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Author(s): Munnukka, Juha; Maity, Devdeep; Reinikainen, Hanna; Luoma-aho, Vilma

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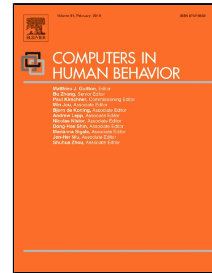
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Juha Munnukka, Devdeep Maity, Hanna Reinikainen, Vilma Luoma-aho



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“Thanks for Watching.” The Effectiveness of YouTube Vlog Endorsements

Juha Munnukka¹

Senior Researcher (Marketing)
Jyväskylä University School of Business and Economics
P.O. Box 35
FI-40014, University of Jyväskylä, Finland

Devdeep Maity

Assistant Professor (Marketing)
Department of Business Administration
College of Business, Delaware State University
Bank of America Building Room 209C

Hanna Reinikainen

Ph.D. Candidate (Corporate Communication)
Jyväskylä University School of Business and Economics
P.O. Box 35
FI-40014, University of Jyväskylä, Finland

Vilma Luoma-aho

Professor (Corporate Communication)
Jyväskylä University School of Business and Economics
P.O. Box 35
FI-40014, University of Jyväskylä, Finland

Abstract

This study examines the effectiveness of brand endorsements in vlogs (video blogs) by assessing the role of audience participation, parasocial relationship, and valence toward vlog endorsements on the perceived credibility of the vlogger and brand attitudes. Four experimental conditions were created on Qualtrics based on a YouTube vlog where the endorser reviewed a few products. The data were collected using Mturk and analyzed with 203 usable responses. The findings indicate that audience participation in the vlog enhances parasocial relationship with the vlogger, thus further fostering the vlogger's perceived credibility as an endorser. Additionally, the valence of the audience's attitudes toward vlog endorsements moderates the audience participation–parasocial relationship. The results show that vlogs with high levels of audience participation are more likely to increase the acceptance of the brand's endorsement via enhanced credibility perceptions among viewers. Hence, time should be spent choosing vloggers who are active in the online community. This study contributes to the understanding of the distinct characteristics of vlogs that specifically affect endorsement effectiveness. The focal role of parasocial relationship for message acceptance in the context of vlogs is also highlighted.

Keywords - endorsement effectiveness; audience participation; parasocial relationship; endorser credibility; valence; vlog

¹ Corresponding Author
Email: juha.munnukka@jyu.fi; Tel. +35840 576 7826

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1 Introduction

Over the past decade, there has been a drastic change in online behavior because of the rise of new social media channels, including social networking sites, discussion boards, podcasts, webinars, and Q&A sites (Colliander, Dahlén, & Modig, 2015; Habibi, Laroche, & Richard, 2016). This has had a significant effect on marketing and advertising. Specifically, in consumer markets, these new social media channels have continued to capture additional advertising dollars (IAB, 2018). Social media channels have become one of the main platforms of communication through which companies engage with consumers, allowing for new forms of participation, interactivity, and even co-creation (Colliander et al., 2015). One highly popular social media platform is a blog. Blogs appeal to audiences and provide companies with opportunities to carve out new markets for their products and create brand preference (Batra & Keller, 2016). Presently, 91.8 million new blog posts are written each month (WordPress, 2016), and 81% of U.S. consumers trust information and advice from blogs while 61% of U.S. consumers have made a purchase based on a recommendation from a blog (Barker, Barker, Bormann, & Zahay, 2017).

The current study focuses on one specific form of a blog, namely video blogs (or vlogs), where YouTube is used as the platform for video blogging (or vlogging). Vlogs can be seen as a subgenre of blogs because blogs and vlogs share certain similarities, such as discussing personal matters and having control over the creator's content (Frobenius, 2011). The contents of vlogs can be categorized into different kinds of videos, such as haul videos featuring products that the vlogger has just acquired; Q&A videos where the vlogger answers questions from fans; product reviews where the vlogger reviews recently released products; or DIY videos that feature, for example, recipes or tips on how to fix a common item (Zhang, 2018). These uploaded videos are

commonly based on the vloggers' own lives and filmed using simple, handheld cameras (Stefanone & Derek, 2009). This format tends to add realism to the content, thereby generating more interest and drawing larger audiences, with some vloggers garnering tens of millions of subscribers (Lee & Watkins, 2016). Therefore, vlogs are considered a powerful marketing channel for companies (Lee & Watkins, 2016), one that allows their brands or products to be presented in positive light and targeted to certain consumer segments. Companies often offer vloggers products or services for free, gift cards, or money, and in exchange, the vloggers provide positive and interesting content about the products or services in their vlogs (Liljander, Gummerus, & Söderlund, 2015). In these situations, vloggers are considered the endorsers. In the context of a vlog, an endorser is defined as a vlogger who enjoys public recognition and uses this recognition on behalf of a consumer good, service, or brand by appearing with that good, service, or brand in a vlog post. Therefore, this form of vlogging is considered equivalent to the concept of celebrity endorsement found in McCracken's research (1989, p. 310). Previous studies show that published content with product- or brand-related information, evaluations, and experiences influences audience's attitudes, brand credibility, and behavior (Ho, Chiu, Chen, & Papazafeiropoulou, 2015; Chung & Cho, 2017).

Thus, not surprisingly, vlogs have become an important channel of product- and service-related information and an integral part of consumers' buying decision process (Chu & Kamal, 2008; Hsu, Lin, & Chiang, 2013; Ho et al., 2015). Based on the source credibility and endorsement literature, endorsement effectiveness depends on the persuasiveness and credibility of the endorser (Ohanian, 1990). Having an endorser with higher credibility and persuasiveness leads to the audience having more positive attitudes toward the endorsement, more positive brand attitudes, and increased buying intentions. Although source credibility and endorsement

effectiveness have been studied in traditional media contexts (Caballero & Solomon, 1984; Clemente, Dolansky, Mantonakis, & White, 2014; Roy, Guha, & Biswas, 2015), only a few studies have examined endorsement effectiveness in the social media context (Chung & Cho 2017; Ho et al., 2015; Chu & Kamal, 2008). Ferchaud, Grzeslo, Orme, and LaGroue (2018) have studied the formation of perceived authenticity and parasocial attributes, which have been found to affect the effectiveness of a message. Although, communication effectiveness in social media is clearly gaining popularity in recent research, the call for more research from Kapitan and Silvera (2016) on the effects of product and brand endorsements in the social media context is still valid.

