the comments section because the audience reflects the perception the general public has of the Reels. I analyzed the top three most-liked Instagram comments, as they likely reflect the audience's consensus and could be analyzed in a timely manner. To receive a certain score, $\frac{2}{3}$, or the majority of the comments would have to fall into the following criteria. For the positive score, $\frac{2}{3}$ of the comments would depict the Reel as helpful, uplifting, motivational, lighthearted, and or community-building. For the neutral score $\frac{2}{3}$ of the comments would mostly show an objective tone, ask a question without picking a side, give constructive feedback, and maintain respect for a variety of perspectives. To receive a negative score, the comments would have to mostly depict that the Reel makes them feel worse, is misleading, or creates problems. Additionally, the use of polarizing or upsetting words/images (GIFS or Emojis) would also result in a negative score.

Equation. To give each Reel a final score, I developed an equation to find the sentiment of videos about ADHD on Reels (S). The “sentiment” is the view or attitude towards a situation so finding the sentiment of each Reel told me about people’s perceptions. In my equation in Figure 2, I decided to double the value of M to emphasize its significance in the total sentiment value. Though each category is important, the Reel’s message is more prominent due to my goal of understanding what the creators’ goals were. To calculate the mean value, I divided $2M+T+C+Lc$ by five to account for the message being weighed twice. Without this adjustment, the scores would have skewed into the negative range. The range can be seen in Figure 3, where the values 1-3 are equally divided to score each Reel. My equation would directly help me

answer my first research question of determining if the Reels portray ADHD negatively or positively.

Figure 2

Sentiment Equation

$$S = \frac{2M+T+C+Lc}{5}$$

Figure 3

Score Range

negative score	2.33-3
neutral score	1.67-2.32
positive score	1-1.66

After scoring 100 Reels, I categorized each one as negative, neutral, or positive based on their final score. I then calculated the percentage of Reels that fell into each category to determine the overall distribution of perspectives on ADHD. These percentages represented the final data for my content analysis, providing insight into how ADHD is portrayed in Instagram Reels.

Cross-sectional Survey

The second part of my study had to answer how Reels affected adolescents' perspectives. To complete this, I sent out a Google Forms survey to my high school because my school has students from ages 13-18 which is the age group of adolescents. The participants were made aware that no identifying information would be collected therefore they would stay anonymous. Additionally, I included no incentive and a reminder of its voluntary nature to avoid any bias. The survey had four major sections: the introduction, the definition of ADHD, the Reels and their questions, and the conclusion. The survey was essential to gauge how each Reel made people feel, what they learned, and how it could affect their future actions. Additionally, my

survey helped reflect the results from my content analysis and see the results' effect on adolescents. See Appendix B for all of the form's questions and structure.

Introduction

For my survey introduction, I asked how familiar the participants were with ADHD by using a 1-5 rating scale. Then, I asked what aspects they felt they understood well about ADHD and listed 5 options surrounding the disorder. I began with these questions to understand if ADHD was a well-known topic within my school and understand how videos on social media can fill in gaps in their minds about the disorder.

Defining ADHD

To ensure that all participants had a clear and unbiased understanding of ADHD, I incorporated a paraphrased definition from the American Psychiatric Association (2022). This provided a medically accurate foundation for their understanding of the disorder. Additionally, to prevent any potential bias in how ADHD was presented, I was careful to include only objective statements in my summary, avoiding any language that could influence participants' perceptions.

Reels

For my third section, I included three Reels with the same four follow-up questions per Reel. I chose to include 3 Reels in my survey which may have been a limitation, as incorporating more Reels could have provided me with a clearer understanding of how Reels influence adolescents' perceptions of ADHD. However, having 3 Reels allowed my survey to maintain participant engagement. To choose the Reels, I looked at my group of 100 previously saved Reels and found the three most-liked Reels from that group. Another limitation I encountered was the exclusion of Reels containing profanity, as such content was not appropriate for my high school audience. To address this, I opted to include the next most-liked Reel in place of those

that were excluded. I used the most-liked Reels because Instagram does not consistently display the number of views each Reel has received. As a result, the next best indicator of engagement was the like count. My instructions were for participants to watch the entire Reel before answering any questions. The questions I included focused on how the Reel made them feel, what they learned from it, how well it helped them understand ADHD, and whether they would be willing to spread awareness. To assess how each Reel made participants feel, I provided a list of nine emotion options (including an “Other” category) for them to select from, giving participants the chance to respond how they feel with a variety of options. I then asked a short-answer question about what new information the Reel taught them about ADHD, which allowed me to gauge what participants learned. Next, I asked whether the Reel helped them understand ADHD, which provided insight into the Reel’s effectiveness in conveying information and filling gaps in their knowledge. Finally, I inquired whether they would share the Reel to raise awareness about ADHD, helping me assess how well the Reels could promote advocacy. These questions remained consistent across all three Reels to eliminate bias in the responses.

