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Who Is the “You” in YouTube?

Missed Opportunities in Race and
Representation in Children’s YouTube Videos

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COMMON SENSE IS GRATEFUL FOR THE GENEROUS SUPPORT AND
UNDERWRITING THAT FUNDED THIS RESEARCH REPORT:

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A Letter from Our Founder

Online video viewing has exploded in the last four years among kids of all ages. Our last two Common Sense Census reports revealed that for the youngest kids, time spent watching online videos has surpassed traditional television. And for teens, YouTube is the platform they simply cannot live without.

At the same time, we know the entertainment industry has fallen short on telling authentic stories that represent the world we live in. Movies and TV shows still feature a majority of White faces and frequently stereotypical depictions of people of color, and Hollywood and the entertainment industry are still struggling with representation from BIPOC creators behind the camera.

The popularity of YouTube and other online video platforms creates a unique opportunity for user-generated content to tell different, diverse, representative stories.

YouTube could be a leader in changing the story for millions of kids across the country who don't see themselves accurately represented in any of the content they watch: It's free, global, and multilingual.

But unfortunately, YouTube is missing the opportunity. This report, conducted in partnership with the University of Michigan, looks at a large sample of videos watched by kids ages 0 to 8 and 9 to 18. And the analysis reveals that kids are watching content that presents biased and stereotypical representations of race and ethnicity. Here are a few key findings:

- In YouTube videos watched by kids 8 and younger, 62% featured no BIPOC characters at all, while in another 10% of videos, BIPOC characters were portrayed in shallow ways.
- When videos watched by 0- to 8-year-olds featured prominent BIPOC characters, they were significantly more likely to include interpersonal violence (27% vs. 16%), bad language (32% vs. 13%), and marginally higher drinking, drug use, and smoking (7% vs. 2%) than videos with prominent White characters. In addition, videos featuring prominent BIPOC characters had lower educational quality: Only 18% carried educational quality, compared to about 30% of those with White characters.
- Ethnic-racial stereotypes appeared in about 1 in 10 videos watched by tweens and teens, meaning that if tweens and teens watched 10 YouTube videos a day for a year, they might see 300 videos depicting stereotypes of BIPOC characters.
- Gender stereotypes went hand in hand with ethnic-racial stereotypes in videos watched by tweens and teens.
- Teaching about race and ethnicity was extremely rare. Of the 1,242 videos watched by children in the study, only two (0.002%) discussed race and ethnicity.

YouTube can be a source of empowering and inspiring real-life stories and representations of BIPOC communities, but while kids and families can do a lot to seek out the right stories, YouTube could make them easier to find by elevating BIPOC creators and making YouTube a destination for representation in media. We need a better understanding of how YouTube's algorithm is working when it comes to content and creators of color—and we need to know whether it is inadvertently promoting biased, stereotyped content or doing enough to elevate these creators.

In the meantime, it remains very important to help parents, caregivers, and educators find the very best content on YouTube that elevates diverse voices. Common Sense will continue to lead the charge in ensuring that leaders at technology and entertainment companies are putting kids' needs front and center.



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Credits

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The findings, conclusions, opinions, and recommendations expressed in this material are solely the responsibility of the authors and are presented independent of any relationship Common Sense or the University of Michigan may have with Google or YouTube.

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Introduction

YouTube attracts hours of weekly viewing from children younger than 18 (Rideout & Robb, 2019; Radesky, Seyfried, Weeks, et al., 2022). It was the number one distraction for students receiving virtual learning in 2020 and 2021 (Radesky, 2021), and generated nearly \$20 billion in advertising revenue in 2020 (Statista, 2020). For young children (age 0 to 8), time spent on video-sharing sites like YouTube now exceeds time spent watching television (Rideout & Robb, 2020). If forced to choose, teens say YouTube is the site they wouldn't want to live without (Rideout et al., 2022). Despite the outsize presence YouTube plays in children's daily lives, it is not known whether children are exposed to balanced representations of ethnicities and races on this platform, which can be an important contributor to children's ethnic-racial development (Rogers et al., 2021). Exposure to negative depictions of children's own ethnic-racial identity undermines many aspects of well-being, including self-esteem, satisfaction with one's appearance, sense of value of one's ethnic-racial group, academic performance, and future aspirations, while the converse is true for positive depictions (Rogers et al., 2021).

Because YouTube allows content creators to self-publish, it holds great promise for YouTubers who are Black, Indigenous, and people of color (BIPOC) to tell stories of their lived experiences in a manner that is more equitably proportional to the ethnic-racial makeup of the United States. On the other hand, ethnic-racial stereotypes may be used for humor or "engagement" on a platform that provides monetary (i.e., advertising) incentives for channels that accrue more likes, subscribers, and comments for more extreme or controversial content. In a 2020 Common Sense report analyzing YouTube viewing histories of 0- to 8-year-olds (Radesky et al., 2020), stereotyped depictions of race, gender, ability, or body size were present in 9% of videos, which raised concern that user-generated content was allowing questionable, or outright racist, content to be posted.

Does YouTube, as a platform, help level the playing field for talented creators, or does it magnify covert power imbalances by amplifying particular voices over others through its algorithmic feeds? Does YouTube emphasize harmful tropes

embedded in content consumed by children, who are in various stages of ethnic-racial awareness and identity formation? According to YouTube, high-quality videos that encourage positive representations of different groups of people can be elevated in their recommendations. Conversely, creators who create low quality videos may be demonetized (Google, n.d.).

To date, no prior research has examined YouTube content through the lens of ethnic-racial development. Yet such analysis is critically needed, given the popularity of this platform and its ability to shape children's experiences through social validation, viral content, and recommendation feeds.

Media and children's ethnic-racial development

Children look to cues in their social environment, including their media experiences, to build awareness of and knowledge about ethnic-racial groups. However, an abundance of studies have found that many racial and ethnic groups (Black, Latino, Asian, and Native American/Indigenous people) are underrepresented in traditional media (Behm-Morawitz & Ortiz, 2013; Mastro, 2017). Further, it is frequently reported that when minority groups do show up in TV shows and films, it is usually in a stereotypical manner (Dixon et al., 2019). For example, Black people are overrepresented as lazy, violent, and criminal. Latinos are often hypersexualized, while Asians are heavily associated with martial arts. Native Americans, if depicted at all, are frequently shown as magical, with ancient wisdom. What remains constant is the disproportionate and stereotypical media representations of minority groups relative to their White counterparts.

Ethnic-racial representation on YouTube may have notable differences from mainstream media for several reasons. For instance, children experience wishful identification with YouTubers (e.g., boys look up to YouTubers who are funny, violent, and attractive; girls identify with those who are funny and popular) (Tolbert & Drogos, 2019). These YouTubers may also resonate more with children because they are "regular people" who became influencers by creating their own

content, as compared with performers in traditional forms of TV media that are scripted (Jaakkola, 2020). Research on parasocial relationships (the connection children feel with their favorite cartoon, puppet, or human media characters) shows that children are more likely to follow instructions, pay attention to, and be influenced by a parasocial relationship compared to a character they don't know (Richards & Calvert, 2017). Therefore, YouTubers and influencers may be an important part of disseminating positive or negative depictions of different ethnic-racial groups.

In all media, children may consciously or unconsciously seek out content that reinforces their social identity, or reactivates biases about ethnic-racial outgroups (Tajfel 1979). However, on YouTube, personalized recommendations featuring similar content may reinforce stereotyped scripts (i.e., automatic biases) and normalize these stereotypes through social validation (e.g., likes and shares). The simple fact that YouTube recommends a video also acts as social validation, as it suggests that other viewers similar to the child watched the video, regardless of any questionable messages it may contain. As it currently stands, YouTube's recommendation algorithm has the power to greatly assist in the prosocial or antisocial identity formation of today's young people, in parallel filter bubbles that may hinder collaborative thinking.

Therefore, the goals of this report are to describe the ethnic-racial representation of characters in YouTube videos viewed by young children and tweens/teens, and to analyze the portrayal of BIPOC characters in terms of character prominence, quality of interracial interactions and power dynamics, presence of stereotypes, and associations with other types of negative content (e.g, violence, gender stereotypes).

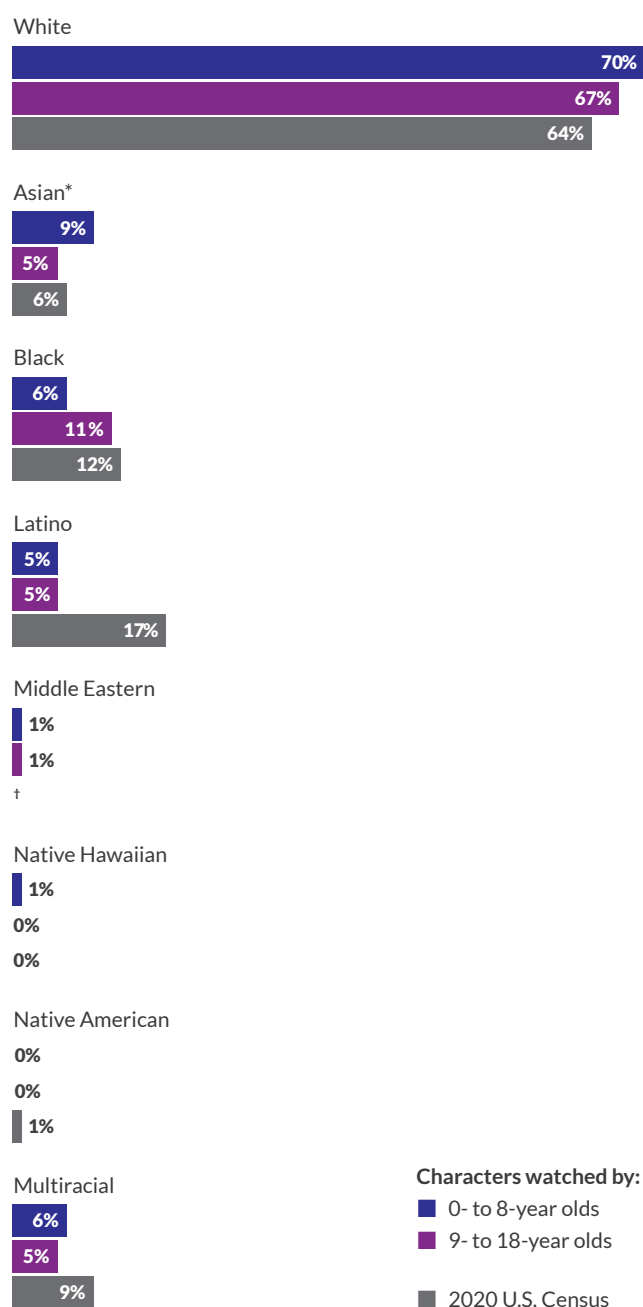
To achieve these goals, Common Sense Media and the University of Michigan analyzed YouTube videos watched by 114 young children (age 0 to 8), collected March through April 2020, and by 140 tween/teens (age 9 to 18), collected June through July 2021. Parents or children provided a list of the last videos the children had watched on the main YouTube site, which were coded for ethnic-racial representation (1,242 videos in total). Recommendations for YouTube design and policy are included. Further details are included in the methodology section.

