

The Dual Impact of Prejudice and Empathy among Adolescent Social Media Use

Alexa Donya Habibi

Received October 15, 2024

Accepted January 26, 2025

Electronic access February 15, 2025

This study analyzes the impact of social media use on adolescents' empathy and prejudice. Algorithms significantly affect reinforcing biases due to their selected exposure and ability to create echo chambers. While previous research suggests that social media platforms promote diverse cultures, resulting in the acceptance and accumulation of empathy towards people with different backgrounds, traditions, and religions, other studies indicate that content and interactions on social media can reinforce stereotypes and prejudice. A primary cause for this is peer influence to form an opinion based on the majority; emphasis on comments, likes, and views further highlights social media's role in propagating biased opinions. This paper draws on insights from a structured quantitative survey of 26 people and an interview with 4 teenagers in California on their social media habits to analyze the influential impacts of social media. The methods offered a nuanced understanding of the ambiguity of social media's impact. In the research, I articulated the causes and effects of consistent use of social media and how algorithms serve a crucial role in adolescents' development of stereotypes and empathy. I also analyzed the significance of social media in terms of the benefit of cross-cultural understanding and acceptance of people from different backgrounds. Ultimately, this study demonstrates how, as social media continues to play a significant role in teenagers' lives, social media also promotes cross-cultural acceptance and empathy while paradoxically perpetuating discriminatory views through algorithmic functions and reinforcing biases from peer influence.

Introduction

"We only see what we want to see," said a seventeen-year-old public high-schooler in California when I asked her to discuss social media's impact on her life. This paper explores empathy as a multidimensional manner in which culture plays an important role¹. Social media use among teens has skyrocketed; currently, over 95% of teens in the US report using at least one type of social media platform, such as Snapchat, YouTube, TikTok, Twitter, or Instagram². The ability to access a vast diversity of false information can affect young people's views on global affairs, political topics, other individuals, and different cultures. On average, adolescents in America spend 4.8 hours on social media, primarily using YouTube and TikTok³. Using algorithms and personalized content, social media platforms can often spread misinformation and keep adolescents hooked on the same biased content. On the one hand, social media can increase empathy by spreading different views and opinions on cultures and fostering community among similar people. On the other hand, it can also amplify stereotypes and spread false information, increasing prejudice among teenagers.

Specifically in California, teenagers' use of social media has become a heated debate within the state government. In response to the US Surgeon General's recommendations for mental health protection from social media among youth, the California senate

approved the Protecting Our Kids from Social Media Addiction Act in January 2024⁴. The act is focused on California and offers a broader legal context for understanding how social media platforms influence teenagers in this study and the wider context of regulation. This act states that parents will be able to enact restrictions on their kids' social media use, will prevent social media companies from providing addictive content to adolescents unless they are not minors, and prohibits social media use until someone is thirteen or older⁵. The government is still enacting the bill. Although these are the primary effects of social media on adolescents, their perception of other people and understanding of emotions will also be impacted by the use of social media. California's senate believes this act should be enacted because researchers have found that social media causes sleep pattern disruptions, low self-esteem, more incidents of cyberbullying, as well as increased anxiety and depression for adolescents⁶.

The increased exposure to diverse countries and perceptions due to social media can profoundly affect young people's understanding of them due to the overconsumption of information. Given the evidence of social media's adverse effects, consuming content regarding someone's conflicts or struggles may have long-term effects on feelings of sympathy for young people. Social media can also impact teenagers' prejudice because it can amplify stereotypes through politically targeted content, jokes,

and hate comments. Prejudice is a manner that perpetuates pre-held or biased views, which is caused by the formation of ingroups and outgroups; these segregate different types of individuals and encourage them to favor their group more than other groups outside their own⁷. Social media's impact on teen prejudice, fueled by ingroup/outgroup dynamics and biased content, aligns with existing research on social media's effects, including comparisons with others.

Furthermore, many adolescents encounter misinformation that can perpetuate biased views, feeding them fake news that can manipulate their opinions and outlook on global conflicts. Consistent use of social media profoundly impacts adolescents' perception of other cultures and people, affecting their empathy and prejudice. Given these significant impacts on adolescent perspectives, I ask how social media produces empathy or prejudice in young people.