Therefore, the current study examines the effectiveness of brand endorsements in vlogs. Specifically, it assesses the role of audience participation, parasocial relationship, and valence on the perceived credibility of the vlogger and on brand attitude. The present study explores how the perceived credibility of a vlogger as a source of brand-related information is constructed and how it affects the effectiveness of the brand-related content published by the vlogger. An experimental between-subjects design is applied to clarify the independent effects of audience vlog participation and valence on the effectiveness of the published content.

2 Literature review

2.1 Endorsement Effectiveness in Vlogs and the Perceived Credibility of the Vlogger (PCV)

Drawing on the source credibility theory (Ohanian, 1990), endorsement effectiveness is driven by the perceived credibility of an endorser. When individuals are faced with a brand endorsement, they assess the endorser's credibility based on the endorser's characteristics, argument quality, and fit with the endorsement object (Kapitan & Silvera, 2016). The positive

characteristics of the endorser (e.g., familiarity, likeability, attractiveness, etc.), high argument quality, and the endorser's good match with the endorsed brand foster the perceptions of trustworthiness, honesty, and expertise, which lead to positive attitudes toward the endorsement message and the brand (Goldsmith, Lafferty, & Newell, 2000). Thus, the perceived credibility of the message source enhances the likelihood that the target audience (Ajzen & Fishbein, 1977) will accept the message. This is explained through affect transfer, suggesting that positive associations and evaluations toward an endorser are transferred to the endorsement message and, consequently, to the endorsed brand (Goldsmith et al., 2000; Till & Nowak, 2000). In a consumer's mind, a credible endorser is more strongly associated with the endorsed brand (Biswas, Biswas, & Das, 2006). In sum, endorsement effectiveness is captured by the attitude of the audience toward the endorsed brand.

In the social media context, bloggers, vloggers, and other content producers are considered endorsers when they recommend or present products and brands in a positive light, thus acting as sources of information (Batra & Keller, 2016). Much like the source credibility construct (Ohanian, 1990), the perceived credibility of the vlogger (PCV) is defined as the extent to which the vlogger is perceived by the vlog audience as possessing expertise relevant to the endorsement topic and the extent to which the vlogger can be trusted to provide an objective opinion of the endorsed brand (Goldsmith et al., 2000; Chu & Kamal, 2008). The vlog audience makes judgments about the degree to which a vlogger truly likes and values the endorsed product, which dictates the audience's disposition toward the endorsement as credible or not, thus becoming more prone to accepting the message (Kapitan & Silvera, 2016). Thus, the acceptability of a vlog endorsement is established through the attributions the audience makes about the vlogger's credibility as an information source (Kareklas, Muehling, & Weber, 2015;

Pornpitakpan, 2004). In this context, associations toward a vlogger function as extrinsic cues to the audience's judgments about endorsement credibility and the attributes of the endorsed brand (Dean, 1999). The PCV construct is conceptualized correspondingly with the endorser credibility construct being composed of perceived trustworthiness, expertise, and similarity (Ohanian, 1990; Pornpitakpan, 2004).

The evidence suggests that endorsements of a credible vlogger is expected to have a stronger effect on the audience's cognitive engagement with the endorsed brand than with a less-credible vlogger. Therefore, the following hypothesis is proposed:

H₁: Perceived vlogger credibility positively relates to brand attitude.

2.2 Audience Participation

According to Khan (2017), audience participation is the degree by which the audience engages in the various activities in a vlog, such as likes, shares, comments, subscriptions, and responses to other comments. Participation is thus understood as an active engagement, whereas content viewing and reading is considered passive engagement. Passive engagement is viewed as content consumption while participation includes interaction with the content and with other users, as well as producing content (Shao, 2009). Recent research shows that incentives to participate are less powerful in the online context, whereas the characteristics of online content (including vividness, interactivity, entertainment, and information) have a direct influence on audience participation (Kujur & Singh, 2017). Although our understanding of the motives for participation on social media has been greatly advanced by recent studies (e.g. Khan, 2018), the current article focuses on the effects of participation.

Getting audiences to actively participate online is one of the great challenges that brands face (Amichai-Hamburger et al., 2016). Research on the psychology of participation online indicates that activity in the online environment is determined by individual differences, social-group processes, and technological settings (Amichai-Hamburger et al., 2016). Individual differences include the need for gratification and self-efficacy (or the belief in one's abilities to shape the outcome) (Hsu & Chiu, 2004), as well as personality traits and the actual time available for online participation. The technological setting consists of the technical design, which either enables or discourages participation, along with the sense of privacy and safety felt by individuals online. The most complex factors shaping participation are social group processes, and recent research has shown that the type of online environment, as well as the way other people online respond to participation, either encourage or discourage individuals' actions (Malinen, 2015). Other social factors include the individual's socialization and several situation-specific factors such as social loafing (similar to free-riding), other people's responses to delurking (how others react to passive individuals becoming active), and the quality of responses (Amichai-Hamburger et al., 2016).

When the audience actively participates, this translates into higher influence on the audience's perceptions, affect, and behavior, which are conveyed by the means of social identification, social prompting (Stryker & Burke, 2000), and modeling the products' attributes, use, and benefits and disadvantages (Bandura, 2001); these means of socializing and communicating within a vlog community deepen individuals' attachment and identification with the vlog, vlogger, and community audience. In addition, audience participation (AP) with the vlogger and endorsement message drives the individuals' processing of the message and enhances its acceptance (Kapitan & Silvera, 2016). Higher participation enables the audience to

more deeply process the message and the vlogger-related cues, thus helping to assess the vlogger's characteristics, argument quality, and fit with the endorsed product (Choi & Rifon, 2012; St. James, 2004; Till & Busler, 2000). Therefore, the more individuals spend time and interact with the vlog, vlogger, and other followers, the better they are able to assess the credibility of the vlogger's endorsements.