1. YouTube videos viewed by children do not reflect the ethnic diversity of young children, tweens, and teens across the United States.

Children age 0 to 8 watched a lot of “colorblind” cartoons, in which animated characters had no clear ethnicity-race (e.g., had nonnatural skin or fur tones such as blue; 27% of the video sample), or videos featuring only White dolls or video game avatars (52% of videos with only dolls/avatars). In videos watched by 0- to 8-year-olds, only 38% of videos had any BIPOC individuals, but the majority of individuals depicted were White (average 70%), followed by Black (6%), multiracial (6%), Latino (5%), and East Asian (5%). Representation of Middle Eastern/North African, Native American/Alaska Native, and Native Hawaiian/Pacific Islander (all less than 1%) was extremely limited. In particular, the greatest discrepancies between the U.S. Census and YouTube representation occurred among Black, Latino, and multiracial groups (Figure A).

Among 9- to 18-year-olds, although more videos contained any BIPOC individuals (61%), the majority of individuals were still overwhelmingly White (67%), followed by Black (11%), multiracial (5%), Latino (5%), and East Asian (4%). Middle Eastern/North African, South Asian, Southeast Asian, Native American/Alaska Native, and Native Hawaiian/Pacific Islander individuals were extremely underrepresented (all less than or equal to 1%). The greatest discrepancies between the U.S. Census and YouTube representation for the tween/teen sample occurred among Latino and multiracial groups (see Figure A).

FIGURE A. Racial and ethnic diversity of YouTube videos, by age group, compared to the 2020 U.S. Census



* Asian includes: East Asian, South Asian, and Southeast Asian, as these categories were not assessed independently in the 2020 U.S. Census.

† Middle Eastern race was not assessed in the 2020 U.S. Census; therefore this number is not included.

2. In videos watched by young children, portrayals of BIPOC characters are disproportionately negative when compared to White characters.

Overall, 22% of videos in the 0–8 sample and 35% of videos in the tween/teen sample had BIPOC characters with a prominent role. However, in videos watched by 0- to 8-year-olds, videos with prominent BIPOC characters were significantly more likely to include interpersonal violence (e.g., bullying, meanness, pranks; 27% compared to 16% of videos with prominent White characters), bad language (32% vs. 13%), and marginally higher drinking/drugs/smoking (7% vs. 2%). In addition, videos featuring prominent BIPOC characters had lower educational quality (18% compared to 30% of videos with prominent White characters). When they appeared in a video, White individuals were more likely to be portrayed in a positive manner (78%) compared to BIPOC individuals (65%). These types of negative depictions could hinder children’s positive ethnic-racial development, even from infancy.

In videos watched by tweens and teens, the opposite was true: A lower proportion of videos with prominent BIPOC characters (18%) contained violence compared to those without prominent BIPOC characters (25%). This discrepancy may be explained by the fact that “Let’s Play” gaming videos contained the highest amount of violence, and were overwhelmingly White male YouTubers in the tween/teen sample.

3. In videos watched by 0- to 8-year-olds, BIPOC character portrayals were shallow or missing almost three-quarters of the time.

Shallow portrayals of BIPOC characters occurred in 10% of videos, and 62% of videos did not include any BIPOC characters at all. For example, nursery rhyme videos often have one BIPOC child as a “token” background character in an effort to depict diversity, but there is no development of the child’s story or identity. Only 29% of videos had BIPOC characters that were considered fully developed or nuanced. Shallow or absent portrayals were much more common than stereotypes in early childhood viewing.

4. For tweens and teens, ethnic-racial stereotypes, including using inappropriate accents, saying the N-word, or jokes with ethnic-racial themes, appeared in about 1 in 10 videos, on average.

When we looked at the YouTube viewing histories of tweens/teens, an average of 9% of videos contained stereotypes. This means that if a tween/teen watches 10 YouTube videos a day, every day for a year, they might see over 300 videos depicting ethnic-racial stereotypes in that time. Examples include video gamers acting violently toward Black or Middle Eastern characters, vloggers or TikTok creators making jokes about Latino individuals, or occasional depictions of characters that approximated blackface. Stereotypical portrayals were much more common than shallow portrayals for tweens and teens.

5. Videos containing ethnic-racial stereotypes had lower viewership compared to videos without stereotypes.

Videos with ethnic-racial stereotypes had lower view count (median 734,822) than videos without ethnic-racial stereotypes (median 1,290,331). This suggests that it may be in content creators’ best interests to keep bias and racism out of their videos.

6. Gender stereotypes pervaded videos viewed by tweens and teens and tended to occur in videos that also had ethnic-racial stereotypes.

Videos that had ethnic-racial stereotypes were significantly more likely to also contain gender stereotypes (55%) compared to those without ethnic-racial stereotypes (18%) in videos watched by tweens and teens. Examples included hypersexualized depictions of female characters in music videos, body shaming and teasing in vlogs, and jokes about “typical jealous boyfriend/girlfriend” in TikTok compilations. On average, 1 in 5 videos watched by our participants showed gender stereotypes (21%).

7. Teaching about race and ethnicity was extremely rare; of the 1,242 videos watched by children in the study, only two (0.002%) discussed race and ethnicity.

Although YouTube represents a platform where people can tell their stories and help others develop insight into diverse backgrounds, coders only found two videos from the entire sample of 1,242 that discussed race and ethnicity. These videos were two different cooking shows, in which race and ethnicity were discussed in the context of food consumed by different cultures.

8. Although tweens and teens watched videos with characters that reflected their own ethnic-racial identity, this was not the case for 0- to 8-year-olds.

In videos watched by both age ranges, White characters were the most prominent. Among children age 0 to 8, BIPOC children's videos had an average of 69% White characters, which was similar to the videos viewed by White children (66%, see Figure B). Tweens and teens of color watched videos with predominantly White characters, but were also more likely to watch content with characters from their own ethnic-racial group (Figure C). For example, White teens watched videos with the highest average proportion of White characters (77%), while Black teens viewed the highest average proportion of Black characters (33%), and Latino teens viewed the highest proportion of Latino characters (13%). This pattern suggests that YouTube could act as a source of positive representation for young people who are seeking messages and entertainment that aligns with their ethnic-racial identity.

FIGURE B. Ethnic-racial representation in YouTube videos viewed by children age 0 to 8

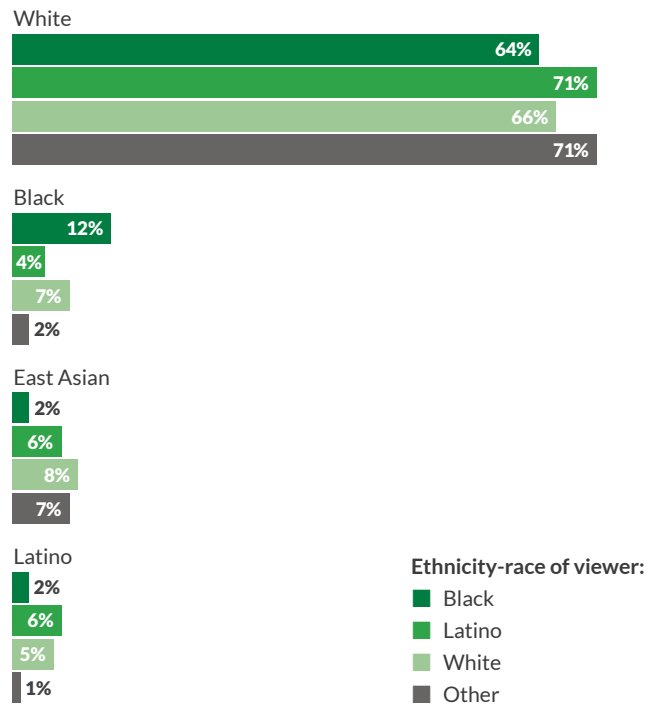
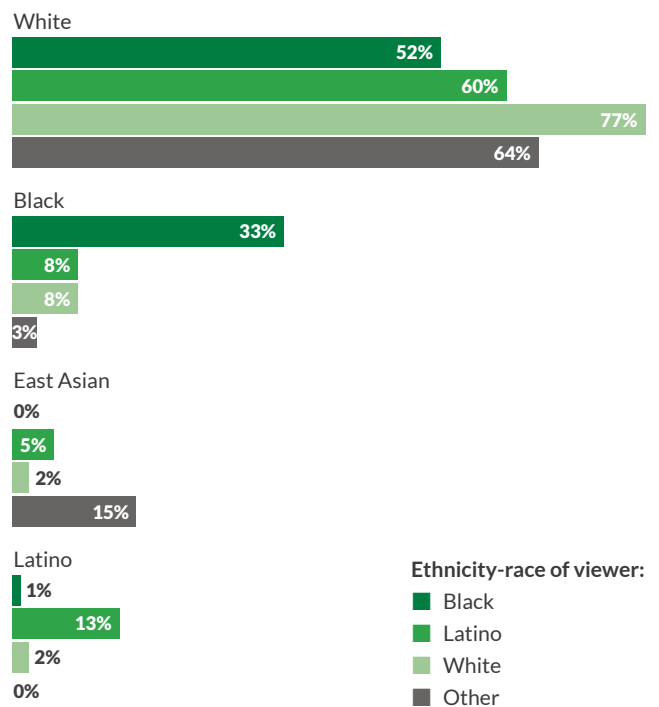


FIGURE C. Ethnic-racial representation in YouTube videos viewed by children age 9 to 18





Methodology

Study design and participants

This analysis used two data sets collected from young children (0- to 8-year-olds, collected in March and April 2020 as part of *The Common Sense Census: Media Use By Kids Age Zero to Eight*) and tweens/teens (9- to 18-year-olds, collected in June and July 2021 as part of *The Common Sense Census: Media Use by Tweens and Teens*). For both studies, participants were invited to take part in a follow-up YouTube survey and were eligible to participate if they watched YouTube at least once a week on YouTube's main platform (not YouTube Kids). After providing electronic informed consent, participants were shown instructions on how to copy and paste the 15 most recent videos they had viewed on YouTube into an electronic survey form.

For each data set, we created a sample of equal numbers of White and BIPOC child participants who had codable videos, matched as closely as possible by age, gender, and sociodemographic characteristics (e.g., parent education, income). The purpose of creating matched data sets was to provide increased statistical power for detecting differences in the YouTube viewing habits of children from different ethnic-racial backgrounds, while reducing coder burden. For the 0- to 8-year-olds, parent ethnicity-race was used as a proxy for child ethnicity-race. Table 1 on page 8 shows participant and video characteristics; although duration of 0 to 8 and tween/teen videos were similar, videos in the 0 to 8 sample had accrued more views at the time of coding.