Survey Conclusion

For my final section, I included three questions to understand the impact the Reels had as a whole. First, I asked participants to explain in a few sentences how these Reels have changed or informed them about ADHD. It is crucial to understand how their ideas have evolved to understand how Reels have changed the perception of adolescents and answer that part of my study. The next two questions asked if they were likely to empathize with someone with ADHD and then advocate for someone with ADHD. I asked this to help the participants reflect on the content they watched and answer how it has possibly changed their morals. I placed the question

about empathy before the one about advocacy because, in most cases, advocating for someone requires first understanding and empathizing with their situation.

Results

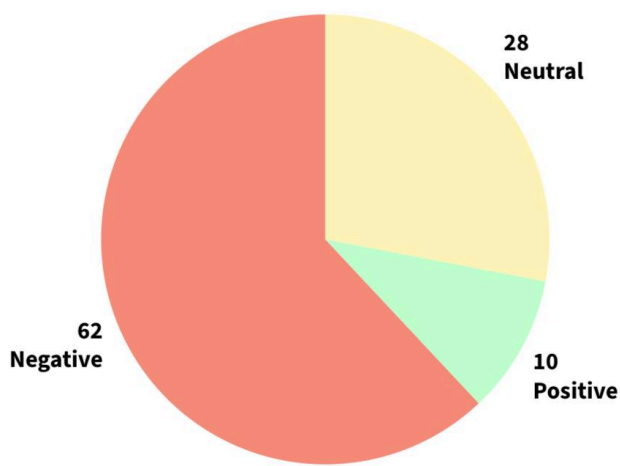
The results I obtained from this study included a mix of qualitative and quantitative data. Using my scoring chart for my content analysis, I left all the final results to be numerical values and percentages. My survey primarily collected qualitative data to understand how Reels made adolescents feel. These qualitative responses were then converted into numerical scores for easier analysis and comparison

Content Analysis

I analyzed 100 Instagram Reels related to ADHD, scoring each based on the criteria displayed through Figure 1 and converted these results into percentages out of the 100 Reels. As shown in Figure 4, 10% of the Reels were categorized as *positive*, 28% as *neutral*, and 62% as *negative*. Refer to Appendix C for the score of each Reel from my analysis.

Figure 4

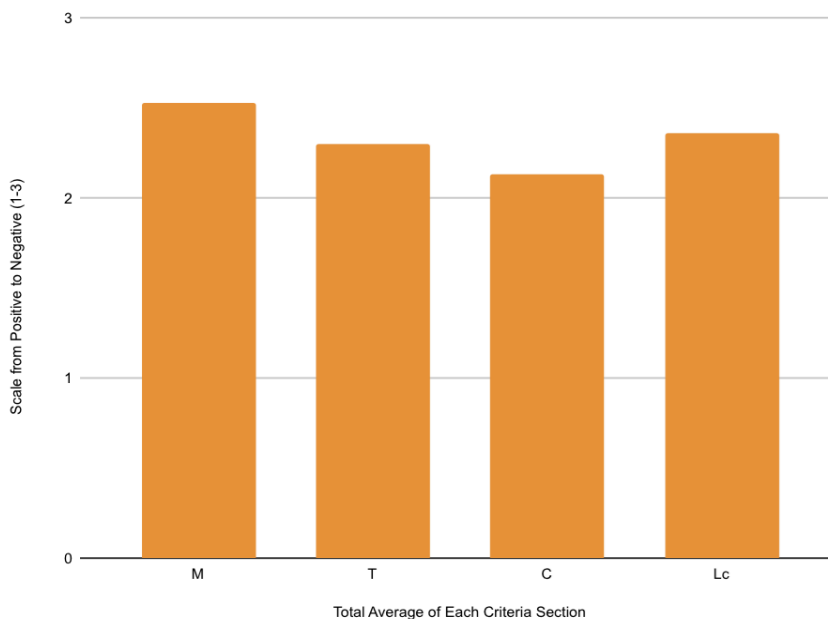
Distribution of Sentiment in ADHD-Related Reels on Instagram



These results suggest that it is likely that Instagram users will see a negative Reel about ADHD while on the app. The overall sentiment was heavily influenced by the weight of the message (*M*) on the overall equation, indicating that the *message* was mainly negative for the 62 Reels. For example, Reel #49 received neutral scores in every category except for the message, as it claimed that ADHD must be accompanied by anxiety and depression. This contributed to a negative portrayal by suggesting that life with ADHD is inherently difficult and burdened with additional mental health challenges. To visualize the contribution of each variable, Figure 5 displays the total average for each category, still using the score range in Figure 4, higher bars represent more negative sentiment. The *caption* category had an overall neutral average score of 2.16, suggesting that most captions were objective. The *tone* category averaged 2.3, also indicating a neutral tone. However, the *comments* category has a higher value averaging 2.36, often reflecting frustration about ADHD symptoms or the Reel being upsetting.

