



DECODING YOUTUBE VIDEO REVIEWS: UNCOVERING THE FACTORS THAT DETERMINE VIDEO REVIEW HELPLEFULNESS

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ABSTRACT

Aim/Purpose	This study aims to identify the characteristics of YouTube video reviews that consumers utilize to evaluate review helpfulness and explores how they process such information. This study aims to investigate the effect of argument quality, review popularity, number of likes, and source credibility on consumers' perception of YouTube's video review helpfulness.
Background	Video reviews posted on YouTube are an emerging form of online reviews, which have the potential to be more helpful than textual reviews due to their visual and audible cues that deliver more vivid information about product features and specifications. With the availability of an enormous number of video reviews with unpredictable quality, it becomes challenging for consumers to find helpful reviews without consuming significant time and effort. In addition, YouTube does not provide a specific feature that indicates a review helpfulness similar to the one found on e-commerce websites. Consequently, consumers have to examine the characteristics of video reviews that are readily available on YouTube, evaluate them, and form a perception of whether a review is helpful or not. Despite the increasing popularity of YouTube's video reviews, video reviews' helpfulness received inadequate attention in the literature. The antecedents of the helpfulness of online video reviews are still underinvestigated, and more research is needed to identify the characteristics that consumers depend

Accepting Editor Dirk Frosch-Wilke | Received: January 4, 2024 | Revised: March 4, 2024 |
Accepted: September 19, 2024.

Cite as: Alsharo, M., Alnsour, Y., & Husain, A. J. A. (2024). Decoding youtube video reviews: Uncovering the factors that determine video review helpfulness. *Interdisciplinary Journal of Information, Knowledge, and Management*, 19, Article 8. <https://doi.org/10.28945/5266>

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upon to assess video review helpfulness. Furthermore, it is important to understand how consumers process the information they gain from these characteristics to form a perception of their helpfulness.

Methodology	Following an extended investigation of the relevant literature, we identified four key video characteristics that consumers presumably utilize to evaluate review helpfulness on YouTube (i.e., review popularity, number of likes, source credibility, and argument quality). By employing the Elaboration Likelihood Model (ELM), we classified these characteristics along the central and peripheral routes. The central route characteristics require a high cognitive effort by consumers to process the review's message and reach a logical decision. In contrast, the peripheral route assumes that consumers judge the review's message based on superficial qualities without substantial cognitive effort. A research model is introduced to investigate the effect of central and peripheral cues and their corresponding video review characteristics on review helpfulness. Accordingly, argument quality is proposed in the central route of the model, while review popularity, number of likes, and source credibility are proposed in the peripheral route. Furthermore, the study investigates how consumers process the information they obtain from these routes jointly or independently. To empirically test the proposed model, a convenient sample of 361 YouTube users was obtained through an online survey. The partial least squares method was used to investigate the effect of the proposed characteristics on video review helpfulness.
Contribution	This study contributes to the literature in several ways. First, it is one of the few studies that investigate online video reviews' helpfulness. Second, this study identifies several unique characteristics of YouTube's video reviews that span peripheral and central routes, which potentially contribute to review helpfulness. Third, this study proposes a conceptual model based on the ELM to explore the effect of central and peripheral cues and their corresponding review characteristics on review helpfulness. Fourth, the research findings provide implications for research and practice that advance the theoretical understanding of video reviews' helpfulness and serve as guidelines to create more helpful video reviews by better understanding the consumer's cognitive processes.
Findings	The results show that among the four characteristics proposed in the research model, argument quality in the central route is the strongest determinant factor affecting video review helpfulness. Results also show that review popularity, source credibility, and the number of likes in the peripheral route have significant effects on video review helpfulness. Altogether, our results show that the effect of the peripheral route adds up to 0.463 compared to 0.430, which is the impact magnitude of the argument quality construct in the central route. Based on the comparable effect magnitude of the central and peripheral routes of the model on video review helpfulness, our results indicate that both peripheral and central cues significantly affect consumers' perception of video review helpfulness. The two routes are not mutually exclusive, and their cues can be processed in parallel or consecutive ways.
Recommendations for Practitioners	The study recommends creating a dedicated category for reviews on YouTube with a specific feature for consumers to indicate the helpfulness of a video review, similar to the helpful vote button in textual reviews. The study also rec-

	ommends that reviewers deliver more appealing and convincing argument quality, work toward improving their credibility, and understand the factors that contribute to video popularity.
Impact on Society	Identifying the characteristics that affect video review helpfulness on YouTube helps consumers access helpful reviews more efficiently and improves their purchase decisions.
Future Research	Future research could look into different types of data that could be extracted from YouTube to investigate the helpfulness of online video reviews. Future studies could employ machine learning and sentiment analysis techniques to reach more insights. Future research could also investigate the effect of product types in the context of online video reviews.
Keywords	review helpfulness, online reviews, video reviews, YouTube, elaboration likelihood model

INTRODUCTION

Online reviews have become a fundamental component of the online purchase process as they resemble an important source of electronic word of mouth (eWOM) through which consumers assist each other in making an informed purchase decision (Chou et al., 2022). Text-based reviews are still the dominant form of online reviews. Yet, several e-commerce websites (e.g., Yelp.com and Amazon.com) permit consumers to post textual reviews supported by multimedia in the form of pictures and videos to better assist consumers in the purchase decision-making process. The main objective of online reviews is to provide consumers with social proof of product value in a way that reduces the uncertainty and search costs associated with the purchase process. Nonetheless, the enormous number of posted online reviews could overload consumers and provide inconsistent information about the same product (Chou et al., 2022; Y. Zhou & Yang, 2019). Having to go through this number of reviews constitutes a significant search cost and cognitive effort on behalf of consumers (Mudambi & Schuff, 2010); this is why a helpfulness score is widely employed in e-commerce websites along with each textual review to indicate the helpfulness of the review from the perspective of the consumers who read the review beforehand.

Video reviews, an emerging form of online reviews, received limited attention in the literature. Compared to the more popular textual reviews, online video reviews deliver more accurate information as they include visual cues that better describe product features and specifications (Alsharo et al., 2016; Galitzki, 2016; Xu et al., 2015). In the past few years, there has been a growing trend to post video reviews on YouTube due to its popularity as the largest online video-sharing platform and the monetary incentives the reviewers receive from YouTube in exchange for the number of views (K. Park et al., 2023). YouTube provides a platform for consumer self-expression that significantly affects consumers' behavior and their relationship with the products (Pace, 2008; Xu et al., 2015). YouTube also provides unique features, including the ability to create and subscribe to channels, and allows users to interact with videos via comments, replies, and likes. Over the years, YouTube has evolved to be more than just a video-sharing platform. According to numerous website rankings services (e.g., Alexa.com, Similarweb.com), YouTube is the second most accessed website in the world, behind only Google. Therefore, it is comprehensible that consumers access YouTube to search for product reviews that support their purchase decisions. It is estimated that more than 50% of consumers watch YouTube video reviews to help them make purchase decisions (K. Park et al., 2023). However, while YouTube attracts consumers to watch video reviews, the absence of a specific feature that assists them in evaluating reviews' helpfulness presents a crucial need to examine and identify video review characteristics that indicate helpfulness. Similar to textual reviews, consumers are overwhelmed by several video reviews available for the same product. In addition, YouTube's video reviews have

unique characteristics that set them apart from textual reviews, including content, duration, reviewer identity, likes, dislikes, and number of views. These characteristics can provide inconsistent signals that affect the quality of information that consumers need to process to assess the review's helpfulness.

