

Arkansas Tech University

## Online Research Commons @ ATU

---

Faculty Publications -School of Business

School of Business

---

1-2021

### Social Media Gains Importance after the COVID-19

Andrew N. Mason

Arkansas Tech University, [amason@atu.edu](mailto:amason@atu.edu)

John Narcum

Arkansas Tech University, [jnarcum@atu.edu](mailto:jnarcum@atu.edu)

Kevin Mason

Arkansas Tech University, [kmason@atu.edu](mailto:kmason@atu.edu)

Follow this and additional works at: [https://orc.library.atu.edu/faculty\\_pub\\_bus](https://orc.library.atu.edu/faculty_pub_bus)



Part of the [Business Commons](#)

---

#### Recommended Citation

Mason, Andrew N.; Narcum, John; and Mason, Kevin, "Social Media Gains Importance after the COVID-19" (2021). *Faculty Publications -School of Business*. 93.

[https://orc.library.atu.edu/faculty\\_pub\\_bus/93](https://orc.library.atu.edu/faculty_pub_bus/93)

This Article is brought to you for free and open access by the School of Business at Online Research Commons @ ATU. It has been accepted for inclusion in Faculty Publications -School of Business by an authorized administrator of Online Research Commons @ ATU. For more information, please contact [cpark@atu.edu](mailto:cpark@atu.edu).



## Social media marketing gains importance after Covid-19

Andrew N. Mason, John Narcum & Kevin Mason |

To cite this article: Andrew N. Mason, John Narcum & Kevin Mason | (2021) Social media marketing gains importance after Covid-19, Cogent Business & Management, 8:1, 1870797, DOI: [10.1080/23311975.2020.1870797](https://doi.org/10.1080/23311975.2020.1870797)

To link to this article: <https://doi.org/10.1080/23311975.2020.1870797>



© 2021 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 11 Jan 2021.



Submit your article to this journal [↗](#)



Article views: 96861



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 25 View citing articles [↗](#)



Received: 8 October 2020  
Accepted: 6 December 2020

\*Corresponding author: Andrew N. Mason, Medicine, Juntendo University, Japan  
E-mail: [m.andrew.at@juntendo.ac.jp](mailto:m.andrew.at@juntendo.ac.jp)

Reviewing editor:  
Usama Awan, Industrial Engineering and Management, Lappeenranta University of Applied Sciences, Finland

Additional information is available at the end of the article

## MARKETING | RESEARCH ARTICLE

# Social media marketing gains importance after Covid-19

Andrew N. Mason<sup>1\*</sup>, John Narcum<sup>2</sup> and Kevin Mason<sup>2</sup>

**Abstract:** This exploratory research examines how the COVID-19 pandemic led to increases in consumers' social media marketing behaviors in the United States (U.S.). Previous research on the impact of a pandemic has focused on behavior for preventive health, however, little attention has been given to the impact of a pandemic on consumer behaviors. To bridge this gap, the Consumer Decision-Making Model was used as a framework to investigate changes in consumers' social media behaviors as they perform various consumer decision-making processes. More specifically, a questionnaire was used to collect survey data from 327 U.S. consumers. Analysis of Variance tests were performed to examine mean differences in consumers' use of social media as a consumer decision-making tool. The findings showed that consumers have increased their utilization of social media as a tool for identifying products, collecting information on products, evaluating products, and making product purchases. Thus, the findings demonstrate the growing importance of social media marketing since the COVID-19 pandemic began. Given that the COVID-19 pandemic is a global phenomenon, the findings likely can be extrapolated across many nations. Suggestions are provided to help businesses adopt to changes in consumers' social media behaviors as they relate to the consumer decision-making processes.



Andrew N. Mason

### ABOUT THE AUTHOR

Andrew N. Mason is Assistant Professor in the School of Medicine at Juntendo University in Tokyo, Japan. Andrew's research interests are in the merged disciplines of medicine and business. Andrew has published articles in several journals including the *Journal of Customer Behaviour* and the *Journal of Applied Financial Research*.

John Narcum is Assistant Professor of Marketing at Arkansas Tech University in the USA. John's research interests include social media marketing, non-profit marketing, and consumer behavior. John has published in a variety of journals including *Business Strategy and the Environment*, and the *Review of Business Research*.

Kevin Mason is Professor of Marketing at Arkansas Tech University in the USA. Kevin's primary research interest is examining how consumers process marketing information to formulate product evaluations. Kevin has published in the *Journal of Consumer Marketing*, *Journal of Marketing Theory and Practice*, and the *Journal of Customer Behaviour*.

### PUBLIC INTEREST STATEMENT

Social media platforms have transformed consumer decision-making behaviors. COVID-19 health-care concerns have increased the value of online consumer behaviors and, thus, enhanced the role of social media as a marketing tool. Consumer behaviors are a function of a variety of factors which emerge from various disciplines, including marketing, economics, psychology, and health. As such, this topic of research is multi-disciplined, and it invites scholars from various disciplines to discuss the ideas presented and hopefully will encourage future research across multiple fields. The current research focused on how the COVID-19 pandemic served as a catalyst for increasing the importance of consumers' social media behaviors on marketing operations. Understanding the impact of this pandemic is important because of its potential to make structural changes in businesses' marketing operations.

**Subjects: Sales; Consumer Behaviour; Marketing Communications; Retail Marketing**

**Keywords: COVID-19; coronavirus; social media; consumer behaviors**

## 1. Introduction

Early in 2020, the U.S. began to experience a healthcare pandemic from a novel coronavirus commonly known as COVID-19. Previous research on the impact of a pandemic has focused on behavior for preventive health, however, little attention has been given to the impact of a pandemic on consumer behaviors. To bridge this gap, the Consumer Decision-Making Model was used as a framework to investigate changes in consumers' social media behaviors that have occurred since the COVID-19 pandemic was declared. Investigating the impact of this pandemic on consumers' social media marketing behaviors is important because recent findings indicate that the pandemic is having significant and structural impacts on consumers' purchase behaviors (Mason, *In Press*), as well as their decision-making processes (Mason et al., *in press*), which could result in significant changes in marketing practices. More specifically, Mason et al., *in press* analyzed changes in U.S. consumer decision-making behaviors since the start of the COVID-19 pandemic and found that the COVID-19 pandemic altered consumers' product needs, shopping and purchasing behaviors, and post-purchase satisfaction levels. With public healthcare concerns and governmental COVID-19 pandemic mitigation policies, the role and impact of social media as a marketing tool stands to increase in importance because, at a time when social distancing is a common practice, social media offers avenues for consumers to interact with others without having physical contact. As such, COVID-19 will likely also result in shifts in consumers' use of social media during consumer behaviors. Therefore, businesses may find new opportunities to gain competitive advantage through their use of effective social media marketing strategies.

