Suzanna J. Opree, Serena Daalmans*, Eva A. van Reijmersdal, and Esther Rozendaal

A content analytic study of the presence of brands and materialistic values in popular influencers' Youtube videos in the Netherlands

https://doi.org/10.1515/commun-2024-0045

Abstract: The present study is the first to provide insights into the presence of brands and materialistic values in videos of popular YouTube influencers. We developed a codebook and analyzed a sample of 240 videos from 20 popular YouTube influencers from the Netherlands. We coded general characteristics of the videos (e.g., video length and number of views), the number of brands and branded products, the use of disclosures and brand prominence, as well as the number and types of materialistic values that were present. The findings show that YouTube watchers are confronted with a large number of brands and materialistic values, which may have serious consequences for their view of the world. In addition, the frequent absence of disclosures indicates a need for spreading awareness about regulations regarding influencer marketing practices.

Keywords: brands, materialistic values, YouTube videos, influencers, quantitative content analysis

1 Introduction

Despite the rise of other visual platforms, such as Instagram and TikTok, YouTube remains incredibly popular among both users and advertisers. In 2022, YouTube reached 2.6 billion active users per month and generated a revenue of 29.2 billion US

***Corresponding author: Serena Daalmans**, Behavioural Science Institute, Radboud University, Nijmegen, Netherlands, E-mail: serena.daalmans@ru.nl
Suzanna J. Opree, Erasmus School of History, Culture and Communication ESHCC, Erasmus University Rotterdam, Rotterdam, Netherlands, E-mail:opree@eshcc.eur.nl
Eva A. van Reijmersdal, Amsterdam School of Communication Research ASCoR, University of Amsterdam, Amsterdam, Netherlands, E-mail:E.A.vanReijmersdal@uva.nl
Esther Rozendaal, Erasmus School of Social and Behavioural Sciences, Erasmus University Rotterdam, Rotterdam, Netherlands, E-mail: rozendaal@essb.eur.nl

dollars (Curry, 2023). YouTube has the highest market penetration in the age group 3–17 (i.e., 89 %; Ofcom, 2022), as well as 18–29, 30–49, and 50–64 (respectively, 95 %, 91 %, and 83 %; Auxier and Anderson, 2021). Furthermore, it has the second highest penetration in the age group 65+ (i.e., 49 %; Auxier and Anderson, 2021). Given its extensive reach, YouTube has become a popular advertising venue. An automatic content analysis of 139,475 YouTube videos, utilizing scripts to derive referral links to online stores from the videos' descriptions and a Structural Topic Model on the videos' auto-generated captions to determine indirectly whether products were orally promoted, revealed that between 2009 and 2017 "YouTube users [...] are confronted with an ever-growing share of product promotion" (Schwemmer and Ziewiecki, 2018, p. 1).

Much of YouTube's revenue is generated by so-called YouTube influencers – users with thousands, ten-thousands, or even hundred-thousands of followers or more, who are often compensated (e.g., with money, free items, or store credit) to promote products and services (Domingues Aguiar and Van Reijmersdal, 2018). Owing to their wide reach and because exposure seems to impact both children's and adults' purchases and purchase requests (Domingues Aguiar and Van Reijmersdal, 2018; Rasmussen et al., 2022), spending on YouTube influencer marketing is still on the rise (Perez, 2022). While there are reasons to suspect that much YouTube influencer content is commercial in nature, the field currently lacks insight into the extent to which brands and materialistic values are promoted in this type of content (Taylor, 2020; Vrontis et al., 2021). Media effects researchers have expressed a need to dive deep into the *content* of social media influencer videos in to order to better grasp their effects on consumers' purchase intentions and materialism (Dávila and Casabayó, 2024; Otto and Thies, 2024; Touminen et al., 2023).

