

# Children's bonding with popular YouTube vloggers and their attitudes toward brand and product endorsements in vlogs: an explorative study

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## Abstract

**Purpose** – The purpose of this study has three primary aims. The first is to examine the amount of time children spend per week on viewing vlogs. Second, the authors explored children's awareness and understanding of the brand or product placement in vlogs. Finally, the authors explored children's self-perceived susceptibility to the potential persuasive effects of these vlogs.

**Design/methodology/approach** – Self-reported measurements were assessed among children (N = 127, 10-13 years of age).

**Findings** – Results indicate that the majority of children frequently view vlogs and that their degree of bonding with the vlogger predicted the time spend on viewing vlogs. Children recalled products and brands that were shown in vlogs, which were mostly food and beverages and considered themselves and others affected by endorsements in vlogs.

**Research limitations/implications** – Only cross-sectional data were collected; these data cannot be used to analyze behavior over a period of time or draw causal inferences.

**Practical implications** – Considering the popularity of vlogs among young people, it is important to acquire more insight into the frequency and amount of time children spend on viewing vlogs and children's processing of persuasive messages in vlogs. This may lead to a better understanding of underlying processes and prediction of the outcomes of advertising through this form of media content. Current findings raise further questions about the persuasive content of vlogs.

**Originality/value** – Because of the popularity of online (social media) channels among youth, companies dedicate a significant proportion of their marketing budget on online influencer marketing. Therefore, it is important to acquire insight into children's processing of online persuasive messages. To the authors' knowledge, there is no empirical research on children's potential bonding with popular vloggers and their awareness and understanding of the brand or product placement in vlogs.

**Keywords** Advertising, Childhood, Digital marketing, Consumer psychology

**Paper type** Research paper

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## Introduction

Social media are a vital aspect of children's and teenagers' social and creative lives. They increasingly create and share content with others on websites and applications (apps) (Haenlein and Kaplan, 2010; Snelson, 2015). At present, youth spend approximately 3 h per day on the internet (Childwise, 2016) and recent reports indicate that 23 per cent of 8-11 year old and 72 per cent of 12-15 year old have at least one social media profile, with the number of profiles doubling between 10 and 11 years of age (21-43 per cent) (Ofcom, 2016). YouTube is a particular source of entertainment for youth, with 73 per cent of 8-11 year old and 87 per cent of 12-15 years old using the YouTube website or app (Ofcom,

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2016). For many children, YouTube has become the most preferred platform for viewing online content such as music videos, funny videos/pranks or video blogs.

Video blogs (hereinafter referred to as vlogs) are a user-generated form of online communication that serve as media for social commentary, creative outlets or personal diaries (Molyneaux *et al.*, 2008; Snelson, 2015). In these short videos, video bloggers (hereinafter referred to as vloggers) share their daily routines, give tutorials or play games, after which viewers can subscribe, “like” and comment on the content of the vlog (Molyneaux *et al.*, 2008). The popularity of vloggers has risen exponentially in the past few years (Hovden, 2013). At present, the world’s most popular YouTube star is PewDiePie, with over 89 million YouTube subscribers, followed by HolaSoyGerman with over 38 million subscribers. In The Netherlands, Enzo Knol (2.1 million subscribers) is the most popular vlogger, with over 3.5 billion views in total.

With the increasing popularity of online video content on YouTube and other social media platforms (Parnell, 2017; Ofcom, 2016), advertisers have found a new and unique way of integrating their content in online videos. A common marketing technique that is used through these social networks is influencer marketing (Hill *et al.*, 2017). Influencer marketing is a form of marketing in which brands build alliances with social media influencers to promote their products or services (De Veirman *et al.*, 2017; Evans *et al.*, 2017). In this way, influential vloggers promote food brands and products by “unboxing” (i.e. opening and trying the promoted foods), making tutorials and product reviews about cosmetic products (i.e. beauty vlogs) or by challenges (e.g. contests, tricks and games). By doing so, vloggers act as role models influencing children to increase the consumption of the advertised brands and products. To date, influencer marketing is one of the most popular advertising channels, with 94 per cent of those who used it believing it is an effective strategy (Ashley and Tuten, 2015; Nelson, 2018; Potvin Kent *et al.*, 2019; Russell and Rasolofarison, 2017).