While research is sorely needed to understand the healthcare and macro-economic implications of COVID-19, marketing research is also needed to examine the impacts of COVID-19 on consumers' behaviors. For example, with restrictions on personal contact and other pandemic mitigation policies, consumers may alter their decision-making behaviors, such as behaviors related to shopping and product acquisition, as well as their post-purchase behaviors.

COVID-19 is a recent phenomenon, therefore, little has been published of its impact on social media marketing behavior in the U.S. This paper explores the role that social media plays in the consumer decision-making process. The authors hypothesize that social media marketing behaviors have shifted due to the COVID-19 pandemic. The current research focused on the U.S. economy because it is the largest consumer spending economy in the world and the COVID-19 pandemic has significantly impacted U.S. healthcare.

## 2. Literature review

Laato et al. (2020) provided a summary of the literature on the impact of pandemics on human behavior and found that researchers have given little attention to a pandemic's impact on consumer behavior. Rather, research has primarily focused on pandemic impacts on behavior for preventive health. The COVID-19 pandemic provides an opportunity to gain valuable consumer behavior insights during a situation of consumer uncertainty about how to react. Thus, the current study sheds light on how consumers' social media behaviors have shifted since the pandemic emerged.

Understanding how the COVID-19 pandemic impacts consumers' social media behaviors can be framed with the S-O-R Theory (Mehrabian & Russell, 1974) and the Consumer Decision-Making Model (Nicosia, 1982). The S-O-R Theory is an environmental psychology-based explanation for how external stimuli can impact behavior (Laato et al., 2020; Xu et al., 2014). Mehrabian and Russell (1974) developed the S-O-R framework, which states that an external stimuli (S) affects an organism (O) leading to a behavioral response (R). Kumar et al. (2020) used S-O-R to explain moderators of consumer behaviors and found that the model is useful for explaining how external

stimuli (S) can affect consumers' (O) affective and cognitive processes, thus, impacting consumer behaviors (R). Regarding the impact of COVID-19 on consumers' behaviors, COVID-19 news would serve as an external stimuli. As such, S-O-R Theory provides justification for how the COVID-19 pandemic can change consumers' perceptions and behaviors.

Nicosia's Consumer Decision-Making Model is used to examine the types of behavioral changes that are impacted by the COVID-19 pandemic. More specifically, consumers operationalize behaviors as they engage in the consumer decision-making processes. Nicosia proposed a model to explain and research the processes involved in consumer decision-making which consists of five stages, or behaviors, related to the identification of product needs, product information searches, alternative product evaluations, purchase decisions, and post-purchase behaviors (Nicosia, 1982). Figure 1 provides an illustration of the consumer decision-making processes.

### 2.1. Social media marketing

In recent years, the use of social media has increased significantly (Thota, 2018), and the COVID-19 pandemic has accelerated social media use among U.S. adults (Samet, 2020). Furthermore, the growth of social media platforms has transformed the dynamics of the electronic marketplace by creating social networks of consumers, opinion leaders, and field experts. Kumar et al. (2020) illustrated the importance of social media marketing when they found that integrated marketing promotional messages can be effective at influencing consumers' perceptions about product image and lead to consumption behaviors.

There are various reasons that people are attracted to social media. Based upon Uses and Gratification Theory, Malik et al. (2016) examined benefits that Facebook users' derived from social media activity. Specifically, from their online survey of 368 Facebook users, they identified six different types of gratifications achieved from sharing photos. They found that user gratification can result from affection, attention seeking, habit, information sharing, disclosure, and social influence.

In addition, Agarwal and Karahanna (2000) found that when users are deeply involved in information technology, they experience a state of cognitive absorption (CA). Agarwal and Karahanna (2000) found that CA draws users into the use of social media for a variety of reasons. For one, social media offers temporal dissociation, which limits the user's awareness of the time passing. Also, social media provides users with focused immersion, which allows the user to escape life's unpleasant realities. Third, social media can provide heightened enjoyment from successful interactions between the user and the software. Fourth, social media provides the user with a sense of control, and lastly, it can satisfy users' curiosity by providing novelty and amazement.

While use of social media is appealing to many, it can have negative effects on the mental health of the population. For instance, in studying adolescents in India, Dhir et al. (2018) found that social media fatigue may result from uncontrolled use of such platforms, and that social media fatigue may lead to increased levels of anxiety and depression. Nevertheless, social media is increasingly being used to facilitate communications between businesses and consumers (Knowles et al. (2020)). Kumar et al. (2020) illustrated the importance of social media in marketing when they found that integrated marketing promotional messages can be effective at influencing consumer perceptions about product image and lead to consumption behaviors. The following literature review sections provide a brief discussion on how social media fits into the Consumer Decision-Making Model, which is illustrated in Figure 1.

Figure 1. Consumer decision-making model.



## **2.2. The role of social media in identifying product needs**

The first stage of the consumer decision-making process is the realization of a product need. A product need is activated when a consumer's actual state and desired state of being become incongruent (Bruner, 1987). Consistent with S-O-R Theory, when external stimuli, such as promotional material, other consumers, product packaging, etc. are noticed by a consumer, they may perceive that they have an unmet need and become motivated to seek additional information to resolve the perceived need. For example, consider a health-conscious female consumer who is exposed to online information about health-related issues and discovers that many Americans lack sufficient vitamins and minerals in their diet. This information may cause the consumer to perceive a discrepancy between her perceived state (insufficient health) and her desired state (improved health). As a result, the consumer may develop a felt need (i.e., problem recognition) that is sufficiently strong as to lead her to seek a product solution.

Thota (2018) argues that businesses can use social media to activate consumers' product needs by triggering brand conversations that promote positive perceptions about products, services, or ideas. For example, consider Starbucks. While the brand has a global presence, Starbucks continues to engage the marketplace with social media to generate felt needs (i.e. problem recognition) by sustaining consumers' brand awareness. In addition, Starbucks consistently deploys virtual messaging to promote consumers' preference for their brand in the marketplace.

Social media is a powerful tool for message exposure. Thota (2018) found that 93% of U.S. businesses use Facebook and other platforms, such as Twitter and LinkedIn. As such, social media provides businesses with virtual avenues to enhance consumers' product/brand awareness. Social media platforms are also used for consumer-to-consumer interactions to share their product/brand experiences (Thota, 2018). As such, social media offers businesses a means to generate brand awareness for their products or services. For example, using owned media, businesses can post brand content related to their products and services. Awareness and excitement for brands can also be generated with paid media, such as boosted Facebook posts, in order to activate recognition of a need/problem that the brand can resolve. In addition, posts by consumer peers and opinion leaders can provide brand influencing stimuli. For example, Jashari and Rrustemi (2017) assert that "every photo, video, comment, review, and other content posted on social media, to which consumers are exposed, plays the role of stimulus (incentives) in recognizing a new need" (p. 4). Thus, companies may also encourage customers to post-product purchases in hopes of activating the product need stage within consumers.