Content coding

For both studies, we watched and coded five videos per child, excluding any videos that were no longer available or were not codable due to depicting only inanimate objects (e.g., cars/trains with no visible humans), pets with no humans/owners ever visible, or calming sounds/images (e.g., thunderstorms). Movie trailers, which were rare, were also excluded from analysis due to their rapid pacing and multiple characters, which were not feasible to code. In the 0 to 8 sample, we included videos that depicted nonhumanoid cartoon characters (e.g., monsters, animals, Mickey Mouse) or humanoid characters with nonhuman skin tones (e.g., bright yellow in

Lego videos) because they made up a considerable proportion of young children's viewing history. These "colorblind" videos were rare in the tween/teen sample, so we excluded them from coding in that sample. We determined that a sample of five videos per child captured the child's usual viewing habits through preliminary work in which we watched 10 to 15 videos per child ($n = 20$ children), which showed that children's viewing histories usually did not vary and stayed within the same genre of videos (e.g., gaming videos, vlogs).

Metadata. For 0-to-8 videos, metadata about title, duration, view count, and date posted was collected in 2020 using Python [<https://github.com/hdnl/youtube-metadata-scrape>]. For all tween/teen videos, metadata about title, duration, view count, date posted, and number of likes and dislikes was collected using Python [<https://github.com/michaelcooke/youtube-scraper>].

Developing the racial representation coding scheme. The coding schemes for the 0 to 8 and tween/teen samples varied from each other slightly due to the types of videos in each sample and insights gained from the first round of coding (0 to 8 sample) that informed the tween/teen approach. An initial coding scheme was drafted by senior authors (TM, JR) based on a review of existing literature on racial representations in media (Aladé et al., 2020; Alper et al., 2016; Dixon et al., 2019; Gray, 1995; Hamlen & Imbesi, 2020; Mastro & Greenberg, 2000; McClain & Mares, 2020; Williams et al., 2009). This coding scheme was iteratively revised based on applying it to a sample of videos, input from the Common Sense Media expert panel, and input from a coding team from a diverse range of backgrounds (Black, Southeast Asian, East Asian, White) and disciplines (communication and media studies, pediatrics, psychology). Because content differed between the 0 to 8 sample and the tween/teen sample, the coding schemes also differed to more adequately capture the content viewed by these two samples.

To improve validity of the coding process and prevent assumptions about the ethnic or racial background of individuals appearing in YouTube videos, coders used a standardized

TABLE 1. Characteristics of children in 0 to 8 and tween/teen samples and coded videos

	0 to 8 sample		Tween/teen sample	
Sociodemographic characteristics	n = 114		n = 140	
Child age range (0 to 8 // tween/teen)	<i>n</i>	Percentage	<i>n</i>	Percentage
• 0 to 2 years // 9 to 12 years	26	22.8%	55	39.3%
• 3 to 5 years // 13 to 15 years	44	38.6%	42	30.0%
• 6 to 8 years // 16 to 18 years	44	38.6%	43	30.7%
Child sex				
• Female	50	43.9%	67	47.9%
• Male	64	56.1%	73	52.1%
Ethnicity-race*				
• Black, non-Latino	20	17.5%	23	16.4%
• Latino	22	19.3%	27	19.3%
• White, non-Latino	57	50.0%	70	50.0%
• Other, non-Latino	15	13.2%	20	14.3%
Parent education level				
• High school or less	26	22.8%	46	32.9%
• Some college	28	24.6%	39	27.9%
• Bachelor's degree or higher	60	52.6%	55	39.3%
Household income (annual)				
• Lower income (<\$35,000)	23	20.2%	27	19.3%
• Middle income (\$35,000 to \$99,999)	42	36.8%	66	47.1%
• Higher income (\$100,000+)	49	43.0%	47	33.6%
Video characteristics	n = 546		n = 696	
	Median	IQR	Median	IQR
• Duration (minutes)	10.3	3.6; 18.0	10.1	4.2; 18.4
• View count	5,442,605	1,121,716; 26,080,261	1,175,310	231,236; 5,655,534
• Like count	†		27,679.5	5,519; 116,588
• Dislike count	†		629.5	118; 3,240
* Parent ethnicity-race was reported for the 0 to 8 cohort, as parents completed the survey.				
† Like and dislike counts were only available for the tween/teen data set.				
Note: IQR is interquartile range.				

approach when applying ethnicity-race codes: 1) use YouTuber's self-disclosed ethnicity-race; 2) search for background information about the YouTuber's ethnicity-race (e.g., on online databases, fan sites, the YouTuber's other social media accounts); 3) apply White/Caucasian code if this was apparent from the individual's appearance, but otherwise code "unknown." Cartoon characters were coded only if they had natural skin tones (e.g., not blue or bright yellow). After several weeks of training, reliability sets were completed and coders were deemed accurate if agreement with a gold standard code set was a weighted Kappa of $> .70$. Uncertainties were resolved by consensus.

Counts were tallied for foreground characters only (i.e., individuals who were part of the narrative, appeared for more than five seconds) in the following categories: White (Caucasian; reliability 0.77 to 0.94), Black (African American; reliability 0.74 to 1), Latino, Middle Eastern or North African, American Indian or Alaska Native, East Asian, South Asian, Southeast Asian, Native Hawaiian or other Pacific Islander, Unknown/other race, and multiracial (due to infrequent codes, reliability was calculated for these combined, 0.72 to 0.83). Although it was known that some individuals might identify as Afro-Hispanic, we decided to not create overlapping race and ethnicity categories for the purposes of easier reliability calculations and infrequent appearances. Any individuals who self-identified with any Hispanic ethnicity were classified as Hispanic/Latino.

When videos contained dolls, toys, or video game avatars, or characters (either humans or cartoons) appeared in groups or crowds, a global code was applied indicating whether zero, less than 25%, 25% to 75%, or greater than 75% of the characters appeared to be BIPOC (reliability 0.82 to 0.94).

Other codes capturing the quality of racial representations and interpersonal dynamics are described in Table 2 on page 10. Prominence was coded to assess whether BIPOC individuals were merely secondary to White lead characters, or had a central role in the video. Positive and negative interracial interactions were captured in two ways. For both video samples, positive interactions were coded when clear, authentic positive exchanges occurred between individuals of different ethnic-racial groups. For the tween/teen sample, the code negative interracial interactions evolved into the presence of an ethnic-racial power imbalance to capture tensions in the video that may not have manifested as outright negative interactions, but nonetheless placed BIPOC individuals subordinate to White characters.

In the tween/teen sample, we additionally coded for gender stereotypes, gender power imbalances, physical violence, and overt consumerism, as these were commonly encountered during the initial coding process, and had already been coded for the 0 to 8 sample (Radesky et al., 2020).

Coding approach. Coders watched each video at 1x to 2x speed, pausing and rewinding as needed. If videos were longer than 15 minutes, only the first 15 minutes counted toward the code, and the remainder of the video was scanned to ensure similarity. For the tween/teen data set, coders also recorded whether the YouTuber was male, female, nonbinary, a family/couple, or another company/organization/other. Genre was recorded to estimate the types of videos in the sample.

Data analysis

Videos from the 0 to 8 sample and tween/teen sample were analyzed separately due to slightly different coding schemes.

Video level. For each of the 1,242 unique videos (546 from 0 to 8 and 696 from tween/teen), we calculated the proportion of total individuals from each ethnic-racial group, the proportion of BIPOC individuals overall, and the frequency of each ethnic-racial representation code (see Table 2 on page 10). We also classified videos by whether they involved any BIPOC characters or any prominent BIPOC characters. In bivariate analyses, we used chi-square tests, Wilcoxon rank-sum tests, and Spearman correlations to examine whether the proportion of BIPOC characters, BIPOC prominence, and any of the ethnic-racial representation codes differed by video genre, view counts (and likes/dislikes in the tween/teen sample only), YouTuber gender (tween/teen sample only), and the presence of violence or consumerism. In the 0 to 8 sample, we also tested whether ad frequency, ad age-inappropriateness, sexual content, bad language, or educational quality (i.e., codes applied to videos in the 2020 study) differed by the proportion of BIPOC characters in the video.

Child level. For the list of five videos reported for each child, we calculated each child's proportion of BIPOC characters overall, characters from the most common ethnic-racial categories (greater than 5% of sample: White, Black, Latino, multiracial, East Asian), and each ethnic-racial representation code. We tested associations between these proportions and the participants' ethnicity-race using Wilcoxon two-sample tests or Kruskal-Wallis tests with Dunn's test for post hoc multiple comparisons (Elliott & Hynan, 2011).

TABLE 2. Ethnic-racial representation codes

Component title	Reliability	Description
All videos (0 to 18)		
BIPOC prominence	0.73–1	BIPOC characters hold a large role in the video or small/background role in the video.
Interaction quality	0.84–0.97	Positive (friendly, playing together), neutral, or negative (disagreements or violence against BIPOC characters) quality of interracial interactions. In tween/teen videos, only positive interactions were coded.
Racial stereotypes	0.70–1	BIPOC characters are represented in a multidimensional manner (0 to 8 videos only), or are represented in a narrow, shallow, or stereotyped manner.
0 to 8 video sample		
BIPOC valence	0.87–0.93	BIPOC characters are depicted in a positive (the hero of the story, shows positive attributes like kindness or intelligence), neutral (which included videos in which some BIPOC characters are depicted positively, others negatively, or all BIPOC characters are depicted in a neutral way overall), or negative manner (portrayed as unlikable, greedy, clumsy, dumb, aggressive, as criminals). This was coded as a continuous variable (1 to 3).
White valence	0.80–0.89	White characters are depicted in a positive, neutral, or negative manner, similar to above BIPOC valence code.
Tween/Teen video sample		
Ethnic-racial power imbalance	1	Evidence of a power imbalance between BIPOC and White characters; for example, YouTubers/gamers from different races and ethnicities being rude and teasing/trolling each other, making fun of each other’s videos, or wielding legal power over each other. There may also be a low-grade negative quality of interracial interactions that feels cringey and uncomfortable.
Gender power imbalance	0.71–1	Presence of definite power imbalance between individuals of different genders (including nonbinary individuals), such that the power dynamic favors either the male or female individual (coded separately). Those in power may actively and intentionally manipulate, or coerce individuals due to their gender or nonbinary status.
Gender or sexuality stereotypes	0.70–1	Overt harassment, humor about a “woman’s place,” hypersexualized portrayal of women, women portrayed in a demure/victim role or gender-stereotyped appearance (e.g., wear all pink and sparkles, or speak in cutesy voice). Male stereotypes may include overt sexist humor about masculinity or questioning of masculinity with homophobic comments.
Physical violence	0.78–1	Ranges from Minecraft/Roblox violence (not just killing a cow for food, but intentionally hurting other villagers) to shooting/gore in more violent video games. Also includes real-life violence such as punching, hitting, shoving, car crashes, highly threatening situations, use of guns, gore, domestic violence, any form of physical abuse, or animal abuse. Destruction of property also counts, even if not aimed at another individual.
Overt consumerism (tween/teen only)	0.64–0.75	There is pressure from the YouTuber to like, comment, subscribe that appears in a prolonged manner (e.g., YouTuber talks about it for a considerable amount of time; has self-promotion of their own brand such as talking about other social media accounts); is connected to apparent manipulation of the viewer (e.g., talking about how the YouTuber needs it to pay bills). Applies to unboxing videos or showing off of luxury goods; also code a 1 if it seems that people are trying to brand their identity/family. YouTubers who have a constant “subscribe” button, their video game codes, or links to other social media pages obscuring part of the video also count here.