Figure 5

Average of Each Category



Survey

Scoring the Survey

After sending out the survey to a school with 1,206 students, 30 responded to my survey. Though this might be seen as a limitation, they provided adequate responses and considered a variety of perspectives so they were all used for my data. The survey results are organized into three key sections: participant's baseline understanding of ADHD (Introduction), their responses to the selected Instagram Reels (Reels), and their overall reflections after watching the Reels (Conclusion). This structure allowed for a comprehensive assessment of how social media content influences adolescents' perceptions of ADHD.

To analyze the survey responses, I used a combination of Google Forms automatically generated percentages and my calculations. For the questions regarding familiarity and understanding, I relied on the pre-calculated percentages. For the emotional responses, I calculated the percentage of participants selecting each emotion. “*Yes/no*” and “*Extremely Well, Somewhat Well, It did not*” were averaged to determine overall understanding and if the Reels prompted viewers to spread awareness. Open-ended responses about learning outcomes were categorized as “*nothing,*” “*neutral,*” “*positive,*” or “*negative,*” using the criteria from my content analysis (Figure 1). Lastly, empathy and advocacy responses were analyzed using Google Forms provided percentages.

Survey Introduction

On a scale of 1 to 5, with 1 being not familiar and 5 being most familiar, the average familiarity with ADHD among participants was 3.9, indicating that most had some background knowledge of the disorder. When asked which aspects of ADHD they understood best, 93.3% identified *symptoms*, and 76.7% felt they best understood the *challenges* associated with the

condition. This may be influenced by frequent media portrayals that emphasize ADHD's obstacles and common discussions about its primary symptoms. However, less than half of the participants (43.3%) reported understanding the *diagnosis* process. This is notable given the rising trend of self-diagnosis among adolescents (Gilmore, “Is TikTok Increasing...”). Similarly, only 46.7% felt they understood *treatment* options, which may reflect limited exposure to diagnostic procedures and treatment plans provided by physicians.

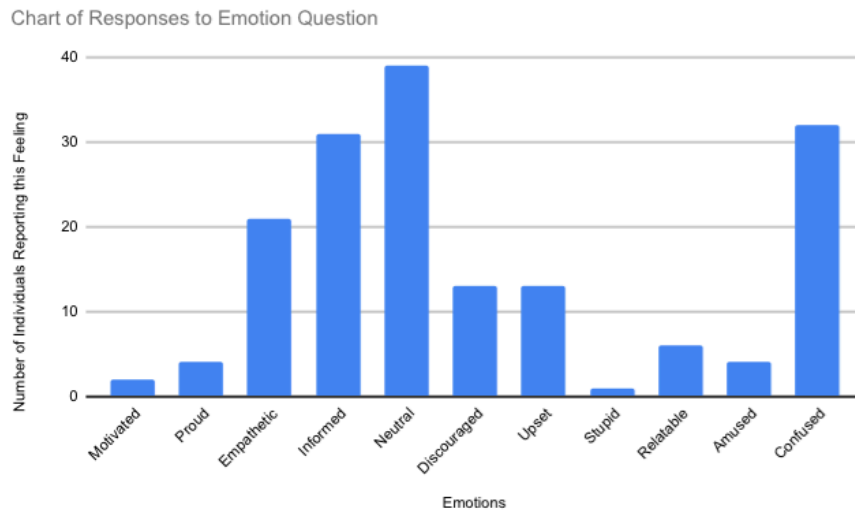
Reels.

“How did this video make you feel about the topic of ADHD?”

After watching each Reel, participants were asked how the Reel made them feel. Across all responses (156), I calculated the average for each emotion. The reason I got 156 responses with only 30 participants was because participants were able to choose however many they resonated with. The most common emotions were “*neutral*,” “*confused*,” and “*informed*,” as shown in Figure 6. The inclusion of an “*other*” option resulted in a total of 11 emotions, capturing responses beyond the provided choices. The least selected emotions were “*stupid*,” “*motivated*,” and “*proud*.” This suggests that while some Reels provided clarity, many left participants feeling uncertain or emotionally neutral. The low selection of emotions like “*motivated*” or “*proud*” may indicate that the Reels were less likely to inspire positive or empowering feelings about ADHD.