Investigating the characteristics that affect consumers' perception of online reviews' helpfulness continues to be a popular research hotspot; however, the majority of the previous research focused solely on investigating the characteristics of textual reviews (Baek et al., 2012; Filieri, 2015; Mousavizadeh et al., 2022; Mudambi & Schuff, 2010; Srivastava & Kalro, 2019). The characteristics of online video reviews and their effect on review helpfulness remain unclear and require further investigation. To address this gap, this study aims to identify the characteristics of YouTube videos that consumers utilize to evaluate review helpfulness. Moreover, we aim to investigate how consumers process the information they obtain from these characteristics by employing the Elaboration Likelihood Model (ELM). The ELM is a dual process theory that distinguishes between two routes for message processing and decision-making (Petty & Cacioppo, 2018). The central route assumes that message recipients have the motivation and ability to invest in a high cognitive effort and objectively process the message to reach a logical decision. In contrast, the peripheral route assumes that message recipients often make decisions based on superficial qualities without sufficient cognitive effort (Meservy et al., 2014; K. Z. K. Zhang et al., 2014). Since the emergence of computer-mediated communications, dual processing theories have become widely adopted to examine and understand how individuals process the information delivered to them via digital platforms (C. M. K. Cheung & Thadani, 2012; C. M. K. Cheung et al., 2012). In the context of online reviews, dual processing theories describe how consumers process online review information by either spending extensive cognitive effort or by applying simple decision rules based on heuristic cues (Chou et al., 2022; Mousavizadeh et al., 2022; Srivastava & Kalro, 2019; Zhu et al., 2014). The central route is identified as the review's content with specific attention to the arguments presented by the reviewer. The peripheral route is identified by the external characteristics of the review, such as presentation format, rating, votes, and source characteristics (Chou et al., 2022; Xu et al., 2015). To this end, this study seeks to answer the following research questions:

- What are the central and/or peripheral characteristics that contribute to YouTube's video review helpfulness?
- Do central and peripheral cues independently or jointly affect YouTube's video review helpfulness?

This study contributes to the online review literature in several ways. First, it is one of the few studies investigating online video reviews' helpfulness. Second, this study identifies the characteristics of YouTube's video reviews that span peripheral and central routes, which potentially contribute to review helpfulness assessment. Third, this study proposes a conceptual model based on the ELM to explore the effect of central and peripheral cues and their corresponding review characteristics on video review helpfulness. Fourth, the research findings provide implications for research and practice that advance the theoretical understanding of video reviews' helpfulness and serve as guidelines to create more helpful video reviews by better understanding the consumer's cognitive processes.

The remainder of this paper is structured as follows. The next section presents a literature review and discusses the theoretical foundation of the research. Then, the research model and the development of its corresponding hypotheses are presented. The research methodology, the data analysis, and the results follow this. Then, the study's findings are presented, which provides implications for theory and practice. Finally, we present the limitations, future research, and conclusion.

LITERATURE REVIEW AND THEORETICAL FOUNDATION

It is established in the literature that online reviews influence consumer behavior and product sales by enhancing the consumer's purchase decision-making process (C. M.-Y. Cheung et al., 2012;

Forman et al., 2008; Leong et al., 2017; K. Z. K. Zhang et al., 2014). Online reviews act as user-generated product information and eWOM that provide recommendations for potential consumers from previous ones (Aghakhani et al., 2021; D. H. Park et al., 2007). E-commerce websites encourage consumers to post reviews regarding their experience with products and services, which radically changes how consumers search and process information before purchasing a product (Biswas, 2004; Erkan & Evans, 2016; Xiao et al., 2016). Furthermore, social media websites enable consumers to post their reviews using different formats like text, photos, videos, or a combination of them, allowing for a multidimensional type of reviews that provide consumers with a holistic picture of product features and specifications (Mousavizadeh et al., 2022; Xu et al., 2015). This, in turn, entitles a greater power of social influence on consumers' purchase behavior and creates a new form of consumer communication that strengthens the effect of eWOM (Aghakhani et al., 2021; Erkan & Evans, 2016). Posting and searching for video reviews on YouTube has gained popularity among consumers as they deliver more eloquent information about products and services supported by multimedia features (Galitzki, 2016; Xu et al., 2015).

Helpful reviews assist consumers in making purchase decisions as they reduce the risk associated with the purchase process. For e-commerce websites, helpful reviews increase customer loyalty and improve their experience (Connors et al., 2011). Review helpfulness has been the focus of many studies in the literature (Baek et al., 2012; Husain et al., 2023; Mudambi & Schuff, 2010). However, the majority of this research investigated textual online reviews, while video reviews received insufficient attention. Prior research identified several factors that affect textual reviews helpfulness, including review characteristics such as rating and length (Baek et al., 2012; Cao et al., 2011; Kreashan et al., 2023; Mudambi & Schuff, 2010; Pan & Zhang, 2011), review content such as argument quality, review consistency, review valence, review sentiment, and readability (Aghakhani et al., 2021; C. M.-Y. Cheung et al., 2012; Kuan et al., 2015; Lopes et al., 2021; Mousavizadeh et al., 2022), and reviewer characteristics such as reviewer credibility, expertise, trustworthiness, and online attractiveness (C. M.-Y. Cheung et al., 2012; Connors et al., 2011; Karimi & Wang, 2017; Zhu et al., 2014; Zhuang et al., 2023). A summary of previous studies that investigated online review helpfulness is presented in Appendix A.

Despite its increasing popularity among consumers, investigating the characteristics of video reviews is still limited in the literature and requires more attention. Previous studies have indicated that presenting products in video format is more effective compared to text-based presentation (Cheng et al., 2022; J. Park et al., 2008; Xu et al., 2015). Furthermore, it is reported that video reviews significantly affect consumers' purchase decisions as they are more engaging, and consumers share them more than they share textual reviews (Cheng et al., 2022; Muda & Hamzah, 2021; Roggeveen et al., 2015). Video reviews provide an opportunity for consumers to see concrete and vivid product information and stimulate temporal and sensory experiences so that the consumer can vicariously experience the product (Xu et al., 2015). As the largest and most popular online video-sharing platform, YouTube provides several means of interaction for users as it enables them to easily create content, provide feedback about the content, and, more importantly, share the content onto various other social media platforms, which form unprecedented eWOM among users (Muda & Hamzah, 2021; Susarla et al., 2016). Similar to textual reviews, video reviews posted on YouTube have several characteristics that have to do with the video's general information, the video's content, and the reviewer's characteristics. However, video reviews offer an opportunity for consumers to relate to and acknowledge visual and nonverbal reactions to the product as reviewers describe their experience with the product (Fitriani et al., 2020; Guo et al., 2022). The visual information in video reviews takes less cognitive effort to process and commit to memory faster than verbal or written language (Xu et al., 2015). In addition, a key advantage of YouTube's video reviews is consumers' ability to better evaluate reviewers' credibility and trustworthiness compared to other forms of online reviews (Fileri et al., 2023; Muda & Hamzah, 2021).