Results: YouTube Videos Watched by 0- to 8-Year-Olds

What are young children watching on YouTube?

Of the 546 videos watched by 0- to 8-year-olds, about 22% were in the early childhood category (e.g., nursery rhymes, videos teaching words, colors, shapes), 33% of videos were in the early elementary category (e.g., toy videos, family vlogs, or cartoons), 18% of videos in the everyone category (e.g., cooking shows, nature shows, or music videos), and about 28% were deemed more appropriate for teens and adults (e.g., violent gaming videos, comedy routines).

Of these videos, 27% had only characters that were colorblind, meaning they were cartoon animals or characters with no apparent ethnicity or race (see Screenshot 1). Viewing of colorblind cartoons was not statistically different in White versus BIPOC participants.

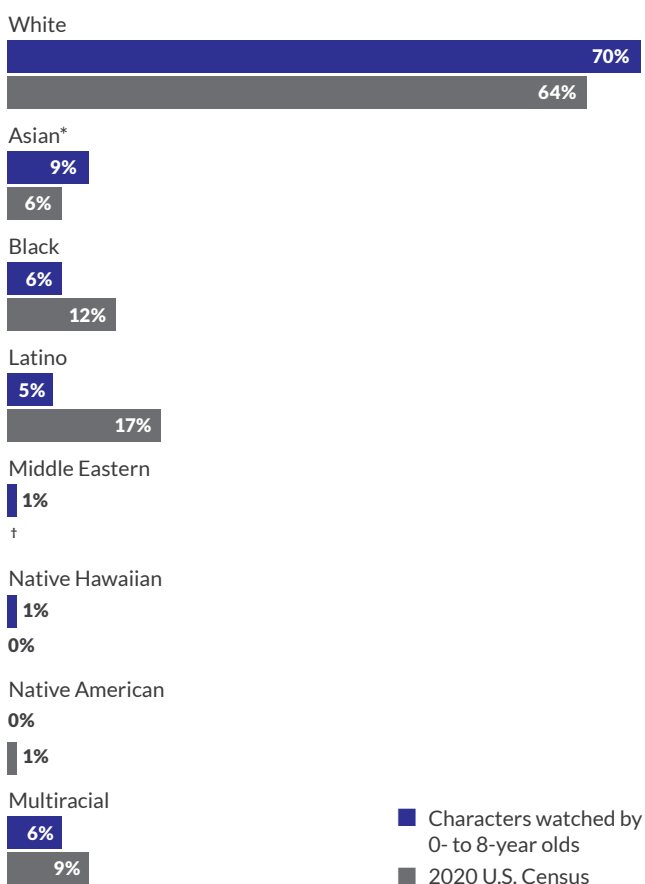
SCREENSHOT 1. Example of a colorblind cartoon viewed. Cartoon characters in this Mickey Mouse video have no apparent ethnicity or race.



Who is being represented in YouTube videos watched by young children?

Videos viewed by young children had limited racial and ethnic diversity: In fact, 62% of videos in this sample contained no BIPOC individuals at all. As shown in Figure 1, of the videos with codable characters, the proportion of White individuals was highest at 70%, followed by Black (6%), multiracial (6%), East Asian (5%), Latino (5%), Unknown/other (4%), Southeast Asian (2%), South Asian (2%), Middle Eastern/North African (0.9%), Native Hawaiian/Pacific Islander (0.9%), and Native American/Alaska Native (0.06%). These proportions are not representative of the U.S. population.

FIGURE 1. Racial and ethnic diversity of YouTube videos in the 0 to 8 sample, as compared with the 2020 U.S. Census.



* Asian includes: East Asian, South Asian, and Southeast Asian, as these categories were not assessed independently in the 2020 U.S. Census.

† Middle Eastern race was not assessed in the 2020 U.S. Census; therefore this number is not included.

Are BIPOC individuals given prominent roles in children’s YouTube videos?

In the 0 to 8 sample, 22% of videos included a BIPOC individual in a prominent role in which they were a large or major part of the video. Examples of these videos included: Ryan’s World videos, the Jancy Family (see Screenshot 2), or Kidz Bop videos, in which several dancers are BIPOC characters.

SCREENSHOT 2. Example of BIPOC prominence in this Jancy Family vlog



The remainder of the videos viewed by young children included BIPOC characters in a very minor role or not included at all. As we described in our ethnic-racial representation analysis of popular early childhood YouTube channels (<https://www.common sense media.org/kids-action/blog/seeking-greater-diversity-in-youtube-videos-for-kids>), nursery rhyme channels like Cocomelon often included White children as the main characters, with one or two background characters who appeared to be BIPOC.

Do videos with BIPOC characters get more views?

Videos with any BIPOC characters had higher median (IQR) 8,995,888 (1,958,982; 37,419,439) views compared to videos containing only White characters: 4,311,751 (800,628; 20,997,493; $p = 0.002$). Some of the videos with BIPOC characters included wildly popular videos such as the “Baby Shark” video (which garnered over 5 billion views at the time of coding), Ryan’s World videos, and Moana music videos, which may have skewed these results. There was no difference in the number of ads or age-appropriateness of ads between videos with and without BIPOC characters.

How are BIPOC individuals portrayed in positive or negative ways on YouTube?

Of the videos where there was an interaction between two characters of different ethnic-racial groups, the vast majority were neutral (41%) or positive (47%), while 12% contained negative interactions. In videos with BIPOC individuals, these characters were portrayed in a positive manner 65% of the time, and in a negative manner 8% of the time (compared with White individuals, who were portrayed positively 78% of the time and negatively 4% of the time).

Using data from our prior coding, we found that videos with prominent BIPOC characters were more likely to also include interpersonal violence (e.g., bullying, meanness, pranks), that is, in 27% of videos compared to only 16% of videos with prominent White characters ($p = .005$). Bad language was more common in videos with prominent BIPOC individuals (32% vs. 13%, $p < .0001$), and drinking/drugs/smoking was marginally higher (7% vs. 2%, $p = .06$). Ratings of strong educational value were less common in videos with prominent BIPOC characters (18% vs. 30%, $p = .02$). Consumerism, ad placement, and ad age-appropriateness were no different between videos with prominent BIPOC versus White characters. In general, consumerism occurred in almost half of all videos watched (45%) and age-inappropriate ads occurred 10% of the time.

What types of stereotypes were present in videos watched by young children?

A range of ethnic-racial stereotypes or narrow portrayals of BIPOC characters was identified in 10% of videos.

For example, the YouTube channel SuperMarioLogan (SML) contained stereotypes, mocking of accents, and inappropriate behavior centered around race, such as bullying Black and female characters. In Screenshot 3, the character appearing as a clown is referenced as being Black, with the makeup resembling blackface. The original SML videos were removed from YouTube due to copyright violations. However, they have been re-uploaded on a new channel.

SCREENSHOT 3. Stereotyped portrayal of BIPOC characters on the SML channel



SML Movie: Bowser Junior's Big Mess [REUPLOADED]

354,306 views • May 4, 2021

7.4K DISLIKE SHARE DOWNLOAD CLIP SAVE ...

Additionally, an episode of *Marvel Rising* demonstrated diversity among its characters but contained stereotypes when it came to the portrayal of different races. Within the episode Indian, Latino, White, East Asian, and African Americans were represented, setting an example of positive interracial interactions amongst the teenage characters who aim to solve problems together. However, the representations of the BIPOC characters were sometimes shallow, such as an African American mother portrayed as a “sassy Black woman” stereotype.

Ethnic-racial tropes were seen in several videos from popular YouTubers. For example, one family created a video in which they walked into a grocery store and paid for everyone's groceries (see Screenshot 4). However, the individuals in the grocery store were primarily BIPOC individuals, and the video narrative shows the family being thanked and celebrated by mostly Latino individuals. This depiction is consistent with the "White savior" media stereotype, in which a White character rescues BIPOC characters from harm or negative circumstances.

SCREENSHOT 4. White YouTuber family paying for groceries of predominantly BIPOC individuals



Walking Into A Grocery Store, Then Paying For Everyone's Groceries

3,336,374 views • Nov 11, 2019

👍 162K 🗨️ DISLIKE ➦ SHARE ⬇️ DOWNLOAD ✂️ CLIP ≡+ SAVE ...

Videos from the gaming YouTuber VuxVux contained stereotypes including mocking African American and Latino accents and aggressive behavior centered around race. In one example of a video, titled "Trolling ROBLOX ODERS as Admin" the main character, who is White, taunts and chases a Black female character and kills her with a sword (Screenshots 5a-c on page 17). Notably, the YouTuber also called other BIPOC individuals his "slaves" in this video.

SCREENSHOTS 5a-c. Stereotypical accents (5a) and violent power dynamics (5b and 5c) involving ethnicity-race



Another example of a clear stereotype from this YouTube channel includes when a White YouTube gamer chants, “Dora, Dora, Dora, the explorer” in a stereotypical accent and makes ethnic jokes (see Screenshot 6).

SCREENSHOT 6. Mocking Latino accent and characters in a Roblox video



Spying on ROBLOX ODERS as a BABY!

15,502,849 views · Mar 15, 2020 403K DISLIKE SHARE DOWNLOAD CLIP SAVE ...

In addition to stereotypes and aggressive behavior toward individuals of BIPOC ethnicity-race described above, we coded the presence of stereotypes in videos containing horror game characters. As shown in Screenshot 7, “Granny” is an antagonist of the video game of the same name, appearing as a woman with zombie-like features, and whose dark skin is associated with being violent and frightening.

SCREENSHOT 7. Horror video game characters in which dark skin is associated with being frightening or violent (horror video game character circled in red)



FINDING BIGFOOT GAME: The Yeti vs FGTEEV! (Glacier Bay Map New Update w/ Bendy & Granny Items?)

30,918,443 views...

376K DISLIKE SHARE DOWNLOAD THANKS CLIP SAVE ...

Are young children seeing their own ethnicity-race represented in YouTube videos?

When we compared the ethnic-racial composition of the videos watched by 114 participants, the proportion of White (64% to 71%) and BIPOC characters (29% to 36%) was not significantly different for children 0 to 8 of different ethnic-racial backgrounds (which differed from tween/teen findings). The prominence of BIPOC characters was similar across Black, non-Latino (20%), Latino (25%), Other non-Latino (19%), and White participants (22%, $p = .67$). Narrow/stereotyped portrayals of BIPOC characters were also not significantly different across participant ethnicity-race: Black, non-Latino (16% of videos), Latino (10%), Other non-Latino (11%), and White participants (13%, $p = .84$).