In this study, we developed a codebook to examine the presence of brands and materialistic values in influencer content. We applied this codebook to 240 YouTube influencer videos to meet three research aims. The first aim is to determine *how many* brands viewers are exposed to in YouTube influencer videos, and to determine *how* these brands are featured. The second aim is to determine *how many* and *what type* of materialistic values viewers are exposed to in YouTube influencer videos. The third aim is to examine interrelationships and determine whether the number of brands and materialistic values are related to video genre and whether the number of materialistic values is related to the number of brands. By content analyzing the videos of YouTube influencers, we move beyond the research of Schwemmer and Ziewiecki (2018), whose work did not capture brands and brands presence directly, and did not include materialistic values.

2 Sample and codebook

To accomplish the set aims, the present study conducts a quantitative content analysis of YouTube influencer videos. It was designed and executed with the Internet Research Ethical Guidelines 3.0 by the Association of Internet Research in mind (Franzke et al., 2019). The sample consisted of a total of 240 videos uploaded by the 20 most popular YouTube influencer channels in the Netherlands (Born and Krul, 2019; Social Blade, 2020). The channels that were selected mostly posted Dutch content, and the number of subscribers for these channels ranged from 436 thousand to 16.2 million. Given their high number of subscribers, it is highly unlikely that the YouTube influencers will consider their content private, and because the material can be thought of as public, no informed consent was sought. Still, to protect the YouTubers' individual interests, all analyzes and results pertain to the bulk of content only. No conclusions are drawn on the level of individual influencers or videos. All videos in the sample were downloaded on the same day in January 2020. For each channel, we downloaded one video for each month of 2019; in January, we downloaded the first video that was uploaded; in February, the second; in March, the third, etc. We used this sampling approach because professional influencers tend to use fixed social media posting schedules. The videos in our sample lasted between 2:03 minutes and 2 hours and 2:00 minutes.

The codebook consisted of 18 pages of text, containing open-ended and multiple choice questions about the YouTube videos, as well as brief definitions for concepts like direct promotion ("explicitly encouraging the audience to buy or rent products or services of a sponsor, for instance, by urging them to go to the store or by mentioning prices or discounts") and indirect promotions ("promoting an item by mentioning benefits of that item, without making a direct purchase appeal"). After the codebook was finalized, it was programed in Qualtrics to ease data registration and access. Fifteen percent of the videos were randomly selected and double-coded by two coders independently to assess the inter-coder reliability. Inter-coder reliabilities were calculated in SPSS using the macro by Hayes for Krippendorff's alpha (Hayes and Krippendorff, 2007). The codebook consisted of three sections. Krippendorff's alpha ranged from .92 to 1.00 for all the variables in the first section, .94 to 1.00 for the second section, and from .68 to 1.00 for the third section of the codebook (for a complete overview, see Table 1 and 2).

Section one dealt with the general characteristics that were logged before the video was viewed. Here, we determined the number of subscribers and the length of the video, as well as the number of views, the number of thumbs up, the number of thumbs down, and the number of comments. In case there were no comments (16.3 %), the comment section had been turned off by the YouTuber himself or herself. Finally, we also coded the main genre of the YouTube influencer video.

Table 1: Sections 1 and 2 of the codebook.

Variable	Categories and observed frequencies	Krippendorff's Alpha
Section 1		
Number of subscribers	Open category: *M* = 2,999,900.00, *SD* = 4,626,660.80 *Range:* 436,000–16,200,000 subscribers	1.00
Number of views	Open category: *M* = 727,098.38, *SD* = 1,401,751.60 *Range*: 37,587–18,674,884 views	1.00
Number of thumbs up	Open category: *M* = 22,905.44, *SD* =36,087.85 *Range:* 1,400–359,000	1.00
Number of thumbs down	Open category: *M* = 548.75, *SD* = 936.68 *Range*: 20–10,000	1.00
Number of comments	Open category: *M* = 1,659.90, *SD* = 2963.51 *Range:* 0–24,881	1.00
Genre of the video	Vlog (42.9 %) Comedy (18.3 %) Games (13.3 %) Beauty & Fashion (8.8 %) Toys (3.8 %) Tech (1.3 %) Prank (1.3 %) Crafts (0.4 %) Music (0.4 %) Miscellaneous (9.6 %)	.92
Section 2		
Sponsorship disclosure in video description	No mention of sponsoring (47.1 %) Yes, mention of paid sponsorship (11.3 %) Yes, explicit mention that there is no paid sponsorship (41.7 %)	1.00
Sponsorship disclosure in video	No (85.4 %) Yes, verbal mention of sponsoring (8.3 %) Yes, mention in video with text (2.9 %) Yes, text and verbal mention of sponsoring (2.1 %) Yes, explicit mention that there is no paid sponsorship (1.3 %)	.94
Presence of YouTube visual regarding sponsored content	Yes (1.2 %) No (98.8 %)	1.00
Are brands and branded products part of the video?	Yes (97.5 %) No (2.5 %)	1.00
Number of brands/brand products[1]	*M* = 8.93, *SD* = 7.64, *range* = 0–60	.97