Investigating the literature revealed that dual processing theories, mainly ELM, were the dominant theoretical background of previous studies that investigated online reviews on different online platforms (Baek et al., 2012; C. M. K. Cheung et al., 2012; C. M. K. Cheung & Thadani, 2012; Chou et al., 2022; K. Park et al., 2023). For instance, Xu et al. (2015) investigated and compared the effect of online reviews presented in three different formats (i.e., text, image, and video) on consumers' intentions to purchase from the perspective of the ELM and the cognitive fit theory. The findings illustrate that online video reviews have a significant positive influence on consumer perceptions and purchase intentions over text reviews. Srivastava and Kalro (2019) investigated the effect of review content-related factors and reviewer attribute-related factors on online review helpfulness from the ELM perspective. The study's findings indicate that the review content-related attributes such as comprehensiveness, argument quality, and valence affect the perceived helpfulness of online reviews more than reviewer attribute-related factors do.

Guo et al. (2022) investigated video review helpfulness from the perspective of the ELM to explore consumers' information processing mechanisms. They investigated the role of video characteristics in the central route (i.e., media richness, perceived expertise, and emotional appeal) and reviewer characteristics in the peripheral route (i.e., emotional trust, perceived attractiveness, and vocal attractiveness) on perceived video review helpfulness. The findings illustrate that both central and peripheral cues positively affect consumers' perceived helpfulness of video reviews. Findings from different studies also show that cues from both central and peripheral routes jointly affect consumers' perception of textual review helpfulness (Baek et al., 2012; C. M. K. Cheung et al., 2012; C. M.-Y. Cheung et al., 2012; Guo et al., 2022). C. M.-Y. Cheung et al. (2012) investigated online review credibility from the perspective of the ELM. The study's model consisted of four independent variables: one variable in the central route (i.e., argument quality) and three variables in the peripheral route (i.e., source credibility, review consistency, and review sidedness). The findings indicate that all variables in both routes had a significant effect on review credibility and that argument quality exerted the highest influence among all the variables. Moradi and Zihagh (2022) conducted a meta-analysis that investigated the factors that affect eWOM adoption and consumer behavioral intention in the literature from the perspective of the ELM. They found that both the characteristics of the review and the reviewers affect eWOM adoption on different online platforms. Furthermore, they found that the type of online platform plays a significant role in the adoption of information by consumers. That is, in e-commerce websites, the central route cues have a dominant effect on consumers' eWOM adoption and behavioral intention, while on social media platforms, the cues of the peripheral route have a stronger effect on consumers compared to e-commerce websites. Altogether, Moradi and Zihagh's (2022) findings illustrate that the effect of the central route of the ELM on eWOM adoption is stronger than the peripheral route cues, but both cues significantly affect eWOM adoption. Therefore, we argue that investigating how the characteristics of video reviews in both the peripheral and central routes affect video review's helpfulness is essential in this study.

This study aims to extend the literature on video review helpfulness by investigating the characteristics of video reviews on YouTube as the dominant online video platform. YouTube video reviews share similar characteristics with text reviews in terms of review characteristics, such as argument quality, and reviewer characteristics, such as source credibility. Yet, how consumers process the information of these characteristics is completely different between text and video, as established by Xu et al. (2015). Furthermore, YouTube provides several unique means of interaction for users as it enables them to easily create content, write comments, and like or dislike a video. With the availability of a tremendous number of video reviews on YouTube, consumers are challenged to identify helpful ones. In addition, YouTube is not a dedicated user-generated online review website and does not provide any straightforward features to assess review helpfulness, similar to the helpfulness vote in e-commerce websites. From the Economics of Information (EoI) perspective, a product's cost includes the cost of searching for information about the product (Stigler, 1961). Therefore, identifying the characteristics that provide cues regarding video reviews' helpfulness can substantially reduce consumers' search costs and aid them in selecting a convenient number of reviews to watch. After

conducting a deep and thorough investigation of online review helpfulness literature along with examining the readily available features in YouTube videos, this study posits that review popularity, number of likes, source credibility, and argument quality are important cues that affect consumers' perception of the helpfulness of video reviews on YouTube. Following the ELM, and based on the amount of cognitive effort consumers endure to process the cues obtained from the identified characteristics, we classify these factors into a central route (i.e., argument quality) and a peripheral route (i.e., review popularity, number of likes, and source credibility).

Argument quality refers to "the audience's subjective perception of the arguments in the persuasive message as strong and cogent on the one hand versus weak and specious on the other" (Petty & Cacioppo, 2018, as cited in C. M.-Y. Cheung et al., 2012). Research has consistently identified argument quality mainly for textual reviews to investigate their effect on review credibility (C. M.-Y. Cheung et al., 2012), review credibility and usefulness (Lopes et al., 2021), behavioral intention (K. Z. K. Zhang et al., 2014), and review helpfulness (Zhuang et al., 2023). It is established in the literature that online messages that have strong and informative arguments are perceived as more persuasive and could influence both review helpfulness and the purchase decision-making process (Srivastava & Kalro, 2019). Thus, it is rational to investigate the effect of argument quality on perceived video review helpfulness.

Source credibility is the consumer's perception of the expertise, capability, and trustworthiness of a review source (Moradi & Zihagh, 2022). From the information adoption model perspective, source credibility is a crucial factor that affects consumers' decision to adopt eWoM (Filieri et al., 2023; Sussman & Siegal, 2003). Previous studies have investigated the effect of source credibility on review helpfulness, review credibility, and behavioral intention in a textual review context (Baek et al., 2012; C. M.-Y. Cheung et al., 2012; K. Z. K. Zhang et al., 2014). YouTube has a significant advantage over traditional textual reviews as reviewers appear in person, have their own channels, and have an exact number of subscribers. Consequently, it is important to investigate if source credibility on YouTube affects consumers' perception of the video review's helpfulness.

Aside from the reported characteristics of online reviews in the literature, YouTube has distinct characteristics that could affect users' perception of a review's helpfulness. For instance, YouTube provides viewers with the exact number of users who watched the review beforehand, which is likely to provide indications of the review's helpfulness. That is, a helpful review is more likely to attract a larger number of views compared to less helpful reviews. We refer to this characteristic as review popularity. In the context of textual reviews, no measure indicates the exact number of consumers who read a review. Mousavizadeh et al. (2022) investigated the effect of different characteristics of text reviews on review popularity. They measured popularity as the total votes associated with a text review on Amazon. However, review popularity on YouTube profoundly differs as it is automatically generated to provide an exact number of viewers who watched the review. In an exploratory study that investigated the effect of several YouTube video characteristics on video review helpfulness, review popularity was identified as one of the factors that affect consumer perception of video review helpfulness (Alsharo et al., 2016); however, this study did not empirically test this relationship. Therefore, it is important to investigate the plausible effect of review popularity on video review helpfulness.

YouTube provides users with the opportunity to provide feedback about the video's content by pressing the like button. Khan (2017) found that liking content on YouTube is the most common form of user engagement. Munaro et al. (2021) investigated how several YouTube video features (i.e., word level elements, linguistic style, emotional valence, and video category) affect users' engagement and found that different video characteristics have positive or negative effects on the video's popularity and number of likes. This is the first study that investigates the effect of the number of likes on consumers' perception of video review helpfulness. We argue that, due to the widespread use of this feature by users as a form of interaction, it could be attributed as a significant cue to identify helpful video reviews with minimal information processing effort.