Is there teaching about race in children's YouTube videos?

There was no explicit age-appropriate teaching about race in any of the videos in the 0 to 8 sample. This is a missed opportunity, but may reflect the fact that children are mostly watching entertainment (not educational) videos that are created with goals of brand promotion or prolonged viewing.

The best examples of age-appropriate content with inclusive themes were from PBS Kids and Sesame Street. In the example depicted in Screenshot 8, Romeo Santos and Elmo are singing a song in Spanish titled, "I Want to Be Your Friend." This video demonstrated friendship and communication in different languages.

SCREENSHOT 8. Example of age-appropriate content with friendship and communication in different languages



Sesame Street: Romeo Santos and Elmo sing "Quiero Ser Tu Amigo"

90,328,555 views • Oct 8, 2013

👍 158K 🗨️ DISLIKE ➦ SHARE ⬇️ DOWNLOAD ⚙️ SAVE ...

The Whiteness of Doll Videos on YouTube

Doll and video game videos were one of the most popular video types among young children in this sample (17% of videos). The majority of these videos (52%) showed only White dolls or video game avatars with light skin, such as Elsa, Mario, and Barbie, while an additional 27% featured only a small proportion (less than 25%) of BIPOC dolls/avatars.



A notable exception was the video “Creatable World Fashion Show,” which depicts Black and White dolls collaborating and supporting each other throughout their fashion show endeavors. The Black character is portrayed with dynamic interests, nuance, and intelligence. Of note, this video is an ad paid for by the toy company Mattel.



Why this matters. The doll tests by Mamie and Kenneth Clark from the 1940s demonstrated that children internalize positive and negative messages about ethnicity and race from the culture around them (McMillan, 1988). In these experiments, Black children attributed more positive traits, such as goodness and beauty, to White dolls and described darker-skinned dolls as bad or ugly. On YouTube, children are primarily seeing YouTubers play with dolls or avatars with light skin, which may unintentionally reinforce the indirect messages that “Whiteness” is considered superior, safe, and good. (Kendi, 2016; Kteily & Bruneau, 2017).



0- to 8-Year-Olds Results Summary— Why These Findings Matter

- “Colorblind” cartoons and puppets have always been common in children’s programming, but they are a missed opportunity for presenting multiple ethnic-racial identities within storytelling that children watch from an early age. Children who see themselves represented in the media in positive ways develop healthier ethnic and racial identities (Reinhard et al., 2017), but many children are watching cartoons where ethnicity and race are invisible. As young as infancy, children start to notice differences in skin tone and ethnic-racial groups (Sangrioli & De Schonen, 2004), so this is a missed opportunity to teach young children through storytelling that shows characters from diverse backgrounds in main roles, not just background characters.
- The lack of proportional ethnic-racial representation in our findings is not new; underrepresentation has been a longstanding problem in the film and television industries (Alade et al., 2020; Annenberg, 2020; Dixon et al., 2019; Mastro & Greenberg, 2000). From this data, it does not appear that YouTube is providing a more diverse set of stories and characters for young children to watch. However, one avenue for increasing ethnic-racial representation on YouTube may be through promotion or elevation of BIPOC content creators, as such content creators were more likely to have greater prominence in this sample.
- In this group of videos, White individuals were portrayed in a positive manner more frequently than BIPOC characters were. In the doll test described above, seeing White individuals portrayed positively more frequently than BIPOC individuals can contribute to indirect learning about ethnicity and race in ways that can be damaging to children’s self-concept.
- Similarly, when BIPOC individuals are repeatedly portrayed alongside violent, negative, or antisocial content, or are excluded from educational content, viewers can internalize the idea that there are superior or inferior ethnic-racial groups. Particularly when such portrayals are posted by popular YouTubers, this can ultimately lead to increased misperceptions about ethnicity and race (Ash, 2017).
- We found stereotypes in content ranging from mainstream media (e.g., *Marvel Rising*) to YouTube-generated content (e.g., family vlogs recreating the “White savior” stereotype; gaming videos that portrayed aggression and trolling of BIPOC characters; video game characters that used dark skin to convey violence and scariness). Because YouTube videos are posted without editorial review, these types of stereotypes will go unnoticed unless they are flagged by viewers, and will only be removed if they fit cleanly into a YouTube “policy violation.” Worse, their presence on a child’s favorite platform may validate these stereotypes and make children less likely to question them, particularly when offered by popular gamers such as FGTeeV (who have 20 million subscribers).



Results:

YouTube Videos Watched by 9- to 18-Year-Olds

Analyses of the tween/teen sample focused on the same concepts of ethnic-racial composition and portrayals that were studied in the 0 to 8 sample, but also included types of genres, like and dislike counts, and gender stereotypes.

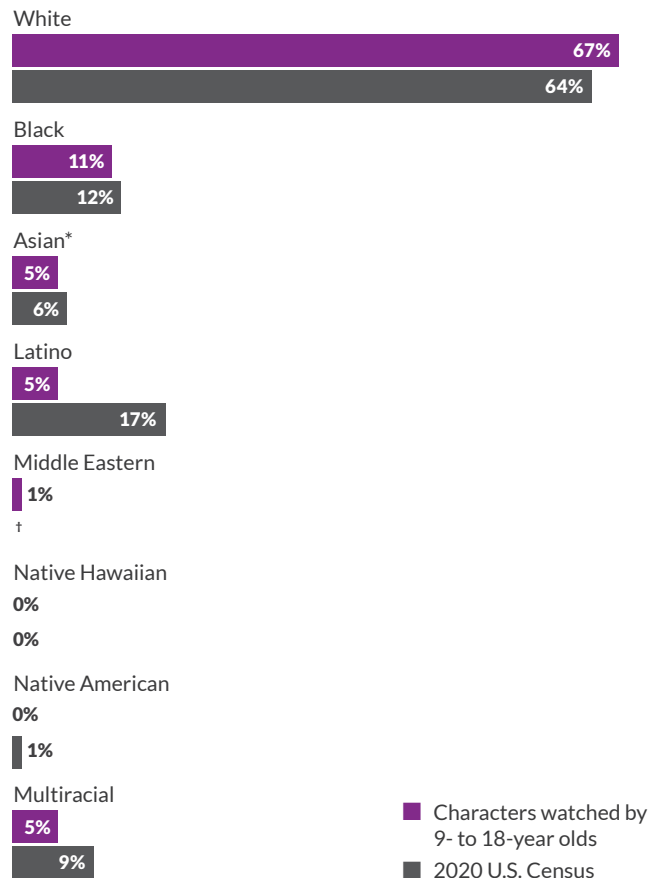
What are tweens and teens watching on YouTube?

Of the 696 videos coded in the tween/teen sample, the most popular genres were vlogs (22%), gaming/Let's Play videos (16%), compilations (13%), music videos (12%), do-it-yourself (DIY)/instructional (7%), educational (7%), or mainstream media (6%), with the remainder of the genres each comprising less than 5% of the video sample. Only 19 (3%) videos were in a language other than English. Of the YouTubers, 41% were male, 16% female, 3% a family or couple, and 40% were a company/organization, or the gender of the channel owner could not be determined.

Who is being represented in YouTube videos watched by teens/tweens?

BIPOC characters were portrayed in 426 videos (61% of the total sample), which is more than in the 0 to 8 sample (38%). Overall, the proportion of characters was predominantly White (average 67%), followed by Black (11%), multiracial (5%), Latino (5%), and East Asian (4%). Representation of Middle Eastern/North African (1%), South Asian (0.9%), Southeast Asian (0.8%), Native American/Alaska Native (0.0%), and Native Hawaiian/Pacific Islander (0.2%) characters was extremely limited (see Figure 2).

FIGURE 2. Racial and ethnic diversity of YouTube videos in the tween/teen sample, as compared with the 2020 U.S. Census



* Asian includes: East Asian, South Asian, and Southeast Asian, as these categories were not assessed independently in the 2020 U.S. Census.

† Middle Eastern race was not assessed in the 2020 U.S. Census; therefore this number is not included.

Are BIPOC individuals given prominent roles in the YouTube videos tweens and teens watch?

BIPOC individuals had a lead role or were prominent in about one-third of videos in the tween/teen sample (35%). Unlike what we found in the 0 to 8 sample, videos with prominent BIPOC characters actually had less violent content (18%) compared to videos with prominent White characters (25%, $p = .048$). This difference between the 0 to 8 sample and the teen/tween sample may have been due to the high number of White video gamers, as the video gaming genre had the highest percentage of violent videos (57%).

Do videos with BIPOC characters get more views?

Similar to the 0 to 8 sample, we found that videos with any BIPOC individuals had more views than videos with only White individuals (median 1,408,128.5 vs. 847,904.5, $p = .007$). Videos with any BIPOC individuals also accrued more likes (median 32,354 vs. 19,398, $p = .02$) and dislikes (median 774 vs. 381, $p = .006$), which suggests that more diverse videos had more engagement overall. However, videos containing any ethnic-racial stereotypes had lower engagement (lower view count (median 734,822 [IQR 199,372; 3,202,468] compared to those without ethnic-racial stereotypes (median 1,290,331 [IQR 232,971; 6,049,168], $p = .054$).

How are BIPOC individuals portrayed in positive or negative ways on YouTube?

In the tween/teen sample, we did not quantify positive or negative valence of BIPOC and White characters because many videos contained both positive and negative portrayals in nuanced ways that manifested as power imbalances between characters of different ethnicities and races. To highlight positive BIPOC portrayals, we instead chose to describe several examples of BIPOC YouTubers whose content was smart, culturally sensitive, and provided positive role models for viewers.

For example, Harriyanna Hook's vlog (see Screenshot 9a on page 27) included a thoughtful discussion of how culture and fashion have changed for tween/teen girls (specifically referring to the Justice clothing store and why it is not as popular as it used to be as well as what may have caused this shift, including the influence of social media sites like Instagram). However, this video had only about 280,000 views. The Queen Beast family vlog (see Screenshot 9b on page 27), which has more subscribers, showed positive interactions between a mother and her daughter. While eating a seafood mukbang, they have discussions about Layla (daughter) growing up on YouTube and the consistent support they have received from their subscribers over the years as their family has grown.

SCREENSHOTS 9a and b. Examples of positive portrayals of BIPOC YouTubers

a



I like to make content based off nostalgia and family and children's entertainment


1:59 / 24:00

the real reason girls don't wear justice clothing anymore.

320,658 views · Jun 10, 2021

18K DISLIKE SHARE DOWNLOAD CLIP SAVE ...

b



LAYLA's GROWING UP + LOBSTER TAIL & KING CRAB SEAFOOD BOIL MUKBANG | QUEEN BEAST

520,799 views...