Considering the popularity of vlogs among young people, it is important to acquire more insight into the frequency and amount of time children spend on viewing YouTube vlogs and to better understand children’s processing of new forms of advertising to children, such as persuasive messages in vlogs, as it can help predict the outcomes of advertising through this form of media content (Buijzen *et al.*, 2010; Parnell, 2017; Nelson, 2018). Although some research has been carried out on influencer marketing on Instagram among student and adult participants (Djafarova and Rushworth, 2017; De Veirman *et al.*, 2017) and on the effects of advertising disclosure on young adolescents’ advertising literacy for sponsored vlogs (De Jans *et al.*, 2019), there is still very little scientific understanding of children’s potential bonding with popular YouTube vloggers and their awareness and understanding of brand or product placement in vlogs. The current study is explorative in its ambition, without having derived causal hypotheses. Three main research aims are stated. First, we aim to gain more insight into the popularity of vlogs and the frequency with which children at 10-13 years of age view these vlogs in The Netherlands. Within this context, we also explore the extent to which children bond with their favorite vloggers and investigate how this affects the frequency at which they follow these vloggers. Second, we explore children’s awareness and understanding of the brand or product placement in vlogs. Third, we explore children’s self-perceived susceptibility to the potential persuasive effects of these vlogs.

## Theoretical background

Vlogs are a relatively new marketing communication technique that is increasingly used by companies to develop consumer socialization among youth (Arnold, 2017). Given that numerous studies have demonstrated that content produced by perceived laypersons is considered to be more trustworthy compared to content produced by experts (Paek *et al.*, 2011) and that trustworthiness positively affects advertising effects and attitude changes (Ananda and Wandebori, 2016), influencer marketing has become an important part of

marketers social media strategy (Nelson, 2018; Potvin Kent *et al.*, 2019). In 2018, marketers spent over \$500m on influencer marketing, which is likely to increase to \$5-10bn in the upcoming next five years (Mediakix, 2018).

Consumer socialization is the process of developing consumer-related skills, knowledge and attitudes by young people (John, 1999; Moschis and Churchill, 1978). Based on general cognitive and developmental psychology (Bandura, 1989; Piaget, 1929), consumer behavior is considered to be strongly influenced by one's (digital) environment, thereby particularly emphasizing on the interaction between personal (e.g. developmental phase, identification and bonding) and environmental factors (e.g. cultural background and nationality). According to social learning theory, for instance, children acquire cognitions and behaviors from their social agents through the process of modeling, reinforcement and social interaction. It is suggested that these online celebrities have a strong impact on consumer socialization as "social influencers" because they are considered as peers and layman, and thus, more credible (Djafarova and Rushworth, 2017).

One important theoretical model that aims to gain more insight into young people's processing of influencer marketing messages is the processing of commercial media content model (PCMC)-model (Buijzen *et al.*, 2010). The PCMC-model integrates multiple theoretical frameworks, adopting a developmental perspective on adult persuasion models (Meyers-Levy and Malaviya, 1999; Petty *et al.*, 2005) and theories of children's consumer development and socialization (John, 1999; Moschis and Churchill, 1978; Valkenburg and Cantor, 2001). The model theorizes how communication messages can predict persuasion processing, based on a limited capacity information approach (Buijzen *et al.*, 2010). According to the PCMC-model, specific message characteristics affect persuasion processing, for example, proximity, prominence, interactivity and the level of integration of the messages in the content. The levels of cognitive elaboration in response to the message related to the recipients' level of attention and awareness of the message and to their motivation and ability to process the message effectively. More specific, according to the PCMC-model, children's motivation and ability to critically process the marketing message of the vloggers will be relatively low, compared to other forms of advertising because the advertising cues in vlogs are highly embedded in the entertaining content. Therefore, children's cognitive resources will be automatically used to process the entertaining aspect of the vlog and additional sources are needed to activate skepticism toward the advertising element of the vlog (Buijzen *et al.*, 2010), while most children will not be highly motivated to do so.