Table 1: (continued)

Variable	Categories and observed frequencies	Krippendorff's Alpha
Role of brands/brand products in video[1]	Visual role (60.3 %) Verbal role (13.2 %) Audiovisual role (26.5 %)	.94
Does the Youtuber interact with the brands or branded products in the video?[1]	Yes (96.6 %) No, but someone else in the video interacts with the brands or branded products (2.6 %) No, brands are shown but not interacted with (0.9 %)	1.00
Prominence of brand/ brand products in video[1]	All brands play a substantial role in video (30.4 %) Some brands play a substantial role in video (64.2 %) Brands play no substantial role in video (2.9 %) Other (2.5 %)	1.00
Direct promotion of brands/brand products[1]	Yes (8.5 %) No (91.5 %)	1.00
Indirect promotion of brands/brand products[1]	Yes (79.1 %) No (20.9 %)	.94

Note: [1] This variable was only coded for videos containing brands or branded products (n = 234).

Section two dealt with brand presence in the videos and was largely based on previous work by Malik and Wojdynski (2014) and Smit et al. (2009). We also took inspiration from previous content analyzes of brand placements in movies (Naderer et al., 2019; Nelson and Deshpande, 2013), television programs (Chan and Lowe, 2018; Elsey and Harris, 2016; Smit et al., 2009; Speers et al., 2011), and music videos (Sánchez-Olmos and Castelló-Martínez, 2020), as well as content analyzes of brand placements online, focusing on influencer content on social media, including YouTube and Instagram (Cranwell et al., 2015; Coates et al., 2019; Elkin et al., 2010; Hendriks et al., 2020; Kolo and Haumer, 2018; Primack et al., 2017; Schwemmer and Ziewiecki, 2018; Tur-Viñes and Castelló-Martínez, 2021), blogs (Boerman et al., 2018), and frequently downloaded apps (Meyer et al., 2018). The number of brands pertains to the number of unique 'real' brands included in the video; the YouTubers' own merchandise is excluded. A brand is included in the count if its logo is partially or fully visible, when it is orally mentioned, or both. Unlike Schwemmer and Ziewiecki (2018), we did not examine whether specific brands are mentioned in the video descriptions.

Section three dealt with the presence of materialistic values in the videos and was inspired by the three dimensions of the Material Values Scale developed by Richins and Dawson (1992). According to these authors, materialistic values comprise

Table 2: Section 3 of the codebook.