17K DISLIKE SHARE DOWNLOAD THANKS CLIP SAVE ...

Authentically positive interracial interactions occurred in 17% of videos that depicted multiple ethnic or racial groups. Only two videos taught about ethnicity-race explicitly, both in the context of talking about food. For example, in the BuzzFeed video “I Recreated My Friend’s Favorite Ube Cake From the Philippines,” a character talks about what this cake meant to him growing up, in reference to connecting with his Filipino heritage (see Screenshot 10).

SCREENSHOT 10. Teaching about ethnicity and race in the context of cooking



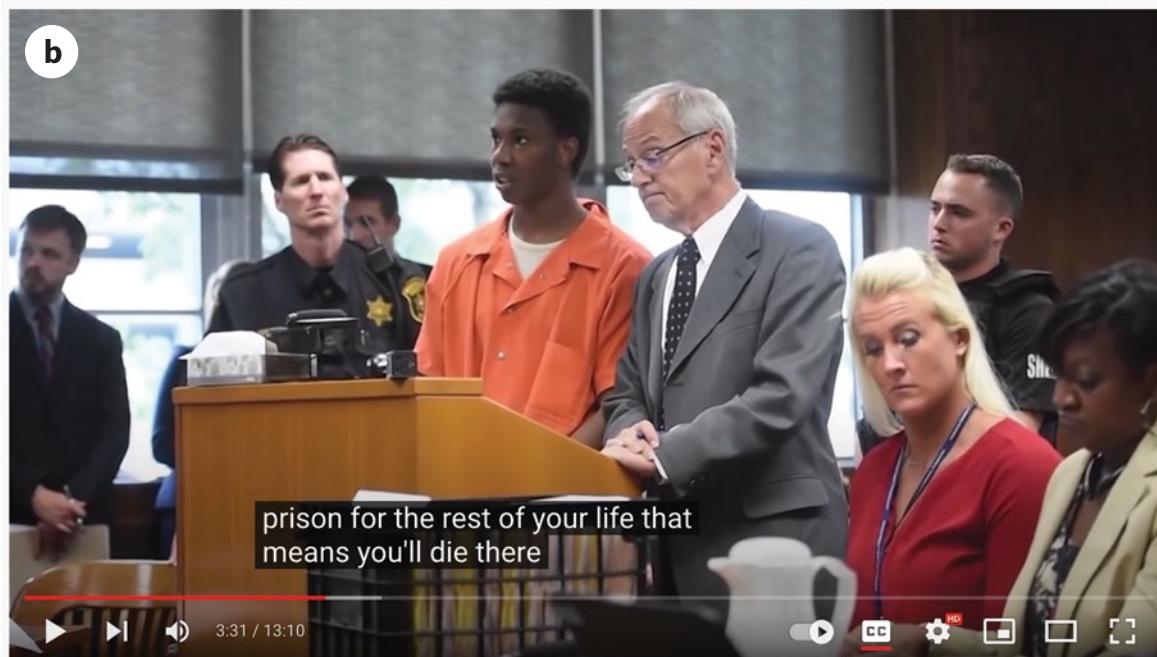
Ethnic-racial power imbalances (i.e., when an individual of one ethnicity-race, usually White, held power or control over another individual, usually BIPOC) occurred in 9% of videos that contained both White and BIPOC characters.

For example, some tweens/teens viewed court proceedings, bodycam footage, or smartphone footage from public interactions between White individuals in a position of power and BIPOC individuals being arraigned, arrested, or questioned by law enforcement. In one video (see Screenshots 11a and b on page 29), a young Black defendant responded to a family statement and said, “I just want to tell y’all I’ll be home soon. RIP Keon. I love my family.” The judge then responded in a demeaning way to the young Black defendant, that he was tempted to not accept the plea deal, and proceed with a trial in which the defendant could be convicted of felony murder, and “go to prison for the rest of your life, that means you’ll die there.”

SCREENSHOTS 11a and b. Video of court proceedings in which a White judge is speaking in a demeaning way to a young Black defendant



#CourtCam
Court Cam: Top 5 Most Disrespectful Defendants | A&E
27,261,774 views • Nov 20, 2020
👍 265K 🗑️ DISLIKE ➦ SHARE ⬇️ DOWNLOAD ✂️ CLIP ⚙️ SAVE ...



#CourtCam
Court Cam: Top 5 Most Disrespectful Defendants | A&E
27,261,774 views • Nov 20, 2020
👍 265K 🗑️ DISLIKE ➦ SHARE ⬇️ DOWNLOAD ✂️ CLIP ⚙️ SAVE ...

Another video shows bodycam footage in which a homeless Latino man is questioned by the police who request his ID. He responds to police by placing his hand in his pocket. Police officers then ask him to take his hand out of his pocket, forcibly take him by the arm, and hold him to the ground, where he has a cardiac arrest. The police then initiate CPR (see Screenshot 12).

SCREENSHOT 12. Bodycam footage of a Latino man being arrested, held to the ground by White police officers, and then undergoing a cardiac arrest



Alameda Police Department body-worn camera footage April 19, 2021

443,550 views • Apr 27, 2021

869 DISLIKE SHARE SAVE ...

In another video, a YouTuber created a compilation of children getting into trouble for stealing. All the video clips show BIPOC children being scolded (often by White adults, see Screenshot 13) or getting very upset when they are reprimanded. For example, at the time stamp shown below, a White woman reprimands a BIPOC child who is reportedly attempting to steal from a food truck.

SCREENSHOT 13. Compilation video shows power imbalances between White adults and BIPOC children



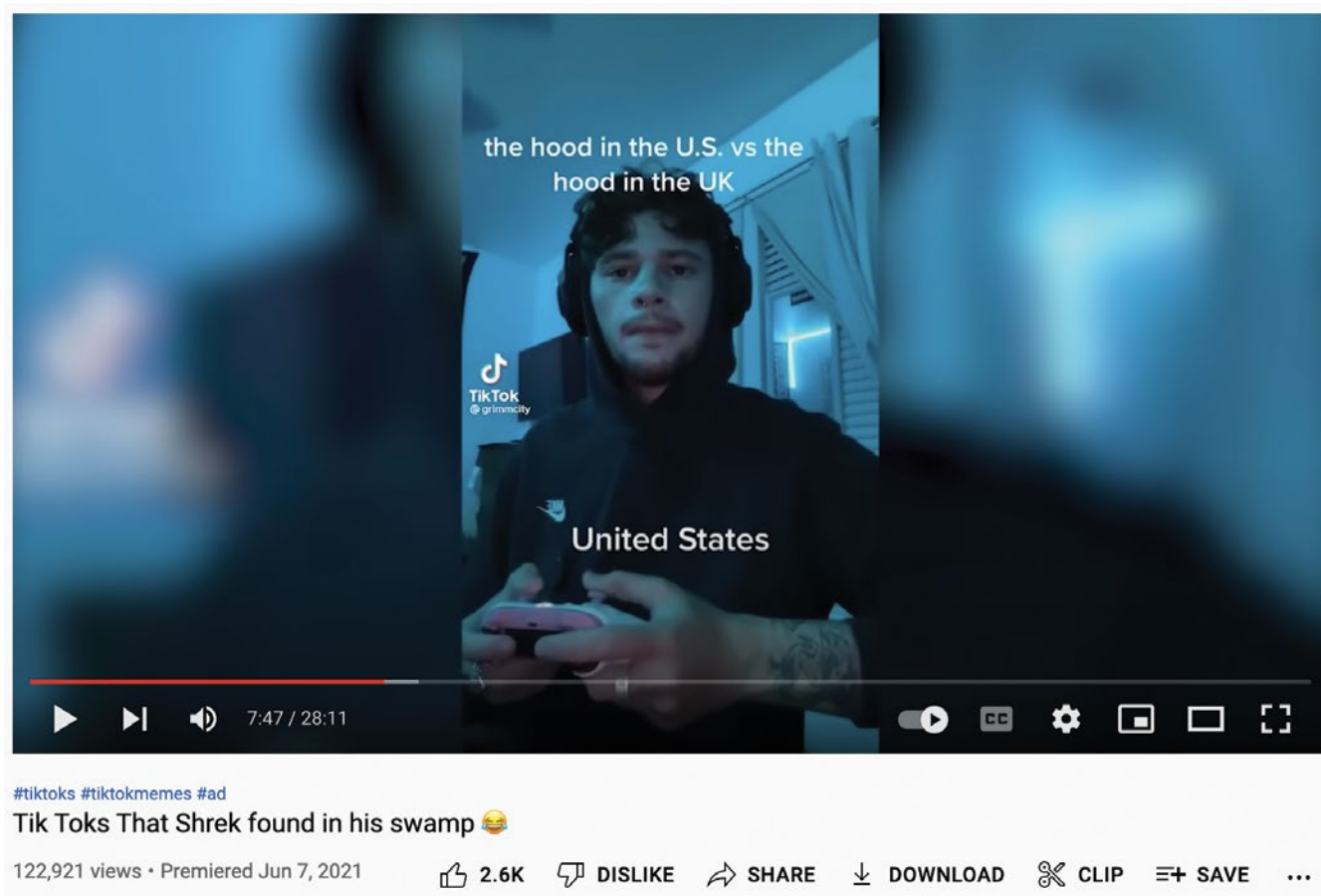
Power imbalances were also noted to occur when a White YouTuber or journalist used their platform to criticize or make fun of BIPOC individuals. For example, PewDiePie’s reaction videos are watched by millions of tweens/teens, and he was observed to make fun of a series of “fail” videos posted mostly by Asian individuals.

What types of stereotypes were present in videos watched by tweens/teens?

Ethnic and racial stereotypes were found in 9% of videos viewed by tweens and teens, including using inappropriate accents, saying the N-word, or jokes with ethnic-racial themes.

