High School Students' Perspectives on Social Media Trolling and the Presence of Cognitive Dissonance

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Abstract

Despite the efforts of *TikTok* as a social media platform, social media trolling is often present in the comment sections of popular posts. Understanding how the viewers of these comments, oftentimes teenagers, perceive these comments is important in the development of intervention methods. Moreover, adolescents may experience the psychological phenomenon of cognitive dissonance after experiencing these trolls. This would result in the adjustment of beliefs or values in order to justify the derogatory comments. It was hypothesized that highschoolers who use cognitive dissonance to justify the action of trolling are more likely to perceive trolling as a minor issue. A survey was conducted to extract the perspectives of high school students on social media trolling, as well as the effect that it may or may not have on their levels of cognitive dissonance. The survey was distributed to a suburban high school in New York to be taken by students aged 13-18. A total of 176 students participated in the survey. It was found that cognitive dissonance is commonly present in teens after experiencing controversy on *TikTok* (p=0.042). While many teens acknowledge the negative nature of trolling, its frequency leads them to dismiss it as less harmful, suggesting a need for more effective interventions to address its psychological impact. This study contributes to understanding the psychological mechanisms behind adolescents' perceptions of trolling and highlights the importance of developing targeted strategies to reduce its effects.

Keywords: Cognitive dissonance, TikTok, Social media trolling

1. Introduction

In recent years, social media use has increased drastically, allowing for simple and efficient communication. With the various benefits of social media, including the diffusion of culture and ideas, comes numerous disadvantages. Among these disadvantages is social media trolling, which consists of hateful comments posted on online platforms, with the intent of being disruptive and initiating arguments (Ghosh & Salian, 2022). Trolling on social media has contributed to the normalization of social inequality in society. Moreover, trolling presents a threat to social cohesion by developing "humorous" statements that contribute to racism and social inequality (Matamoros-Fernández et al., 2022). Racial and social tensions are exacerbated by seemingly harmless comments made on *TikTok* posts. Although these comments appear as harmless, they can take a toll on the mental health of the target group. Social media trolling is very common in the realm of adolescents. As people get older, they tend to exhibit less trolling behaviors on social media (Cardoso et al., 2023). High school aged adolescents tend to be very critical of other people which becomes evident in social media platforms.

Cognitive dissonance is a complex phenomenon that presents itself at some point in any individual's life. It refers to the manufactured reality people experience when information contradicts their own thoughts, feelings, or beliefs (Cravens-Pickens et al., 2019). Although it is very common, dissonance can cause individuals to justify destructive

behaviors. Researchers have given very little theoretical attention to cognitive dissonance in the realm of social media trolling.

The more time spent on social media, the more likely one is to encounter a troll. Social media organizations tend to lack the motivation to effectively assess the vulnerability of trolls, and know when to eliminate them. If social media organizations created stricter and preventative regulations, trolling may grow less abundant. Although a plethora of research surrounding trolling exists, *TikTok* has yet to be analyzed. Despite its recent development, *TikTok* is among the most popular of social media platforms, therefore further analysis is necessary. Social media critics' perceptions of this platform range between loud, unruly, and improper. The platform often fails to eliminate derogatory posts and comments despite their minimal efforts, making them constantly available to the public.

Cognitive dissonance in terms of social media platforms is a severely underdeveloped field. As social media trolling is disruptive to many users, understanding how teens perceive it could help to develop methods of intervention. This begs the question; To what extent does cognitive dissonance in high school students affect their perception of social media trolling on *TikTok*?

Students with high levels of cognitive dissonance may be more likely to rationalize trolling behavior, viewing it as less harmful or more justified to reduce their discomfort. The extent of cognitive dissonance could also influence how students react to trolling, with those experiencing more dissonance potentially engaging more with trolling content to seek validation or reduce their internal conflict. Reducing trolling May boost the self-esteem and confidence of teens during their development, while also decreasing cognitive dissonance.