HYPOTHESIS DEVELOPMENT AND RESEARCH MODEL

This section presents the development of the research hypotheses and the theoretical research model for this study. The research hypotheses are developed around both central and peripheral evaluation of video review helpfulness. The central route in the proposed model includes one variable: argument quality. What distinguishes this variable from the other variables in the peripheral route is that it can only be assessed by watching the video review and exerting a cognitive effort to comprehend the presented information. The remaining variables of the model are proposed in the peripheral route as they could be extracted directly from the video’s webpage without the need to watch the video itself, which requires significantly less cognitive effort.

ARGUMENT QUALITY

It is established in the text review literature that argument quality is the primary factor that affects review helpfulness (C. M. K. Cheung & Thadani, 2012; Chou et al., 2022; Srivastava & Kalro, 2019). Petty and Cacioppo (2018) argue that when a message has a strong argument, it will lead to greater attitudinal differentiation. A high-quality review will typically include an explanation of the product’s specifications and present a two-sided argument that explains a product’s pros and cons (C. M.-Y. Cheung et al., 2012). To deliver a video review with a strong argument quality, the reviewer devotes a significant effort to publishing a convincing, persuasive, and informative review. This, in turn, requires consumers to put in a cognitive effort in processing the reviewer’s message, evaluate it, and decide to which extent the review was helpful. The central route corresponds to rational thinking by which consumers focus on the content of the review and evaluate its argument quality (Chou et al., 2022). Therefore, we argue that an online video review with a strong argument quality will positively affect video review helpfulness. Thus, we propose the following hypothesis:

H1: Argument quality has a positive effect on video review helpfulness

REVIEW POPULARITY

Given the enormous number of online video reviews available on YouTube, consumers are unable to watch all of them. Consequently, they rely on readily available cues that aid them in reducing their search cost and identifying the most likely helpful reviews. Among the characteristics unique to YouTube video reviews is review popularity, which refers to the number of consumers who previously watched the video review. YouTube’s sophisticated recommendation system utilizes the number of views in its search mechanism, which makes more popular video reviews easier to find and more appealing to consumers (Covington et al., 2016). Once a consumer searches for a video review, the number of views is explicitly presented next to each video, and consumers can process this number with minimal cognitive effort to compare between reviews. YouTube’s video popularity is an important metric that indicates the content’s relevance and attracts users’ attention and interest (Munaro et al., 2021). Therefore, video reviews that have a significant number of views could be perceived as more helpful as they attract many users to watch them. We argue that review popularity is among the peripheral cues of online video reviews that could affect consumers’ perception of the video review’s helpfulness. Thus, we propose the following hypothesis:

H2: Review popularity has a positive effect on video review helpfulness

NUMBER OF LIKES

Similar to all other social media websites, YouTube allows users to interact with the content in numerous ways. The easiest and most common method of interaction on YouTube is simply liking or disliking a video (Khan, 2017). Investigating why users click the like button on Facebook.com revealed two reasons: enjoyment and interpersonal relationships (Lee & Watkins, 2016). On YouTube, the number of likes is a metric of consumer engagement behavior, a form of a positive vote, and an indication of a video’s content attractiveness that influences users’ decision to watch the video

(Khan, 2017; Munaro et al., 2021). Therefore, a helpful video review with good-quality content would attract more viewers to click the like button after watching the video review, process its information, and form a positive attitude toward its content (Munaro et al., 2021). Hong and Cameron (2018) argue that the number of likes is a peripheral cue that shapes consumers' initial impressions of a review's content. We argue that the number of likes on a video review is one of the peripheral cues that consumers would utilize to evaluate video review helpfulness. Thus, we propose the following hypothesis:

H3: The number of likes has a positive effect on video review helpfulness.

SOURCE CREDIBILITY

Source credibility is a primary factor affecting the degree to which information influences consumer behavior (C. M.-Y. Cheung et al., 2012; Sussman & Siegal, 2003). It encompasses the reviewer's expertise, trustworthiness, and reputation (Moradi & Zihagh, 2022; Mousavizadeh et al., 2022; Xu et al., 2015). In a physical environment setting, consumers evaluate source credibility based on observed personal behaviors and interactions that occur over time (C. M.-Y. Cheung et al., 2012). In online environments, consumers are challenged to rely on reviews submitted by strangers, who, in most cases, they know very little about. Nevertheless, it is established in the literature that source credibility significantly affects accepting online information (Baek et al., 2012; Karimi & Wang, 2017; Moradi & Zihagh, 2022). E-commerce and dedicated review websites encourage reviewers to create profiles that are later used to rank reviewers and provide more credibility for the information they present to consumers (Karimi & Wang, 2017). Video reviews on YouTube have a significant advantage over traditional textual reviews as reviewers appear in person and create channels to which consumers can subscribe. Consequently, consumers can follow a particular reviewer and watch several reviews posted over an extended time by visiting or subscribing to his channel. Xu et al. (2015) argue that source credibility in video reviews has a stronger effect on consumer perception compared to text reviews. From an ELM perspective, source credibility is among the peripheral cues of video reviews that affect consumers' perception regarding the review's message (Guo et al., 2022). This characteristic enables consumers to familiarize themselves with different reviewers and better assess their credibility. Consequently, a video review could be perceived as more helpful when consumers perceive its reviewer to be a credible source. We argue that source credibility is among the peripheral cues of online video reviews that could affect consumers' perception of the review's helpfulness. Thus, we propose the following hypothesis:

H4: Source credibility has a positive effect on video review helpfulness.

RESEARCH MODEL

To investigate the effect of the aforementioned characteristics on YouTube's video review helpfulness, a research model based on the ELM is introduced. The conceptual research model developed based on the proposed hypotheses is shown in Figure 1. Testing and validating this model with empirical evidence is the main objective of this study. This model also aims to investigate whether consumers rely on the peripheral and central cues jointly or independently to evaluate a video review's helpfulness.