Variable	Categories and Observed Frequencies	Krippendorff's Alpha
Material centrality		
The YouTuber mentions or shows that he/she (or someone in the video) has purchased/is wearing/is using something new	Yes (58.8 %) No (41.3 %)	1.00
The video shows that the YouTuber gives great importance to having, buying or collecting material goods	Yes (20.4 %) No (79.6 %)	.80
The video shows that the YouTuber likes getting goods (i.e., gifts, merchandise)	Yes (11.3 %) No (88.7 %)	1.00
The video shows that the YouTuber gives great importance to brands and branded products	Yes (18.8 %) No (81.2 %)	.87
The YouTuber shows his/her room, house or studio and this is a luxurious environment with luxurious goods.	Yes (16.3 %) No (83.7 %)	1.00
Material happiness		
The YouTuber shows how (branded) products can be used together with other people	Yes (51.2 %) No (48.8 %)	1.00
The YouTuber shows how products can be bought or used in combination with each other	Yes (31.7 %) No (68.3 %)	1.00
The YouTuber shows that products make him/her happier	Yes (35.0 %) No (65.0 %)	.77
The YouTuber shows that brands/branded products make him/her happier	Yes (24.2 %) No (75.8 %)	.68
The YouTuber shows that he/she is entertained because of products	Yes (62.1 %) No (37.9 %)	.86
Material success		
The YouTuber focuses on the status or exclusive status of the products or brands	Yes (25.8 %) No (74.2 %)	.72
The YouTuber stresses that it is important to have the best of the best	Yes (5.8 %) No (94.2 %)	1.00
The YouTuber states that products or brands are a way to show your success	Yes (0.8 %) No (99.2 %)	1.00
The YouTuber shows a "social reward" because of product or brand use (such as receiving compliments)	Yes (21.7 %) No (78.3 %)	1.00
The YouTuber states that products and brands will make you popular	Yes (2.9 %) No (97.1 %)	1.00

three dimensions: 'Material centrality,' the importance consumers attribute to possessions and their acquisition; 'Material happiness,' the happiness consumers associate with possessions and their acquisition; and 'Material success,' the extent to which consumers associate certain possessions and their acquisition as markers of success.

3 Results

Brand presence

The first aim of this study was to determine *how many* brands viewers are exposed to in YouTube influencer videos, and to determine *how* these brands are featured. The number of brands in the videos ranged from zero to sixty (M = 8.93; SD = 7.64), and there were only six videos (2.5 %) in which brands were completely absent. Percentile scores indicated that 25 percent of the videos contained 0–3 brands, 25 percent contained 4–7, 25 percent contained 8–12, and 25 percent contained 13 brands or more.

As Table 1 shows, we coded whether a sponsorship disclosure was included in the video description or in the video itself – either by including YouTube's visual regarding sponsored content or by mentioning the sponsorship verbally, in a text announcement, or both. We constructed a new variable to determine whether an influencer had used at least one of these sponsorship disclosures. In 45.0 % of the videos, the presence or absence of a sponsorship relation was not clarified. In 12.9 % of the videos, the influencer solely declared the presence, and in 37.9 %, the absence of a sponsorship. Furthermore, in 4.2 % of the videos, the influencer indicated they were being sponsored by one or multiple brands included in the video, but not all. ANOVA analyzes with Bonferroni post-hoc tests using the new variable – omitting the latter group of videos due to small group size – revealed that the average number of brands did not differ across the disclosure groups (F(2,227) = 0.16, p = .852), but the number of materialistic values did (F(2,227) = 5.75, p < .01). The number of materialistic values was the highest in the videos that were disclosed as sponsored (M = 4.97, SD = 2.50), followed by those that were disclosed as *not* sponsored (M = 3.73, SD = 2.61), followed by those in which sponsorship was not clarified (M = 3.33, SD = 2.10). All group comparisons were significant at p <.05, except the comparison between the videos that were disclosed as *not* sponsored and the videos lacking a disclosure.

Concerning the brand placements' prominence, modality, and interactivity, the results from Table 1 show that when brands were included in YouTube videos, generally, at least some of the brands (64.2 %) if not all brands (30.4 %) played a substantial role in the video. Furthermore, they tended to be featured in either a visual (60.3 %) or audio-visual manner (26.5 %) – brands were rarely just verbally mentioned (13.2 %). The latter is also reflected in the statistics on interactivity: In 99.1 % of the videos, the brand was used by either the YouTuber himself or herself (96.6 %) or by someone else in the video (2.6 %). As for the type of brand promotion, we see that only a few brands were directly promoted (8.5 %).

Table 3: Mean number of brands and materialistic values per genre.