1.1 Cognitive Dissonance

Individuals may modify their behaviors and actions in order to produce consistency in their lives. When people perceive actions as deviating from social norms, cognitive dissonance arises, which can result in shame. If an action is viewed as deviating and harmful to another person, guilt is more likely to evolve (Breslavs, 2013). Cognitive dissonance plays a major role in day-to-day experiences, as feelings of shame and guilt may stem from any source. Researchers specializing in cybersecurity and high tech issues including Faesen, Klimburg, Mirtl, and Verhagen, discovered that cognitive dissonance played a major role in the covid-19 pandemic, especially on the internet. With the extra time spent on social media, the previously existing dissonance involved in giving up personal information on social media worsened (Faesen et al., 2020). Evidently, cognitive dissonance on the internet is in fact a researched field, however, researchers have yet to examine it in relation to social media trolling.

Cognitive dissonance relates to victim blaming and hostility on the internet by showing the perspective of online arguments from the content viewers of which are not being targeted. People tend to blame the victim of online hostility in order to justify the actions of the perpetrator with the intent of reducing their cognitive dissonance. People on the internet must put an end to victim blaming and begin rightfully blaming the perpetrator (Cravens-Pickens et al., 2019). This concept is further supported by the idea that trolling could be reduced by the increase of cognitive empathy because it would make people less likely to disregard the emotions of other people (Felipe et al. , 2023).

1.2 Social Media Trolling

Many people are genuinely disturbed by trolls, as they are weapons of power used to target individuals or groups. Trollers tend to hide behind the anonymity of social media, and find creative ways to make offensive remarks without being filtered by the platform. Trolling, a mechanism of dividing society, plays a major role in shaping society, as it makes the online environment more hostile for all users. It has become normalized by social media users. It can be broken down into three subcategories including; aggression towards others, the disruption of a social platform, and the success when receiving the attention they were searching for (Ghosh & Salian, 2022). Deceiving someone and meaningless disruption are characteristics of trolling (March & Steele, 2020). Moreover, words used to describe trolling behavior include; menacing, harassing, and offensive (March et al., 2023).

Trollers often get triggered by the content they are viewing and look to initiate arguments in comment sections, meaning momentary aggression is more likely to cause someone to troll than an ongoing hatred (Felipe et al., 2023).

Current online trolling is perceived as identity-based threat, discrimination, and harm, in contrast to trolling prior to the popularity of social media (Ortiz, 2020). Similarly, perpetrators tend to target women more often than men with the intent of shaming them, calling them names, threatening, and discrediting them (Ghosh & Pillai, 2022). People tend to troll on social media so that they can shape the social dynamic of the group they are commenting on (Felipe et al., 2023).

During adolescence, teens undergo many cognitive and emotional changes which can negatively affect self-image and confidence. This idea of low self-esteem can put them in a more vulnerable position to trolling (March et al., 2023). As previously mentioned, feelings of guilt and shame, which stem from cognitive dissonance, can cause an individual to strive for self-improvement. Deficits in empathy and self-control may lead someone to engage in trolling behaviors, as well as a high powerful status (Felipe et al., 2023). On social media, perpetrators tend to show less empathy for the emotions of others because the lack of face-to-face confrontation makes it harder to gauge the consequences of their actions.

1.3 Predicting Factors

Trolling can be predicted by a deviance from societal norms. When on the receiving end of hostility, one is more likely to engage in trolling behaviors. Evidently, victims of poverty, ineffective education, and family issues are most likely to resort to trolling as a defense mechanism. Trolling is influenced by political identities, meaning trollers feel that they have to troll to gain a higher power status over others (Howard et al., 2022). As mentioned in the previous section, a high powerful status may lead someone to engage in trolling behaviors. Trollers tend to make downward social comparisons, meaning they compare themselves to people who are of a lower social class or more unfortunate than them (March et al., 2023). Researchers focusing on communication and media including Felipe, Gruzd, Jacobson, and Hodson claim that "an individual is more likely to troll if they have a favorable attitude toward themselves combined with a desire to inflict pain onto and dominate others"(Felipe et al., 2023). It is clear that there is an abundance of research available on social media trolling; however, researchers are yet to look at trolling on *TikTok* specifically. This idea paired with the lack of research on cognitive dissonance in the field creates a gap within the existing body of knowledge.