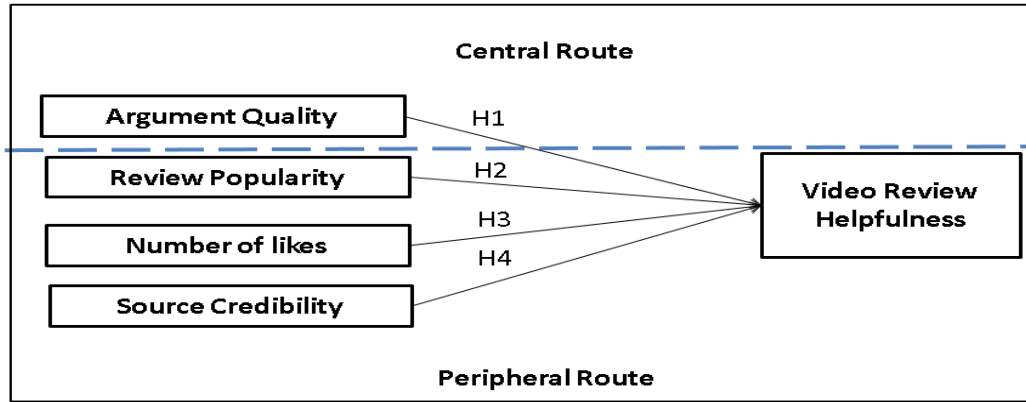


Figure 1. Research model

RESEARCH METHODOLOGY

MEASURES

This study identified four characteristics of YouTube’s video reviews, namely review popularity, number of likes, source credibility, and argument quality, and applied a quantitative approach to data collection and analysis. To accurately investigate the effect of the identified characteristics on video review helpfulness, measurement items used for collecting the data were either adapted from previously validated scales in the literature, when possible, with minimal modification to fit the context of the study, or newly developed. For instance, the items that measure the review helpfulness construct were adapted from Jiang and Benbasat (2004) and Xu et al. (2015). The items that measure source credibility and argument quality constructs were adapted from Berlo et al. (1969), C. M.-Y. Cheung et al. (2012), and Y. Zhang (1996). The items that measure review popularity and number of likes constructs were inadequately discussed in the literature and thus were newly developed following procedures recommended by Moore and Benbasat (1991), which consisted of writing a set of initial items for each construct. We then asked a group of information systems faculty members to provide feedback regarding the wording of each item. Based on the feedback, the items were revised and modified. The items were then submitted for two rounds of card sorting by a group of graduate students. Consequently, the final set of appropriate items was used in the study. A seven-point Likert scale was adopted for all the measurement scale items (see Appendix B).

DATA COLLECTION

To test our research model, an online survey was designed and administered to a convenient sample of YouTube users. Previous studies have shown that university students are good representatives for empirical studies and are constantly used in consumer behavior research (Aghakhani et al., 2021; Khan, 2017; D. H. Park et al., 2007; Xu et al., 2015). Empirical data for testing the hypotheses were mainly collected from undergraduate and graduate students in 2023. To diversify the sample, a Google form link for the survey was posted on several social media groups, such as Facebook and Instagram, with the assistance of top contributors to assure respondents that the link was not a virus or phishing. The survey explained the purpose of the study and asked participants to complete the survey based on their experience watching YouTube video reviews. The survey included control questions to test the validity of the collected data by ensuring that the respondents have the necessary experience regarding video reviews. The participants were asked to rate their experience and familiarity with YouTube video reviews on a scale of 1 to 5, with 1 denoting a lack of familiarity and 5 denoting a high level of familiarity. The subjects who lacked the experience were excluded from the study. Participation in the study was voluntary, and subjects were free to withdraw at any time before

submitting their responses. Overall, 389 surveys were retrieved, and 28 surveys were excluded from the data analysis due to incompleteness or lacking the necessary requirements.

Table 1 presents the sample demographics, which illustrates that 43% of the respondents were females, and the overwhelming majority of respondents were under the age of 45. The respondents have the necessary experience to respond to the survey with a 3.29 average familiarity score.

Table 1. Sample demographics

	Category	Frequency	Percentage
Sex	Male	205	57%
	Female	156	43%
Age	18-24	109	30%
	25-34	122	34%
	35-44	94	26%
	45 or more	36	10%
Familiarity with video reviews	Very low	25	7%
	Low	84	23%
	Moderate	97	27%
	High	73	20%
	Very high	82	23%

DATA ANALYSIS AND RESULTS

The partial least squares (PLS-SEM) technique was used for data analysis, which is a robust and commonly used technique in information systems research (Davcik, 2014; Hair et al., 2009; Qureshi & Compeau, 2009). The statistical package used for data analysis was SmartPLS version 3.3.3. The PLS-SEM technique provides two simultaneous analyses for measurement (validity and reliability) and structural model (hypotheses testing). The decision to use PLS-SEM over CB-SEM depended on the proposed research model and the characteristics of the collected data. That is, since the research's objective is prediction and theory development, PLS-SEM is recommended. Furthermore, PLS-SEM is less sensitive to non-normality in the data and more suitable for small sample sizes (Fornell & Larcker, 1981; Hair et al., 2009).

RELIABILITY AND VALIDITY

The model's constructs were tested for reliability using Cronbach's alpha and composite reliability. The results illustrated in Table 2 indicate that all the constructs show adequate values above 0.7 (Hair et al., 2009). The convergent and discriminant validity of the research model was assessed using the criteria suggested by Fornell and Larcker (1981). Accordingly, the average variance extracted (AVE) for each construct exceeds 0.50, as demonstrated in Table 2, and the square root of the AVE results demonstrated in Table 3 indicate that the model has sufficient convergent and discriminant validity. Furthermore, as demonstrated in Table 4, the standardized confirmatory factor analysis (CFA) loadings for all scale items exceed the minimum loading criterion of greater than 0.5 except for SCR1, which loaded below 0.4 and therefore was eliminated from the study as recommended by Hair et al. (2009). To account for the potential issue of multicollinearity, we evaluated the variance inflation factors (VIF). The results show that all VIF values are below the threshold of 5 (Hair et al., 2009).

Table 2. Reliability of the model

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Argument Quality	0.91	0.909	0.931	0.73
Number of Likes	0.87	0.889	0.917	0.736
Source Credibility	0.80	0.864	0.871	0.598
Review Popularity	0.74	0.914	0.845	0.658
Helpfulness	0.88	0.88	0.912	0.675

Table 3. Convergent and discriminant validities

	1	2	3	4	5
Helpfulness	0.822				
Argument Quality	0.634	0.855			
Number of Likes	0.307	0.364	0.858		
Source Credibility	0.754	0.571	0.27	0.773	
Review Popularity	0.178	0.314	0.538	0.168	0.811

Table 4. Cross loadings of measurement items

	Argument quality	Number of likes	Source credibility	Review popularity	Helpfulness
ARG1	0.832	0.239	0.659	0.117	0.514
ARG2	0.854	0.238	0.58	0.122	0.563
ARG3	0.861	0.301	0.642	0.189	0.519
ARG4	0.853	0.312	0.668	0.17	0.534
ARG5	0.873	0.227	0.676	0.161	0.577
LIK1	0.267	0.872	0.24	0.463	0.321
LIK2	0.32	0.925	0.262	0.507	0.351
LIK3	0.234	0.795	0.188	0.414	0.28
LIK4	0.223	0.834	0.229	0.456	0.292
SCR2	0.588	0.273	0.819	0.155	0.442
SCR3	0.67	0.171	0.889	0.103	0.498
SCR4	0.642	0.16	0.872	0.126	0.518
SCR5	0.7	0.188	0.831	0.062	0.456
POP1	0.195	0.532	0.187	0.903	0.263
POP2	0.159	0.492	0.146	0.94	0.332
POP3	0.023	0.201	0.03	0.525	0.095
HEL1	0.567	0.311	0.51	0.23	0.833
HEL2	0.553	0.322	0.479	0.217	0.769
HEL3	0.501	0.321	0.464	0.298	0.821
HEL4	0.467	0.241	0.425	0.23	0.843
HEL5	0.504	0.291	0.456	0.314	0.839

HYPOTHESES TESTING

The SEM results are demonstrated in Figure 2, and a summary of the hypotheses testing is presented in Table 5. The data analysis provides support for all the proposed hypotheses in the central and peripheral routes. Overall, the research model explains a considerable level of variance in the dependent variable ($R^2=44.5\%$). The results indicate that argument quality in the central route is the strongest predictor of video review helpfulness, followed by review popularity in the peripheral route. Furthermore, the results indicate that the effect of the central route on video review helpfulness is analogous to the collective effect of the variables in the peripheral route.