Methodology

Literature Review

To address how social media impacts empathic or prejudiced emotions by teenagers, I surveyed media studies and popular media articles on social media's effects on teenagers to supplement academic studies. I only focused on recent developments in the literature; the articles ranged from 2017-2024. To find the various articles on Google Scholar, I used keywords such as social media (TikTok, Instagram, algorithms), teenagers, empathy, cultures (cross-cultural learning, perception), prejudice, misinformation, and mental health (body image, cyberbullying). There were many articles describing TikTok's harmful effects on adolescents, as well as many studies on how social media's algorithm can spread misinformation.

In addition to this literature review, I used my social network to recruit respondents who live in the Bay Area, California. At the outset of the survey and follow-up interview, I informed each participant about the research project's content, what it would be used for, and that data would be anonymized.

Data Survey

This study utilized a survey design that reached twenty-six people aged fourteen to seventeen. The survey included questions about the respondent's average amount spent on social media daily, their social media habits, the types of content they consume, experiences they've had where they have become aware of other conflicts through social media, and their personal views on how social media impacts them. The survey included sixteen multiple-choice questions, six short answer questions, and four scale questions where respondents chose a number from one to ten depending on their answer. This quantitative data survey provides the standalone information needed to under-

stand the overall patterns, feelings, and experiences within teens, emotions, and social media.

Interviews

The interview consisted of nineteen follow-up and open-ended questions to discuss the data survey responses in more depth. Based on the responses from the survey, interview questions were developed to probe the respondents further regarding their experiences with social media. Four people were further interviewed after completing the survey; each interview lasted ten to twenty minutes, and OtterAI was used to transcribe what the interview discussed. I established a quality control check by listening to the interview recordings and confirming that the OtterAI translation process was accurate. Three of the exchanges were conducted over a phone call, and one of the interviews was held in person. The interviews were conducted with two girls and two boys, and the age range was fourteen to seventeen. Due to the constraints surrounding time and resources, this study focused on four interviewees and was able to go more in-depth into their lived experiences. It may provide a limited perspective on the general population; however, this qualitative study offers details and nuance regarding the specific influence on teens in California. The interview transcripts and survey data were analyzed thematically for patterns related to the multifaceted impact of social media. These interviews allowed me to capture the opinions and voices of teenagers impacted by social media and further the depth of research by exploring new perspectives of a range of people.

Key Results

In this study, all participants resided in California, and most were female. The respondents ranged in age from 14 to 17, and more than half were of the white race. There was significant diversity in the participants' social media usage and the frequency of videos surrounding cultural topics. Most respondents had 6+ discussions with classmates from different racial/ethnic backgrounds per week.

Algorithm's Role on Impacting Teenager's Empathy and Prejudice

One crucial consideration when answering the research question is the connection between algorithms, teens, and empathy in social media. Theophilou et al. (2023) explored how consent use of social media within adolescents creates echo chambers due to the advanced algorithm dictating the content based on user preference, which can perpetuate biased perceptions and distorted realities. The source emphasized how the over-dependence on AI algorithms on social media can reinforce negative views, such as poor body image. In their study, the 121 students (most

Field	Category	Percentage	Frequency
Area of residence	California	100%	26
Gender	Female	76.9%	20
	Male	23.1%	6
Age	14	11.5%	3
	15	69.2%	18
	16	11.5%	3
	17	7.7%	2
Race/ethnicity	White	57.7%	15
	Asian	15.4%	4
	Middle Eastern	7.7%	2
	Hispanic or Latino	3.8%	1
	Mixed	15.3%	4
Was English the predominant language spoken at home?	Yes	69.2%	18
	No	3.8%	1
	Yes, along with another language	26.9%	7
Average time spent on social media daily	Less than an hour	0%	0
	1-2 hours	34.6%	9
	3-4 hours	30.8%	8
	5-6 hours	15.4%	4
	6-7 hours	3.8%	1
	More than 8 hours	15.4%	4
Conversations with classmates from different racial/ethnic backgrounds per week	Never/rarely	3.8%	1
	1-2 times	7.7%	2
	3-5 times	34.6%	9
	6+ times	53.8%	14
Frequency of videos surrounding cultural content on the feed	Never	3.8%	1
	Occasionally	53.9%	14
	Often	38.5%	10
	Always	3.8%	1

Table 1 Demographics of Data: *This table demonstrates the survey’s key results; I incorporate these pieces of evidence within this paper.*

were teenagers) experimented on their awareness levels of the social media algorithm after being exposed to an intervention. This interposition was a series of topics related to filter bubbles, image classification, and systems under the theme of body image. Findings reported that after learning the adverse effects of AI algorithms on social media, adolescents would have an increased awareness and significant concern about the impact⁸.