Research on the relation of cognitive dissonance and adolescents' perceptions of social media trolling can help to show where new regulations should be implemented on *TikTok*. The reduction of trolling may help to improve the self-esteem and confidence of teens throughout their development, while also reducing cognitive dissonance. Within the abundance of research conducted on social media trolling, cognitive dissonance is yet to be researched. The following research works to evaluate the effects cognitive dissonance has on students' perceptions of social media trolling on *TikTok*. It is hypothesized that high levels of cognitive dissonance in high school students will make them more vulnerable to trolling and being trolled. It can also be theorized that high schoolers who use cognitive dissonance to justify the action of trolling are more likely to perceive trolling as a minor issue. It is important to recognize the dangers associated with social media trolling because a better understanding of adolescents' perspective on the topic could help experts with the development of a plausible solution.

2. Materials and Method

In order to answer my research question regarding high school students' perceptions of social media trolling and the relevance of cognitive dissonance, a survey was conducted through the application of "Google Forms". Consequently, the two main variables within the research are social media trolling and cognitive dissonance. The aim of the survey is to collect data that can help to evaluate the correlation between these two variables. In order to effectively answer the research question, both qualitative and quantitative data are necessary.

2.1 Participants

The survey has been distributed to high school students, with the only criteria being that they must be between the ages of thirteen and eighteen. Teens undergo a multitude of changes both cognitively and physically, affecting

their decision making skills. For this reason, high schoolers are more likely to troll on social media than older individuals (Cardoso et al., 2023). Also, it is likely that the participants have easy access to social media platforms such as *TikTok*. With age comes independence on the internet, which allows teens the opportunity to make negative comments with a low probability of receiving consequences.

The sampling method used was voluntary sampling. The survey was distributed to the population of a suburban highschool in northeastern United States, with a total of about 1,500 students. Before distribution, the survey was presented before an Institutional Review Board who evaluated the survey and deemed it appropriate to be sent out to high school participants. Additionally, consent questions were placed at the beginning of the survey, ensuring complete confidentiality and anonymity, as well as parental consent.

The study is dependent on the perspectives of high school students, which can be extracted from their responses to the survey. Additionally, the questions given before and after viewing controversial content, as well as troll comments left on a popular influencer's *TikToks* will represent the cognitive dissonance aspect of the research question.

2.2 Content

Trolls are characterized by the attempt at using a humorous approach towards slandering a specific group or individual (Matamoros-Fernández et al., 2022). Trolls tend to attack popular influencers since the majority of their lives are subject to discussion on the internet. For example, my survey contains a comment reading "She probably bought/bribed *TikTok*, similar to how she probably bribed Justin to be her husband". In this comment, the user targeted Hailey Bieber, a celebrity on *TikTok*, and made an attempt at using a comical tone to address their negative opinion towards her. This comment fits the most well known definition of social media trolling, and set the criteria for the other *TikTok* comment contained in the survey.

Qualitative and quantitative data can be gathered from the survey. Qualitative data is necessary to discover the personal opinions of adolescents. The survey contains free response questions asking participants their perceived definition of social media trolling, and their opinions regarding controversial topics, which will provide qualitative data to be analyzed. Moreover, incorporating quantitative data is essential for the study, as Likert scales are necessary to accurately assess the extent to which participants are affected by cognitive dissonance. Quantitative data is found within a few multiple choice questions, such as "Have you ever intentionally trolled someone?". Questions similar to this can provide numeric statistics regarding how teens are affected by the variables.