Furthermore, the literature on psychological ownership posits that a person can develop feelings of ownership toward objects or nonphysical entities and other people (Pierce, Kostova, & Dirks, 2003; Maity & Arnold, 2013) the primary routes to the growth of such ownership feelings are one's enhanced ability to control the object, enhanced knowledge about the object, and a higher degree of self-investment toward the object. In the context of vlogging, one can be highly invested in the vlogs and perceive enhanced control through his or her participation (such as likes, shares, subscriptions, comments, responses to other comments, etc.). The extent to which one invests in a vlog dictates his or her level of ownership toward the vlog and vlogger. These stronger ownership feelings give the viewer a favorable impression and higher credibility perception of the vlogger to whom the effort is directed. This results in a positive relationship between the AP and PCV. Thus, the following hypothesis is proposed:

***H₂**: When audience participation is high, perceived vlogger credibility will be significantly higher compared to when audience participation is low.*

2.3 Parasocial Relationship (PSR)

PSR is an illusionary feeling of a "face-to-face relationship" (Horton & Wohl, 1956) and interpersonal involvement (Rubin, Perse, & Powell, 1985) with a media persona. Although illusionary, the experience has been found to be very powerful. Parasocial relationships can for

example draw the audience members back to the content and have them spending increased time consuming the content (Quintero Johnson & Patnoe-Woodley, 2016). Parasocial interaction (PSI) is a related concept, referring to “illusionary interaction” with a media persona (Horton & Wohl, 1956). The two concepts have often been used as interchangeable in the research literature, but while parasocial interaction occurs during viewing and is defined as capturing a sense of mutual awareness, attention and adjustment (Hartmann & Goldhoorn, 2011; Dibble, Hartmann, & Rosaen, 2016), parasocial relationship refers more to a sense of liking and either a short- or long-term involvement with the media performer (Dibble et al., 2016).

PSR was originally studied in the domain of mass media, but it has also been found to be an important and relevant concept while exploring social media (Lee & Watkins, 2016; Hwang & Zhang, 2018). For example, Ferchaud et al. (2018) show how video bloggers use different ways to evoke parasocial experiences within their audiences. This is interesting, as although video blogs are a rich media, interaction in vlogs is often still primarily one-sided, with the audience members knowing a lot about the vlogger but not the other way around. Thus, we apply Brown’s (2015) idea, which emphasizes that a parasocial experience with a media persona develops both during and after the viewing experience. In the context of vlogs, this means that the experience begins by spending time with the vlogger through participation and is characterized by perceived relational development with the vlogger and knowing the vlogger well; this suggests that PSR mediates the relationship between AP and PCV. The notion is further supported by past scholarship on PSR (Horton & Wohl, 1956). That is, the more the audience members participate, the higher their degree of PSR will be because they will be more integrated with the vlogger, thus growing their self-investment toward the vlogger and thereby reinforcing PCV. Thus, the following hypothesis is proposed:

H₃: The relationship between audience participation and perceived vlogger credibility is mediated by parasocial relationship, where high audience participation leads to high parasocial which in turn leads to high perceived credibility of the vlogger.

2.4 Valence toward the vlog

The prior attitudes toward an advertised object are acknowledged to bias the processing of a persuasive message and influence the message effectiveness (Arias-bolzmann, Chakraborty, & Mowen, 2000; Crowley & Hoyer, 1994). A positive initial attitude is found to lead to a more positive response to a positive persuasive message, whereas a negative initial attitude leads to a greater negative response to a negatively charged message. As Petty, Fabrigar, and Wegener (2003) note, the influence patterns of persuasive messages on attitude change have been well studied. However, evidence of the factors that moderate persuasion effectiveness is limited. For example, in the context of social media and vlogs specifically, a better understanding is needed about how negative and positive valence affect the judgments and perceptions made about the endorsement messages (e.g., Pornpitakpan, 2004). In the present study, valence is defined as the audience's attitudinal state (positive or negative) toward the vlog (Chen & Dubinsky, 2003). It is understood as affect disposition reflecting individuals' positive or negative attitudes toward brand- or product-related communication (Iabucci & Öström, 1996; Nijssen, Singh, Sirdeshmukh, & Holzmüller, 2003). According to the affective-cognitive matching effect (Fabrigar & Petty, 1999; Petty & Wegener, 1991; Petty et al., 2003), prior attitudes towards an object of a persuasive message bias the messages processing. Therefore, judgments and attitudes toward the object of a persuasive message are formed differently depending on the attitudinal

state of the audience. Positive initial attitudes lead to more positive perceptions and judgments about the object than negative attitudes (Bower, 2001).

Based on the prior evidence, we expect that the positive relationship proposed between AP and PSR depend on the audience's disposition toward the vlog. Therefore, a positive valence toward the vlog would strengthen the participation–PSR relationship and vice versa. Thus, the following hypothesis is proposed:

H₄: When audience participation is high, the parasocial relationship will be significantly higher when valence toward the vlog is high compared to low.

3 Methodology

3.1 Participants and design

The current study was conducted following an experimental design with 203 usable responses. An experimental two-way between-subjects design was applied for testing and verifying the independent effects of vlog participation and valence on the constructed model. Four experimental conditions were created to control and verify the independent causal effects of audience participation and valence on the vlog endorsement effectiveness. The respondents well represented the average vlog follower because most of respondents were young adults with a median age between 26–30 years, and 78.3% were 35 years old or younger. Out of the respondents, 58.1% were male and 41.9 % female. On average, the respondents were quite highly interested in the vlog's topic, with a mean value of 5.04 (std. 1.54; 1=not interested, 7=extremely interested). However, the vlogger was relatively unfamiliar to the respondents, with a mean value of 2.54 (std. 1.99; 1=unfamiliar, 7=familiar).