This finding corroborates my observations from the interviews. One seventeen-year-old female told me, “We only see what we want to see,” while discussing how the social media algorithm functions. Another fifteen-year-old male stated, “It scares me; I feel like I’m in this bubble on social media,” after explaining how algorithms operate and can distort perceptions and the potential risks of over-reliance on the algorithm to cu-

rate content. These results emphasize Theophilou’s conclusions on how over-reliance on social media’s AI algorithms can lead to decreased critical thinking and biased perceptions. Overly frequent social media use among adolescents has been found to negatively impact their mental health, increase cyberbullying, and escalate narcissistic behavior. Everson (2022) reveals how platforms like TikTok and Instagram encourage teenagers to constantly seek praise due to the competitive atmosphere in the content consumed.

Furthermore, recurrent use of social media may contribute to decreased empathy in some adolescents. The pressure to be recognized, whether it’s with school, sports, social media, or awards, influences adolescents’s self-centered behaviors, ultimately having the potential to decrease their empathy. Everson

reports that social media is "filled with attention-seeking motives that can lead people to ignore the feelings of others in their rise to success." Teenagers's need for acceptance can cause them to become socially unaware of the impact of their actions, which relates to the increase in cyberbullying. Anderson (2018) found that almost 59% of US teens have been cyber-bullied or harassed in some way online; Everson (2022) theorizes the motivation for this is due to chronic use of social media and the glorification of narcissistic behaviors⁹.

Algorithms are designed to keep users on the platforms for extended periods due to their ability to customize the content curated. In the survey, 15% of the respondents reported spending more than eight hours on social media daily. In the follow-up interviews I conducted, respondents disagreed with Everson's claim of an increase in narcissistic behaviors from social media for users who spent excessive amounts of time on the platform. On the contrary, some reported that after viewing specific videos on TikTok regarding political factors or a conflict, they felt more inclined to become more familiar with the topic. Despite discussing their experiences and their growth in compassion, one sixteen-year-old male respondent admitted to me that sometimes it "gets in his head." He told me, "Like when I post something, I'm constantly checking who viewed, liked, and commented, just because it feels good to get that sort of attention." Ultimately, it emphasizes the possible effects of recurrent use of social media among teenagers.

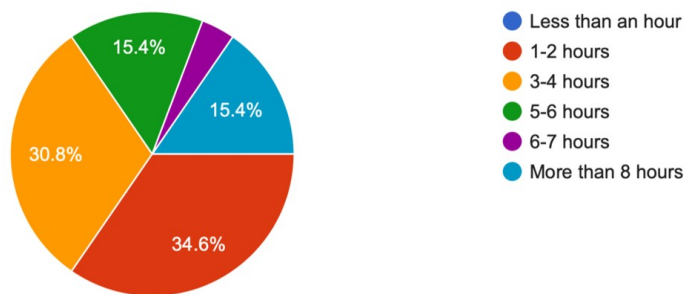


Fig. 1 Total amount of hours spent on social media platforms according to participants

Social Media and Empathy Decline within Teens

Additional research areas could examine to what extent empathy, different cultures, and teenagers are interconnected. Aylin (2012) discovered that people who use social media for more than four hours daily display higher levels of acceptance towards "diverse appearances." The study consisted of 516 persons from different generations, who were measured for acceptance and prejudice based on someone's physical appearance, ethnicity, and race by answering various questions. Aylin also uncovered that women have higher levels of acceptance than men. In

the study, generation Z was found to have the lowest tolerance towards people with different ethnicities; this generation ranges from ages 12-27, demonstrating the predominant ages being teenagers. Despite this generation's experience with social media, the findings suggest they have more traditional beliefs, most likely due to their parents' opinions and social instances. Aylin (2012) states that "as the time of social media use increases, the acceptance of diverse religions/ethnicities, acceptance of diverse appearances and acceptance of diverse ideas/values increase," highlighting the role that social media plays in people's lives and acceptance towards people with different backgrounds. Aylin (2012) argues the adverse effects of social media on people, habitual time spent on these apps will result in higher levels of acceptance towards people with diverse backgrounds; they state, "it is natural for those who use social media for 4 hours or more to be more exposed to the differences in the wide communication network provided on a global scale compared to those who use it for less time and therefore normalize these differences in their lives," accentuating how excessive time on social media concludes to receiving a broader and open perceptive to life¹⁰.