The first section of the survey covers fairly simple questions regarding the participant's age, gender, and frequency of *TikTok* usage, which is necessary in order to categorize individuals by likelihood of exposure to trolls on this platform. The following section consists of two free response questions, which will provide qualitative data regarding the participant's personal opinions on social media trolling. These questions are inspired by a survey conducted by Stephanie Ortiz, an assistant professor of sociology and researcher, who aimed to discover what trolling means to the average adult using the methodology of a survey (Ortiz, 2020). The final multiple choice question asks if the participants have ever trolled someone intentionally.

The next two sections begin to dive into the cognitive dissonance aspect of the survey. It questions the individual's beliefs regarding feminism before and after viewing a short *TikTok* clip. To clarity, a fifteen second clip of a controversial *TikTok* regarding the usage of feminism in the music industry was incorporated in my survey. The information in the *TikTok* was presented in the form of an interview. I chose to implement this short clip into my survey because it would help to gauge how adolescents' beliefs are impacted by controversy on *TikTok* (Headsuk, 2023). A Likert scale question asking the participants to rate the severity of their feminist beliefs, as well as a short answer question asking for an explanation, will be given before and after they watch the clip. A troll comment left on the video is also incorporated with the intent of understanding how the average person responds to trolls. The final section of the survey depicts a troll comment left on celebrity Hailey Bieber's *TikTok* with the aim of evaluating the participant's perspective on trolling after taking the survey. Hailey Bieber's comment section is analyzed because her popularity is often controversial and there is a very large population that dislikes her. A free response question is also asked to conclude the survey with additional information regarding cognitive dissonance.

In order to analyze the results, both a thematic analysis and a statistical analysis were used. In order to conduct a Two-Sample T-Test, the first step is to find both the mean and standard deviation for the values extracted from both Likert scales. Then, these values are input into a TI-84 calculator with the application to perform the Two-Sample T-Test. The resulting value determines whether or not the data is statistically significant.

3. Results

The survey accumulated a total of 176 respondents, both males and females, between the ages of fourteen and eighteen. A majority of the participants were females (71%), with the remainder being males (29%). Many of the participants were either fifteen (38.1%) or sixteen (31.8%), with few being seventeen (25%), eighteen (4.5%) or fourteen (0.6%).

One of the first questions the participants were asked was in regards to their frequency of *TikTok* usage. More than half of the respondents (71.6%) answered that they use *TikTok* on a daily basis. This statistic is important to note because the more exposure one has to *TikTok*, the more likely they are to come across trolling. When asked if they had ever intentionally trolled someone on social media, nearly all of the respondents (77%) answered that they had not. Later in the survey, the participants were shown a troll comment from Hailey Bieber's comment section. The comment read, "She probably bought/bribed *TikTok*, similar to how she probably bribed Justin to be her husband", and was followed by a Likert scale questioning the adolescents' likelihood of posting a similar comment. The number one was associated with being unlikely to troll, while the number five was associated with being likely to troll. Similar to the previous percentage, the majority of participants (71.7%) claimed that they are very unlikely to post a troll comment similar to the one received by Hailey Bieber.

The change occurring between these two questions could be considered an example of cognitive dissonance experienced by high schoolers in regards to social media trolling. Although the majority of respondents maintained their previous answer, several (5.3%) participants did change their answer on the Likert scale, leaning more toward the promotion of trolling. It can be inferred that the few adolescents who changed their answers were looking to justify their beliefs in order to avoid the discomfort experienced by the holding of conflicting values, also known as cognitive dissonance. It is also possible that the adolescents were unaware of what comments are categorized as trolling before answering the first question.

3.1 Thematic Analysis

A thematic analysis was completed in order to analyze and derive patterns from the responses to the open-ended questions. This was necessary due to the amount of qualitative data needing to be analyzed for patterns and recurring themes. The purpose of pulling themes from each question was to establish the most common perspectives of the adolescents who participated in the survey.