	Vlog	Beauty and fashion	Games	Comedy	Other
Number of brands	11.17[c]	12.19[c]	3.19[a]	5.98[ab]	9.33[bc]
Materialistic values combined	4.66[c]	6.81[d]	3.34[b]	1.55[a]	3.25[b]

Note: [ab] Means in the same row sharing the same superscript are not significantly different at $p < .05$.

Presence of materialistic values

The second aim of this study was to determine *how many* and *what type* of materialistic values viewers are exposed to in YouTube influencer videos. The total number of materialistic values in the videos ranged from zero to ten ($M = 3.86$; $SD = 2.53$), with only fifteen videos containing no materialistic values at all (6.2 %). The percentile scores indicated that 25 percent of the videos contained 0–2 materialistic values, 25 percent contained 3–4, 25 percent contained 5–6, and 25 percent contained 7–10. Looking at the three types of materialistic values, values of material happiness were expressed most often ($M = 2.05$; $SD = 1.19$), followed by material centrality ($M = 1.25$; $SD = 1.24$) and material success ($M = 0.57$; $SD = 0.76$).

Interrelationships

The third aim of this study was to determine whether the number of brands and materialistic values are related to video genre and to each other. To address the first part of this aim, we recoded our genre variable into a new variable with at least 20 observations per category (1 = vlog, $n = 103$; 2 = beauty & fashion, $n = 21$; 3 = games, $n = 32$; 4 = comedy, $n = 44$; 5 = other, $n = 40$). Subsequently, ANOVAs with Bonferroni post-hoc tests were conducted. There were significant relations between genre and the number of brands ($F(4,235) = 10.91$, $p = .000$) and the number of materialistic values ($F(4,235) = 29.02$, $p = .000$). As can be derived from Table 3, the number of brands and materialistic values were the highest in vlogs and beauty & fashion videos. To address the second part of this aim, we conducted a correlation analysis between the total number of materialistic values and the number of brands. They were found to be significantly and positively related ($r = .40$, $p = .000$).

4 Conclusion and discussion

Previous studies examining solely the presence of food and beverages (Coates et al., 2019), or the presence of alcohol, tobacco, and/or electronic cigarettes (Cranwell et al., 2015; Hendriks et al., 2020) in influencer content found high levels of displays of these items, but relatively low levels of branding. However, based on our results focusing on all product categories, we conclude that YouTube influencer videos are saturated with brands and materialistic values: most of the selected videos contained brands (97.5 %) and materialistic values (93.8 %), and they contained quite a few (an average of 8.93 brands and 3.86 materialistic values). Brands play a prominent role in YouTube videos without being directly promoted. More than half of the videos contained a sponsorship disclosure. Interestingly, these mainly indicated that the video was *not* sponsored (37.9 % vs. 12.9 % of disclosures indicating that a video was sponsored). Brands were often used by YouTubers themselves, who typically indirectly promoted brands and mostly included them visually – for instance, by wearing certain attire or consuming certain snacks. Although nearly all videos contained brands and materialistic values, the number of brands and materialistic values differed greatly across video genres and were most dominant in the vlogs and beauty and fashion categories.

Our findings bear important theoretical and practical implications. Scholars have recently called for content analyzes of social media influencer videos (Taylor, 2020; Vrontis et al., 2021), because these can advance our understanding of their potential to affect consumers' purchase intentions and materialism (Dávila and Casabayó, 2024; Otto and Thies, 2024; Touminen et al., 2023). The high numbers of brands and materialistic values found in our sample, validates future research into their effects. The fact that 45.0 % of the videos in our sample lacked a sponsorship disclosure is alarming. Current EU legislation requires the use of disclosures for all types of social media marketing (European Commission, 2023), but previous research has indicated that a large share of influencers from various EU member states do not comply yet (European Commission, 2024). Hence, the awareness of current legislation and the use of disclosures should be promoted and monitored over time and – if needed – non-compliance needs to become penalized.