The interviews I conducted also demonstrate a similar pattern. When asked about her opinion on people posting politically controversial topics, one respondent shared that after seeing this type of content, it makes her "automatically label" another student, adding "not in a good or bad way, but now labeling them in [my] head in a different way." These qualitative results complicate Aylin's claims that high social media usage will increase acceptance. Although the respondent spent 3-4 hours on social media daily, she does not believe social media has influenced her to become more accepting towards people with different cultures and somewhat more aware. Furthermore, a fourteen-year-old female shared that social media "can help spread different cultures" and make people "feel more empathetic." While conversing about the videos surrounding Japanese culture and how that has influenced her, she states, "You can also see from different people's point of view, they can share their content about their own culture and where they're from," expressing her agreement with what Aylin (2012) found in their study.

In other experiences, social media has been found helpful in providing cross-cultural connections among young people from different backgrounds. Tuzel and Hobbs (2017) explored the role of digital media in connecting two seventh-grade classes, one from Turkey and one from the United States. The students interacted through using a private social media platform and would share their interests through their posts, photos, and videos. Tuzel and Hobbs (2017) explain that after conducting the study, they "stopped seeing the students at the other school as a group of foreigners and started to see them as individuals." Tuzel and Hobbs (2017) wrote, "It was certainly the same for Turkish students, too, who may have had stereotypes about American culture." This project further displays the benefits of

using social media platforms to promote learning about other cultures and understanding of different countries and potentially reduce held prejudices or stereotypes against 'othered' groups. Although finding the correct times to schedule the sessions and overcoming the language barrier between the groups, Tuzel and Hobbs (2017) conclude that social media can "promote cross-cultural dialogue" and state that "teachers may benefit from structured opportunities to reflect on how their attitudes about mass media and popular culture may shape their curriculum choices and use of digital texts, tools, and technologies," moreover indicating the role that social media can play in adolescents' lives. The study emphasized how social media can be a practical and valuable tool for adolescents to communicate despite cultural differences¹¹.

This finding aligned with the present study through the exploration of interviews, discussing teenagers' experiences and opinions on how social media can play a role in cross-cultural understanding. The adolescents I interviewed explained their feed's lack of cultural videos, impacting their views on culture. However, a fifteen-year-old teenager stated, "Like, I watch this guy who cooks a lot of Chinese food, and it kinda made me feel more open about Chinese culture," reflecting on social media platforms' influence on teenagers. Through cooking content, he learned more about Chinese customs, cuisine, and culture, potentially leading him to become more equipped for cross-cultural encounters and disregarding prejudices towards diverse people.

Additionally, in the data survey I conducted, 50% of the 26 respondents rated their open-mindedness to people from different backgrounds/cultures as a 10 (out of a 1-10 scale). However, when asked how curious they are about other people's lives, cultures, and habits, only 7.7% rated themselves "very open-minded" on the scale. The study and discussion with respondents reveal how social media platforms impact adolescents by overcoming past-held stereotypes and developing cross-cultural relations. Additionally, when asked if social media contributes to mistrust and hostility towards other cultures, half of the respondents found it contributes "very much," while nearly a third of respondents were neutral, and almost 20% of respondents found that social media "does not at all" contribute to mistrust and hostility towards various cultures.

Algorithmic Influence on Bias and Perception

As well as impacting young peoples' empathy, studies have shown that social media can perpetuate prejudices among teens against people with different backgrounds, lives, and cultures. Zhang (2023) explores the impact of the social media platform TikTok on "reinforcing stereotypes," specifically among Chinese teenagers. He concludes that immediate action is needed to establish guidelines restricting adolescents from receiving the adverse effects of social media. Furthermore, he demonstrates how adolescents can form stereotypes through the media literacy

theory, social pressure, social cognitive theory, and symbolic interactionist theory. He explains the effects of social interactionism and cultural studies to examine TikTok's influence on social and cultural perceptions and teenagers' academics. Zhang (2023) states that TikTok users "may convey stereotypes by changing the meaning and interpretation of symbols to make them more controversial and compelling. This allows stereotypes to have a wide impact on social networks, making them more likely to spread among adolescents."