The first open-ended question asked was in regards to the participants' perceived definition of social media trolling. The acquired themes from this question are defined in Table 1.

The following open-ended question was created with the intent of extracting the participants' perceived reason for why people troll on the internet. The corresponding themes to this question can be found in Table 2.

Table 1. Perceived Definition of Social Media Trolling.

Theme	Definition	Number of Respondents
Cyber Bullying	Social media trolling is a form of cyberbullying. Cyber bullying is the use of technology to harass another person.	69
Fake Identity	Trolls create a fake identity and take advantage of the anonymity of the internet.	16
Targeting the Individual	People are targeted by angry or jealous individuals looking to initiate an argument.	17
Sarcastic Reaction	Users try to create humorous comments that will initiate a sarcastic reaction from viewers.	17
Harassment	Tollers look to harass people on the internet and radiate negativity.	52

Table 2. Perceived Motive of Social Media Trolling.

Theme	Definition	Number of Respondents
Insecurity, Coping	People troll to cope with problems going on in their lives, as well as to make them feel better about their insecurities.	111
Sarcasm	Users troll with the intent of getting a humorous or sarcastic reaction from others.	45
Attention, Power	People troll to achieve a sense of power over others, and to make themselves the center of attention.	12
Anonymity	Users troll because of the lack of face-to-face confrontation available due to internet use.	6

Participants of the survey were given a *TikTok* to view that discussed a controversial topic. The topic was music artists, more specifically Taylor Swift, and the use of feminism in music (Headsuk, 2023). Respondents were asked to answer an open-ended question regarding their initial views on feminism prior to watching the *TikTok*. The themes derived from this question are provided in Table 3. This question was strictly opinion-based, and the answers ranged from favoritism towards women, to hatred towards women. The majority of the participants believed in gender equality and did not have strong values regarding feminism.

After viewing the short *TikTok* video, the respondents were asked to answer an open-ended question regarding their perception on the use of feminism in the music industry (Headsuk, 2023). From their responses, the following themes have been found as shown in Table 4. These responses are compared with those from the previous question to look for changes or continuities in ideas.

Table 3. Initial Beliefs on Feminism.

Theme	Definition	Number of Respondents
Equality	The belief that women and men should be equal in all aspects of life.	116
Moderation	The support of feminism, excluding the extreme ideals.	4
No Strong Opinion	No significant opinions or values regarding feminism.	28
Women >	Extreme ideals favoring women.	8
Women <	Extreme ideas against women.	5

Subsequently, the participants were given a comment from the previous *TikTok's* comment section reading, "'as a fan'- like y'all ain't embarrassed?! LMAO". They were then asked to describe their reaction to this trolling comment in the form of an open-ended question. The themes derived from the responses can be found in Table 5. The themes from these responses ranged, as each individual person perceives trolling in their own way.

Table 4. Use of Feminism in Music.

Theme	Definition	Number of Respondents
Feminism	Feminism is used in the music industry to make the artists' music more popular.	75
Personal Experiences	Artists write songs based upon their personal experiences to create awareness.	30
No Opinion	No strong opinion on whether or not artists use feminism to their advantage in their music.	44

The final two open-ended questions were created with the intent of obtaining qualitative data regarding cognitive dissonance in the realm of social media trolling. Respondents were asked to reflect on how trolling and comments left on *TikTok* posts have affected their perspective on their own values. This initiated a range of themes which can be found in Table 6. It was common for

Table 5. Reaction to Trolling Comment.

Theme	Definition	Number of Respondents
Unnecessary	Trolling is unnecessary and uncalled-for.	33
Harmless	Trolling is harmless and sometimes even humorous.	26
Degrading	Trolling is degrading and derogatory.	54
No Effect	Trolling had no effect on the viewers.	25
Annoyance	Trolling is annoying to come across.	5
Attention Seeking	Trolls are seen as a weapon of power and attention seeking.	9

respondents to answer that they widened and maybe even changed their perspective on an idea based upon comments left on *TikTok* posts. This justifies a positive correlation between social media trolling and cognitive dissonance, meaning that cognitive dissonance is often present after teens experience controversy on *TikTok*.