Figure 6

Emotion Response to Reels

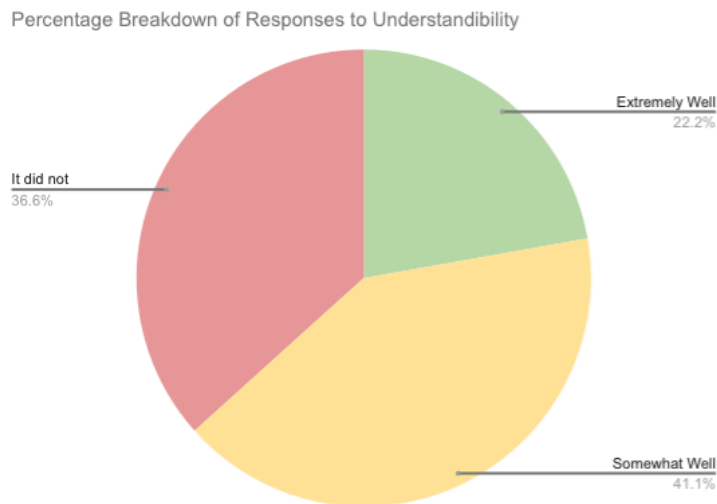


“How well did the video help you understand ADHD?”

To answer this question, participants selected from three options: “*Extremely well*,” “*Somewhat well*,” or “*It did not*.” There were 90 total responses across the three Reels, and I calculated the overall average for each response category. The results, shown in the pie chart in Figure 7, indicate that 22.2% of participants felt the Reels explained ADHD *extremely well*, while 41.1% felt the Reels explained it *somewhat well*. However, 36.6% of participants reported that the Reels *did not* help them understand ADHD. These results suggest that while a small portion of participants found the Reels highly informative, the majority either gained only a partial understanding or learned nothing new. This implies that the Reels may not have been effective in fully communicating the complexities of ADHD and that social media content might lack the depth necessary for fostering a complete understanding of the disorder. This coincides with the results from the content analysis because the negativity was mostly found through generalizations and light-hearted remarks that made fun of ADHD.

Figure 7

Understanding ADHD from Reels



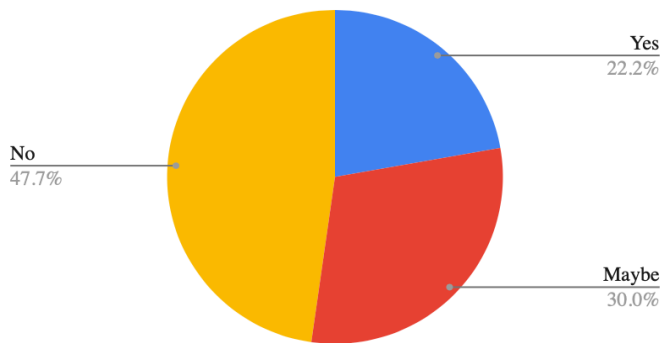
“Would you share this video to spread awareness?”

To answer this question, participants selected from three options: “yes” “maybe,” or “no” There were 90 total responses across the three Reels, and I calculated the overall average for each response category. The results can be seen in Figure 8, where 22.2% said “yes”, 30% said “maybe” and 47.7% said “no”. These results suggest that the majority of participants did not feel motivated to share the Reels to raise awareness about ADHD. The high percentage of “No” responses indicates the content may not have been seen as impactful enough to inspire advocacy. The 30% who selected “Maybe” may reflect uncertainty about the Reel’s effectiveness or a mild interest in spreading awareness. This highlights the need for more engaging content to encourage action in raising ADHD awareness.

Figure 8

Spreading Awareness

Percent



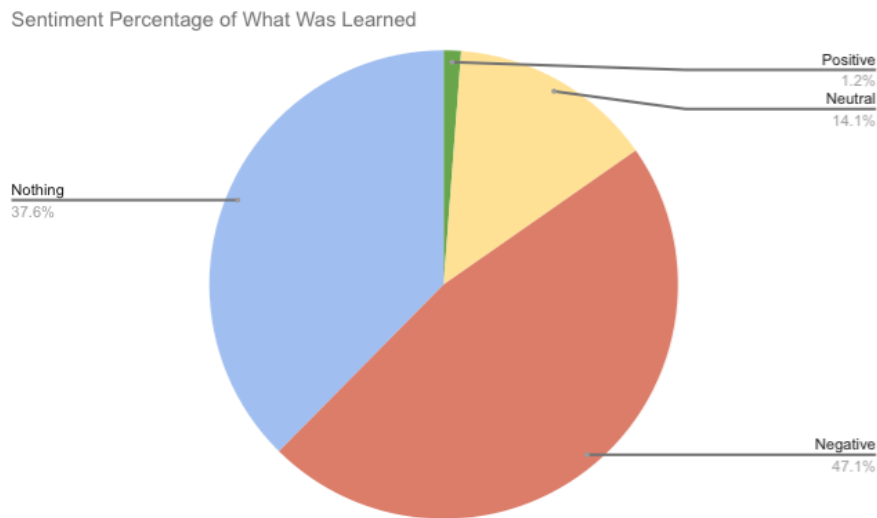
Conclusion

“In a few sentences, explain how these videos may have changed or informed you about ADHD”

For this response, I categorized each response using the Liked Comments Criteria outlined in Figure 1 of the methods section. This approach allowed me to convert qualitative responses into numerical values. In total, 30 responses were categorized. As shown in Figure 9, 47.1% of participants reported learning something *negative* or *nothing* at all. Only 1.2% learned something *positive*, while 14.1% described their learning as *neutral*. These results suggest that the Reels tend to emphasize the challenges and disadvantages of ADHD, often overlooking the positive aspects of the disorder.