In addition, the level of cognitive elaboration of advertising cues in vlogs leads to cognitive, emotional and behavioral changes regarding the advertised product or brand (Folkvord *et al.*, 2016), as has clearly been discussed in the differential susceptibility to media effects model (DSMM) (Valkenburg and Peter, 2013). The DSMM has organized, integrated and extended the insights developed in previous micro level media-effects theories. According to this theoretical model, three types of consumer socialization can be distinguished, namely, dispositional, development and social susceptibility. Next to this, the DSMM proposes three different media response states that mediate the effects of media on its recipients, namely, cognitive, emotional and excitative. The basic underlying assumptions are that it explains why some children are more susceptible to media effects than others, how and why media influences these individuals and how media effects can be enhanced or counteracted.

Individual susceptibility to media messages effects may particularly apply to influencer marketing in vlogs as it is specifically designed to tap into an existing community of engaged followers. Influencers are specialists in their community and have established a high level of trust and two-way communication with their followers. Although some children recognize advertising in sponsored vlogs (De Jans *et al.*, 2019), the extent to which these followers perceive that they share values, attitudes or perceptions of reality with the vlogger

might create a connection or bond between both, leading to more positive attitudes toward the product and increase purchase intentions (Erdogan, 1999). Endorsements by peer-aged influencers will be perceived as more credible and authentic than regular commercial messages by advertisers, as viewers are more likely to believe they will receive an honest advice or opinions about certain brands or products. Therefore, the probability that children will activate skepticism toward the vlogs is less than in more traditional forms of advertising.

In the case of vlogs, in which vloggers often let their viewers be part of their personal life by sharing intimate personal stories, this identification process is often reinforced and can lead to conformity among the viewers (Basil, 1996). Similarly, the residential setting that is seen in the vlog can further increase identification with the vlogger and increase the likelihood that the product that is endorsed is viewed more positively. In this way, influencer marketing could be seen as a form of virtual word-of-mouth advertising and it has been found that these strategies carryover effects substantially longer than traditional marketing actions and produce higher response elasticities (Trusov *et al.*, 2009).

In sum, based on the theoretical understanding of vlogs, we expect that children's level of bonding with the vlogger is positively related to the frequency and extent to which they watch the vlogs of their favorite vloggers. Furthermore, we expect that most children will be aware that popular vloggers will be paid for using brands and products in their vlogs. At the same time, children will report that they (and others) are still affected by the promotion of brand and products in the vlogs.

## Methods

### *Participants and procedure*

Participants in the present study were 127 boys and girls from two primary schools in The Netherlands. All children were in Grade 5 or 6 and between 10 and 13 years of age. After obtaining written consent from both schools to participate in the current study, we sent all parents a letter with detailed information regarding the study, and we asked them to inform us if they did not want their child to participate in the study (i.e. passive consent procedure). The parents of six children did not give consent for their child's participation.

All children were asked to complete the several questions during school hours in the presence of their teachers. Before the assessment, we emphasized to both parents and the children that all of the data for this study would remain confidential and that children could cease participation at any time. Children in both grades filled out the questionnaires individually with a research assistant present to answer questions. This took approximately 10 min. The study protocol was reviewed and approved by [anonymous]. Data for this study were collected between April and June, 2017. The data that supports the findings of this study are available from the corresponding author, [Anonymous], upon reasonable request.

### *Measures*

*Frequency, viewing duration and evaluation of top five vloggers.* Participants were asked whether they frequently watched the videos of any vloggers, and if so, to list their five favorite vloggers. Furthermore, frequency of viewing each of their favorite vloggers was assessed in a similar manner as previous studies have done in assessing television viewing time (Lipsky and Iannotti, 2012; van der Voort and Vooijs, 1990). Participants were asked to indicate for each of the vloggers how often they watched their vlogs (response categories from: 1 to 7 days per week) and how long they would watch these vlogs (response categories: "less than 1 h per day", "1-2 h per day", "2-3 h per day" or "more than 3 h per day") (Lipsky and Iannotti, 2012; van der Voort and Vooijs, 1990). To calculate an average viewing time in minutes per week for each of the vlogger that was mentioned, participants' daily viewing time was recoded: less than 1 h was recoded into 30 min, 1-2 h was recoded

into an average of 90 min, 2-3 h in 150 min and more than 3 h into 210 min. Subsequently, daily viewing time was multiplied by the number of days, which resulted into participants' average weekly viewing score for each of their favorite vloggers.