Limitations and suggestions for future research

There are several limitations associated with this study. Due to the selection criteria, the sample of videos that was analyzed consisted of Dutch celebrity influencers only. Celebrity influencers are influencers with 300,000 followers or more. In practice, however, brands also collaborate with micro-, meso-, and/or macro-in-

fluencers (i.e., those with 1,000–20,000, 20,000–100,0000, and 100,000–300,000 followers) because they may charge more favorable rates or cater to a niche market (Domingues Aguiar and Van Reijmersdal, 2018). To reach a complete understanding of the presence of brands and material values in YouTube influencer videos, videos of these other types of influencers need to be coded too. Also, it is important to study YouTube content and its effects across all regions of the world, as cultural differences may affect local content production and content reception (Lapierre and Rozendaal, 2019). Because influencer content may both shape the future and reflect the present consumption-orientation within society, the presence of brands and material values may differ across countries and cultures. In addition, regulations pertaining to product promotion differ across the world too.

Importantly, our findings support and extend previous claims that brands and consumerism are omnipresent in YouTube content (Kolo and Haumer, 2018; Schwemmer and Ziewiecki, 2018). Previous research on the effects of traditional commercial media content has indicated that audiences who are frequently exposed to commercial content are not only more likely to request or purchase the products that they have seen but are also more likely to become materialistic (see Nairn and Opree 2021; Russell and Shrum 2021). In comparison, the effects of commercial YouTube video content on audiences' consumer values may be even stronger, due to three interrelated mechanisms frequently mentioned in media-effect research (see Valkenburg and Peter, 2013): Selective exposure, parasocial interaction, and social comparison (Yan and Yang 2021). YouTube users actively select content to watch, pay ample attention to the selected content, relate strongly to their favorite influencers, and perceive them as friends while simultaneously looking up to them – wanting to emulate and copy the influencers. Frequent exposure to brands and materialistic values might lead to overindulgence and over-consumption, which is likely to foster the detrimental social and environmental effects associated with such over-consumption (Shrum et al., 2022).

The fact that YouTube influencer videos have the *potential* to affect viewers does not necessarily mean that they do. The number of brands and materialistic values viewers are exposed to may depend on their YouTube diet: How many and which YouTube influencer videos they watch. The number of brands and materialistic values differed across video genres, and therefore, genres should be considered when exploring the effects of exposure to influencer videos on, for example, brand responses or materialistic values. Furthermore, to reach a holistic picture of the presence of brands and material values in influencer content, the codebook that we introduced in this study needs to be applied to influencer content in popular influencer platforms such as Instagram and TikTok (Perez, 2022).

References

Auxier, B., & Anderson, M. (2021). *Social media use in 2021*. Pew Research. https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2021/04/PI_2021.04.07_Social-Media-Use_FINAL.pdf

Boerman, S. C., Helberger, N., Van Noort, G., & Hoofnagle, C. J. (2018). Sponsored blog content: What do the regulations say? And what do bloggers say? *Journal of Intellectual Property, Information Technology and Electronic Commerce Law, 9*(2), 146–159. https://www.jipitec.eu/jipitec/article/view/224/219

Born, O., & Krul, R. (2019). *De YouTube Top 100*. F. C. Klap.

Chan, F. F. Y., & Lowe, B. (2018). Product placement practices in prime-time television programmes in Hong Kong. *International Journal of Advertising, 37*(6), 984–1009. https://doi.org/10.1080/02650487.2017.1353263

Coates, A. E., Hardman, C. A., Halford, J. C. G., Christiansen, P., & Boyland, E. J. (2019). Food and beverage cues featured in YouTube videos of social media influencers popular with children: An exploratory study. *Frontiers in Psychology, 10*, 2142. https://doi.org/10.3389/fpsyg.2019.02142

Cranwell, J., Murray, R., Lewis, S., Leonardi-Bee, J., Dockrell, M., & Britton, J. (2015). Adolescents' exposure to tobacco and alcohol content in YouTube music videos. *Addiction, 110*(4), 703–711. https://doi.org/10.1111/add.12835

Curry, D. (2023). *Social app report 2023*. Business of Apps. https://www.businessofapps.com/data/social-app-report

Dávila, J. F., & Casabayó, M. (2024). Instagram paths to materialism in young people: Social comparison and identification with influencers. *Behaviour & Information Technology*. Advance online publication. https://doi.org/10.1080/0144929X.2024.2326560

Domingues Aguiar, T., & Van Reijmersdal, E. A. (2018). *Influencer marketing*. SWOCC.