Figure 9

What Was Learned



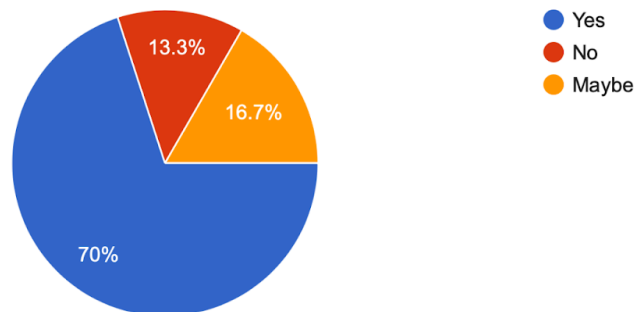
“After watching the videos, how likely are you to empathize with someone who has ADHD?”

For this question, there were 30 responses, which were averaged using Google Forms built-in algorithm. As shown in Figure 10, 70% of participants reported that, “Yes”, they were likely to empathize with someone who has ADHD. This may be due to the way Reels often highlight the struggles associated with ADHD, eliciting sympathy that can lead to greater empathy. Only 13.3% of participants responded “No,” suggesting that the videos had a generally positive impact on increasing understanding and compassion for individuals with ADHD.

Figure 10

Empathy After Viewing Reels

After watching the videos, how likely are you to empathize with someone who has ADHD?
30 responses



“Are you more likely to advocate for ADHD awareness and support after watching the videos?”

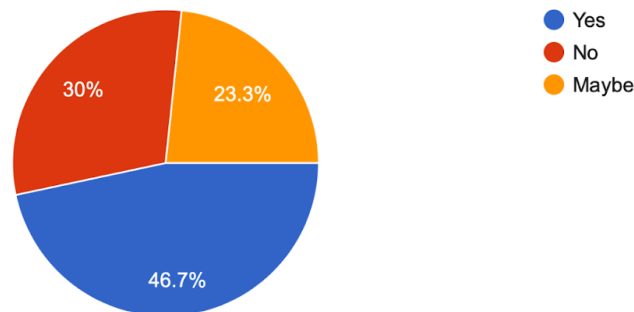
For the final question of my survey, responses were scored using the same method as the previous question. With 30 total responses, Google Forms generated an overall average. Participants could select “Yes,” “No,” or “Maybe.” As shown in Figure 11, the results differed from the previous question. While “Yes” had the highest percentage, fewer than half of the participants selected this option. This time, 30% responded “No” and 23.3% responded “Maybe.” This suggests that while many participants empathized with individuals with ADHD, far fewer were willing to take action to advocate for them. This may be because committing to action requires more effort than simply feeling empathy. These findings indicate that ADHD-related Reels typically do not inspire a strong sense of advocacy among adolescents.

Figure 11

Advocacy After Viewing Reels

Are you more likely to advocate for ADHD awareness and support after watching the videos?

30 responses



Discussion & Conclusion

The purpose of my study was to identify if Instagram Reels about ADHD depict a negative or positive view on the disorder and their implications on adolescents. The results of my content analysis reveal that Reels about ADHD predominantly portray the disorder in a negative light, effectively answering my first research question and proving my original hypothesis. I anticipated that given the trend of previous research on how TikTok increased stigma and was mostly misleading my research would reflect the Reels to be negative and possibly cause users to be affected adversely. Supporting my hypothesis, with 62% of the analyzed Reels conveying negative themes, it is evident that social media users are frequently exposed to content that emphasizes the challenges of ADHD. This overrepresentation of struggles may lead to adolescents identifying excessively with symptoms, potentially contributing to overgeneralization, self-diagnosis, or the belief that ADHD is an insurmountable condition.

Further reinforcing this concern, my survey revealed that a majority of adolescents lack knowledge about ADHD treatments, suggesting that they may perceive the disorder as something without viable solutions. This knowledge gap, combined with the abundance of negative portrayals, could promote a sense of helplessness among individuals with or suspecting

they have ADHD. Additionally, Yeung et al.'s findings on TikTok, where 52% of ADHD-related videos were deemed misleading, indicate a broader trend of unreliable mental health content on social media. It is likely that Instagram Reels reflect a similar pattern, where negativity is not only pervasive but also potentially inaccurate or exaggerated, further distorting public perceptions.