*Attitudes toward vlogger.* Participants were asked to score their favorite vloggers on a scale from 1 to 10, with higher scores indicating more positive attitudes toward this vlogger.

*Children's bonding with the vlogger.* Participants were asked to describe their bond (i.e. how much they identify) with their favorite vloggers. To do so, an adapted version of the Inclusion of Other in the Self scale (Aron *et al.* (1992) was used. This is a pictorial measure, which depicts two circles varying in seven degrees. In the first picture, the circles are next to each other and in the seventh and last picture, the circles overlap for approximately 90 per cent. Participants were asked to indicate, which picture indicated their bond with the vlogger best. A higher score (range 1-7) indicated a greater overlap with the vloggers (resembling a stronger bond).

*Awareness of brands and products in vlogs.* Participants were asked to give as many brands or products that they had seen in the vlogs they frequently watch. They could report a maximum of ten different brands and products. Based on children's most frequent responses, we coded their answers into the following four categories, namely:

1. food brands and products;
2. toy brands and products;
3. daily care brands and products; and
4. other.

*Self-perceived susceptibility to brand and products in vlogs.* A set of questions were asked to assess the self-perceived effect of brands and products in vlogs, covering participants' intention to buy the brands or products seen in the vlogs, participants' intention to ask their parents to buy these brands or products, their attitude toward these brands or products, and their recall of these brands and products (cf. Boerman *et al.*, 2018). Response categories ranged from "No, not all" (1) to "Yes, I am absolutely sure" (4).

*Peers' susceptibility to Brand and products in vlogs.* Participants were asked to indicate their peers' intention to buy the brands or products seen in the vlogs and their peers' attitude toward these brands or products (Boerman *et al.*, 2018). Again, response categories ranged from "No, not all" (1) to "Yes, I am absolutely sure" (4).

*Awareness of vloggers' endorsement.* Participants were asked with seven different questions to report vloggers' intention to use products and brand in their vlog, based on previous research on advertising literacy (Rozendaal *et al.*, 2016). Specifically, participants were asked whether vloggers use a product or brand in their vlog to affect viewers' attitudes or buying intentions, to increase the number of viewers of a vlog or to make the vlog more appealing. Furthermore, participants were asked whether they think that vloggers have to pay money to use a product or brand in their vlog, and if the vloggers get paid to use the brand or product in their vlog. Again, response categories ranged from "No, not all (1)" to "Yes, I am absolutely sure" (4).

*Attitude toward advertising in vlogs.* Participant's attitude toward advertising in vlogs was assessed (Boerman *et al.*, 2018). It was stated that vloggers were paid sometimes by companies to use their products and brand. Subsequently, four different items, on a four-point scale, were used to assess participants' attitudes toward this. Participants were asked whether they thought this was "good", "stupid", "wrong" or "okay". The anchors, for example, were "I think this is very good" (1) to "I think this not very good at all" (4).

*Understanding of sponsorship disclosure.* Finally, participants were asked how they could know whether vlogs are paid to use a product or brand in their vlog (Rozendaal *et al.*, 2016). Answers were: "you cannot know"; "Then the vlogger will say in his vlog that he cooperates

with a company”; “Then the hashtag #sp is used”; “then the vlogger says how much money he/she earns with it”; “then it is told that the vlog is sponsored by a certain company”; “Then the vloggers says he has been asked to use the product or brand”; and “I do not know”.

### Statistical analyses

Most responses to the self-report measures used in this exploratory study are depicted in frequency tables. First, we show descriptive information on the frequency, duration and evaluation of top five vloggers. Then, we do the same for children’s bonding with the vlogger. To gain more insight into the relationship between children’s bonding and time spend on viewing vlogs, we perform a linear regression analysis to examine whether the amount of time spend on viewing vlogs is predicted by sex, popularity score and bonding score. The analyses were performed for the five most popular vloggers separately, to explore whether there were individual differences between vloggers. Finally, descriptive information about awareness of brands and products in vlogs, self-perceived susceptibility to brand and products in vlogs, peers’ susceptibility to brand and products in vlogs and awareness of vloggers’ endorsement is shown.