Utilization of macro-influencers to help build product awareness is also a common practice among businesses attempting to build brands on social media. Businesses can hire elite influencers (e.g., celebrities and athletes) to post-favorable information about their products (Wertz, 2019). This practice is effective because many highly paid macro-influencers (i.e., opinion leaders) have millions of followers on their social media platforms. All such content posted by these opinion leaders has the potential to influence the consumer decision-making process.

## **2.3. The role of social media in product information searches**

The second stage of the consumer decision-making process occurs when a consumer conducts a product information search. In other words, upon activation of a perceived need, the consumer is motivated to gather information concerning a way to satisfy the need. During this process, consumers become aware of the relative features of competing brands or products. Consumers sometimes initiate the information search process by asking influencers (i.e., opinion leaders) in their network for product or service recommendations. Positive brand content, developed by a business, can be met with skepticism. However, peer product reviews are viewed more favorably because they are considered more credible than information provided by the marketer (Jin & Lee, 2014; Sher & Lee, 2009).

The level of importance a consumer places upon a product is referred to as the consumer's involvement with the product. A consumer's involvement with a given product moderates the way

they process the information provided in a consumer review. Sher and Lee (2009) conducted an experiment with 278 subjects and found that highly involved consumers engage in formal, detailed analysis of product information (i.e., elaborate processing), whereas less involved consumers are more persuaded by the quantity of reviews provided by other consumers (i.e., reliance on peripheral cues).

If the consumer has a low involvement need, then s/he will exert little effort during the information search. More specifically, when involvement is low, the consumer is likely to process information through peripheral routes and rely on cues as opposed to investigating more detailed product-specific information (Cacioppo et al., 1986). The use of cues such as colors, images, and sounds are salient factors for gaining consumers' attractions when they are in a low involvement situation.

However, consumers who are highly involved with a given product or purchase activity are motivated to engage in elaborate information searches. That is, the consumer is prone to seek out detailed information from multiple sources and acquire information through product trial experiences (Beatty & Smith, 1987). In the high involvement situation, consumers are inclined to directly engage with potential influencers (e.g., opinion leaders, friends, sales staff, other consumers, etc.). To increase messaging impact, higher levels of consumer involvement are necessary. Increased consumer involvement can be achieved with high-quality, unusual, or entertaining communication among buyers and sellers through multiple social media channels (Liu & Arnett, 2000; Rambe & Retumetse, 2017).

#### **2.4. The role of social media in evaluating product alternatives**

During stage three of the consumer decision-making process, consumers' evaluate product and brand choices from a set of considered options, commonly referred to as the evoked set. That is, after consumers complete the information search, they create a mental conceptual map of the alternative products that might reduce or eliminate their recognized need (Bettman, 1979; Howard & Sheth, 1972; Jacoby, 1975; Phillips et al., 1995). To arrive at an evoked set, consumers use a number of decision heuristics, or rules of thumb, to evaluate the product options. Potential heuristics include the lexicographic rule, the conjunctive rule, and the compensatory rule (Srinivasan, 1987; Wright, 1972). Using the lexicographic rule, consumers look for the product that performs the best on the attribute that is perceived to be most important. For example, price is sometimes used by consumers looking for the least expensive product alternative. A consumer uses a conjunctive heuristic to eliminate product options that are perceived as performing poorly on a salient attribute. For example, product style/fashion may be so important to the consumer that s/he only considers a product that is perceived to be stylish/fashionable, even if it does not perform well on other desirable characteristics, such as price or comfort. Consumers use the compensatory rule when they seek the best "overall" performing product. With the compensatory rule, the consumer will consider multiple product attributes, such as price, durability, and style. Then, the consumer mentally creates a weighted average performance rating across the set of attributes for each product in the evoked set.

Businesses can utilize social media strategies to create favorable information and resolve concerns relevant to the consumers' decision criteria. Social media affords a business with the ability to have two-way conversations with customers. Potential consumers can comment on product/brand posts or directly contact the business with direct messaging to obtain more information on product offerings. For instance, consumers can use social media to ask questions about products. In turn, the business can directly respond to the consumer questions/concerns on the same post.

#### **2.5. The role of social media in purchase decisions**

During the fourth stage of the Consumer Decision-Making Model, the consumer makes a purchase decision. While, the primary strength of social media is to build awareness for products and services, some platforms allow consumers to make direct purchases. However, for many businesses, the degree to which consumers have purchased from such platforms has been

disappointing. For example, Halzack (2016) found only 1.8% of online U.S. sales during the 2015 holiday shopping season were made on social media platforms. Nevertheless, it seems intuitive that as social media platforms evolve with greater capabilities, their use for purchases will also increase.

An important factor related to the purchase decision is the consumer's perceived risk that a given product will not deliver as desired. Pre-COVID-19, consumers typically addressed their perceived risk by seeking product validation from family, friends, perceived experts, and opinion leaders (Delener, 1990; Voyer & Ranaweera, 2015). However, the COVID-19 pandemic has restricted consumers' ability to directly contact their social influencers. Fortunately, social media platforms allow consumers to interact with a greater number of consumers without the need to make physical contact. Therefore, in the COVID-19 pandemic environment, social media may play an increased role in consumers' engagement with influencers as they seek to reduce their perceived risk. In other words, the role of social media for purchase decision behaviors is likely to increase.

### **2.6. The role of social media in post-purchase behaviors**

In the final stage of the Consumer Decision-Making Model, the consumer engages in post-purchase processes, such as formulating purchase satisfaction or dissatisfaction emotions. Consumers' level of satisfaction is a key element in the development of consumers' relationships and repeat purchase behaviors, otherwise known as customer loyalty (Shemwell et al., 1998; Spreng et al., 1996). Often when consumers are dissatisfied with a purchase, they do not express why they are dissatisfied. Rather, they shift their future consumer shopping and/or purchase behaviors towards other options. Social media offers a method whereby consumers can express shopping and purchase satisfaction or dissatisfaction. Therefore, social media offers businesses with a quick, efficient and relatively inexpensive means of getting feedback from consumers and, thus, provides a method to quickly resolve concerns.

After making a purchase, consumers can turn to social media to show off and/or discuss their new purchase. When pleased, the consumer may turn to social media to promote or endorse the company. For example, if the product is a luxury brand, the consumer may post to display their ownership of the product in order to enhance their status among peers. However, consumers can also post their dissatisfactions about a product or shopping experience.