A vlog entry from an American female travel vlogger with around 200,000 subscribers was chosen for the present study. The vlog was carefully shortlisted with the help of experts in the field (doctoral students and peers). Careful consideration was given to matching the vlog with the U.S. respondents, as well as the casting of the vlog, which showcased only one vlogger rather than multiple individuals in the same video. The focus of the vlog's content, the genre of the vlog (a travel vlog), and the type of products it displayed (consumer goods) were also examined carefully.

A 2 (audience participation: low, high) X 2 (valence: positive, negative) between-subject design was developed, and four experimental conditions were created. The experimental conditions and the following measures were created on Qualtrics, and the data were collected with Mturk. The video was embedded from YouTube in Qualtrics. A pretest was conducted (30 usable responses) prior to the main data collection to test the manipulations, appropriateness of the experimental conditions, and instructions. Following minor changes, the main data were collected. The respondents received compensation in exchange for their participation in the study, which fell in line with Mturk's suggested compensation rates.

3.2 Data collection procedure

The respondents first read a short scenario (the scenario manipulated the moderating variable valence as explained later) and then watched a video that featured the vlogger presenting a couple of products related to traveling. Next, they were asked to take a short qualifier quiz to ensure that they had watched the video carefully. Following this initial qualification process, the respondents were required to provide written descriptions sharing their thoughts and feelings about the vlog, the vlogger, and the displayed products and brands, as well as their participation

in the vlog. These written responses were primarily collected to ensure that the respondents were involved in the experiment. The written descriptions were evaluated based on the quality of the write-ups and existence of systematic patterns reflecting haste. After the written descriptions were obtained, the respondents were required to answer the survey items, which also included the manipulation of the variable, audience participation, as explained next).

3.3 Independent Variables

The high and low levels of audience participation (AP) were manipulated by explicitly asking respondents to participate in the vlog (by liking/disliking, sharing, commenting, and subscribing) for the high AP condition while the respondents were not asked to do so for the low AP condition. In the high AP condition, like/dislike, share, subscribe, and comment buttons were replicated in Qualtrics to offer the participants the feel of an actual YouTube environment (the actual like/dislike, share, subscribe, and comment buttons were disabled for the respondents to avoid potentially impacting the vlogger). In the low AP condition, no such buttons were replicated or offered to the respondents. Hence, the audience did not have much of an ability to participate in the vlog.

The positive and negative valence was manipulated by priming respondents with positive and negative scenarios about the vlog before exposing them to the actual vlog. In the positive valence condition, the scenario oriented the respondents so that the vlog was portrayed as an unsponsored, credible one with unbiased, thorough, and detailed reviews on innovative products; here, the vlog was positioned as entertaining and enjoyable, containing important information, of great quality, and worthy of one's time. In the negative condition, the scenario oriented the respondents so that the vlog was portrayed as overly sponsored, biased, scripted, and paid to

push the products. The vlog was positioned as an unnecessary one, of poor quality, annoying, and unworthy of one's time. The experimental scenarios are summarized in Table I.

Table I. Experimental Scenarios

<p style="text-align: center;">Condition 1 - High AP X Negative Valence</p> <p>Please read the following passage carefully: The video that you are about to see is an example of an overly sponsored YouTube video where the endorsement is done mainly for money. You will see that the paid advertisement is trying to push the products to its viewers. You may come to understand that this is what companies do nowadays to make you purchase things you absolutely do not need. The video is biased, scripted, and of poor quality. You may even find it annoying and may end up disliking it. You may feel as though there are millions of videos just like this one that you could have watched instead, and you may even regret wasting your time watching it.</p> <p>(Next Page) Please watch the video carefully at a comfortable pace (ignore the embedded ads, if any). You are strongly encouraged to participate in the video, such as through sharing, commenting, liking, disliking, or subscribing to the video by using the options shown below (We have replicated the like, dislike, share, and subscribe buttons, as well as the comment section, within the survey, as shown below; therefore, we request you use these options. DO NOT use the like/share etc. buttons on the actual YouTube video)</p>
<p style="text-align: center;">Condition 2 - High AP X Positive Valence</p> <p>Please read the following carefully: The video that you are about to see is an example of an unsponsored, credible YouTube video containing unbiased reviews of innovative products. You will see that the reviews are very thorough and detailed. You may come to understand the useful tips that the video contains, along with other important information that is pretty much on point. You may find the video to be entertaining, enjoyable, and of great quality. You may even end up liking it. You may feel like as though there are very few videos like this and may find it worthy of your time.</p> <p>(Next Page) Please watch the video carefully at a comfortable pace (ignore the embedded ads, if any). You are strongly encouraged to participate in the video, such as through sharing, commenting, liking, disliking, or subscribing to the video by using the options shown below (We have replicated the like, dislike, share, and subscribe buttons, as well as the comment section, within the survey, as shown below; therefore, we request you use these options. DO NOT use the like/share etc. buttons on the actual YouTube video).</p>
<p style="text-align: center;">Condition 3 - Low AP X Positive Valence</p> <p>Please read the following carefully: The video that you are about to see is an example of an unsponsored, credible YouTube video containing unbiased reviews of innovative products. You will see that the reviews are very thorough and detailed. You may come to understand the useful tips that the video contains, along with other important information that is pretty much on point. You may find the video to be entertaining, enjoyable, and of great quality. You may even end up liking it. You may feel like as though there are very few videos like this and may find it worthy of your time.</p> <p>(Next Page) Please watch the video carefully at a comfortable pace (ignore the embedded ads, if any). You are strongly discouraged to participate in the video, such as by sharing, commenting, liking, disliking, or subscribing to the video.</p>

Condition 4 - Low AP X Negative Valence

Please read the following passage carefully: The video that you are about to see is an example of an overly sponsored YouTube video where the endorsement is done mainly for money. You will see that the paid advertisement is trying to push the products to its viewers. You may come to understand that this is what companies do nowadays to make you purchase things you absolutely do not need. The video is biased, scripted, and of poor quality. You may even find it annoying and may end up disliking it. You may feel as though there are millions of videos just like this one that you could have watched instead, and you may even regret wasting your time watching it.