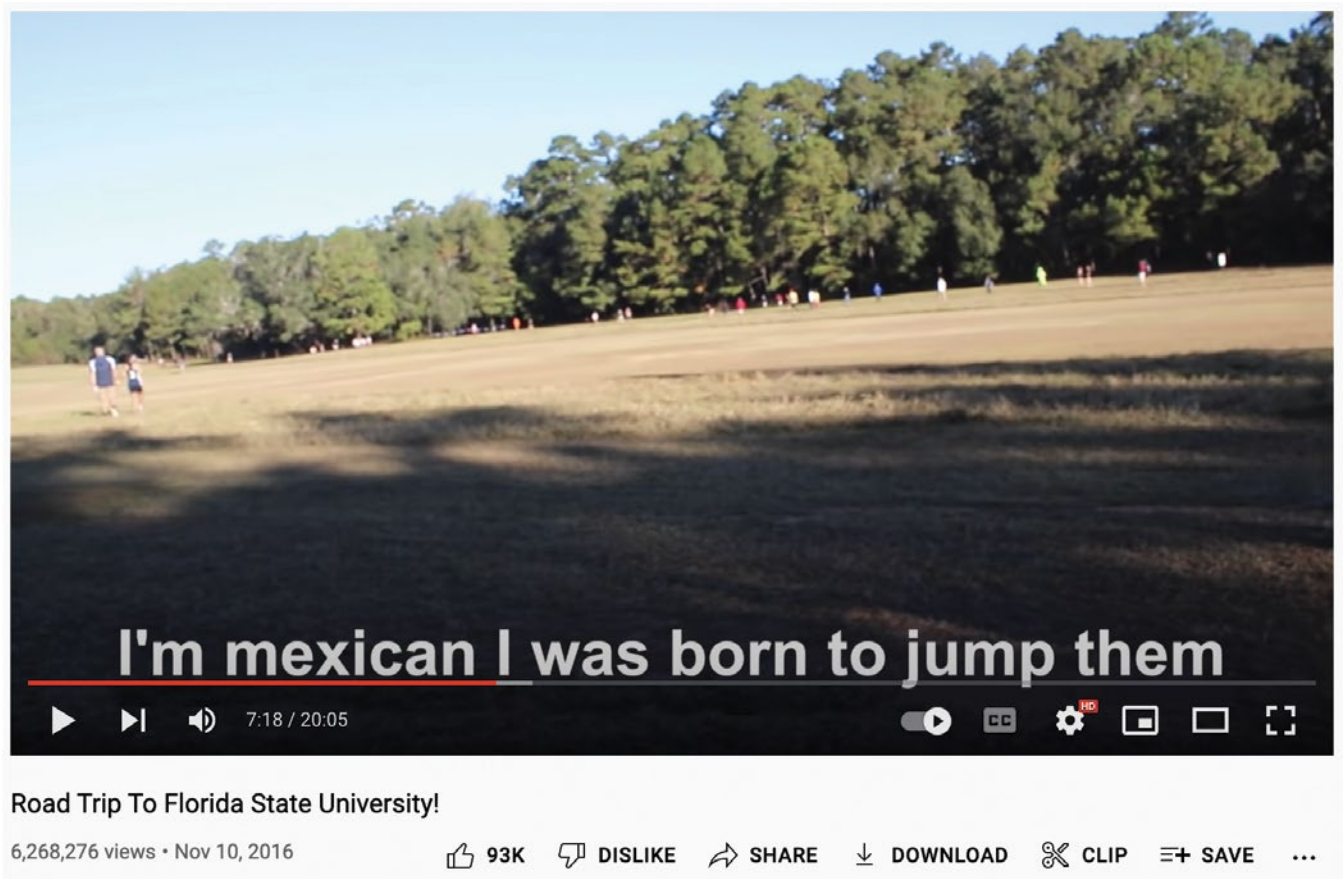
For example, TikTok compilations often contained brief references to ethnic-racial themes, such as mocking what “the hood” feels like in the United States (see Screenshot 14), a young White woman alluding to the fact that a Latino individual purportedly broke into her car, and use of inappropriate ethnic accents.

SCREENSHOT 14. Example of ethnic-racially themed joke on a brief TikTok video in a compilation



In another example of racial stereotype, vlogger Danny Duncan (see Screenshot 15) was documenting a road trip that he took to Florida. During the vlog, Danny attended a track meet and was heckling individuals at the meet. A staff member at the track meet came up to him and noted he should leave, pointing out a wooden fence intended to keep out individuals who are not a part of the state track meet. Danny Duncan then said, "I'm Mexican. I was born to jump them," referring to the fence. This video garnered over 5 million views.

SCREENSHOT 15. Vlog featuring racist joke about Mexicans



The screenshot shows a YouTube video player. The video frame displays a wide, grassy field with a line of trees in the background under a clear blue sky. A large white text overlay at the bottom of the video frame reads "I'm mexican I was born to jump them". Below the video frame is the YouTube player interface, including a progress bar showing 7:18 / 20:05, and various control icons. Below the player, the video title "Road Trip To Florida State University!" is visible, along with the view count "6,268,276 views • Nov 10, 2016" and a row of interaction buttons: Like (93K), Dislike, Share, Download, Clip, Save, and a menu icon.

Violence against other ethnicities was occasionally seen in gaming/Let's Play videos. For example, Flamingo (a YouTuber who often puts violent or insensitive content in his Roblox videos, yet remains highly popular) targets an Arabic-speaking player in one video (see Screenshot 16).

SCREENSHOT 16. Violence against BIPOC players




Gender stereotypes were also found in a considerable number of videos watched by tweens and teens, including popular music videos (see Screenshot 17a on page 35). Another example included gender stereotypes of the “typical jealous boyfriend” in a challenge video in which one teen goes on dates with her boyfriend’s best friends. Body stereotypes were not limited to female characters; YouTubers the Stokes Twins tease each other about their physical fitness as part of a vlog (Screenshot 17b on page 35).

Gender and ethnic-racial stereotypes often co-occurred. In videos with any ethnic-racial stereotype, 55% had gender stereotypes, compared to 18% of videos without ethnic-racial stereotypes ($p < .0001$).

Compared to videos without gender stereotypes, those containing gender stereotypes had more likes (median 37,979 [IQR 9,358; 134,036]) vs. 25,259 [4,717; 111,756], $p = .008$) and dislikes (919 [158; 4,311] vs 606.5 [106; 2,803.5], $p = .04$). Similarly, videos that showed a male character in a dominant power position relative to female or nonbinary characters had more engagement (e.g., more likes per video) compared to those without gender power imbalances (likes 51,999 [10,623; 243,155] vs. 26,535 [5,082; 111,259], $p = .02$ and dislikes 1,315 [166; 4,311] vs. 612 [117; 2,849], $p = 0.054$).

SCREENSHOTS 17a and b. Gender stereotype examples

a



#50Cent #ImTheMan #Vevo
50 Cent ft. Chris Brown - I'm The Man (Official Video)
259,989,439 views · May 6, 2016

👍 1.6M 🗑 DISLIKE ➦ SHARE ⬇ DOWNLOAD ✂ CLIP ⌵ SAVE ...

b



HOT vs COLD POOL Challenge!
16,339,817 views · Premiered Oct 9, 2020

👍 678K 🗑 DISLIKE ➦ SHARE ⬇ DOWNLOAD ✂ CLIP ⌵ SAVE ...

Are tweens and teens seeing their own ethnicity-race represented in YouTube videos?

Of the videos tweens and teens watched, the highest proportion of characters were White, (average of 67%), while BIPOC characters overall made up 33% (primarily Black 11%, multi-racial 5%, Latino 5%, and East Asian 4%).

Unlike the 0 to 8 sample, tweens and teens in this study seemed to seek out videos containing characters who looked like them. Differences in proportion of characters' ethnicity-race among participants from different ethnic-racial groups are shown in Table 3. No significant differences were found for the proportion of characters of Middle Eastern/North African, American Indian/Alaska Native, South Asian, Southeast Asian, Native Hawaiian/Pacific Islander, multiracial, or unknown/other ethnicities.

Across all videos tweens and teens viewed, an average of 8% showed positive interracial interactions, 9% showed ethnic-racial stereotypes, 5% showed an ethnic-racial power imbalance, and 9% showed a gender power imbalance favoring male characters. On average, 1 in 5 videos watched by our participants showed gender stereotypes (21%), about 1 in 4 showed physical violence (23%), and almost half (47%) displayed overt consumerism. Most of these aspects of content did not vary by the ethnicity-race of the tween/teen participant. However, Black participants viewed more videos with gender stereotypes (30%) than Latino participants (13%, $p = .05$)

TABLE 3. Differences in proportion of YouTube character ethnicity-race appearing in videos viewed by tweens/teens from different ethnicities and races

Viewer ethnic-racial group	Black characters* mean (SD)	Latino characters* mean (SD)	East Asian characters* mean (SD)	White characters* mean (SD)
Black, non-Latino	33% (35)	1.4% (5)	0.3% (0.9)	52% (36)
Latino	8% (16)	13% (24)	5% (12)	60% (34)
Other, non-Latino	3% (8)	0.4% (1)	15% (26)	64% (34)
White, non-Latino	8% (14)	2% (6)	2% (6)	77% (25)
<i>p</i> value [†]	.015	.008	.007	.007

* Proportion of characters from specified ethnicity-race viewed by participants, averaged over their five videos.

† *p*-value represents the overall differences in proportion of characters of specified ethnicity-race across participant ethnicity-race.

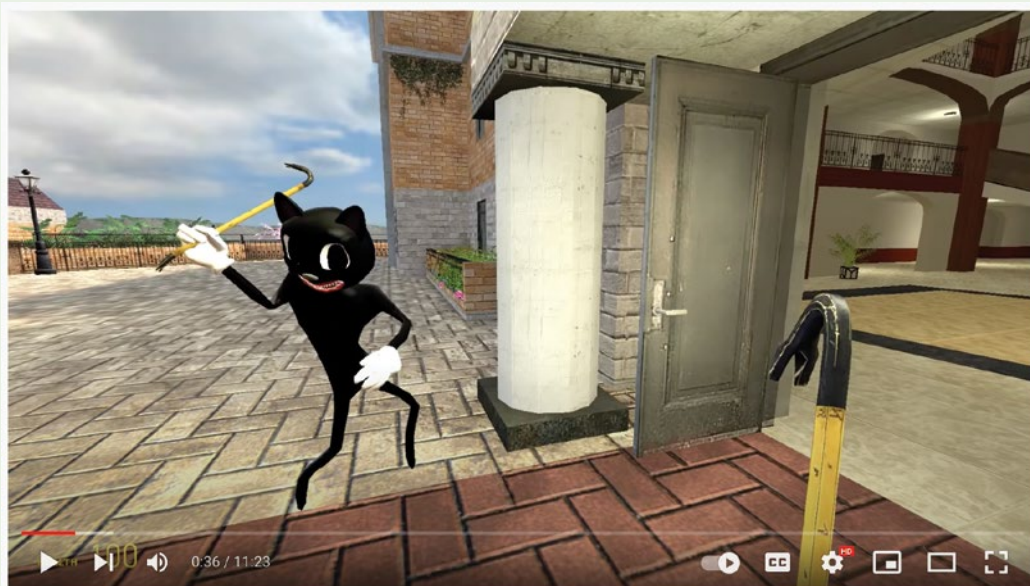
Note: SD is standard deviation.

The Persistence of Blackface in YouTube Videos

A few of the 1,242 videos watched contained depictions that approximated blackface. One case was a clip of Old Gregg from the British TV series *The Mighty Boosh*, which has been removed from Netflix due to other blackface episodes. The Old Gregg character is a merman whose face is painted dark green and black, with bright red lips.