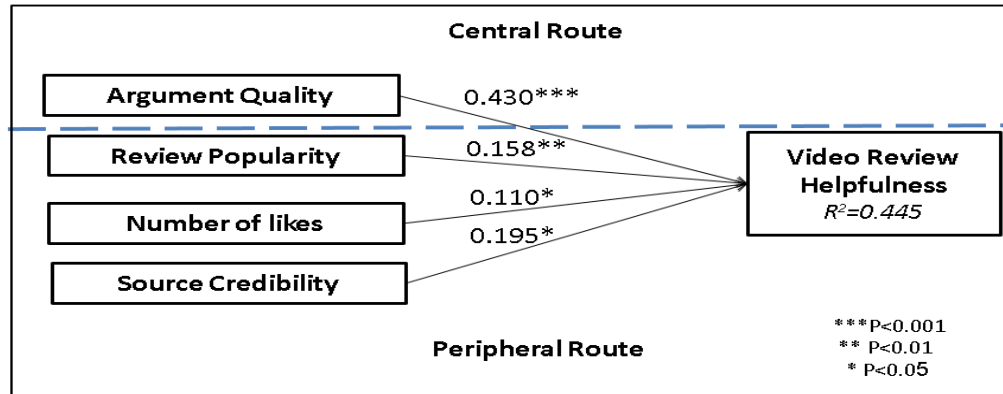


Figure 2. Hypotheses testing (PLS-SEM)

Table 5. Summary of hypotheses tests

		T Statistics	P Values	Supported
Central route	H1: Argument Quality → Helpfulness	5.322	0.000	Yes
Peripheral route	H2: Review Popularity → Helpfulness	2.989	0.001	Yes
	H3: Number of Likes → Helpfulness	1.664	0.048	Yes
	H4: Source Credibility → Helpfulness	2.288	0.011	Yes

DISCUSSION

This research aims to extend the literature on online reviews by examining the characteristics that consumers perceive to affect video reviews' helpfulness. This form of online review, which utilizes videos to describe users' experience with products, is underinvestigated in the literature. For the purpose of this study, we focused solely on video reviews published on YouTube. Following the ELM, the factors examined in this study were well-arranged along central and peripheral routes. The central route in our proposed model includes only one variable, argument quality (H1), which proposes a positive relationship between the argument quality of the review and review helpfulness. According to our results, H1 is supported ($\beta=0.430$, $P<0.001$). This result is consistent with several studies that investigated the relationship between argument quality and review helpfulness in a textual review context (C. M. K. Cheung & Thadani, 2012; Petty & Cacioppo, 2018). Our findings provide additional support for the role of argument quality by demonstrating its effectiveness in the context of video reviews and confirming that it is a major determinant of video review helpfulness. That is, more convincing, persuasive, and informative video reviews were perceived as more helpful by consumers. To assess a video review's argument quality, consumers must watch the video review and undergo a substantial cognitive effort to understand the reviewer's message and decide to what extent it helps them make an informed purchase decision. A video review with high-quality arguments should explain the product in detail, experiment with the product in the video, and demonstrate the pros and

cons of the product. Therefore, reviewers on YouTube need to deliver an argument of the highest quality so that consumers will perceive their review as helpful.

The peripheral route in our proposed model includes three variables, all of which are supported by our results. The results indicate that H2 is supported ($\beta = 0.158, p < 0.01$), which proposes a positive relationship between review popularity and review helpfulness. That is, reviews that attracted a significant number of users to watch them were perceived as more helpful by consumers compared to less popular ones. This result complements the finding of Munaro et al. (2021) in the sense that video popularity affects consumer engagement and indicates the video's content relevance. This result also provides empirical evidence for Alsharo et al.'s (2016) study, which suggested a relationship between the number of views, indicating the video's popularity and video review helpfulness. Review popularity is unique to online video reviews posted on YouTube because it is indicated in the video's attributes.

In contrast, there is no indication of the number of consumers who read text reviews. Predicting YouTube video popularity has attracted several studies in the literature (Aggrawal et al., 2020; Mousavizadeh et al., 2022; R. Zhou et al., 2016) as it is considered a crucial measure of a video's success with several implications (Halim et al., 2022). For instance, an indication of a video's success could be measured by the number of people who watched it on YouTube. Even more, the number of views on a YouTube video is used to calculate the amount of money YouTube pays a video's publisher; the more people watch a video, the more the publisher is paid. YouTube also relies on the number of views within a specific time to inform users about trending videos in different locations. In the context of video reviews, our results indicate that consumers significantly emphasize the review's popularity to assess review helpfulness. A high number of views indicates the precision and reliability of the review's content, which encompasses valuable information to aid a purchase decision. This ultimately positively affects consumers' evaluation of the video review's helpfulness and assists them in selecting potentially helpful video reviews with minimal cognitive effort. Furthermore, consumers would feel more consistent and in line with other consumers who previously selected to watch more popular video reviews (Miranda et al., 2021). Altogether, our results confirm that review popularity assists consumers in comparing videos that review the same product and selecting the most popular among them. In this sense, consumers reduce the cost of searching for information by eliminating a significant number of video reviews that they perceive to be less helpful.

According to our results, H3 is supported ($\beta = 0.110, p < 0.05$), which proposes a positive relationship between the number of likes associated with a YouTube video and review helpfulness. This result is consistent with the findings of Hong and Cameron (2018), who reported that the number of likes associated with an online review is a peripheral cue that affects consumers' perception of the review's content credibility. The number of likes gives the impression of the closest YouTube video review feature to the helpfulness vote available in textual reviews. However, in the context of textual reviews, consumers push the helpfulness button to evaluate the review's helpfulness explicitly. YouTube users could push the like button for different reasons. For example, users could push the like button because they liked the product, not the review, or because they enjoyed watching it regardless of whether it was helpful (Lee & Watkins, 2016). Investigating consumer engagement on YouTube, Munaro et al. (2021) found that the analytical thinking style of the reviewer does not affect the number of likes, while at the same time, they reported that the number of likes is highly associated with the subjective attributes of the reviewers such as their feelings and opinions. In their investigation of the visual and vocal characteristics that affect video review helpfulness, K. Park et al. (2023) used different measures for video review helpfulness, such as the ratio of likes count to the total likes and dislikes count, likes per view, and comment positivity. Using these measures provides additional evidence that we cannot rigorously utilize the number of likes as helpfulness votes. Therefore, we recommend that YouTube provide a helpfulness button dedicated to video reviews for consumers to rely on to assess the helpfulness of an online video review.

According to our results, H4 is supported ($\beta = 0.195$, $p < 0.05$), which proposes a positive relationship between the video review's source credibility and review helpfulness. This indicates that consumers perceive a video review posted by well-known and credible reviewers as a helpful review. This result is consistent with previous studies that reported a positive effect of source credibility on review helpfulness, review credibility, and behavioral intention in a textual review context (Baek et al., 2012; C. M. K. Cheung & Lee, 2012; Kuan et al., 2015; K. Z. K. Zhang et al., 2014). This result also emphasizes the significant effect of the reviewer's credibility in terms of expertise, trustworthiness, and reputation on consumers' perception of video review helpfulness. For many years, online consumers were challenged with having to rely on textual reviews written by anonymous strangers with little to no information about their personality and expertise. E-commerce and review-dedicated websites tried to overcome this limitation by asking reviewers to create profiles to provide credibility to their reviews (Karimi & Wang, 2017). These websites even created ranking systems to portray more contributing reviewers as more credible.