The COVID-19 pandemic and associated government mitigation policies make direct social contact more difficult and, thus, hinder businesses' service efforts. With poorer customer service, customer dissatisfaction will likely increase and, therefore, harm a business' efforts to generate consumer loyalty. Athwal et al. (2019) argue that social media marketing can lower dissatisfaction by providing gratification of consumers' emotional needs and cognitive needs. More specifically, social media marketing activities have been found to satisfy consumers' emotional needs for entertainment (e.g., joy, humor, excitement) and their cognitive needs were satisfied through the use of social media as an information source (Athwal et al., 2019).

### **2.7. Hypotheses**

Knowles et al. (2020) found that consumers' fear of having physical contact with other customers and retail sales representatives is increasing. So, it seems intuitive that consumers may increase their reliance on social media to seek out product needs and information, as well as to evaluate products and make purchases. Furthermore, it has been speculated by Root (2020) that social distancing policies may hinder businesses' abilities to preform customer service and, therefore, lessen service efficiencies. Therefore, use of social media to maintain communication and contact with consumers is expected to increase. Hence, the authors postulated the following hypotheses:



*Hypothesis 1: Consumers' usage of social media to identify product needs has increased since the declaration of the COVID-19 pandemic.*

*Hypothesis 2: Consumers' usage of social media in shopping to acquire product comparison information has increased since the declaration of the COVID-19 pandemic.*

*Hypothesis 3: Consumers' usage of social media to evaluate the perceived risks of products has increased since the declaration of the COVID-19 pandemic.*

*Hypothesis 4: Consumers' usage of social media to purchase products has increased since the declaration of the COVID-19 pandemic.*

*Hypothesis 5: Consumers' usage of social media to express product purchase satisfaction or dissatisfaction has increased since the declaration of the COVID-19 pandemic.*

### **3. Research methods**

For this study, the defined population was U.S. consumers. Several dependent variables were assessed that consisted of consumers' social media behaviors that followed the Consumer Decision-Making Model. Specifically, the dependent variables were measured as the degree to which respondents use social media to (1) identify product needs; (2) conduct product information searches; (3) compare product alternatives; (4) purchase products, and; (5) express post-purchase satisfaction/dissatisfaction. The independent variable was the COVID-19 pandemic, which was measured as two time periods: pre- and post-news about the declaration of the COVID-19 pandemic.

Data was obtained with a survey of consumers. The survey consisted of a questionnaire that was created by the authors. To complete the survey, respondents rated various statements about their use of social media in consumer decision-making behaviors. For example, respondents were asked to "Please rate the degree to which you used social media to identify needed products before the COVID-19 pandemic" and they were also asked to "Please rate the degree to which you currently use social media to identify needed products." Responses were provided on a seven-point scale, where one indicated very low social media usage and seven indicated very high usage. To summarize, the questionnaire had two items dealing with each of the five consumer decision-making social media behaviors (i.e., dependent variables), where one item measured behaviors before the pandemic and the other measured behaviors since the pandemic began. Therefore, a total of 10 items were used to measure the dependent variables. In addition, the questionnaire utilized five items to collect demographic profiles of the respondents. More details of questionnaire are shown in the Appendix.

The survey questionnaire was administered to 327 respondents across the U.S. The majority of the respondents ( $n = 291$ ) were acquired through a service provided by Amazon Mechanical Turk (MTurk), with some observations (36) acquired from university students. MTurk was utilized because it has been shown to provide high-quality data (Buhrmester et al., 2011). MTurk allows requesters (e.g., researchers) the ability to hire individuals to complete a virtual task known as a Human Intelligence Task (HIT). In this study, the HIT was participation in the survey. MTurk also allows requesters the ability to set qualifications for those who can participate in the HIT. Two qualifications were required for participation. One requirement was that the MTurk participants be located in the U.S. Second, the participants had to demonstrate a history of dependability. More specifically, participation was limited to those who had at least a 90% HIT approval rating for previous HITs. In other words, previous researchers accepted input from those who participated in our survey at least 90% of the time. This limits involvement from participants who do not fully complete surveys and who fail to provide reliable responses. Participants were compensated 1.00 USD for their participation in our survey.

While the majority of the respondents ( $n = 291$ ) were recruited through MTurk, the remainder of observations ( $n = 36$ ) were collected in the summer of 2020 from online students at a midsize university located in the U.S. Midwest. The students participants were scattered across various

locations in the U.S. Unfortunately, five respondents from the MTurk pool failed to answer the two questionnaire items that related to product purchase behavior (see these items used to measure Dependent Variable 4 in the Appendix). So, while 327 observations were obtained for all other dependent variables, the number of observations available to analyze the respondents' social media purchase behavior was 322.

The sample pool had a diverse respondent profile, with similar demographics to the U.S. population. The respondents had an approximate age of 34 years. In addition, the sample pool of consumers exhibited a symmetrical distribution of income levels, education levels, and ethnicity. More specifically, annual incomes for the subjects ranged fairly evenly from less than 20,000 USD to over 100,000. USD Respondents' education levels were also well represented, ranging from high school graduate to doctoral degree. The ethnic diversity of the subjects closely resembled the same sub-group percentages across the entire U.S.

Table 1 provides a summary of the respondents sampled and how those characteristics compare to the U.S. population. As compared to the U.S. population, the average age of the respondents is slightly younger; the education levels are slightly higher and our sample represented a higher concentration of males than occurs in the U.S. population. However, the median income and ethnic characteristics of our sample very closely reflect the entire U.S. population. Overall, the sample group reasonably reflects the U.S. population, making the findings generalizable to U.S. consumers.

#### 4. Data analysis

The observations collected included respondents' usage of social media (i.e., dependent variables) for two time periods (i.e., independent variable) across the same subjects. Therefore, the impact of the COVID-19 pandemic on consumers' social media behaviors were analyzed using one-way analysis of variance (ANOVA) with a blocking factor employed to test for statistical significance between the behavioral mean responses before and after the COVID-19 pandemic was declared. Since, the sample participants provided responses for both time periods, the respondent served as the ANOVA blocking factor. This analysis is adequate because ANOVA is fairly robust against departures from normality and the observed variance between groups was very close.

**Table 1. Comparison of the sample and overall United States demographics**

Demographic	Sample Pool Characteristics	United States Characteristics*
Age	Average = 34.1682 Years	Average = 38.5 Years
Gender	64% male; 36% female	49.2% male; 50.8% female
Annual Household Income	6.4% Over 100,000 USD 14.7% 75,000 USD to 100,000 USD 29.7% 50,000 USD to 74,999 USD 21.4% 35,000 USD to 49,999 USD 14.1% 20,000 USD to 34,999 USD 13.8% Less than 20,000 USD	Median 60,300 USD
Education Level	0.3% Doctorate 26.3% Master's degree 45.6% College graduate 24.5% Some college 3.4 % High school graduate	88 % with at least a High School Degree 33% with at least a College Degree
Ethnicity	4.3% Asian 13% Black or African American 5.8% Hispanic or Latino 2.8% Native American 73% White 0.6% Other	4.4% Asian 12.5% Black or African American 6% Hispanic or Latino 2.36% Native American 74.5% White 0.3% Other

\*Source: United States Census at [www.census.gov](http://www.census.gov)

As shown in Table 2, ANOVA results (F-value = 10.13) indicate a significant difference in the observed means for using social media for identifying product needs after the declaration of the COVID-19 pandemic. Means for respondents' social media usage increased significantly (P-value < .01) from 4.64 to 4.86 on the 5.0 point scale used. These findings support hypothesis 1. In other words, the pandemic was found to be associated with an increase in consumers' use of social media to identify product needs.

