

Exploring Cognitive Response Trends in the Age of Social Media

MARIKO RIZKIANSYAH*

DADANG SUGIANA

ASEP SUNARYA

IRA MIRAWATI

Universitas Padjadjaran, Indonesia

ABSTRACT

Researchers have studied cognitive responses since their emergence in the era of television and radio media. There is much research related to advertising. However, in today's era, social media is taking over the role of television and radio as popular media for publishing messages. This research explains the development trend of cognitive response research in the social media era and the pattern of topics used in this research related to cognitive response and social media. This research uses the Prisma method to determine the answer to this question. To make research more accessible, researchers also used Rayyan.AI and VostViewer for data screening. The results show many trends in cognitive response research and social media related to COVID-19. Generally, research links cognitive responses with trust in a product or issue. Most research also makes a connection between cognitive response and the participation of social media visitors. Additionally, there is plenty of research on test effect variation from the dimensions of cognitive theory of response to social media. Topics regarding advertising are still widely used for research; meanwhile, other themes relate to health communication, politics, and news. Although Cognitive response is a widely known theory, it still can be developed and improved to help solve problem regarding social media.

Keywords: *Cognitive response, social media, VosViewer visualization, research trends, COVID-19.*

INTRODUCTION

Communication research must be distinct from the role of thinkers in psychology. Kurt Lewin, Paul Lazarsferd, Harold Laswell, and Carl Hovland are psychology experts who contributed ideas regarding the relationship of psychology in communication, including Laswell's mass communication model or Hovland's persuasive communication model.

One communication theory that is also related to psychology and communication is cognitive response theory. This idea is based on research by Lavidge and Steiner, who developed a model that describes how consumers react to advertising based on interest and attention. (Lavidge & Steiner, 1961). Then, Palda (1966) developed the model by adding cognition, affection, and behaviour to the advertising response model. This model then became the basis for researchers to determine the role of cognition on brands, attitudes, and purchase intentions.

Cognitive response theory was then developed in various scientific disciplines and interests, one of which was linking cognitive responses to the role of mediation in politics (Calder, 1978) and positive-negative cognitive responses to political advertising (Meirick, 2002).

*Corresponding author: mariko21001@mail.unpad.ac.id

E-ISSN: 2289-1528

<https://doi.org/10.17576/JKMJC-2024-4002-29>

Meanwhile, other researchers link cognitive response theory with the effect of messages about gender justice (Taylor-Carter et al., 1995) or link cognitive response theory with trust, curiosity, and self-confidence in products from an advertising perspective (Smith & Swinyard, 1988).

As online technology develops, there are also emerging studies that try to connect the cognitive response approach with social media, such as its impact on selective avoidance in politics on social media (Zhu et al., 2018), cognitive response theory with social media use (Wang et al., 2023) and the impact of immersive virtual cognitive responses on emotions and navigation while browsing (Mandolfo, Baisi, & Lamberti, 2023).

There is ongoing discussion regarding when social media began to take shape. Several scholars wrote early emails on social media. Since they included terminology from online conversations, they are classified as social media even though they fall within the mass media category. This was due to the restricted publication at the time (Sajithra & Patil, 2013). Meanwhile, Van Dijck explained that the emergence of social media began with invention. A new type of internet is networked communication. This new internet network makes connecting in groups easier, giving rise to various new media types such as weblogs, list servers, and email services. The development of Web 2.0 infrastructure gave rise to social media platforms that allow people to expand network conversations and disseminate information and data communication (Dijck, 2013).

Social media is one of the most developed forms of media in the current era. According to statistical data from Statista (2024, the number of internet users has reached 5.35 trillion, with the number of social media users worldwide reaching 5.04 trillion. So, 62.3 percent of the world's population are active social media users. The average user uses social media for 151 minutes per day, an increase of 40 minutes compared to 2015. Facebook is the most popular social media user, reaching 3 million active users, followed by YouTube with 2.4 million users, WhatsApp with 2 million, and Instagram with 2 million users (Statista, 2024).

This review research intends to address this background: 1) Cognitive research patterns response if connected to social media; 2). Development of cognitive response research trends when linked to cases that occurred on social media.

LITERATURE REVIEW

Understanding of Response Cognitive Theory

Responses refer to the thoughts and beliefs that arise in response to a stimulus. This stimulus can be anything, such as new Information, events, or even interactions with others. Although it originates from psychology, it is a cognitive response often used in various problems and multidisciplinary knowledge. From a communication perspective, the response is a reaction that arises due to a stimulus.

According to cognitive response theory, messages from stimuli do not directly influence a person's behavior. However, a person's cognitive response (thoughts after reading, seeing, or listening to someone's message) plays a role in accepting or rejecting the stimulus to influence behavior (Greenwald, Brock, & Ostrom, 2013). The audience is not passive in receiving media messages, as in previous communication theories such as hypodermic and propaganda. However, it is active because it can accept or reject when the message enters the cognitive response phase.

Cognitive response theory assumes that the recipient's cognitive response to a persuasive message is the primary determinant of attitude change. If the cognitive response is positive, there will be a change in attitude. Cognitive response theory suggests that effective messages must consider factors likely to increase positive cognitive responses in recipients.

One of the differences between cognitive response theory and other theories that examine the impact of stimulants on attitudes or intentions leading to behavior is that there is a cognitive response after the stimulant message appears. The role of cognitive reactions as a moderating factor has been the subject of numerous research studies. Belch's research examines how comparative and non-comparative commercial advertising impacts message reception through cognitive responses and how repeated ad exposure affects product intentions and purchases through cognitive responses (Belch, 1982). Meanwhile, other research tested the use of cognitive responses as a defense for television advertising in children (Brucks, Armstrong, & Goldberg, 1988), and cognitive responses were able to manipulate the message of public service advertisements so that they had no impact on people's attitudes towards the smoking ban (Shen, 2010).