Nevertheless, it is confirmed that many textual reviews were hoaxes generated by numerous non-credible sources to boost sales of certain products by posting deceiving reviews (Petrescu et al., 2022). Source credibility in video reviews has different unique features that overcome many of the limitations of textual reviews as reviewers expose their identity to consumers by appearing in person in videos and interacting with products being reviewed to demonstrate their features. Moreover, reviewers on YouTube create channels, and consumers can search through these channels, judge reviewers' knowledge, and subscribe to the channels they trust the most. Repeated exposure to online reviewers would develop a one-sided relationship, which ultimately results in the reviewers being perceived as a trusted source of product information (Lee & Watkins, 2016). In this sense, online video reviews are the closest to the traditional WOM in which consumers seek product information from other people they perceive to be credible. Source credibility is hypothesized in the peripheral route of the proposed model because consumers can evaluate it without watching the video review, thus requiring minimal cognitive effort to assess the review's helpfulness.

In addition to investigating the characteristics that affect consumers' perception of video review helpfulness, this study also aimed to investigate the effect of the central and peripheral route cues. This involves investigating whether the central and peripheral cues independently or jointly affect YouTube's video review helpfulness. On this basis, H1 was proposed in the central route, and hypotheses H2-H4 were proposed in the peripheral route. The obtained results provide further interesting implications since hypotheses from both routes were supported. The peripheral route's constructs jointly explain 0.463 of the variance in review helpfulness, while argument quality in the central route explains 0.430 of the variance. Altogether, the peripheral and central cues of the proposed model managed to explain 44.5% of the variance in the dependent variable, video review helpfulness. These results provide additional support for the argument in dual process theories literature regarding how individuals process peripheral and central cues. The two routes are not mutually exclusive, and cues can be processed in parallel or consecutively. Based on these results, we conclude that, in the context of video reviews, the effect of the peripheral route constructs collectively is close in magnitude to the effect of the central route construct. These findings are consistent with previous studies in the literature that concluded a significant effect of both central and peripheral cues on review helpfulness and that the effect of the central route of the ELM is stronger than the peripheral route cues (C. M.-Y. Cheung et al., 2012; Guo et al., 2022; Moradi & Zihagh, 2022).

Online reviews are utilized in the information search and evaluation of alternatives stage of the consumer decision-making process (Mudambi & Schuff, 2010). Our results indicate that consumers initially rely on peripheral information of a review for minimal processing effort to evaluate alternatives. Then, they rely on central information that requires more effort but with fewer alternatives to decide on review helpfulness (Baek et al., 2012). Consequently, consumers should consider both peripheral and central information to determine a review's helpfulness.

IMPLICATION TO THEORY AND PRACTICE

This study provides several important implications for both research and practice. From a research perspective, this study has the following implications. First, this is one of the few studies investigating a growing trend in online reviews: that of video reviews. Previous research in the literature primarily focused on investigating the characteristics that affect textual reviews' helpfulness; this research enriches the literature and offers insights for future studies. Second, building on the foundation of the dual processing theories, this study extends the application of the ELM in the literature to online video reviews, mainly reviews posted on YouTube. The current study also contributes to the literature by investigating how the central and peripheral cues and their corresponding video review characteristics jointly affect consumers' perception of video review helpfulness. Third, the empirical evidence regarding the effect of argument quality and source credibility on review helpfulness confirms the findings from previous studies in the literature that the characteristics of both the review and the reviewer are important in evaluating online review helpfulness (Connors et al., 2011; Galitzki, 2016).

From a practitioner's perspective, this study provides several implications. First, while YouTube provides categories of posted videos (e.g., games, entertainment, comedy), there is no dedicated category for video reviews. Hence, taking into consideration the tremendous amount of video reviews posted on YouTube and their influence on consumers, it would be beneficial for consumers to have a dedicated category for reviews. Second, creating a dedicated category for video reviews would enable YouTube to provide a specific feature for consumers to indicate the helpfulness of a video review, similar to the helpful vote button in textual reviews. Third, the findings of this study can be utilized in YouTube's recommendation system to suggest more helpful video reviews for consumers. Fourth, the findings of this study assist online reviewers in creating helpful online video reviews following the findings of this study. Mainly, video review content creators have to be cognizant of the impact of both the central and the peripheral cues on consumers' perception of the video review's helpfulness. Consequently, reviewers need to provide more appealing and convincing argument quality, work toward improving their credibility, and understand the factors that contribute to video popularity to gain more attention from consumers. Fifth, as the number of video reviews grows, consumers could benefit from the findings of this study by better identifying helpful video reviews that reduce their search costs and assist them in making a more informed purchase decision.

CONCLUSION, LIMITATIONS, AND FUTURE RESEARCH

Video reviews posted on YouTube are an emerging form of online reviews, which have the potential to be more helpful than textual reviews. However, YouTube does not provide a specific feature that indicates a review helpfulness similar to the helpfulness vote in e-commerce websites. Investigating video reviews' helpfulness received inadequate attention in the literature, which predominantly focuses on investigating the helpfulness of textual online reviews. Thus, investigating online video reviews extends the online review literature, provides valuable insights for research and practice, and opens the door for further research in this area. This study aimed to identify the characteristics of YouTube videos that consumers depend upon to assess video review helpfulness and to understand how consumers process the information they gain from these characteristics.

Addressing the first research question of this study (What are the central and/or peripheral characteristics that contribute to YouTube's video review helpfulness?), we identified four characteristics of YouTube videos that consumers could utilize to evaluate video review helpfulness classified into peripheral and central routes. Precisely, we introduced a theoretical model based on the ELM that investigated the effect of argument quality in the central route and the effect of review popularity, number of likes, and source credibility in the peripheral route on consumers' perception of YouTube's video review helpfulness. The results illustrated that argument quality in the central route is the primary factor affecting video review helpfulness, which is consistent with previous research

that investigated textual review helpfulness. As for the peripheral route, the results illustrated that review popularity, the number of likes, and source credibility significantly affect consumers' perception of video review helpfulness. Addressing the second research question (Do central and peripheral cues independently or jointly affect YouTube's video review helpfulness?), based on the comparable effect magnitude of the central and peripheral routes of the model on video review helpfulness, our results indicated that consumers examine both peripheral and central cues to evaluate alternatives and watch the most helpful reviews. Both routes are essential when consumers process the information of a YouTube video to reach a perception of a video review's helpfulness.

This study has a few limitations. For instance, we relied on self-reported data to test our proposed model. Future research could look into different types of data that could be extracted from YouTube to investigate the helpfulness of online video reviews. Future studies could employ machine learning and sentiment analysis techniques to reach more insights. A second limitation of this study is that it only investigated video reviews posted on YouTube, which raises a generalizability issue. Future research may consider extending our findings to other online platforms, such as Instagram and TikTok. A third limitation of this study is that reviews posted on YouTube span a large variety of products, including technology, entertainment, and toys, among other things. Mudambi and Schuff (2010) argue that product type affects online review helpfulness as they distinguish between two types of products: search products and experience products. Future research could investigate product types in the context of online video reviews.