The ANOVA findings were also significant when testing differences in consumers' use of social media for shopping behaviors. Specifically, Table 3 shows that the computed F-value (16.86) was significant (P-value < 0.01), providing support for hypothesis 2. Mean measurements for this consumer behavior increased from 4.42, before the pandemic, to 4.86 after the pandemic was declared. The results illustrate that, after the pandemic was declared, consumers increased their usage of social media in shopping to acquire product alternatives comparison information.

Table 4 demonstrates significant changes in consumers' use of social media as a tool for evaluating product risks. Specifically, the ANOVA F-value (17.04) was significant (P < 0.01) indicating a significant difference in means across the two time periods. Specifically, the mean for respondents' use of social media to evaluate product risks increased from 4.25 to 4.60 after the pandemic was declared. These findings support hypothesis 3 and demonstrate that consumers are increasingly using social media to gather and evaluate product benefits and problems.

Analysis of consumers' use of social media to purchase products is presented in Table 5. The ANOVA F-value (5.09) was significant, though not as significant as the previous ANOVA tests. As

**Table 2. Analysis of variance—use of social media to identify product needs**

	Type 3 Sum of Squares	DF	Mean Square	F-Value	P-Value	Mean pre-COVID-19 Pandemic	Mean post-declaration of COVID-19 Pandemic
COVID Pandemic	7.927	1	7.93	10.13	<0.01*	4.64	4.86
Respondent Blocking	1840.86	326	5.65				

\*significant difference

**Table 3. Analysis of variance—use of social media for shopping to compare products**

	Type 3 Sum of Squares	DF	Mean Square	F-Value	P-Value	Mean pre-COVID-19 Pandemic	Mean post-declaration of COVID-19 Pandemic
COVID Pandemic	19.18	1	19.18	16.86	<0.01*	4.42	4.76
Respondent Blocking	1802.53	326	5.52				

\*significant difference

**Table 4. Analysis of variance—use of social media to evaluate product risks**

	Type 3 Sum of Squares	DF	Mean Square	F-Value	P-Value	Mean pre-COVID-19 Pandemic	Mean post-declaration of COVID-19 Pandemic
COVID Pandemic	19.87	1	19.87	17.04	<0.01*	4.25	4.60
Respondent Blocking	1920.12	326	5.89				

\*significant difference

**Table 5. Analysis of variance—use of social media to purchase products**

	Type 3 Sum of Squares	DF	Mean Square	F-Value	P-Value	Mean pre-COVID-19 Pandemic	Mean post-declaration of COVID-19 Pandemic
COVID Pandemic	4.199	1	4.199	5.09	0.025*	4.17	4.33
Respondent Blocking	2282.25	321	7.109				

\*significant difference

such, the findings demonstrate a significant increase in the mean for social media purchase behavior after the pandemic was declared ( $P = 0.025$ ). The findings, therefore, support the hypothesized outcome that consumers have increased their use of social media for purchasing products (hypothesis 4).

The ANOVA results, testing for mean differences in consumers' use of social media to express product satisfaction levels, are shown in Table 6. The F-value was not statistically significant ( $P = .26$ ), so the findings do not support hypothesis 5. While not statistically proven, the means did reflect an increase in respondents' behavior of expressing post-purchase satisfaction levels via

**Table 6. Analysis of variance—use of social media to express product satisfaction levels**

	Type 3 Sum of Squares	DF	Mean Square	F-Value	P-Value	Mean pre-COVID-19 Pandemic	Mean post-declaration of COVID-19 Pandemic
COVID Pandemic	1.034	1	1.034	1.25	0.26	4.03	4.11
Respondent Blocking	2362.48	326	7.247				

\*significant difference

social media after the pandemic began. A possible explanation as to why the findings were not significant could be from potential confusion about the wording used on the questionnaire. More specifically, the respondents may not be familiar with the term “post-purchase satisfaction” used on the questionnaire. If so, it may be that the use of layman terms would have led to more significant findings. For example, if the questionnaire post-purchase items would have been worded as “Please rate the degree to which you use social media to share satisfaction or remorse after you make a purchase,” then the mean outcomes may have been significantly different.

Taken together the results observed show that, after the pandemic was declared, consumers’ usage of social media increased significantly for four of the five consumer decision-making behaviors. In summary, the findings supported hypotheses 1–4. So, the pandemic appears to have altered the way consumers activate product needs, shop for products, evaluate product alternatives, and purchase products. In addition, the findings provided some evidence consistent with hypothesis 5, albeit not statistically significantly. That is, the data showed an increase in consumers’ use of social media as a tool for expressing their post-purchase satisfaction/dissatisfaction levels. However, as mentioned earlier, the 0.26 p-value observed lacked statistical significance.

With many consumers becoming concerned about physical contact with others after the COVID-19 pandemic was declared, it appears that consumers are increasingly using online platforms to conduct their consumer behaviors. More specifically, social media, which allows consumers to interact remotely, appears to be gaining importance as a tool for identifying product needs. In addition, consumers are increasingly engaging other consumers and retailers through social media to shop for product options, evaluate the alternatives, and make purchases.

### **5. Marketing implications**

As the COVID-19 pandemic leads consumers to spend less time in stores, the influence of in-store promotional materials on consumers’ shopping and purchase behaviors will decline. The findings indicate that consumers’ use of social media is on the rise. According to S-O-R Theory and the Consumer Decision-Making Model, consumers can be influenced by external entities. That is, consumers are subject to societal influence and, therefore, prone to imitate the behaviors of others. It is common for a person to make a purchase decision after receiving recommendations from a trusted source. Also, consumers can be socially influenced by messaging from satisfied consumers. The findings demonstrated that consumers are increasingly utilizing social media for societal influence as they shop and evaluate product alternatives.

Social media is appropriate for building consumers’ product and brand awareness. The data supports hypothesis 1, which states the consumers are increasingly using social media to identify product needs. When consumers recognize a problem, they are compelled to search for a resolution to the problem. However, often the consumer does not know which product will resolve their problem. With so many consumers utilizing social media to search for problem resolution options, businesses can develop social media followers and proactively promote how their products resolve consumer needs. The challenge here is for businesses to ensure their social media strategies lead to favorable information that is relevant to the decision criteria used by the consumer.