## Results

### Demographics

A total of 127 children (47 per cent boys) participated. The mean ( $\pm$  SD) age of the children in grade 5 ( $n = 68$ ) was  $10.7 \pm 0.53$  y, and in grade 6 ( $n = 59$ ) was  $11.6 \pm 0.59$  y.

### Frequency, viewing duration and evaluation of top five vloggers

In total, 69 per cent ( $n = 88$ ) of the participants in this study reported to watch vloggers. From this group, almost all children ( $n = 79$ ) reported to frequently view the vlogs of at least two different vloggers. Further, almost one-third of the participants (30 per cent) reported to frequently view the vlogs of at least five different vloggers. The five most popular vloggers were [anonymous] (reported by 61 per cent the participants), [anonymous] (26 per cent), [anonymous] (22 per cent), [anonymous] (19 per cent) and [anonymous] (15 per cent). Both boys and girls did not differ in the total number of vloggers they followed. Yet, [anonymous] and [anonymous] were only reported by girls.

It was found that 10 per cent of the children indicated to frequently view the vlogs of their favorite vlogger for only one day a week, whereas 24 per cent of the children indicated to view the vlogs of their favorite vlogger every day of the week. Additionally, 58 per cent of the children reported to view the vlogs of their favorite vlogger less than 1 h on average on the day(s) that he or she viewed this video, while more than 40 per cent of the children viewed the vlog of their favorite vlogger over one hour on average on the day(s). [Table I](#) shows the means (SD) for the popularity scores for the five most popular vloggers in this sample.

**Table I** Participants’ bonding with and popularity scores for the five most popular vloggers

Variable	vlogger 1 (N = 85)	vlogger 2 (N = 79)	vlogger 3 (N = 60)	vlogger 4 (N = 48)	vlogger 5 (N = 41)
Popularity score	8.71 (0.82) 7–10	8.08 (1.03) 5–10	7.77 (1.36) 4–10	7.67 (1.42) 4–10	7.85 (1.48) 4–10
Bonding	3.79 (1.81) 1–7	3.09 (1.65) 1–7	3.07 (1.74) 1–7	2.94 (1.52) 1–6	3.54 (1.79) 1–7

**Notes:** All values are in mean ( $\pm$  SD), minimum-maximum; bonding scores were measured from 1 to 7 and popularity from 1 to 10

### Children's bonding with the vlogger

Table I shows the means (SD) for participants' bonding with the five most popular vloggers, and their attitude score toward these vloggers.

First, no direct effects of sex and school grade were found on viewing duration, indicating that sex or school grade did not predict the amount of time participants spend on viewing vlogs. However, a relationship was found between the popularity of the vlogger and viewing time and between the degree of bonding and viewing time. Table II shows the standardized regression coefficients and *p*-values for bonding on the amount of minutes viewing the vlogger for each of the top five vloggers. Results show that even while controlling for popularity grading, the degree of bonding with the vlogger predicted participants' viewing time. Thus, the stronger the bond between viewer and vlogger, the more time is spent on viewing the videos of the vloggers. This relationship is found for 4 out of 5 top five vloggers.

### Awareness of brands and products in vlogs

Participants reported that food and beverages were the most common products seen in vlogs.

In total, children reported 112 food brands and products as being recognized in vlogs. Of these 112 food brands and products, 64 were food-related. The other products were associated with sodas or fruit juices (*n* = 42) or alcoholic beverages (e.g. beer) (*n* = 6). The products that were most mentioned were almost all high-energy dense snack foods (e.g. candy, energy drinks and chocolate). The brands that were mentioned most were most often fast-food restaurant chains (e.g. KFC or McDonald's) or suppliers of energy drinks (e.g. Red Bull).