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APPENDIX A. SUMMARY OF RELATED LITERATURE

Reference	Independent variable(s)	Dependent variable(s)	Review type	Methodology
Mudambi and Schuff (2010)	<ul style="list-style-type: none"> Review extremity Review depth 	<ul style="list-style-type: none"> Review helpfulness 	Text	The economics of information
Connors et al. (2011)	<ul style="list-style-type: none"> Review characteristics Reviewer characteristics 	<ul style="list-style-type: none"> Review helpfulness 	Text	A multi-method approach
Pan and Zhang (2011)	<ul style="list-style-type: none"> Review characteristics Product type Expressed reviewer characteristics 	<ul style="list-style-type: none"> Review helpfulness 	Text	Content analysis
Baek et al. (2012)	<ul style="list-style-type: none"> Rating inconsistency Reviewer credibility Word count Negative words Word count 	<ul style="list-style-type: none"> Review helpfulness 	Txt	ELM, Heuristic-Systematic Model of information processing (HSM)
C. M.-Y. Cheung et al. (2012)	<ul style="list-style-type: none"> Argument quality Source credibility Review consistency Review sidedness 	<ul style="list-style-type: none"> Review credibility 	Text	ELM
Kuan et al. (2015)	<ul style="list-style-type: none"> Review content Review valence Review extremity Reviewer credibility 	<ul style="list-style-type: none"> Review voting Review helpfulness 	Text	EIM
K. Z. K. Zhang et al. (2014)	<ul style="list-style-type: none"> Source credibility Argument quality Perceived quantity of the review 	<ul style="list-style-type: none"> Behavioral intention 	Text	HSM
Zhu et al. (2014)	<ul style="list-style-type: none"> Review readability Review length Reviewer expertise Reviewer online attractiveness 	<ul style="list-style-type: none"> Review helpfulness 	Text	ELM
Xu et al. (2015)	<ul style="list-style-type: none"> Reviewer characteristics Review characteristics 	<ul style="list-style-type: none"> Purchase intention 	Video	ELM, cognitive fit theory
Alsharo et al. (2016)	<ul style="list-style-type: none"> Review popularity Comments Video information Review depth 	<ul style="list-style-type: none"> Review helpfulness 	Video	Factor analysis

Reference	Independent variable(s)	Dependent variable(s)	Review type	Methodology
Jing et al. (2016)	<ul style="list-style-type: none"> • Certainty • Expertise • Popularity • Status 	<ul style="list-style-type: none"> • Review usefulness 	Text	Poisson regression model
Karimi and Wang (2017)	<ul style="list-style-type: none"> • Review attributes • Reviewer attributes 	<ul style="list-style-type: none"> • Review helpfulness 	Text	Social presence theory
Srivastava and Kalro (2019)	<ul style="list-style-type: none"> • Peripheral review factors • Central review content manifest factors • Central review content latent factors 	<ul style="list-style-type: none"> • Review helpfulness 	Text	ELM
Aghakhani et al. (2020)	<ul style="list-style-type: none"> • Rating inconsistency • Review inconsistency 	<ul style="list-style-type: none"> • Review usefulness 	Text	ELM
Aghakhani et al. (2021)	<ul style="list-style-type: none"> • Rating inconsistency • Review consistency 	<ul style="list-style-type: none"> • Review usefulness 	Text	ELM
Lopes et al. (2021)	<ul style="list-style-type: none"> • ArgumentsStrength • Review sidedness • Writing quality • Number of arguments • Number of reviews • rated review usefulness • summary review rating 	<ul style="list-style-type: none"> • review credibility • review usefulness 	Text	ELM
Munaro et al. (2021)	<ul style="list-style-type: none"> • Word level elements • Linguistic style • Emotional valence • Category video content 	<ul style="list-style-type: none"> • Number of views • Number of likes • Number of dislikes • Number of comments 	Video	ELM
Guo et al. (2022)	<ul style="list-style-type: none"> • Media richness • Perceived expertise • Emotional appeal • Emotional trust • Perceived attractiveness • Vocal attractiveness 	<ul style="list-style-type: none"> • Perceived helpfulness 	Video	ELM
Mousavizadeh et al. (2022)	<ul style="list-style-type: none"> • Review extremity • Review length • Title sentiment • Utilitarian cues • Hedonic cues • Review sentiment • Readability 	<ul style="list-style-type: none"> • Review popularity • Review helpfulness 	Text	ELM
Moradi and Zihagh (2022)	<ul style="list-style-type: none"> • eWOM usefulness • Perceived informativeness • Message quality • eWOM credibility • source trustworthiness • source expertise • Tie strength • Platform type 	<ul style="list-style-type: none"> • eWOM adoption • Behavioral intention 	Text	ELM meta-analysis

Reference	Independent variable(s)	Dependent variable(s)	Review type	Methodology
K. Park et al., (2023)	<ul style="list-style-type: none"> • Visual variation • Brightness • Face presence • Positive emotion • Speech rate • Voice pitch • Word count • Total votes 	<ul style="list-style-type: none"> • Review helpfulness 	Video	Media richness theory Multimedia learning theory
Zhuang et al. (2023)	<ul style="list-style-type: none"> • Argument quality • Source reliability 	<ul style="list-style-type: none"> • User-generated content more helpful on social media platforms 	Text	Information adoption model

APPENDIX B. MEASUREMENT ITEMS

Argument Quality (adapted from Y. Zhang, 1996)

I think that online video review arguments should be convincing.

I think that online video review arguments should be strong.

I think that online video review arguments should be persuasive.

I think that online video review arguments should be good.

I think that online video review arguments should be informative.

Review Popularity

POP1: I think that the number of views of a YouTube video helps me select the reviews to watch.

POP2: I think that a YouTube video review that has a high number of views is good.

POP3: I think that the number of views is an important measure of the review's relevance

POP4: I think that the number of views is an indication of the review's content quality.

Number of Likes

LIK1: I think that the number of likes of a video review on YouTube is a rating of the review's content.

LIK2: I think that YouTube's video reviews that have a high number of likes are more informative.

LIK3: I think that the number of likes on a YouTube video review is social proof of the reviews' content

LIK4: I regularly check the number of likes before watching a video review on YouTube.

Source Credibility (adapted from Berlo et al., 1969, and C. M.-Y. Cheung et al., 2012)

SCR1: I think that online video reviewers should be reputable.

SCR2: I think that online video reviewers should be trustworthy.

SCR3: I think that online video reviewers should be competent.

SCR4: I think that online video reviewers should be experts.

SCR5: I think that online video reviewers should be knowledgeable.

Review Helpfulness (adapted from Jiang & Benbasat, 2004, and Xu et al., 2015)

HEL1: I think that online video reviews improve my ability to make a purchase decision.

HEL2: I think that online video reviews help me in judging the quality of products.

HEL3: I think that online video reviews help me with the overall evaluation of products.

HEL4: I think that online video reviews help me familiarize myself with products.

HEL5: I think that online video reviews help me find useful information about products.

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