In support of hypotheses 2–4, the findings demonstrate that consumers are increasingly using social media to compare product alternatives, evaluate product risks, and make purchases, respectively. Social media can be used to take advantage of the marketplace opinion leaders and build brand value, which improves the consumers’ perceptions of the brand relative to alternatives. Businesses must select social media systems that promote active engagement among the users of the platform because users sometimes experience dissonance from negative social media experiences which can result in them switching services (Dhir et al., 2016). To build a strong brand image, a business must be careful to not utilize social media platform(s) that generate user regrets or dissonance. Rather, Kaur et al. (2018) recommend that businesses utilize social media systems that promote social

enhancement and entertainment. They investigated factors associated with users' intentions to continue social media activity with a given social media platform. In addition, their study examined differences in the influence of factors that impact users' social media activity levels. Findings from Kaur et al. (2018) highlighted that users' perceptions of the social enhancement and playfulness of a given platform are meaningful predictors of their desire to continue engaging on that platform. Furthermore, Kaur et al. (2016) found that user enjoyment and social interaction play important roles in the users' experiences.

While the findings did not support the hypothesis concerning increased use of social media to express consumers' satisfaction levels (H5), it seems reasonable that a business can build brand value by gathering feedback from satisfied customers, then posting the satisfied consumers' positive remarks on social media. This positive messaging may be promoted via likes for opinion leader posts, as well as sharing positive reviews and comments. Businesses can increase the impact of the positive social media posts by sharing reviews, tweets, likes, and highlight satisfied consumers' experiences in order to generate consumer conversions and build brand trust. For example, sharing testimonials, positive comments, pictures, or videos of highly satisfied consumers can be placed on the businesses' web landing page. Also, opinion leader experts for a given product might be used to attract attention to promotional messaging. For example, an influential celebrity or athlete could generate interest and even influence consumers' product need, product evaluation, or purchase processes.

Per findings on consumer involvement presented in the literature review, brand value can also be enhanced if businesses develop social media marketing strategies that lead consumers to higher levels of involvement and engagement during the consumer decision-making process. To engage and promote consumer involvement, social media can be used to generate focus group interviews where the business can make emotional connections with consumers and gain insights into consumers' concerns with a brand, so that problems can be identified and resolved. Businesses can use the focus groups to generate post-purchase satisfaction and success stories, which can then be shared on their social media platforms.

In addition, a successful business strategy includes building positive social network communities. Consumers have high expectations for the various media channels they experience. Emmons (2019) argues that meeting or exceeding consumer expectations using the business's social networking communities will create engaging experiences for consumers, which will lead to meaningful business-to-consumer relationships. According to Emmons (2019), engaging social media experiences shift business-consumer relationships from "us versus them" to "we" relationships, which foster the business's credibility. Furthermore, Emmons (2019) offers suggestions for businesses to build meaningful consumer experiences by continually developing fresh, compelling content; providing quick responses to consumer inquiries or concerns; and, continually monitoring trending conversation to gauge consumers' perceptions. Lastly, Emmons (2019) argues that it is advisable for a business to have a social purpose to help connect with consumers who want to be involved with a business which exemplifies social/community responsibility.

Although businesses may want to engage with consumers more on social media, they should be careful not to encourage behaviors that lead to social media fatigue. To counteract this threat, socially responsible businesses could encourage consumers to interact with them by engaging in brand-related activities offline and later posting about such activities on social media. For example, an outdoor equipment retail store could encourage consumers to socially distance outside while using products outdoors. The business could run a contest where they select the best outdoor brand-related photo posted by consumers. This activity could build positive relationships because Dhir et al. (2017) found that photo sharing may be used to show affection and Eftekhari et al. (2014) speculate that online photo tagging can enhance relationships. To promote corporate social responsibility, businesses need to be aware of the potential negative outcomes of increased social media time and identify ways to encourage healthy behaviors.

## 6. Limitations

The survey data observed was useful to get preliminary evidence of consumer social media changes associated with the COVID-19 pandemic. However, the data was based upon self-reported perceptions. Therefore, while the results appear to have face validity, true validity of outcomes cannot be assessed. Another potential limitation of the data is that the respondents' provided perceptions for two time periods and the data was gathered at one time. More specifically, respondents reflected on their social media behaviors prior to the pandemic and then also provided their current behaviors. Fortunately, the data was gathered soon after the COVID-19 pandemic was declared. Hence, the perceptions should provide a fairly accurate reflection of their behaviors prior to the pandemic. While the use of MTurk to acquire the respondents may cause the data to lack some robustness, the preliminary results strongly show that consumers' social media behaviors are changing and, thus, provide evidence of the need for additional research.

Also, the findings were based upon an aggregate (macro-level) analysis of U.S. consumers. Future research should consider examining in-depth comparisons of various consumer segments (e.g., demographics, lifestyles, benefits sought, etc.) to get understandings of how various consumer market segments may be changing from the effects of the COVID-19 pandemic.

## 7. Future research recommendations

The current study findings were based upon self-reported social media behaviors. It would be beneficial to create future studies which obtain consumer's actual social media behaviors, such as which platforms are most used and how much time they are used. Given that some social media platforms may produce negative feelings for certain consumers (Dhir et al., 2016), it would be enlightening to research the relationships between a given social media platform and positive/negative consumer behaviors, such as increased shopping searches, increased purchases, and consumers' post-purchase satisfaction posts. Also, empirical investigations are needed to examine the effectiveness of a given social media strategy for creating brand awareness, brand equity, brand purchases and post-purchase satisfaction. In addition, longitudinal studies would be useful to determine if the changes in social media behaviors observed since the start of the COVID-19 pandemic will continue and have long-term systematic effects on consumers' social media behaviors. Finally, studies are needed to explore whether certain marketing segments are more influenced by social media marketing. In other words, it would also be useful to conduct studies of the moderating effects of various demographics (e.g., education, income, age, etc.) on social media behavioral changes with respect to the consumer decision-making processes.

## 8. Conclusions

Social media is a salient source for influencing consumers' shopping and buying behaviors as they share product reviews, service experiences, and/or product usage tips. The findings highlight the growing importance of social media as a marketing tool that has occurred since the declaration of the COVID-19 pandemic. As such, the findings illustrate the impact that social media can have on consumer decision-making processes. Therefore, effective application of social media should be a part of any business' marketing strategy. For example, social media visuals, content, promotional activities, and use of opinion leader influence should be deployed to positively influence the buying behaviors of consumers.