Elkin, L., Thomson, G., & Wilson, N. (2010). Connecting world youth with tobacco brands: YouTube and the internet policy vacuum on Web 2.0. *Tobacco Control, 19*(5), 361–366.

Elsey, J. W. B., & Harris, J. (2016). Trends in food and beverage television brand appearances viewed by children and adolescents from 2009 to 2014 in the USA. *Public Health Nutrition, 19*(11), 1928–1933. https://doi.org/10.1017/S1368980015003274.

European Commission (2023). *Legal brief #6: How to disclose advertising on social media.* https://commission.europa.eu/system/files/2023-10/Legal%20brief%206.pdf

European Commission (2024). *Why is this necessary?* https://commission.europa.eu/live-work-travel-eu/consumer-rights-and-complaints/influencer-legal-hub_en#why-is-this-necessary

franzke, a. s., Bechmann, A., Zimmer, M., Ess, C. M., & the Association of Internet Researchers (2019). *Internet research: Ethical guidelines 3.0.* Association of Internet Researchers. https://aoir.org/reports/ethics3.pdf

Hayes, A. F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures, 1*(1), 77–89. https://doi.org/10.1080/19312450709336664

Hendriks, H., Wilmsen, D., Van Dalen, W., & Gebhardt, W. A. (2020). Picture me drinking: Alcohol-related posts by Instagram influencers popular among adolescents and young adults. *Frontiers in Psychology, 10*, 2991.https://doi.org/10.3389/fpsyg.2019.02991

Kolo, C., & Haumer, F. (2018). Social media celebrities as influencers in brand communication: An empirical study on influencer content, its advertising relevance and audience expectations. *Journal of Digital & Social Media Marketing, 6*(3), 273–282.

Lapierre, M. A., & Rozendaal, E. (2019). A cross-national study examining the role of executive function and emotion regulation in the relationship between television exposure and children's purchase requests and purchase related conflict. *Journal of Youth and Adolescence, 48*(10), 1980–2004. https://doi.org/10.1007/s10964-019-01119-7

Malik, C., & Wojdynski, B. W. (2014). Boys earn, girls buy: Depictions of materialism on US children's branded-entertainment websites. *Journal of Children and Media, 8*(4), 404–422. https://doi.org/10.1080/17482798.2013.852986

Meyer, M., Adkins, V., Yuan, N., Weeks, H. H., Chang, Y-J., & Radesky, J. (2019). Advertising in young children's apps: A content analysis. *Journal of Developmental & Behavioral Pediatrics, 40*(1), 32–39. https://doi.org/10.1097/DBP.0000000000000622

Naderer, B., Matthes, J., & Spielvogel, I. (2019). How brands appear in children's movies. A systematic content analysis of the past 25 years. *International Journal of Advertising, 38*(2), 237–257. https://doi.org/10.1080/02650487.2017.1410000

Nairn, A., & Opree, S. J. (2021). TV adverts, materialism, and children's self-esteem: The role of socio-economic status. *International Journal of Market Research, 63*(2), 161–176. https://doi.org/10.1177/1470785320970462

Nelson, M. R., & Deshpande, S. (2013). The prevalence of and consumer response to foreign and domestic brand placement in Bollywood movies. *Journal of Advertising, 42*(1), 1–15. https://doi.org/10.1080/00913367.2012.749195

Ofcom. (2022). *Children and parents: Media use and attitudes report 2022*. Ofcom.