(Next Page) Please watch the video carefully at a comfortable pace (ignore the embedded ads, if any). You are strongly discouraged to participate in the video, such as by sharing, commenting, liking, disliking, or subscribing to the video.

3.4 Dependent Variables

The primary dependent variables were perceived vlogger credibility, PSR, and brand attitude. Perceived vlogger credibility was measured using an 11-item, 7-point Likert scale adapted from existing scales (Morimoto & La Ferle, 2008; Ohanian, 1990). The average of the ratings of these 11 items was computed and used as one single rating to represent the subject's perceived vlogger credibility. PSR was measured using an eight-item, 7-point Likert scale adapted from existing scales (Labrecque, 2014; Lee & Watkins, 2016; Quintero-Johnson & Patnoe-Woodley, 2016; Rubin et al., 1985). The average of the ratings from these eight items was computed and used as one single rating to represent the subject's perceived PSR. The brand attitude was hypothesized as DVs to the perceived credibility of the vlogger. This was measured using a four-item, 7-point Likert scale adapted from existing scales (Priester & Petty, 2003).

4 Results

After a preliminary graphical examination of the data for outliers or violations, the items were subjected to a confirmatory factor analysis using Lisrel 9.3 (see Table II). Validity and unidimensionality were assessed and found to be satisfactory (Table III). The alpha reliabilities

(Cronbach's alpha) of the constructs were found to be high demonstrating good internal reliability (α AP = 0.88; α PSR = 0.96; α PCV = 0.96; α Brand Attitude = 0.96). Factor constructs with an adequate convergent validity should also hold less than 50% error variance (Ping, 2004). Therefore, the average variance extracted (AVE) of each factor construct should exceed 0.5. As the AVEs ranged between 0.57 and 0.82, and the factor loadings of each item varied between 0.41 and 0.95, the items were found to converge on their assigned factors.

Table II. Confirmatory Factor Analysis

<i>Measures and Items</i>	<i>CFA-Loading</i>	<i>SMC</i>	<i>AVE</i>	<i>CR</i>
1. Audience Participation			0.57	0.88
I spent a lot of time watching the video	0.41	0.17		
I was heavily into the video	0.87	0.76		
I tried to fit the video into my schedule	0.50	0.25		
I perceived a high level of participation interacting with the video	0.85	0.72		
I was very much involved with the video	0.94	0.88		
Overall, I assess my video participation to be	0.8	0.64		
2. Valence			1.00	1.00
I had a pleasant experience watching the vlog	1.00	1.00		
3. Perceived Credibility of Vlogger			0.71	0.96
I feel the vlogger was honest	0.89	0.79		
I consider the vlogger trustworthy	0.92	0.85		
I feel the vlogger was truthful	0.91	0.83		
I consider the vlogger earnest	0.88	0.77		
I feel the vlogger knows a lot about the product	0.81	0.66		
I feel the vlogger is competent to make assertions about the product	0.85	0.72		
I consider the vlogger an expert on the product	0.76	0.58		
I consider the vlogger sufficiently experienced to make assertions about the product	0.82	0.67		
The vlogger and I have a lot in common	0.77	0.59		
The vlogger and I are a lot alike	0.76	0.58		
I can easily identify with the vlogger	0.82	0.67		
4. Parasocial Relationship			0.77	0.96
I look forward to watching the endorser on her channel	0.94	0.88		
If the endorser appeared on another YouTube channel, I would watch that video	0.92	0.85		
When I'm watching the endorser, I feel as if I am part of her group	0.90	0.81		
I think the YouTube endorser is like an old friend	0.82	0.67		

I would like to meet the YouTube endorser in person	0.80	0.64
If there were a story about the YouTube endorser in a newspaper or magazine, I would read it	0.87	0.76
The YouTube endorser makes me feel comfortable as if I am with friends	0.88	0.77
When the YouTube endorser shows me how she feels about the brand, it helps me make up my own mind about the brand	0.87	0.77
5. Brand Attitude		0.82 0.96
I feel----toward the brand/product		
Positive/negative	0.95	0.90
Beneficial/harmful	0.84	0.71
Wise/foolish	0.83	0.69
Good/bad	0.95	0.90
Favorable/unfavorable	0.94	0.88

Table III. Descriptive Statistics, Reliabilities, and Intercorrelations

Measures	A	Mean	SD	1	2	3	4	5	6
AP (Manipulated)	---	0.47	0.50						
AP (Scale)	0.88	5.04	1.35	0.19**					
Valence (Manipulated)	---	0.51	0.50	0.02	0.27**				
Valence (Scale)	---	5.21	1.69	0.02	0.65**	0.37**			
PSR	0.96	3.93	1.80	0.11	0.63**	0.37**	0.80**		
PCV	0.96	4.76	1.48	0.14*	0.65**	0.35**	0.83**	0.88**	
Brand Attitude	0.96	5.26	1.44	0.11	0.61**	0.31**	0.80**	0.78**	.83**

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

Manipulation checks – An ANOVA was run with AP (low, high) as independent groups, and the summated scale of AP as the dependent variable. The results show a significant difference in the summated scale between the two groups ($F = 7.44$, $df = 1, 201$, $p = 0.007$). The low AP mean was 4.80, and the high AP mean was 5.31. The mean value of the six-item AP scale was 5.04. Similarly, in relation to the manipulation check of valence, an ANOVA was run with valence (positive, negative) as independent groups and the summated scale of valence as the DV. The results show a significant difference on the summated scale between the two groups ($F = 32.21$, $df = 1, 201$, $p = 0.00$). The positive valence mean was 5.82, and the negative valence mean was 4.57, whereas the mean value of valence was 5.21.

Test of Main Effects – To test the relationship between PCV and brand attitude, a regression test was run using SPSS v25 between PCV as an independent variable and brand attitude as a dependent variable. The results indicate that the relationship was positive and significant ($\beta_{PCV} = 0.81, p = 0.00; R^2 = 0.69$). This supported H_1 .