The potential consequences of these portrayals are significant. With adolescents comprising a large portion of Instagram's user base, individuals with ADHD may internalize these representations, feeling defined by their struggles rather than their strengths. One survey participant captured this sentiment, stating, *"For people struggling with ADHD, being bombarded with these sorts of videos and playful commentary can actually aggravate the symptoms of ADHD"* by lowering attention spans or increasing anxiety. This highlights the real-world implications of social media content on mental health, especially for vulnerable audiences.

Given the influence of Instagram Reels on public perceptions of ADHD, medical professionals should be mindful of the narratives shaping adolescent experiences. Greater sensitivity and awareness in clinical conversations could help counteract the misconceptions spread online. Furthermore, algorithmic changes on social media platforms should be explored to promote more accurate, educational, and positive content about ADHD, lessening the dominance of negative portrayals. Future researchers can benefit from this data to analyze how conversations about ADHD have evolved over time, using my research as a foundation for understanding a major platform of information. Additionally, researchers should dive into how these videos affect those with ADHD, asking questions about self-esteem, willingness to seek support, and mental health.

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Appendix A

Examples of Criteria for Content Analysis

Examples of Criteria for Content	Caption (C)	Top 3 Liked Comments (Lc)
Positive (1)	-“Neurodivergent powers activate” -“It’s a vibe 🤪🧐” -“ADHD isn’t a bad thing, it shows us how to think differently and create a new world of ideas”	-“My god! That’s my whole life there in words. How perfectly spoken and put out there. Thank you xx” -“I think of them as my gifts 🤪” -“🤪 Isn't it so funny how I thought all of these traits were ONLY MY QUIRKS?? That's been the crazy part to learn after my diagnosis, that there are so many people in the world who are just like me... how crazy is it that all of us adhd'rs have the same traits. Love our tribe 🦋”
Neutral (2)	-“What do you think about this? Do you agree?” -“How you know you live with someone with ADHD” -“Who else loves layered music?”	-“Very informative! How do people cope with ADHD? Is there anything the government could do?” -“This video explains ADHD in an interesting way. Thanks for sharing this information.” -“How does ADHD affect people differently depending on their age?”
Negative (3)	-“It’s literally a never ending cycle for me 😭” -“Be patient with us ADHD folk. 🙄” -“ADHD Paralysis is a special kind of demon for many of us because it can leave you feeling stuck, lazy, and useless.”	-“It looks cute in the video but sometimes I break down in frustration because I can't talk. Almost to tears. It's not cute when it happens to you all day every day and all you want to do is convey a simple message” -“Doesn’t everyone act like this??” -“very relatable and exhausting...” -“Perfect description! Going through this right now 😞”

Appendix B Survey Questions

AP Research: ADHD Content on Instagram

The objective of this form is to gather information about the effect of Instagram Reels content on adolescents' perspectives about ADHD. By filling out this form, you consent to the use of any information provided. No identifying information will be collected, and you will remain anonymous throughout the data collection process. This form should take about 3-6min to complete, thank you for your help!

This form has been approved by  AP Coordinator.

* Indicates required question

1. How would you rate your familiarity with Attention-Deficit/Hyperactivity Disorder? *
- 1= not at all familiar. 5= very familiar**

1	2	3	4	5
				

2. Which aspects do you feel you understand well? **Check all that apply** *

Check all that apply.

- ☐ Symptoms
- ☐ Diagnosis
- ☐ Treatment
- ☐ Misconceptions
- ☐ Challenges/Accommodations
- ☐ None

What is Attention-Deficit/Hyperactivity Disorder?

Source: "What is ADHD?" *Psychiatry.org*

Please read the following about ADHD before we continue.

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental condition marked by patterns of inattention, hyperactivity, and impulsivity that impact daily life. Commonly diagnosed in childhood, its causes are linked to genetic, neurological, and environmental factors. Treatments often include therapy, lifestyle changes, and medication.

Video #1

Please watch the following video entirely and answer the following questions.

Video #1

Please watch the following video entirely and answer the following questions.

Video #1



<http://youtube.com/watch?v=LukTnyWdkc0>

3. How did this video make you feel about the topic of ADHD? *

Check all that apply.

- ☐ Motivated
- ☐ Proud
- ☐ Empathetic
- ☐ Informed
- ☐ Neutral
- ☐ Discouraged
- ☐ Upset
- ☐ Confused
- ☐ Other: _____

4. What new information did you learn about ADHD? *

5. How well did the video help you understand ADHD? *

Mark only one oval.