Video game characters also have vestiges of blackface. For example, the horror character Cartoon Cat is based on Felix the Cat, who was modeled after entertainers from minstrel shows (a form of racist comic, music, and dance entertainment developed in the 19th century, in which White performers acted in blackface and portrayed Black characters in stereotypical ways). Cartoon Cat is now used in “mod” video games, or games that have been altered or built by YouTubers. In this screenshot, he appears to be menacing (holding a crowbar, which happens to appear like a cane), with white teeth and red lips. A thumbnail for a related recommendation video shows Cartoon Cat and Cartoon Dog, both in prison uniforms, another trope about Black individuals. More needs to be known about why and how content creators are recreating tropes that have largely been removed from mainstream media but persist on YouTube.





Tween/Teen Results Summary— Why These Findings Matter

- The most popular genres viewed by tweens and teens in our sample consisted of user-generated content: vlogs, gaming videos, and compilations. This matters because YouTubers may be motivated to gain more engagement with their personal brand or channel through posting outrageous content that gains attention, yet may not have editorial staff who can help determine when that content is crossing a line.
- Although tweens and teens appeared to be drawn to YouTubers from the same ethnic-racial groups as them, the majority of characters in participants' viewing histories were nonetheless White. Lack of representation was particularly marked for Latino, Native American, and Middle Eastern groups, meaning that children from these backgrounds may not find stories about their experiences on YouTube.
- We found several positive Black role models in tween/teen viewing histories, but these videos had often accrued fewer views than popular gamers whose videos contained aggression against BIPOC individuals. More research is needed to understand whether YouTube's engagement incentives and recommendation feeds elevate content that contains ethnic-racial stereotypes or reinforces racist schemas.
- We observed power imbalances in reality content, from bodycam footage to court proceedings. The dehumanizing interactions in these videos was concerning; one video had accrued 5 million views with the clickbait title "kid caught STEALING iPhone" and included a compilation of all-BIPOC children being disciplined for bad behavior. Although the YouTuber may not have intended to advance racist schemas through this compilation, its images are emblematic of the systemic racism that has created such power dynamics to begin with, and which remain "indirectly unseen" in the videos. It is unclear if teens are receiving the support and education needed to unpack the troublesome power dynamics in these particular videos.
- Stereotypes were found in 9% of videos. On YouTube, stereotyped content may be used to attract more views through racial and gender heuristics that may not be acting on a conscious level. Heuristics are mental shortcuts that tap into automatic thought processes and schemas that are learned through societal influences, like family, school, or media. Compilations with very brief durations, such as TikTok videos or memes, particularly need to engage viewers immediately through such mental shortcuts. When viewers see that stereotyped content is rewarded (i.e., highly viewed and shared), biases can be normalized. This (albeit unintentional) reinforcement cycle of YouTubers tapping into stereotype heuristics, getting increased engagement, and thereby winding up in recommendations feeds matters for children because exposure to negative ethnic-racial representations can contribute to the development and reinforcement of biases, or even encourage discrimination (Mastro & Stamps, 2018).
- We know that children follow trends and influencers on social media—with unfortunate results such as the Tide Pod or milk crate challenges. The influence of YouTubers on children's conscious or unconscious biases is likely just as strong.



Conclusions

YouTube remains the most popular online, user-generated video platform in the United States. This content analysis of children's ethnic-racial representation on YouTube reveals several missed opportunities for richer discussions around race, representation, and diversity. There was limited ethnic and racial diversity in the videos viewed by young children and tweens/teens. Characters from Native American/Alaska Native, Native Hawaiian/Pacific Islander, and Middle Eastern/North African backgrounds were nearly invisible.

A significant number of cartoons watched by younger children have "colorblind" characters with no clear ethnic-racial identity, or include narrowly portrayed BIPOC characters who are secondary to the White main characters. When BIPOC characters were prominent in videos viewed by younger children, they were often accompanied by interpersonal violence, bad language, and use of substances like tobacco or alcohol.

In the tween/teen sample, young people appeared to be seeking out content that aligned with their ethnic-racial identity, but nonetheless encountered ethnic-racial stereotypes in 9% of videos, and gender stereotypes and consumer pressure in a substantial proportion of their viewing experience. This means that if a child watched 10 YouTube videos daily for one year, they might see over 300 videos containing ethnic-racial stereotypes during that time. In both samples, explicit discussions or teaching about race were so rare that our research team needed to drop the code describing this concept.

Prior work has found that digital media constructions of race and ethnicity are internalized into children's long-term understanding of race and ethnicity, with children creating mental understandings of race—both conscious and unconscious—from their viewing experiences. Our findings suggest that YouTube can be a place where diverse child viewers may experience perceived validation or denigration of their ethnic-racial background, both through direct messaging from YouTubers (e.g., through racially insensitive jokes), informal learning from portrayals of characters as worthy or problematic, and the social reinforcement that occurs through likes,

views, and comments. At the same time, among White children, stereotypes may be formed or reinforced by watching negative media portrayals of BIPOC individuals, which can then translate to real-life thoughts and behaviors (Gerbner et al., 1986).

There are some affordances of YouTube as a platform that hold promise in delivering content with high levels of diversity and representation to a vast audience, including its: (1) user-generated videos, (2) high level of uptake in the general public, and (3) algorithm-based recommendations that can promote certain content creators or types of content. We found that tweens and teens especially are watching BIPOC content creators who provided diverse viewpoints and positive messaging. User-generated content may offer tweens and teens, who are in developmentally sensitive windows of identity development, the opportunity to connect with parasocial relationships—ones in which BIPOC children may see a positive and robust representation of themselves.

On the other hand, these very affordances in the YouTube platform may also be pitfalls when it comes to large-scale distribution of stereotyped content. User-generated content does not pass through editorial review, is often spontaneous or improvised, and therefore may unintentionally replicate tropes. When content creators rely on heuristics and implicit biases to generate engagement with their videos, it also means that biases are likely to be perpetuated and amplified through virality. Indeed, some of the videos in our sample with problematic and negative racial stereotypes also had views in the millions (e.g., SML).

Young children, tweens, and teens are active participants in their digital ecosystems, and they are seeking out positive, educational, and how-to content on YouTube, particularly (Jimenez & Vozmediano, 2020). Therefore, the YouTube platform holds promise as a site where children can see themselves, learn about others, or tell their stories, but only if the right guardrails are applied to content creators and algorithmic recommendation feeds.

Limitations

Coding ethnicity and race based on appearance and contextual cues or tone of voice has inherent limitations, which we attempted to address through the addition of objective data collection measures, reliability sets, and consulting with experts. In many cases, YouTube videos are not produced in a way that surfaces those culturally relevant contextual cues for children, which makes coding more challenging. In addition, this report simply describes the prevalence of ethnic-racial representations on YouTube, not how children process or understand these videos. Future research should examine children's impressions and norm generation from ethnic-racial portrayals of characters on video-sharing platforms.

One final limitation is that the videos coded in this report were sourced from YouTube's main platform and not from YouTube Kids, the latter of which maintains safeguards to try to protect the safety of children while viewing. However, research suggests that more children use YouTube than YouTube Kids and so we determined it was appropriate for analysis (Radesky et al., 2022).

Recommendations

Parents and kids

- For families who are able and willing to seek out and find BIPOC creators and channels that are positive, resonate with your identity, and don't rely on stereotypes to get clicks, YouTube can be a source of positive ethnic-racial representations.
- Be cautious about compilations or recommended videos that use stereotypes or manufactured ethnic-racial or gender drama to drive engagement.
- Watch together when possible to help kids recognize when subtle stereotypes are present in videos, and have conversations about when this crosses the line.
- For children under 13, consider moving your child's viewing to YouTube Kids or other child-directed platforms instead. Content moderation on these platforms may be stronger, which could decrease the likelihood of encountering questionable videos.
- If you can't strike the right balance with ethnic-racial and gender representations on YouTube, or if you have concerns about other aspects of the content, try other streaming video platforms that are reviewed and curated by humans.
- Seek out high-quality videos such as those reviewed by Common Sense Media:
<https://www.commonsensemedia.org/articles/kids-youtube-channels-for-early-learning>

The YouTube platform

- Update the algorithm to avoid favoring biased and racist content, especially in kids' content. Consider human review of a selection of trending videos by experts to identify where questionable/biased portrayals are spreading fast.
- Update YouTube's flagging systems and platform rules to treat offensive stereotypes and racist and biased content as official policy violations. Broaden the flagging system and add resources to help kids process creepy or borderline content they might encounter.
- Invest in BIPOC creators who feature positive ethnic-racial portrayals and ensure their channels get promoted to achieve more representative content distribution on the platform. YouTube has a program to support Black content creators, and should consider expanding support to other underrepresented groups with additional focus on children's content (Google, 2022).
- Consider screenings and/or implicit bias trainings and workshops to better establish the standards of content that will promote a more inclusive environment.
- Although YouTube has been making changes to improve the quality of content on the YouTube Kids site and child-directed content, many of the problems in this sample were from videos that would not fall under these policies or incentives. Additional attention to the ethnic-racial representations in general audiences content will be essential to reach the majority of children.

Content creators

Common Sense *The Inclusion Imperative* report provides guidance for content creators about exposure to diversity, equity, and inclusion; ethnic-racial socialization; and how language is used to reference ethnicity-race (pages 19 to 22). It also provides a detailed list of suggestions for what content creators should know about ethnic-racial development and what media should do to create culturally responsive and diverse content (pages 25 to 29).

Based on this study's findings, additional recommendations for YouTube content creators include:

- Creating content for young children and tweens/teens is a big responsibility. Read up on ethnic-racial development at different ages, so you can identify and disrupt the problematic ethnic-racial messages and stereotypes that occur in media, rather than passively reinforce or share them.
 - For gamers, this includes knowing which game characters reinforce racial stereotypes (for example, darker-skinned characters being portrayed as scary, evil, antisocial, or subservient; or characters like Cartoon Cat that are based on racial tropes; scantily clad female characters), and not including them in your video.
 - In “reaction” videos, check that you’re not only reacting to, or mocking, videos that involve BIPOC individuals. Also, think about whether your own potential biases may be at play when you make this kind of content.
 - In compilations, be aware that short videos are more likely to include stereotypes that tap into “fast-brain” automatic thinking to grab viewers’ attention. Avoid putting videos in a compilation that have gender, ethnic-racial, or other stereotypes, or that are demeaning to people of color, since this normalizes biases in child (and adult) viewers.
- A lot of what vloggers and gamers say is spontaneous and unscripted. If you’re unsure about something you said while recording, go back and edit or re-record that part.
 - Vloggers and influencers have a lot of power to talk about race and ethnicity in constructive ways, rather than ignoring it. In fact, including counter-stereotype messages can positively influence younger viewers.
 - Check your Comments section to see whether viewers are interpreting your video as containing ethnic-racial or gender stereotypes. If so, consider taking the video down or at least engaging in conversation with viewers to better understand why your video may be perpetuating harmful tropes.
 - If you’re a company that creates early childhood cartoons or videos, include main characters from diverse backgrounds who have rich, not shallow, portrayals.
 - For unboxing and toy-play videos, pay attention to the diversity of dolls, who the main characters are, and how they are portrayed.

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