To test the relationship between AP and PCV, a one-way ANOVA was run with AP (low vs. high) as an independent factor and PCV as dependent variable. Results indicate that respondents with low AP reported a mean PCV of 4.56 compared to a mean PCV of 4.99 reported by the high AP group. The difference is significant at $\alpha = .05$ ($F=4.18, df=1, 201, p=0.04$). Follow up regression tests between manipulation checks of AP (the summated scale) as an independent variable and PCV as dependent variables reveal that AP and PCV are positively related ($\beta = 0.72, p < 0.00; R^2 = 0.43$). This supports H_2 .

Test of Mediation – To test the role of PSR as a mediator between AP and PCV, we followed Baron and Kenny's (1986) recommendations for conducting a mediation analysis. Several regression analyses were run to meet the three following conditions: (1) AP to have a significant effect on PCV; (2) AP to have a significant effect on PSR; and (3) PSR to have a significant effect on PCV over and above the effect of AP [1]. The effect of AP on PCV must be diminished when compared with condition 1. As shown earlier through the support for H_2 , AP does have a significant effect on PCV ($\beta_{AP} = 0.65, p < 0.00; R^2 = 0.38$), thereby satisfying Baron and Kenny's first condition for mediation. Next, PSR was regressed on AP, and the relationship was significant ($\beta_{AP} = 0.63, p = 0.00; R^2 = 0.39$), which satisfied Baron and Kenny's second condition for mediation. Next, PCV was regressed with PSR alone ($\beta_{PSR} = 0.86, p = 0.00; R^2 = 0.77$), followed by AP and PSR ($\beta_{AP} = 0.17, p = 0.00; \beta_{PSR} = 0.77, p = 0.00; R^2 = 0.78$), which found support for Baron and Kenny's third condition for mediation. PSR

was found to remain significant after controlling for AP and vice versa, whereas AP weakened after controlling for PSR (β_{AP} changed from 0.65 to 0.17).

In addition to Baron and Kenny, the bootstrapping method was employed to test mediation, as proposed by Preacher and Hayes (2004) and Hayes (2012); this consisted of running the Andrew Hayes PROCESS macro in SPSS. The results indicate that the indirect effect of AP on PCV via PSR is significant (the 95% confidence results obtained from the bootstrap results did not include a zero; indirect path coefficient: 0.48; LL: 0.40 and UL: 0.56). Therefore, H₃ was supported.

To assess the mediation even further and take account of all the possibilities, the bootstrapping method was re-employed with AP (low vs. high) as an independent factor, PCV as dependent variable and PSR as the mediator variable. The results indicate that the indirect effect of AP (low vs. high) on PCV via PSR is not significant (the 95% confidence results obtained from the bootstrap results did include a zero; indirect path coefficient: 0.10; LL: -0.03 and UL: 0.21). Therefore, H₃ was not supported when the manipulated AP (high, low) is used instead of the summated AP.

Test of Moderation - To test the interaction effect of AP and valence on PSR, a two-way ANOVA was run with AP (low vs. high) and valence (positive vs. negative) as the independent factors and PSR as the dependent variable. The interaction term was not significant at the $\alpha = .05$ ($F=1.03$, $df=1, 199$, $p=0.31$).

Follow up regression tests between manipulation checks of AP (the summated scale) as an independent variable, valence (the summated scale of the valence, which is a continuous variable and has been used here) and PSR as dependent variables reveal that the interaction is significant ($\beta_{AP} = -0.05$, $p = 0.64$, $\beta_{Valence} = 0.37$, $p = 0.007$, $\beta_{interaction} = 0.51$, $p < 0.02$; $R^2 =$

0.67). To decompose the above interaction, a floodlight analysis was used (Johnson-Neyman technique) to identify the range(s) of the valence for which the effect of AP on PSR was significant [2]. The analysis reveals that there was a significant positive effect of AP on PSR for any model of valence greater than 3.30 ($B_{JN} = 0.16$, $SE = 0.08$, $p = 0.05$) but not for any model of valence lesser than 3.30 (the valence ranged from 1 to 7; like before, the summated scale of the valence, which is a continuous variable and has been used here). As predicted, a positive valence strengthens the AP–PSR relationship, and a negative valence weakens it. Therefore, H_4 was supported. The model with beta values is presented in Figure I, and the significant regression results are presented in Table IV. The slope analysis is presented in Figure II.