- ☐ Extremely Well
- ☐ Somewhat Well
- ☐ It did not

6. Would you share this video to spread awareness? *

Video #2

Watch the following video entirely and answer the following questions.

Video #2



<http://youtube.com/watch?v=kY0pcNeZGtA>

7. How did this video make you feel about the topic of ADHD? *

Check all that apply.

- ☐ Motivated
- ☐ Proud
- ☐ Empathetic
- ☐ Informed
- ☐ Neutral
- ☐ Discouraged
- ☐ Upset
- ☐ Confused
- ☐ Other: _____

8. What new information did you learn about ADHD? *

9. Would you share this video to spread awareness? *

Mark only one oval.

- ☐ Yes
- ☐ Maybe
- ☐ No

10. How well did the video help you understand ADHD? *

Mark only one oval.

- ☐ Extremely Well
- ☐ Somewhat Well
- ☐ It did not

Video #3

Watch the following video entirely and answer the following questions.

Video #3



http://youtube.com/watch?v=lij6-C2_Ue0

11. How did this video make you feel about the topic of ADHD? *

Check all that apply.

- ☐ Motivated
- ☐ Proud
- ☐ Empathetic
- ☐ Informed
- ☐ Neutral
- ☐ Discouraged
- ☐ Upset
- ☐ Confused
- ☐ Other: _____

12. What new information did you learn about ADHD? *

13. How well did the video help you understand ADHD? *

Mark only one oval.

- ☐ Extremely Well
- ☐ Somewhat Well
- ☐ It did not

14. Would you share this video to spread awareness? *

Mark only one oval.

- ☐ Yes
- ☐ Maybe
- ☐ No

Summary

Please answer these final questions on the impact of these videos.

15. In a few sentences explain how these videos may have changed or informed you about ADHD. *

16. After watching the videos, how likely are you to empathize with someone who has ADHD? *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Maybe

17. Are you more likely to advocate for ADHD awareness and support after watching the videos? *

Mark only one oval.

☐ Yes

☐ No

☐ Maybe

Thank you for participating!

This content is neither created nor endorsed by Google.

Google Forms

Appendix C

Content Analysis Category Results

1	Video ID= username+ #(whatever number)	#	Message x2	#	Tone	#	Caption	#	Comments	#	Average score	Category
2	connorcallec #1		6		3		3		3		3	negative
3	get_inflow #1		6		3		1		2		2.4	negative
4	alex_partridge_100 #1		6		2		2		3		2.6	negative
5	myadhdadventure #1		6		3		3		3		3	negative
6	jazzthornton #1		6		2		2		3		2.6	negative
7	connorcallec #2		6		3		3		3		3	negative
8	adhd_empowerment_coaching #1		2		3		3		3		2.2	neutral
9	get_inflow #2		2		1		1		1		1	positive
10	rebelwithoutadrink #1		4		2		2		1		1.8	neutral
11	adhdfounder #1		6		3		2		1		2.4	negative
12	adhd_chatter_podcast #1		2		1		1		1		1	positive
13	lifecatuator #1		6		3		2		3		2.8	negative
14	adhd_memetherapy #1		6		3		3		2		2.8	negative
15	adhddoes #1		6		3		3		3		3	negative
16	cobywattsmusic #1		6		1		1		1		1.8	neutral
17	adhd_chatter_podcast #2		2		1		2		1		1.2	positive
18	sarahthebookfairly #1		6		3		2		3		2.8	negative
19	adhdfounder #2		2		3		1		2		1.6	positive
20	adhd_chatter_podcast #3		2		1		1		3		1.4	positive
21	hidden20podcast #1		4		2		2		1		1.8	neutral
22	alex_partridge_100 #2		2		2		2		3		1.8	neutral
23	adhdersbee #1		6		3		2		3		2.8	negative
24	connor.dewolfe #1		6		2		3		3		2.8	negative
25	myadhdadventure #2		2		2		2		1		1.4	positive
26	understoodorg #1		4		2		2		2		2	neutral
27	alex_partridge_100 #3		6		3		3		3		3	negative
28	adhdfounder #3		6		3		2		2		2.6	negative
29	msjherisouth #1		6		3		1		3		2.6	negative
30	adhdfounder #4		6		3		2		1		2.4	negative
31	alex_partridge_100 #4		4		2		2		3		2.2	neutral
32	Melrobbins #1		4		2		2		1		1.8	neutral
33	adhdfounder #5		6		3		2		2		2.6	negative
34	adhd_partridge_100 #5		6		3		2		3		2.8	negative
35	neurodivergent_minds #1		6		3		2		3		2.8	negative
36	adhdfounder #6		4		2		2		3		2.2	neutral
37	Alex_partridge_100 #6		4		1		2		2		1.8	neutral
38	alex_partridge_100 #7		6		3		2		2		2.6	negative
39	alex_partridge_100 #8		2		1		2		3		1.6	positive
40	alex_partridge_100 #9		6		3		2		3		2.8	negative
41	get_in_flow #2		6		3		3		3		3	negative
42	danmartell #1		2		1		2		1		1.2	positive
43	barely.adhd #1		2		3		2		3		2	neutral
44	adhd_empowerment_coaching #2		6		3		3		1		2.6	negative