In addition, participants reported to recognize 77 toy brands and products in vlogs; 34 were specific toy brands or products, 21 were computer games or consoles and 22 were mobile phone related brands or products. Furthermore, participants reported 68 brands and products that referred to daily care products. Finally, children reported 21 brands[1] or products that could be categorized as other because they were not interrelated or unclear (e.g. individual shops, specific car brands or cars and animals).

**Table II** Bonding with vlogger predicting time spend on watching vlogs

# Vlogger	Stand coefficient <i>β</i>	<i>p</i> -value <i>p</i>
1		
Bonding	0.411	<0.001
Popularity score	0.161	0.140
2		
Bonding	0.008	0.952
Popularity score	0.308	0.024
3		
Bonding	0.520	0.001
Popularity score	0.069	0.623
4		
Bonding	0.382	0.015
Popularity score	0.316	0.042
5		
Bonding	0.329	0.036
Popularity score	0.358	0.024

### *Self-perceived susceptibility to brand and products in vlogs and peers' susceptibility to brand and products in vlogs*

More than half of the children reported to buy or ask their parents to buy brands or products shown in the vlogs (Table III). In addition, almost 75 per cent of the children report that they gained brand awareness due to the brands in the vlogs. Remarkably, 80.5 per cent of the children reported that other children would buy brands or products seen in the vlogs, and that the majority of children (72 per cent) would like the brands and products more because they were shown in the vlog.

### *Awareness of vloggers' endorsement*

Half of the children reported that vloggers show brands and products to influence their viewers (i.e. liking, buying and wanting), while the rest of the children report this is not the case (Table IV). Most children either answered: "No, I do not think so" or "Yes, I think so" on these three questions, while only a few of the children responded: "No, definitely not" or "Yes, definitely", on these questions. Most children reported that vloggers do not use brands and products in their vlogs to attract viewers, and that they do not have to pay companies to use their brands and products. Yet, more than half of the children indicated that vloggers use brands and products to increase the popularity of their vlogs. Finally, over 70 per cent of the children indicated that vloggers get paid for using brands and products in their vlogs. In general, children reported that advertising for brands and products in vlogs is not good. Over 60 per cent of the children indicated that it is stupid and wrong, whereas only 30 and 40 per cent reported that it is okay or good when vloggers do this (Table V).

**Table III** Self-perceived susceptibility to brand and product placement in vlogs (*N* = 88)

<i>Variable</i>	<i>N</i>	<i>(%)</i>
<i>Do you buy a brand or product that you have seen in a vlog?</i>		
No, definitely not	15	17.4
No, I do not think so	26	30.2
Yes, I think so	33	38.4
Yes, definitely	12	14.0
Missing value	2	
<i>Do you ask your parents to buy a brand or product after you have seen it in a vlog?</i>		
No, definitely not	18	20.5
No, I do not think so	19	21.6
Yes, I think so	41	46.6
Yes, definitely	10	11.4
<i>Do you know certain brands because you have seen it in a vlog?</i>		
No, definitely not	10	11.4
No, I do not think so	11	12.5
Yes, I think so	29	33.0
Yes, definitely	38	43.2
<i>Do you think other kids buy brands or products because they have seen it in a vlog?</i>		
No, definitely not	1	1.1
No, I do not think so	16	18.4
Yes, I think so	44	50.6
Yes, definitely	26	29.9
Missing value	1	
<i>Do you think other kids such as brands or products better after they have seen it in a vlog?</i>		
No, definitely not	6	6.8
No, I do not think so	18	20.5
Yes, I think so	51	58.0
Yes, definitely	13	14.8