Figure I. Model with Standardized Regression Coefficients

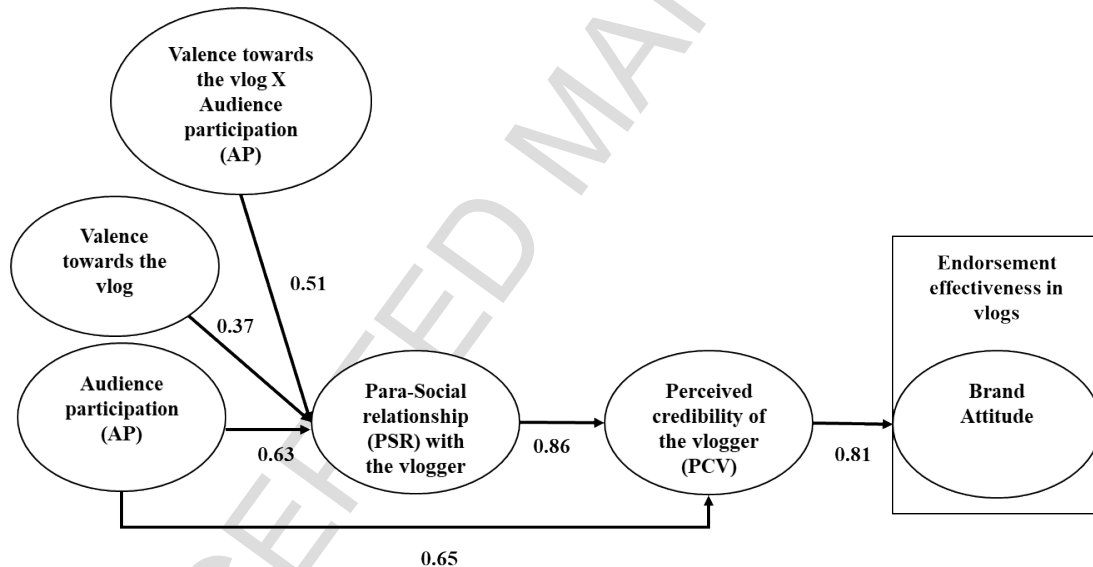


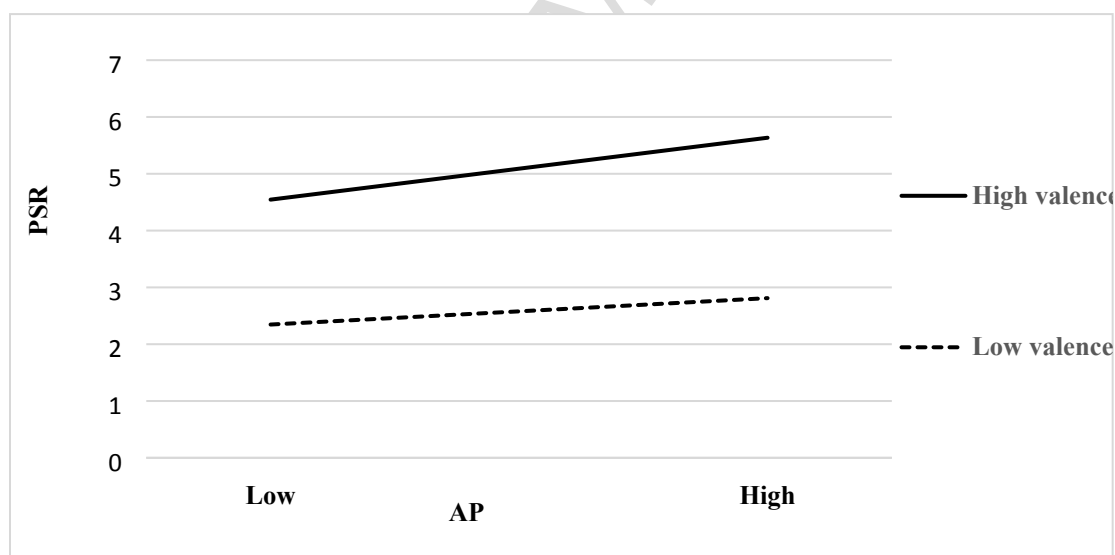
Table IV. A Summary of Significant Regression Coefficients

Equation	t Value	Pr > t	β	R^2
Dependent Variable: Brand Attitude				0.69
Intercept	7.37	<0.001		
PCV	21.28	<0.001	0.81	

Dependent Variable: PCV				0.38
Intercept	3.72	<0.001		
AP	12.91	<0.001	0.65	
Dependent Variable: PSR				0.39
Intercept	-0.74	0.46		
AP	11.43	<0.001	0.63	
Dependent Variable: PCV				0.77
Intercept	15.72	<0.001		
PSR	25.67	<0.001	0.86	
Dependent Variable: PCV				0.78
Intercept	6.98	<0.001		
AP	4.01	<0.001	0.17	
PSR	18.21	<0.001	0.77	
Dependent Variable: PSR				0.67
Intercept	0.48	0.63		
AP	-0.47	0.64	-0.05	
Valence	2.74	0.01	0.37	
Interaction	2.46	0.02	0.51	

** $p < 0.001$.

Figure II. Slope Analysis – AP, PSR, and Valence



Note. Moderate = mean value, low = minus one standard deviation from the mean, high = plus one standard deviation from the mean.

5 Discussion

The present study constructed and tested an extended model of endorsement effectiveness to explain the vlog endorsement effects on attitudes toward endorsed brands. The results support on the most part the constructed hypotheses that suggested a positive relationship between audience participation and perceived vlogger credibility as mediated by PSR (H_2 & H_3) and the role of the audience's valence toward the vlog as a moderator (H_4). Finally, perceived vlogger credibility was confirmed to have a positive effect on attitudes toward the displayed brands (H_1). The hypotheses H_2 and H_3 were partially supported as the significant mediation and moderation effect was detected when the self-reported scales (summated AP and valence) were applied but not in the case of the manipulation groups (AP-low, high; valence-negative, positive). An evaluation of the means of summated AP and valence as shown in Table III, reveals that the respondents in the negative valence group were not overly negative towards the vlogger. In a similar fashion, the respondents in the low participation group perceived and reported higher participatory contribution. Such tendencies can be explained by self-serving bias (Bendapudi & Leone, 2003) where the participants' display illusory cognitive and perceptual tendencies or bias to perceive and evaluate their participatory contributions as higher than the actuality (as displayed via high AP ratings) as well as have limited impact about others' negative evaluations of someone (such as negative valence scenario/story about the vlogger). Therefore, the results on the self-reported scales are emphasized. The main effects were similar in both cases.

The current study contributes to the endorsement effectiveness literature, which has provided a strong basis for the effects of brand endorsements in the traditional media context (e.g., Biswas et al., 2006; Goldsmith et al., 2000; Till & Nowak, 2000). Brand endorsements in social media have been examined in a few previous studies (Kapitan & Silvera, 2016; Liljander et al., 2015; Khan, 2017), but an understanding of the special characteristics of vlogs that

specifically affect endorsement effectiveness is still limited. The present study adds evidence to this deficiency by showing that brand endorsements in vlogs effectively drive positive brand attitudes through the perceived credibility of the vlogger as a message source. This supports the positive relationship between vlogger credibility and endorsement acceptance. Therefore, a positive brand message that is presented by a vlogger perceived as a credible brand endorser is more likely to be accepted than in the case of a less-credible vlogger (c.f. Dean, 1999; Goldsmith et al., 2000; Kareklas et al., 2015).