Zhang highlights symbol manipulation by TikTok users, exemplifying the application of symbolic interactionism and the significance of content manipulation. He also explores the media literacy theory (an individual's ability to evaluate/analyze media) and how it could be utilized to explain "how adolescents form stereotypes about specific groups through their understanding and evaluation of content." Zhang (2023) analyzes social cognitive theory, which defines how individuals process and evaluate content to form social media stereotypes. He states that when "certain stereotypical content becomes popular on the platform, adolescents may form stereotypes about specific groups by observing these trends" due to a reward mechanisms system that affects their social cognitive functions to enable stereotypes to be reinforced by liking, commenting, or reposting. This tendency to form stereotypes by observing popular content, as explained by social cognitive theory, is often driven by social influence and 'herd' behavior. Zhang (2023) concludes that this theory provides a significant framework for fully comprehending the formation of stereotypes among adolescents on TikTok¹².

I saw similar patterns in the data survey I conducted; 19.2% of respondents answered that they always view the comments on social media posts, and when asked if their opinions changed after viewing the comments, 42.3% of adolescents answered yes, demonstrating the frequency and result that social influence can have other teenagers in perpetuating prejudices and stereotypes. The shift in their initial speculation of social media displays the likelihood of adolescents conforming to the majority view, especially on social media outlets. These results also exhibit social media's significance and essential role in forming perceptions of various content.

Due to the normalization of high use of social media, adolescents may be exposed to biased or false content, increasing the probability of prejudice. Bravo et al. (2019) surveyed the consequences of online ethnic/race discrimination, simultaneous engagement, and the urgency to prevent adolescents from consuming discriminatory content on social media platforms. They emphasize the significance of algorithmic bias, which can perpetuate prejudices. Bravo et al. (2019) encourage individuals to take action to inform youth of the effects of consumption of discriminatory content and to teach adolescents to build resilience against biased matters; they state that "the regular consumption of social media, where much activity is often unmonitored

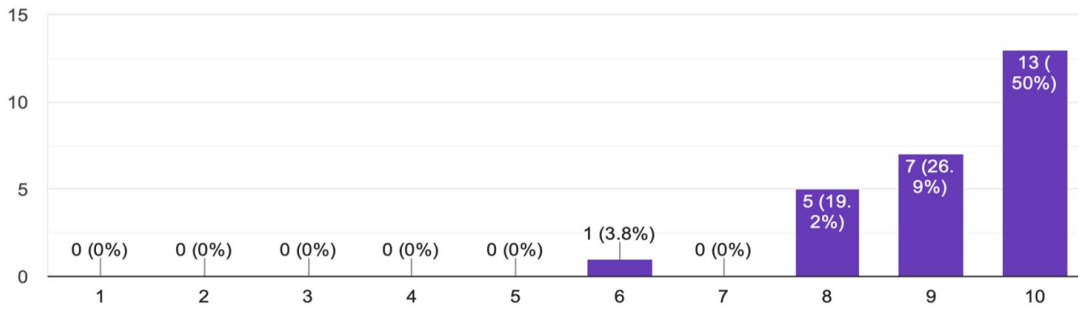


Fig. 2 How open-minded are you to other cultures different from your background? 1 (Not At All Open Minded) to 10 (Very Open Minded).

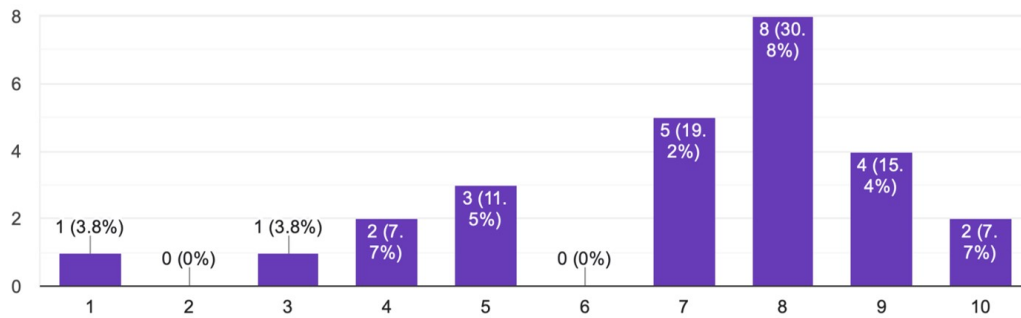


Fig. 3 How curious are you about other people's lives, habits, traditions, or backgrounds? 1 (Not interested at all) to 10 (Very Curious).