**Table IV** Awareness of vloggers' endorsement (N = 88)

Variable	N	(%)
<i>Do you think vloggers use brand and products in their vlog to influence people so that will such as the brand and product?</i>		
No, definitely not	8	9.2
No, I do not think so	32	36.8
Yes, I think so	38	43.7
Yes, definitely	9	10.3
Missing value	1	
<i>Do you think vloggers use brand and products in their vlog to influence people so that they will buy the brand and product?</i>		
No, definitely not	10	11.4
No, I do not think so	30	34.1
Yes, I think so	37	42.0
Yes, definitely	11	12.5
<i>Do you think vloggers use brand and products in their vlog to influence people so that they want the brand and product?</i>		
No, definitely not	2	2.3
No, I do not think so	35	40.2
Yes, I think so	42	48.3
Yes, definitely	8	9.2
Missing value	1	
<i>Do you think vloggers use brand and products in their vlog so that more people will watch their vlog?</i>		
No, definitely not	33	38.8
No, I do not think so	35	41.2
Yes, I think so	15	17.6
Yes, definitely	2	2.4
Missing value	3	
<i>Do you think vloggers use brands and products in their vlog so that their vlog is liked more?</i>		
No, definitely not	13	14.8
No, I do not think so	26	29.5
Yes, I think so	39	44.3
Yes, definitely	10	11.4
<i>Do you think vloggers have to pay companies to use their brand and products in a vlog?</i>		
No, definitely not	27	30.7
No, I do not think so	37	42.0
Yes, I think so	21	23.9
Yes, definitely	3	3.4
<i>Do you think vloggers get paid by companies to use a brand or product in their vlog?</i>		
No, definitely not	7	8.1
No, I do not think so	17	19.8
Yes, I think so	40	46.5
Yes, definitely	22	25.6
Missing value	2	

## Discussion

The present study explored the frequency and amount of time children spend on viewing YouTube vlogs, and assessed the relationship between children's bonding with the vlogger and viewing duration. Furthermore, we examined children's awareness and understanding of the brand or product placement in vlogs, and explored children's self-perceived susceptibility to the potential persuasive effects of these vlogs. The popularity of online (social media) channels among youth, it is important to acquire more insight into children's processing of online persuasive messages, as it can help to understand and predict the outcomes of advertising through this form of media content. Until now, there is still very little

**Table V** Attitude toward brand and product placement in vlogs (N = 127)

Variable	N	(%)
<i>Do you think this is good?</i>		
No, definitely not	5	4.1
No, I do not think so	66	54.5
Yes, I think so	39	32.2
Yes, definitely	11	9.1
Missing value	6	
<i>Do you think this is stupid?</i>		
No, definitely not	3	2.5
No, I do not think so	29	23.8
Yes, I think so	69	56.6
Yes, definitely	21	17.2
Missing	5	
<i>Do you think this is wrong?</i>		
No, definitely not	9	7.4
No, I do not think so	36	29.8
Yes, I think so	53	43.8
Yes, definitely	23	19.0
Missing	6	
<i>Do you think this is okay?</i>		
No, definitely not	7	5.8
No, I do not think so	78	64.5
Yes, I think so	33	27.3
Yes, definitely	3	2.5
Missing	6	

scientific understanding of the role of advertising in this new form of communication, although it is an increasingly popular medium among a susceptible target group.

The current study demonstrated that the majority of children frequently view vlogs and that the degree of bonding with the vlogger predicted the time spent on viewing their vlogs. Children recalled products and brands that were shown in vlogs, which were mostly food and beverages, and considered themselves and others affected by product and brand endorsements in vlogs. These findings provide some preliminary evidence that the success of influencer marketing in vlogs can be explained by commodification through proximity and identification, as has been suggested in previous work on the influence of vloggers on brand perceptions and intentions (Lee and Watkins, 2016).

As the PCMC-model predicts and explains (Buijzen *et al.*, 2010), specific message characteristics affect the persuasion processing of the message. In particular, characteristics that are relevant in processing media messages in vlogs are proximity, prominence, interactivity and the level of integration of the persuasive messages in the content. Young adolescents often build a special type of relationship with their favorite vloggers because they admire these influences and consider them as their friends, imagining them being part of their social world and follow their advices (De Jans *et al.*, 2019). This relationship often has been referred to as a parasocial interaction (De Jans *et al.*, 2019; Lee and Watkins, 2016), and studies have shown that developing a parasocial interaction with a vlogger has a positive effect on brand perceptions (De Jans *et al.*, 2019; Lee and Watkins, 2016). Vloggers often let their viewers be part of their personal life by sharing intimate personal stories in a residential setting, establishing a high level of trust and two-way communication with their followers. Similarly, the residential setting that is seen in the vlog can further increase identification with the vlogger and increase the likelihood that the product that is endorsed is viewed more positively. Because children's cognitive abilities are still developing (Piaget, 1929), the levels of cognitive elaboration in response to

media message relates to the level of attention and awareness of the message and to their motivation and ability to process the message effectively is very low (Valkenburg and Peter, 2013). As a consequence, children become highly susceptible target groups of these vlogs and may, therefore, be highly influenced by this new form of marketing (Buijzen *et al.*, 2010).