Otto, T., & Thies, B. (2024). Exploring the influence of Instagram use on materialism and situational intrinsic learning: An online experimental study. *Education and Information Technologies*. Advance online publication. https://doi.org/10.1007/s10639-024-12762-4

Perez, Z. (2022, August 2). *TikTok to overtake Facebook in influencer marketing spend this year, YouTube by 2024.* Tech Crunch. https://techcrunch.com/2022/08/02/tiktok-to-overtake-facebook-in-influencer-marketing-spend-this-year-youtube-by-2024-forecast-claims/

Primack, B. A., Colditz, J. B., Rosen, E. B., Giles, L. M., Jackson, K. M., & Kraemer, K. L. (2017). Portrayal of alcohol brands popular among underage youth on YouTube: A content analysis. *Journal of Studies on Alcohol and Drugs, 78*(5), 654–664. https://doi.org/10.15288/jsad.2017.78.654

Rasmussen, E. E., Riggs, R. E., & Sauermilch, W. S. (2022). Kidfluencer exposure, materialism, and U.S. tween's purchase of sponsored products. *Journal of Children and Media, 16*(1), 68–77. https://doi.org/10.1080/17482798.2021.1910053

Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research, 19*(3), 303–316. https://doi.org/10.1086/209304

Russell, C. A., & Shrum, L. J. (2021). The cultivation of parent and child materialism: A parent-child dyadic study. *Human Communication Research, 47*(3), 284–308. https://doi.org/10.1093/hcr/hqab004

Sánchez-Olmos, C., & Castelló-Martínez, A. (2020). Brand placement in music videos: Artists, brands and products appearances in the Billboard Hot 100 from 2003 to 2016. *Journal of Promotion Management, 26*(6), 874–892. https://doi.org/10.1080/10496491.2020.1745986

Schwemmer. C., & Ziewiecki, S. (2018). Social media sellout: The increasing role of product promotion on YouTube. *Social Media + Society, 4*(3), 1–20. https://doi.org/10.1177/2056305118786720

Shrum, L. J., Nguyen Chaplin, L., & Lowrey, T. M. (2022). Psychological causes, correlates, and consequences of materialism. *Consumer Psychology Review, 5*(1), 69–86.https://doi.org/10.1002/arcp.1077

Smit, E., Van Reijmersdal, E. A., & Neijens, P. (2009). Today's practice of brand placement and the industry behind it. *International Journal of Advertising, 28*(5), 761–782. https://doi.org/10.2501/S0265048709200898

Social Blade. (2020). Top 100 YouTubers in the Netherlands sorted by subscribers. https://socialblade.com/youtube/top/country/nl/mostsubscribed

Speers, S. E., Harris, J. L., & Schwartz, M. G. (2011). Child and adolescent exposure to food and beverage brand appearances during prime-time television programming. *American Journal of Preventive Medicine*, *41*(3), 291–296. https://doi.org/10.1016/j.amepre.2011.04.018

Taylor, C. F. (2020). The urgent need for more research on influencer marketing. *International Journal of Advertising*, *39*(7), 889–891. https://doi.org/10.1080/02650487.2020.1822104

Touminen, J., Rantala, E., Reinikainen, H., & Wilska, T.-A. (2023). Modern-day socialization agents: The connection between social media influencers, materialism, and purchase intentions of Finnish young people. *The Journal of Social Media in Society, 12*(1), 21–48. https://thejsms.org/index.php/JSMS/article/view/1107

Tur-Viñes, V., & Castelló-Martínez, A. (2021). Food brands, YouTube and children: Media practices in the context of the PAOS self-regulation code. *Communication & Society, 34*(2), 97–105. https://doi.org/10.15581/003.34.2.87-105

Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication, 63(2),* 221–243. https://doi.org/10.1111/jcom.12024

Vrontis, D., Makrides, A., Christofi, M., & Thrassou, A. (2021). Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies, 45*(4), 617–644. https://doi.org/10.1111/ijcs.12647

Yan, Q., & Yang, F. (2021). From parasocial to parakin: Co-creating idols on social media. *New Media & Society, 23*(9), 2593–2615. https://doi.org/10.1177/1461444820933313