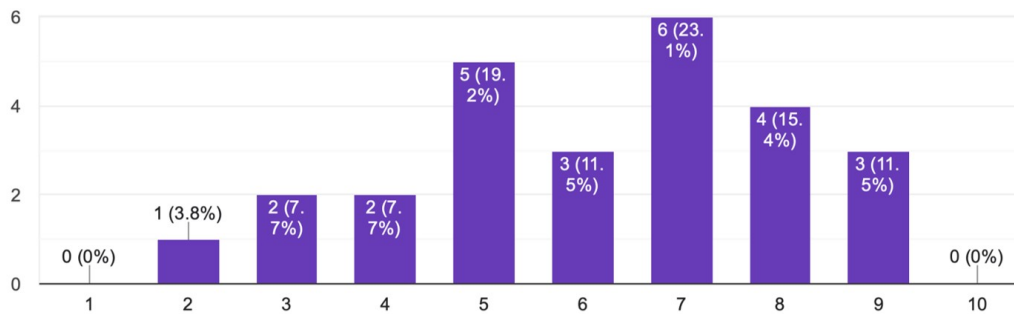


Fig. 4 How much does social media contribute to mistrust and hostility between cultures? 1 (Not at all) to 10 (Very Much).

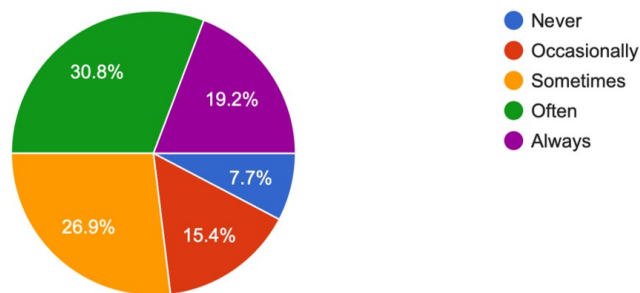


Fig. 5 How often do you read comments on social media posts?

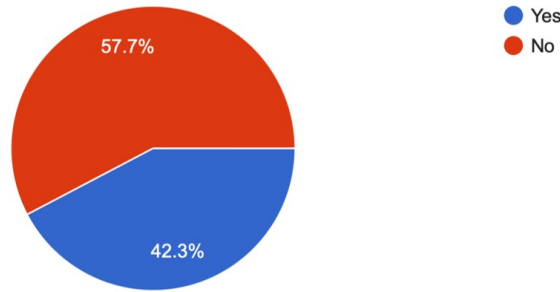


Fig. 6 If you read comments on social media posts, has your opinion ever changed about a social media post (video/picture) due to the comments?

and perceived as private or anonymous, has been linked with increased risks of ethnic-racial discrimination,” reflecting on the possibility of exposure to dictionary content could lead to reinforcing biased perceptions of various ethnicities, ultimately contributing to prejudiced opinions among teenagers¹³.

In the interviews I organized and the data survey, I noticed many participants had differing opinions on how social media affects their prejudice and empathy. A fifteen-year-old male admitted that when he sees “something on social media,” he “end[s] up believing what they are saying” despite his lack of knowledge in the subject, showcasing how teenagers are easily malleable from social media platforms. Despite many teenagers agreeing with Bravo et al. (2019) research on how social media platforms reinforce stereotypes among adolescents, 30.8% of the respondents rated an eight on a 1-10 scale when asked if social media makes them feel more or less empathetic towards different cultures, contradicting Bravo et al. (2019)’s argument. Ultimately, biased social media content is shown to perpetuate stereotypes and impact teenagers’ cognitive functions.