One important finding of this study was that children could recall the products and brands that were shown in vlogs, which mostly associated to food and beverages, and considered themselves and others affected by product and brand endorsements in vlogs. The food and drinks that were recalled by the children were almost all high-energy dense snack foods (e.g. candy, energy drinks and chocolate), whereas the brands that were mentioned most were most often fast-food restaurant chains (e.g. KFC or McDonald's) or suppliers of energy drinks (e.g. Red Bull). Similar findings are reported by Potvin Kent *et al.* (2019), who found that children are often exposed to food marketing through social media platform, such as YouTube and Instagram, and that the most promoted food categories were fast food, sugar-sweetened beverages and candy or chocolate. In addition, their study also suggested that the most promoted companies were chains such as McDonald's and Starbucks (Potvin Kent *et al.*, 2019). These findings are worrisome and more research is warranted on children's exposure to vlog content, thereby examining the effect of this form of marketing on children's intentions and behaviors, especially in the long term (Parnell, 2017; Okazaki and Taylor, 2013). By now, there is abundant evidence that acute exposure to food advertising on television and internet increases food intake children (Boyland *et al.*, 2016; Andreyeva *et al.*, 2011), but less is known about exposure to food marketing in vlogs. Experimental studies that give insight into the potential causal relationship between food advertising in vlogs and intentions to buy and consume these foods are therefore required. These studies, for instance, could manipulate the content of these vlogs and compare the effects of vlogs either promoting food products, non-food products or no promotion at all on children's intentions and eating behaviors. In addition, longitudinal studies that examine how frequent exposure to food marketing on social media in general, and vlogs, in particular, is related to dietary intake behaviors and weight are urgently needed.

The findings of our study need to be discussed in light of several limitations. First, we only tested children between 10 and 13 years of age. Older and younger children might give us significant different responses with regard to brand and product placements in vlogs (Folkvord *et al.*, 2016; Valkenburg and Peter, 2013). Second, we did not show actual (sponsored) vlogs to children to examine whether children were able to recognize the sponsored content. Showing children a vlog with sponsored content versus non-sponsored content and subsequently asking children whether they can tell if the vlogs contained advertising could be an interesting follow-up study, especially to understand the persuasion knowledge of children in this new form of advertising. Third, the current study showed that the level of bonding might be an important factor in explaining the mechanism of the persuasive effect of vlogs, although we did not experimentally manipulate this to test the effect. If children bond and identify themselves to a larger extent with the vlogger, it could be that they are more susceptible to this form of advertising than children who do not (Folkvord *et al.*, 2016). Experimental or longitudinal studies are required to unravel this effect.

In conclusion, the marketing landscape is changing rapidly, mainly because children and adolescents spend an increasing amount of time online and marketers aim to affect these age groups (Dutch Ministry of Health, Wellbeing and Sport, 2016; Hill *et al.*, 2017; Ofcom, 2016). One of the most recent forms of online marketing is vlogging (Gao *et al.*, 2010) and the most advertised brands and products are predominantly unhealthy food snacks, toy products or (health)care-related items, thereby stimulating childhood obesity and materialism (Boyland *et al.*, 2016; Buijzen *et al.*, 2010; Folkvord *et al.*, 2016). Major firms increasingly use celebrities as a part of their marketing communications strategy, especially

due to the large amount of time that youth spend on social media platforms and the use of vlogs is increasing rapidly (Hill *et al.*, 2017). Scientific research on social media advertising is still in its infancy, and needs further attention, considering its rapid increase during the past few decades (Okazaki and Taylor, 2013).

## Note

1. Three brands or products reported by the children were unclear, so we could not categorize these. These answers were excluded from the analyses.

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### Further reading

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