As previously mentioned, social media platforms are an important marketing tool for building brands, especially with regards to building brand awareness and excitement. The current study focused on the U.S. because of the diversity and considerable influence of the American economy and culture on the world. That is, many cultures are included and addressed in American social media platforms. Given that COVID-19 appears to be pushing consumers towards more online consumer behavior activity, the influence of social media will likely increase throughout the world. However, cultural differences should be considered when developing social media strategies in other countries because social media platform preferences may differ from one country to another.

### Acknowledgements

The authors would like to thank the editor and anonymous reviewers for their supportive comments and suggestions.

### Funding

The authors received no direct funding for this research.

### Author details

Andrew N. Mason<sup>1</sup>  
E-mail: [m.andrew.at@juntendo.ac.jp](mailto:m.andrew.at@juntendo.ac.jp)  
John Narcum<sup>2</sup>  
E-mail: [jnarcum@atu.edu](mailto:jnarcum@atu.edu)  
Kevin Mason<sup>2</sup>  
E-mail: [kmason@atu.edu](mailto:kmason@atu.edu)

<sup>1</sup> School of Medicine, Juntendo University, 1-1 Hirakagakuendai, Inzai, Chiba 270-1695, Japan.

<sup>2</sup> Management and Marketing Department, Arkansas Tech University, 106 West O Street, Rothwell Building #417, Russellville, AR 72801-2222, USA.

### Ethic Approval Statement

Prior to collecting data, the authors obtained IRB Committee approval from Arkansas Tech University. The research was exempted. Approval number is: Narcum\_062920.

### Citation information

Cite this article as: Social media marketing gains importance after Covid-19, Andrew N. Mason, John Narcum & Kevin Mason, *Cogent Business & Management* (2021), 8: 1870797.

### References

- Agarwal, R., & Karahanna, E. (2000). Time flies when you are having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly*, 24(4), 665–694. <https://doi.org/10.2307/3250951>
- Athwal, N., Istanbuluoglu, D., & McCormack, S. (2019). The allure of luxury brands' social media activities: A uses and gratifications perspective. *Technology & People*, 32(3), 603–626. <https://doi.org/10.1108/ITP-01-2018-0017>
- Beatty, S., & Smith, S. (1987). External search effort: An investigation across several product categories. *Journal of Consumer Research*, 14(1), 83–95. <https://doi.org/10.1086/209095>
- Bettman, J. (1979). *An information processing theory of consumer choice*. Addison-Wesley.
- Bruner, G. (1987). The effect of problem recognition style on information seeking. *Journal of the Academy of Marketing Science*, 15(4), 33–41. <https://doi.org/10.1007/BF02723288>
- Buhrmester, M., Kwang, T., & Gosling, S. (2011). Amazon's mechanical turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3–5. <https://doi.org/10.1177/1745691610393980>
- Cacioppo, J., Petty, R., & Kao, C. (1986). Central and peripheral routes to persuasion: An individual difference perspective. *Journal of Personality and Social Psychology*, 51(5), 1032–1043. <https://doi.org/10.1037/0022-3514.51.5.1032>
- Delener, N. (1990). The effects of religious factors on perceived risk in durable goods purchase decisions. *The Journal of Consumer Marketing*, 7(3), 27–39. <https://doi.org/10.1108/EUM00000000002580>
- Dhir, A., Chen, G. M., & Chen, S. (2017). Why do we tag photographs on Facebook? Proposing a new gratifications scale. *New Media & Society*, 19(4), 502–521. <https://doi.org/10.1177/1461444815611062>
- Dhir, A., Kaur, P., Chen, S., & Londa, K. (2016). Understanding online regret experience in Facebook use – Effects of brand participation, accessibility & problematic use. *Computers in Human Behavior*, 59, 420–430. <https://doi.org/10.1016/j.chb.2016.02.040>
- Dhir, A., Yossatorn, Y., Kaur, P., & Chen, S. (2018). Online social media fatigue and psychological wellbeing: A study of compulsive use, fear of missing out, fatigue, anxiety and depression. *International Journal of Information Management*, 40, 141–152. <https://doi.org/10.1016/j.ijinfomgt.2018.01.012>
- Eftekhari, A., Fullwood, C., & Morris, N. (2014). Capturing personality from Facebook photos and photo-related activities: How much exposure do you need? *Computers in Human Behavior*, 37, 162–170. <https://doi.org/10.1016/j.chb.2014.04.048>
- Emmons, J. (April 3, 2019). From how businesses are using communities to engage customers. *Guild*. Retrieved October 27, 2020, from <https://guild.co/blog/how-businesses-are-using-communities-to-engage-customers/>
- Halzack, S. (2016). Why the social media 'buy button' is still there, even though most never use it. *Business Magazine*. Retrieved June 2, 2020, from <https://www.washingtonpost.com/news/business/wp/2016/01/14/why-the-social-media-buy-button-is-still-there-even-though-most-never-use-it/>
- Howard, J., & Sheth, J. (1972). *The theory of buyer behavior*. Free Press.
- Jacoby, J. (1975). Perspectives on a consumer information processing research program. *Communication Research*, 2(3), 203–215. <https://doi.org/10.1177/009365027500200302>
- Jashari, F., & Rustemi, V. (2017). The impact of social media on consumer behavior- Case study Kosovo. *Journal of Knowledge Management, Economics and Information Technology*, 7(1), 1–21. <https://www.scientificpapers.org/economics/the-impact-of-social-media-on-consumer-behavior-case-study-kosovo/>
- Jin, Y., & Lee, H. (2014). Consumer responses toward online review manipulation. *Journal of Research in Interactive Marketing*, 8(3), 224–244. <https://doi.org/10.1108/JRIM-04-2013-0022>
- Kaur, P., Dhir, A., & Rajala, R. (2016). Assessing flow experience in social networking site based brand communities. *Computers in Human Behavior*, 64, 217–225. <https://doi.org/10.1016/j.chb.2016.06.045>
- Kaur, P., Dhir, A., Rajala, R., & Dwivedi, Y. (2018). Why people use online social media brand communities: A consumption value theory perspective. *Online Information Review*, 42(2), 205–221. <https://doi.org/10.1108/OIR-12-2015-0383>
- Knowles, J. R., Ettenson, P. L., & Dollens, J. (2020). Growth opportunities for brands during the COVID-19 crisis. *MIT Sloan Management Review: Cambridge*, 61(4), 2–6. <https://shop.sloanreview.mit.edu/store/growth-opportunities-for-brands-during-the-covid-19-crisis>
- Kumar, S., Dhir, A., Talwar, S., Chakraborty, D., & Kaur, P. (2020). What drives brand love for natural products? The moderating role of household size. *Journal of Retailing and Consumer Services*, 58. <https://doi.org/10.1016/j.jretconser.2020.102329>
- Laato, S., Najmul Lslam, A., Farooq, A., & Dhir, A. (2020). Unusual purchasing behavior during the early stages of the COVID-19 pandemic: The stimulus-organism-response approach. *Journal of Retailing and Consumer Services*, 57:102224. Retrieved October 31, 2020. <https://doi.org/10.1016/j.jretconser.2020.102224>
- Liu, C., & Arnett, K. (2000). Exploring the factors associated with web site success in the context of electronic commerce. *Information & Management*, 38(1), 23–33. [https://doi.org/10.1016/S0378-7206\(00\)00049-5](https://doi.org/10.1016/S0378-7206(00)00049-5)