The Dual Impact of Prejudice and Empathy Shaping Social Media for Teens

Social media’s effect on teenagers’ prejudice and empathy reinforces stereotypes for some adolescents, while for some, social media facilitates empathy towards other people and cultures. Algorithms contribute significantly to determining how young people will be impacted by the content shown; algorithmic-driven echo-chambers where teenagers are repeatedly exposed to similar viewpoints result in reinforcing those biased stereotypes. Additionally, it was found that peer influence hugely impacts adolescents’ views on various subjects; as a result of cognitive functions, teenagers feel more inclined to believe a biased opinion if it’s held by a large group of people, further perpetuating stereotypes and prejudice among young people. On the other hand, specific algorithms can expose young people to various cultures, opinions, and experiences, ultimately impact-

Definitions of Empathy
feeling sympathy for others in difficult situations, and putting yourself in their position.
Recognizing when someone’s feeling down and trying your best to make someone feel better/seen.
Thinking from others’ perspective.
Empathy means understanding the many different views and experiences people have in the world. It means caring for those who have different backgrounds from your own and trying to put yourself in their shoes.
To be able to open up and speak freely about your emotions in a setting with people you can trust.
It is to feel someone else’s pain and the same accomplishment as someone else when they achieve something. Even if you haven’t experienced what another person is going through, good or bad, you still understand their emotions.
Trying to understand and connect with another person’s emotions and experiences.
Empathy is trying to understand and stand by others when they are hurting.
Empathy is trying to help by understanding instead of acting.
Empathy means understanding someone else and what they’re feeling/going through.
Empathy is understanding what someone is going through because you have gone through it before yourself.
Kindness.

Table 2 Definitions of Empathy. *This table demonstrates the different responses adolescents gave to the question on the survey, ultimately providing insight into the various views about empathy.*

ing their empathy and viewpoints of contrasting people. Social media algorithms were found to have more of a negative impact than a positive one, emphasizing the consequential outcomes of algorithmic reliance among young people.

In some cases, social media usage by teenagers promotes

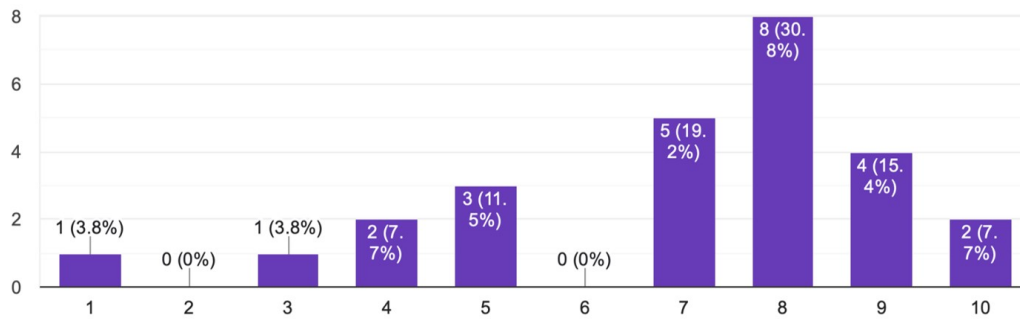


Fig. 7 Does social media make you feel more or less empathetic towards people from different cultures? 1 (less empathetic) to 10 (more empathetic)

cross-cultural learning, eventually giving rise to cultural exchange and the facilitation of empathy. Adolescents with more diverse content on their feeds are more likely to become positively exposed to empathy because of the exposure to various views of culture, opinions, and lives. When algorithms expose teenagers to diverse topics on social media platforms, they are less likely to be affected by the biased content present. For that reason, they will not reinforce or perpetuate stereotyped and prejudiced views. Social media heavily influences young people's perceptions of others and sometimes reinforces previously held beliefs and prejudices about others. However, reinforced prejudices vary widely due to the many forms of content teens are exposed to across social media platforms. There is a disconnect between what teens self-report about social media's impact on prejudice and the actual impact social media platforms have on reinforcing stereotypes for teens. While most respondents in the study self-reported being open-minded to other cultures, when asked if they have ever changed their opinion after viewing comments on an Instagram post, over half said they did not. Specific popular or niche content, such as memes, clips, and jokes, were shown to compel adolescents to take on stereotypical opinions or views. This study suggests that these types of content impact teens by enforcing cognitive bias and desensitization surrounding prejudiced topics. Additionally, peer interactions such as sharing, liking, reposting, and commenting were shown to help internalize the stereotypes perpetuated by other individuals on the platforms, further increasing the likelihood of exposure to biased content. Ultimately, understanding the multifaceted role of social media is important when discussing its effects on prejudice and empathy among teens.