Second, we extend the present knowledge in this area by providing evidence of how audience participation affects the effectiveness of a brand endorsement. Vlog participation, which includes the time spent participating in the vlog and the actions that are taken (like, share, subscribe, etc.) while watching the video, was found to increase the vlogger's perceived credibility indirectly through PSR. Although the result was slightly mixed, this indicates that the focal role of PSR for message acceptance found in the traditional media context (Ballantine & Martin, 2005; Perse & Rubin, 1989) is also valid in the context of vlogs. In the present study, the vlog audience's perceptions of PSR were defined as illusionary relationship and involvement (Rubin et al., 1985; Dibble et al. 2016) with the vlogger, and the findings showed that this type of illusion is an important element of the vlog endorsement effectiveness model. Although blogs and vlogs appear to be reciprocal communication platforms, the interaction between the bloggers and audience is mostly one-sided. Therefore, a vlogger's ability to provide a perception of reciprocity is sufficient for increasing the trust of the audience toward the vlogger and greater acceptance of the brand endorsement. The present study extends the findings of Ferchaud et al. (2018), which explored the factors that affect the formation of parasocial experiences in the vlog context. In sum, the time spent liking and sharing activities in vlogs effectively improves the

perception of PSR, which has a strong impact on the effectiveness of brand endorsement in vlogs. Therefore, although vloggers or other spokespersons of a brand on social media may not be able to interact directly with all of their followers, the mere ability to create a feeling of reciprocity and involvement is sufficient for increasing the effectiveness of the endorsement.

Although the processes that explain how persuasive messages lead to attitude change are well known, little evidence exists as to how initial attitudinal states affect the perceptions and judgments made about endorsement messages (see Pornpitakpan, 2004). The current study shows that the audience's valence of initial attitudes toward the vlogger moderates the relationship strength of vlog participation and PSR. That is, a positive initial attitude was found to strengthen the effect of audience participation on the perception of PSR with the vlogger, but a negative initial attitude did not provide this strengthening effect. This finding also coincides with prior evidence showing that the affect-biasing effect is conditional on the affective-cognitive matching (Fabrigar & Petty, 1999; Petty & Wegener, 1991). In other words, the biasing effect exists when the valence of the initial attitude and observed valence of the message match. Thus, a positive initial attitude toward vlog endorsements strengthens the effect of audience participation on the audience's perceptions of reciprocal interaction with the vlogger, which leads to greater endorsement effectiveness.

The results of the current study have strong managerial implications. For instance, brand owners should understand that working with vloggers can serve as a new form of generating influence but working with a vlogger requires relationship management combined with a deep understanding of the vlog's audience. The results on audience participation offer clues as to how to choose the right vloggers to work with. Vlogs with a high level of positive audience participation (comments, likes, shares, subscriptions, etc.) are likely to increase the acceptance of

brand endorsement via enhanced credibility perceptions among consumers. Hence, time should be spent when choosing vloggers with an active online community. Furthermore, based on the results, vloggers who are likely to induce parasocial experiences among their audiences will strengthen the effectiveness of the endorsement. The results on valence suggest that endorsements are best met when the audience's attitudes toward brand endorsements in vlogs are positive. This creates pressure for the entire industry to invest in reputation management to ensure that vlog endorsements are perceived positively in the minds of potential consumers. One central area contributing to endorsements is the level of disclosure within the content production, publication, and distribution process: should the industry wish to harness the effectiveness of endorsements, attention should be paid to the transparency of the company's co-operation with the vlogger. The lack of such transparency may end up harming the vlogger, the brand, and the industry at large. Allowing vloggers to produce brand-related content on their own terms, minimizing commercial influence, and leaving room for authenticity and realism are the keys to successful vlogger collaboration.

5.1 Conclusions

The present research investigated vlog endorsement effectiveness, which was proposed to be a function of the AP, PSR with the vlogger, perceived vlogger credibility, and valence toward brand endorsements in vlogs. The results supported the proposed relationships by showing that consumers' brand attitudes are largely explained by perceived vlogger credibility, which is affected by AP, PSR, and valence toward the vlog. The findings provide new empirical evidence of the drivers of vlog endorsement effectiveness while also showing that active participation by the vlog audience enhances the acceptance of vlog endorsements. Active participation positively

affects perceptions of PSR with the vlogger, the vlogger's credibility, and positive attitudes toward the endorsed brand.

5.2 Limitations and future research directions

The present study includes a few limitations that provide opportunities for future studies. The first limitation concerns the research design, which involved one specific vlog and one vlog video presenting three products of the same brand. The findings may be specific to the product category, brand, or the personality type of the vlogger present in the current study. Therefore, future studies should test the constructed model of brand endorsement effectiveness in the context of other product types, brands, and different vloggers. Second, we used brand attitude as the sole measure of endorsement effectiveness. Future studies should test the model's ability to explain other outcome variables, such as attitude toward the endorsement, intention to buy, intention to recommend, and so forth. Third, the constructed model was tested in the case of a positive brand endorsement. However, the effects of the constructs may not change symmetrically in the case of negative or neutral brand endorsements. Therefore, future research should focus on examining negative brand endorsement situations intimately. This research was also limited to the United States and a single vlog. A cross-country setting and testing the model on various types of vlogs may further validate the findings of the present study and provide a thorough picture of the phenomenon of brand endorsement in vlogs. Finally, the results on mediation and moderation effects were partially mixed when applying either the self-reported summated scales of participation and valence or the manipulation groups. The future studies should further validate these results to confirm whether the self-serving bias or the design of the experimental scenarios affected the observed inconsistency in the results.

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Highlights

- The study constructed and tested an extended model of endorsement effectiveness in the video blog (vlog) context.
- Participation in a vlog drives the audience's perceptions of parasocial relationship and vlogger credibility.
- Positive valence strengthens the effect of vlog participation on parasocial relationship.
- Parasocial relationship is a mediator between vlog participation and perceived vlogger credibility.
- Perceived vlogger credibility has a strong positive effect on the acceptance of an endorsement.