- Malik, A., Dhir, A., & Nieminen, M. (2016). Uses and gratifications of digital photo sharing on Facebook. *Telematics and Informatics*, 33(1), 129–138. <https://doi.org/10.1016/j.tele.2015.06.009>
- Mason, A. (2020). Coronavirus disrupts the United States economy: A preliminary conceptual investigation. *Journal of International Business and Economics*.
- Mason, A., Narcum, J., & Mason, K. (2020). Changes in consumer decision-making resulting from the COVID-19 pandemic. *Journal of Customer Behaviour*, 19(3). <https://doi.org/10.1362/147539220X16003502334181>
- Mehrabian, A., & Russell, J. (1974). *An approach to environmental psychology*. The MIT Press.
- Nicosia, F. (1982). Consumer decision processes: A futuristic view. *Advances in Consumer Research*, 9, 17–19. <https://www.acrwebsite.org/volumes/5893/volumes/v09/NA-09>
- Phillips, D., Olson, J., & Baumgartner, H. (1995). Consumption visions in consumer decision-making. *Advances in Consumer Research*, 22, 280–284. <https://www.acrwebsite.org/volumes/7759/volumes/v22/NA-22>
- Rambe, P., & Retumetse, J. (2017). Impact of social media advertising on high energy drink preferences and consumption. *Journal of Applied Business Research*, 33(4), 653–668. <https://doi.org/10.19030/jabr.v33i4.9977>
- Root, A. (2020). Social distancing will hit the best-performing restaurant stocks. Here's how bad it could get. *Barons Online*, March 16. Retrieved May 28, 2020, from <https://search.proquest.com/abicomplete/docview/2377259642/fulltext/391FA67D87B54A2BPQ/3?accountid=8364>
- Samet, A. (2020). 2020 US social media usage: How the coronavirus is changing consumer behavior. *Business Insider*, June 9. Retrieved November 9, 2020, from [www.businessinsider.com/2020-us-social-media-usage-report](http://www.businessinsider.com/2020-us-social-media-usage-report)
- Shemwell, D., Yavas, U., & Bilgin, Z. (1998). Customer-service provider relationships: An empirical test of a model of service quality, satisfaction and relationship oriented outcome. *International Journal of Services Industry Management*, 9(2), 155–168. <https://doi.org/10.1108/09564239810210505>
- Sher, P., & Lee, S. (2009). Consumer skepticism and online reviews: An elaboration likelihood model perspective. *Social Behavior and Personality: An International Journal*, 37(2), 137–144. <https://doi.org/10.2224/sbp.2009.37.1.137>
- Spreng, R., MacKenzie, S., & Olshavsky, R. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(3), 15–32. <https://doi.org/10.1177/002224299606000302>
- Srinivasan, T. (1987). An integrative approach to consumer choice. *Advances in Consumer Research*, 14, 96–100. <https://www.acrwebsite.org/volumes/6661/volumes/v14/NA-14>
- Thota, S. (2018). Social media: A conceptual model of the why's, when's and how's of consumer usage of social media and implications on business strategies. *Academy of Marketing Studies Journal*, 22(3), 1–12. <https://www.abacademies.org/articles/social-media-a-conceptual-model-of-the-whys-whens-and-hows-of-consumer-usage-of-social-media-and-implications-on-business-strategi-7531.html>
- United States Census. (2020, November 8). [www.census.gov](http://www.census.gov)
- Voyer, P., & Ranaweera, C. (2015). The impact of word of mouth on service purchase decisions. *Journal of Service Theory and Practice*, 25(5), 636–656. <https://doi.org/10.1108/JSTP-04-2014-0070>
- Wertz, J. (2019). How business and influencers are monetizing Instagram. *Forbes*, December 31. Retrieved May 22, 2020, from <https://www.forbes.com/sites/jiawertz/2020/12/31/how-businesses-and-influencers-are-monetizing-instagram/#5d0b4b8f1078>
- Wright, P. (1972). Consumer judgement strategies: Beyond the compensatory assumption. *Association for Consumer Research, SV -Proceedings of the Third Annual Conference of the Association for Consumer Research* (pp. 316-324). <https://www.acrwebsite.org/volumes/12009>
- Xu, J., Benbasat, I., & Cenfetelli, R. (2014). The nature and consequences of trade-off transparency in the context of recommendation agents. *MIS Quarterly*, 38(2), 379–406. <https://doi.org/10.25300/MISQ/2014/38.2.03>

## Appendix Survey Instrument

### Dependent Variable 1: Identification of Product Needs Items\*

- (1) Please rate the degree to which you used social media to identify needed products before the COVID-19 pandemic.
- (2) Please rate the degree to which you currently use social media to identify needed products.

### Dependent Variable 2: Product Comparison Information Search Items\*

- (1) Please rate the degree to which you used social media to gather information to compare products before the COVID-19 pandemic.
- (2) Please rate the degree to which you currently use social media to gather information to compare products.

### Dependent Variable 3: Product Evaluation Items\*

- (1) Please rate the degree to which you used social media to evaluate product purchase risk before the COVID-19 pandemic.
- (2) Please rate the degree to which you currently use social media to evaluate product purchase risk.

### Dependent Variable 4: Product Purchase Items\*

- (1) Please rate the degree to which you used social media to purchase products before the COVID-19 pandemic.
- (2) Please rate the degree to which you currently use social media to purchase products.

### Dependent Variable 5: Post—Purchase Processes Satisfaction Items\*

- (1) Please rate the degree to which you used social media to express post-purchase satisfaction or dissatisfaction before the COVID-19 pandemic.
- (2) Please rate the degree to which you currently use social media to express post-purchase satisfaction or dissatisfaction.

### Respondent Demographic Items

- (1) Age
- (2) Gender
- (3) Race
- (4) Annual Income
- (5) Highest Education Level

\* Rated items used a scale of 1 to 7 where 1 = very low and 7 = very high.



© 2021 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



***Cogent Business & Management* (ISSN: 2331-1975) is published by Cogent OA, part of Taylor & Francis Group.**

**Publishing with Cogent OA ensures:**

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

**Submit your manuscript to a Cogent OA journal at [www.CogentOA.com](http://www.CogentOA.com)**