Conclusion

This study asks How social media produces empathy or prejudice for young people. This study's findings conclude that the results of social media impacting teenagers' prejudice and empathy vary due to other components that also influence the effect of social media. These findings underscore the various

roles that social media plays in how teenagers are impacted by algorithmic-driven content and how this facilitates crafting empathy or prejudice. Some studies highlight social media's positive effects and how it can increase empathy towards them, while other cases explored how these platforms increase judgmental and prejudiced thoughts¹⁴.

Despite the data being limited to California, this may reflect the opinions and attitudes of adolescents distinct from those of other geographic areas. Furthermore, 77% were female, making the data less applicable to the broader population. Another limitation was the small sample size; I evaluated 26 people in the survey and 4 in the interviews. These limitations affected my conclusions because the results may not represent the wider teenage population, leading to potential bias. Future studies could address these limitations by expanding the geographic scope to other areas beyond California and creating a more balanced gender distribution. Future studies could also enlarge the sample size, making the data more reliable. This research reflects on the profound significance of how social media affects adolescents' prejudice and empathy; it explores how digital media can shape teenagers' perceptions and opinions.

This study suggests that teenagers must be more aware of how social media impacts their empathy and prejudice to create an empathetic and inclusive environment that promotes cross-cultural understanding. Encouraging adolescents to improve their critical media literacy will significantly increase their ability to construct a more inclusive environment and foster acceptance among young people.

Author Biography

Alexa Habibi, a sophomore at Menlo-Atherton High School in California, is deeply engaged in the social sciences. Her academic interests include anthropology, the evolution of educational practices, and the influence of social media on society and human behavior. She is passionate about understanding how these fields shape cultures and communities.

References

- 1 P. Y. Jami, *Interaction of empathy and culture: A review*, 2023.
- 2 Office of the Surgeon General (OSG), *Social media and youth mental health: The U.S. Surgeon General's advisory*, 2024, <https://pubmed.ncbi.nlm.nih.gov/37721985/>, PubMed, Washington (DC), US Department of Health and Human Services.
- 3 J. Rothwell, *Teens spend average of 4.8 hours on social media per day*, 2023, <https://news.gallup.com/poll/512576/teens-spend-average-hours-social-media-per-day.aspx>.
- 4 N. Skinner, *CA Senate approves Sen. Skinner's landmark bill to protect youth from social media addiction*, 2024, <https://sd09.senate.ca.gov/news/20240521-ca-senate-approves-sen-skinner-s-landmark-bill-protect-youth-social-media-addiction:~=Under%20California%27s%20Protecting%20Our%20Kids>, Accessed 22 Sept. 2024.
- 5 M. Kreidler, *California forges ahead with social media rules despite legal barriers*, 2024, <https://californiahealthline.org/news/article/california-social-media-regulations-legal-challenges-tech/:~=A%20Gallup%20survey%20in%202023>, Accessed 22 Sept. 2024.
- 6 C. DiFelicianonio, *This California law could break your kid's social media addiction*, 2024, <https://www.sfchronicle.com/tech/article/california-kids-social-media-law-19780664.php>, Accessed 22 Sept. 2024.
- 7 T. Nelson, *The psychology of prejudice*, Google Books, 2023.
- 8 G. D. D. O. R. J. S.-R. . D. H.-L. E. Theophilou, F. Lomonaco, *AI and Narrative Scripts to Educate Adolescents About Social Media Algorithms: Insights About AI Overdependence, Trust and Awareness*, 2023, https://link.springer.com/chapter/10.1007/978-3-031-42682-7_28.
- 9 L. Everson, *The negative effects of social media sites on adolescents and the benefits of evoking empathy through reading*, 2022.
- 10 A. Tutgun-Ünal, *Social media generations' levels of acceptance of diversity I*, 2021, <https://files.eric.ed.gov/fulltext/EJ1304620.pdf>.
- 11 S. Tuzel and R. Hobbs, *The use of social media and popular culture to advance cross-cultural understanding*, 2017, Accessed 21 Aug. 2020.
- 12 G. Zhang, *The impact of TikTok on Chinese teenagers' stereotypes*, 2023, Accessed 17 Mar. 2024.
- 13 e. a. B. Y. Bravo, *When things go viral: Youth's discrimination exposure in the world of social media*, 2019, Accessed 30 Nov. 2022.
- 14 J. Martingano, *Social media and empathy around the globe*, 2023, <https://www.psychologytoday.com/us/blog/what-do-you-mean/202305/social-media-and-empathy-around-the-globe>, Accessed 22 Sept. 2024.