Some responses were discarded from the thematic analysis because of nonsensical information or responses that did not answer the question being asked. This could have affected the analysis because of the loss of participants.

Table 6. How Trolling Changes Perspectives on Different Topics.

Theme	Definition	Number of Respondents
Mixed Ideas	People have conflicting ideas regarding a specific topic.	7
Gains More Knowledge on the Opposing Side	People achieve a new perspective on a topic from the comments left by other users.	77
Changing Ideas from New Information	People achieve new ideas from the information proposed by trolls or other commenters.	33
Sometimes	Time to time, comments can alter opinions or perceptions.	13
Remains the Same	Ideas do not change from comments left by other users.	19

3.2 Statistical Analysis

In order to better understand the correlation between cognitive dissonance and social media, a Two-Sample T-Test was performed in order to analyze quantitative data. Two-sample T-Test is a statistical method used to determine if there is a significant difference between the means of two independent groups. Within the survey, a controversial *TikTok* regarding feminism was implemented to aid in the evaluation of the presence of cognitive dissonance. Questions were provided before and after watching the *TikTok* with the purpose of getting a well rounded idea of the participants' nature of thoughts. The values being compared were derived from the two Likert scale questions given before and after viewing the *TikTok*. To reiterate, the *TikTok* shown was a controversial clip about Taylor Swift's overuse of feminism in her music, which received multiple troll comments (Headsuk, 2023). Respondents were asked to use the Likert scale to rate their perception of the use of feminism in society, more specifically the music industry, pre and post *TikTok*. The following equation was used to calculate the p-value:

$$t = (\bar{x}_1 - \bar{x}_2)/\sqrt{(s_1^2/n_1) + (s_2^2/n_2)}$$

The p-value calculated from the Two-Sample T-Test is p=0.042. This value is statistically significant, meaning that there is a notable difference between the two variables. Additionally, the p-value means that there is only a 4.2% chance that the results received were coincidental. This value supports the original hypothesis, as it means that cognitive dissonance became apparent after viewing the *TikTok*. Such information can be determined by the change in variables, or alteration in views due to the controversy of the given *TikTok*. This ultimately means that cognitive dissonance was present in many of the adolescents after viewing the *TikTok* because their answers to the Likert scale questions were altered.

4. Discussion

It was concluded that cognitive dissonance is often present in individuals after experiencing a troll on *TikTok*, which is not necessarily negative or positive. The minority of adolescents choose to ignore their morals and put other people down as a result of trolls on *TikTok*. A larger number stated that *TikTok* aided in their awareness of an issue from multiple perspectives. This could be beneficial in teenagers creating a broad body of knowledge for themselves. Moreover, the majority of the high school population find themselves unbothered by social media trolls, which speaks toward the normalization of social media trolling in society, as introduced by researchers Pillai and Ghosh. Adolescents often perceive trolling as a minor issue due to the fact that it has been normalized in society (Ghosh & Pillai, 2022). Although they feel that they personally are not necessarily affected by it, teenagers commonly perceive trolling as unnecessary and derogatory.

From the findings of the survey, It is apparent that there are distinct ways that high school students perceive trolling. Some participants believe that trolling is a form of harassment and cyberbullying, where they look to target unsuspecting victims. Meanwhile, others believe that it is when people use a fake identity to get sarcastic reactions from others with minimal consequences. In reality, social media trolling is hate comments posted on online platforms, with the intent of being disruptive and initiating arguments (Ghosh & Salian, 2022).

There is no default way that adolescents perceive trolling. While some feel it is equivalent to cyberbullying, others feel that it is a humorous way to take advantage of the internet. Similarly, the same group considered insecurity and attention seeking to be the main motives of trolling. The mixed perspectives received from the survey justify the idea that many adolescents are not fully aware of the impact trolls can have on the target group. While trolls are known to be humorous to some extent, they create a hostile environment for all users of the app (Ghosh & Salian, 2022).