4:47PM Tue Apr 15								14%							
	A	B	C	D	E	F	G								
1	Video ID= username+ #(whatever number)	#	Message x2	#	Tone	#	Caption	#	Comments	#	Average score	Category			
45	adhd_love_ #1	6		2		3		3		2.8	negative				
46	caringparent #1	2		2		2		1		1.4	positive				
47	divergentcoahckelly #1	6		3		3		2		2.8	negative				
48	myadhdadventure #3	6		2		2		2		2.4	negative				
49	clairebowmanofficial #1	6		2		2		2		2.4	negative				
50	get_inflow #3	6		2		3		2		2.6	negative				
51	adhd_empowerment_coaching #3	4		1		2		2		1.8	neutral				
52	brain.curiosities #1	4		2		2		2		2	neutral				
53	cherry.adhd #1	6		2		1		3		2.4	negative				
54	adhdfounder #7	6		3		2		2		2.6	negative				
55	rich_pink_ #1	6		3		3		3		3	negative				
56	adhdviibes #1	6		3		2		2		2.6	negative				
57	dr.jimcostello #1	6		3		2		3		2.8	negative				
58	haleybybaylee #1	6		3		3		2		2.8	negative				
59	sebbyjonn #1	6		2		2		3		2.6	negative				
60	alex_partridge_100 #10	6		2		2		2		2.4	negative				
61	hidden20podcast #2	6		3		2		3		2.8	negative				
62	i.have.adhd.podcast #1	6		3		2		3		2.8	negative				
63	adhdwithjennafree #1	4		1		2		3		2	neutral				
64	kellybaums #1	6		2		2		2		2.4	negative				
65	thejennieanderson #1	4		2		1		3		2	neutral				
66	adhdfounder #8	6		3		2		3		2.8	negative				
67	univl_adhd #1	6		1		1		2		2	neutral				
68	adhdersbee #2	4		2		2		3		2.2	neutral				
69	alex_partridge_100 #10	6		3		2		3		2.8	negative				
70	camhannah #1	6		1		3		2		2.4	negative				
71	adhd_memetherapy #2	6		2		2		2		2.4	negative				
72	propeladhd #1	6		3		1		3		2.6	negative				
73	olivialutfallah #1	6		3		3		3		3	negative				
74	adhd_memetherapy #3	6		3		2		2		2.6	negative				
75	coolestguyontheinternet #1	6		3		2		3		2.8	negative				
76	elizaisntfunny #1	4		2		2		2		2	neutral				
77	get_inflow #4	6		3		1		3		2.6	negative				
78	adhd.abi #1	6		1		2		2		2.2	neutral				
79	adhd_chatter_podcast #4	6		3		3		3		3	negative				
80	propeladhd #2	6		3		2		3		2.8	negative				
81	dr.dansullivan #1	4		2		2		3		2.2	neutral				
82	adhd_love_ #2	6		2		2		3		2.6	negative				
83	alex_partridge_100 #11	6		3		2		3		2.8	negative				
84	brain.curiosities #2	4		1		3		2		2	neutral				
85	myadhdadventure #3	6		1		3		2		2.4	negative				
86	mattraelboom #1	4		1		2		1		1.6	positive				
87	studiesshowthings #1	4		2		2		2		2	neutral				
88	barely.adhd #2	6		3		2		2		2.6	negative				
89	divergentlives #1	4		2		3		2		2.2	neutral				
90	rich_pink_ #2	6		3		2		3		2.8	negative				
91	adhdwithjennafree #2	4		2		2		3		2.2	neutral				
92	adhd_memetherapy #4	6		3		3		3		3	negative				

1	Video ID= username+ #(whatever number)	#	Message x2	#	Tone	#	Caption	#	Comments	#	Average score	Category
93	olivialutfallah #2			4	1		2		2		1.8	neutral
94	propeladhd #4			6	3		1		3		2.6	negative
95	thevibewithky #1			6	3		3		1		2.6	negative
96	alex_partridge_100 #12			6	1		2		2		2.2	neutral
97	myadhdadventure #4			4	2		3		3		2.4	negative
98	get_inflow #5			6	3		3		3		3	negative
99	nadiaaddesi #1			4	2		2		3		2.2	neutral
100	alex_partridge_100 #13			6	3		2		1		2.4	negative
101	myadhdadventure#5			4	1		3		3		2.2	neutral