The majority of respondents believe that trolling is performed with the intention of coping with insecurities using the anonymity of social media platforms. Other high school students believe that it is done to initiate sarcastic responses, more commonly known as attention seeking. This question had no right or wrong answer because trollers have no set motive.

The results extracted and analyzed from the survey can help social media platforms, such as *TikTok*, to create new regulations to help provide a safe environment for users. Although *TikTok* does have existing rules in place, clearly they are not effective in completely eliminating trolls. Understanding how teens perceive and are affected by social media trolling is the first and arguably the most essential step to the development of intervention methods. Some examples of possible consequences to trolling may include suspension from the app or banning of the account when caught. It is important to eliminate troll comments for the safety and security of *TikTok* users.

Additionally, licensed psychologists can work in conjunction with school programs to develop informative courses on social media trolling. Schools might establish awareness campaigns or anti-bullying clubs that encourage positive social media engagement and provide support for victims of trolling. These efforts would not only raise awareness but also create a culture of accountability, where students are more likely to intervene when they witness trolling behavior.

5.   Conclusion

Understanding the correspondence between social media trolling and cognitive dissonance introduces a new psychological perspective on social media trolling. After analyzing previous research, it became clear that although cognitive dissonance has been researched on the internet, it has not been connected to a specific platform and analyzed alongside a phenomenon such as trolling. Prior to my research, *TikTok* was yet to be analyzed specifically for social media trolling since it is a fairly new platform. Proving the original hypothesis, it was concluded that in adolescents, cognitive dissonance is commonly present as a result of the viewing of trolls on *TikTok*. Oftentimes, trolling is perceived as a minor issue by high school students as a result of their subconscious attempts to justify it.

5.1 Future Directions

In the future, more research should be conducted by a licensed psychologist for the purpose of achieving a deeper understanding of the role of cognitive dissonance in adolescents' cognitive processing. Psychologists are more qualified to determine the presence of cognitive dissonance and know how to prevent it. Those who are professionally educated in the realm of psychology can evaluate specific levels of cognitive dissonance using methods involving direct questioning of participants or an experimental basis. These methods may or may not be more effective than a survey.

Furthermore, future research can focus on younger age groups to assess how their values and morals are being influenced by a potentially dangerous environment on social media. The current generation is exposed to social media at a much younger age than the previous generations of youth. The analysis of their potentially influenced morals from platforms like *TikTok* could add more information to the body of knowledge pertaining to cognitive dissonance and social media trolling. It may also be beneficial to research primarily male participants because the majority of teenagers represented in this study were female, possibly influencing the results.

5.2 Limitations

Although I sought out teenage participants ages 13-18, I only received one 14 year old response. No responses were logged from a 13 year old. This could entail that the entirety of the target age group was not represented in the survey. It is possible that younger teens have a different perspective on trolling since they are generally less mature and experiencing rapid cognitive growth (Cardoso et al., 2023). It is also important to reiterate that the majority of respondents were female. It is possible that if there were more male participants, responses may have been different.

This study exclusively focuses on TikTok, which limits the generalizability of the findings to other social media platforms. Trolling behaviors may manifest differently across these platforms, and a broader comparison could provide a more comprehensive understanding of how adolescents perceive and respond to trolling in various online environments.

It is also true that nonsensical responses were given on multiple open-ended questions, which had to be eliminated from the thematic analysis. This issue could have arisen from the participants' lack of understanding or dedication to the task, as well as human error. Impractical responses could have created a lack of full representation of the participants' perspective in the thematic analysis.

Additionally, the sample size could have been larger to give a more accurate pool of respondents. The high school that the survey was distributed to houses roughly 1,500 students, while the survey received a total of 176 responses. If a larger population of the school was analyzed, it is possible that new themes could arise or current themes could change in frequency.

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