Research on cognitive responses saw many developments during the era of conventional media, such as radio and television. Belch developed a four-block cognitive response model based on his research into advertising that appears on radio or television (Belch, 1981; 1982). These blocks are exposure, cognitive response, attitude, and intention. Based on the model proposed by Belch, this model includes exposure to advertisements or media influences triggers cognitive response. Exposure advertisement is the level of Interaction between the user and the media.

The cognitive response is thoughts that arise after somebody communicates. Belch shared three: thinking to message, thought to source messages, and thoughts to other outside factors, messages, or sources. However, related to production from messages, the *message thoughts* are cognitive responses produced by users after being exposed to messages provided by stimuli and consist of two types, namely *counterargument* and *support argument*. *Counterargument* is a person's thought-provoking response to the message conveyed after being exposed to the message. Meanwhile, *support arguments* are the user's positive response to the message delivered after being exposed to the message. The indicator is the user's response to accepting or rejecting a message after being exposed to messages from social media. *Source-oriented thoughts* are cognitive responses related to the message's source, and there are two types: source derogation and source bolster. *Source derogation* is a form of doubt in a person's thinking when exposed to a message about that source.

Meanwhile, *source bolster* is a positive response from visitors to the message's source. Indicators of source-oriented thoughts are positive or negative responses from users to material sources seen from three factors: credibility, attractiveness, and strength of the source. *Message execution thoughts* are cognitive responses from visitors that have nothing to do with the source or message conveyed by the content creator. This third response category relates to liking or disliking the creativity of presenting content such as games, quizzes,

Then, the response cognitive gives effect to determination attitude. According to Belch, there are two attitudes: the attitude towards the brand and the attitude to material from the

message. The second attitude determines the intentions of people's decisions towards the message they receive. After being impacted by the cognitive reaction to the Information acquired, an attitude is created. Attitude is a learned tendency to respond to an object. Another way to think about attitude is how someone feels about items, concepts, or circumstances and whether they have neutral, positive, or negative dispositions toward them. There are two types of attitudes: toward the brand and the message. Brand attitude refers to an individual's attitude towards a particular brand or brand. Meanwhile, attitude towards a message is a person's evaluation of the message received. The attitude here is later that will influence its blocks to four in the Belch model, viz intention somebody to do something.

As done by Belch, cognitive responses are not only about advertising but can also be tested on other perspectives, such as politics. For example, research linking cognitive and political responses has contributed much to advancing this theory, especially in persuasive communication. Researchers widely use cognitive response theory with a persuasive communication perspective to understand how it influences political persuasion. Strauss's research found three different cognitive responses to heteroglossia in American workers: horizontal containment, vertical containment, and integration (Strauss, 1989). In the meantime, another study examines the potential combination of cognitive response and logical credibility in assessing public opinion of public policies and judgments (Coursey, 1992). Wang et al.'s research examines selection avoidance as a cognitive response to social media behavioral stimulants and social psychology attitudes toward the use of social media as a source of political Information seeking (Wang et al., 2023).

In other studies, related to tourism and health, cognitive response theory is interconnected with messages. For instance, Kilic et al.'s research highlights that the main variables influencing cognitive and emotional responses among tourist volunteers include responsibility, quality, and curiosity (Kılıç et al., 2023). Meanwhile, fear of COVID-19 influences the cognitive response of people's confidence in traveling and is inversely proportional when faced with confidence in vaccines (Seçilmiş, Özdemir, & Kılıç, 2022).

Various studies of mass media have attempted to test how a person's cognitive response influences messages from mass media. Research from Randyani links the effects of exposure to news in the mass media with cognitive responses to change behavior in reducing the use of plastic bags. Stimulants in the form of news about the death of marine animals and the zero campaign with a plastic bag diet are the affected behavior (Rarasati & Pradekso, 2019). Hynes and Wilson (2016) research discover that social media can affect pro-environmental attitudes, leading to behavior changes. In Dardis (2008) research examines how individual cognitive responses are when exposed to mass media through the issue of penalties. The study's findings demonstrate that age, religion, and morality impeded the public's access to knowledge about attitudes (Dardis et al., 2008).

Research on cognitive responses before the era of social media often used radio listeners and television viewers as their research objects. Belch's research examines how comparative and non-comparative commercial advertising impacts message reception through cognitive responses (Belch, 1982) and the effect of repeated ad exposure on product intentions and purchases through cognitive responses (Belch, 1982). both use the research object on viewers in

television media. Meanwhile, other research examines the use of cognitive responses as a defense for television advertising in children (Brucks, Armstrong, & Goldberg, 1988), and cognitive responses can manipulate messages from public service advertisements on television so that they do not have an impact on people's attitudes towards the smoking ban (Shen, 2010).

As done by (Belch, 1982), cognitive responses are not only about advertising but can also be tested on other perspectives, such as politics. Research linking cognitive and political responses, for example, has contributed much to advancing this theory, especially in persuasive communication. Cognitive response theory with a persuasive communication perspective is widely used to find out how it is used in political persuasion. Strauss's research found three different cognitive responses to heteroglossia in American workers: horizontal containment, vertical containment, and integration (Strauss, 1989). Meanwhile, other research tests how the theory of logical credibility and cognitive response can determine public perceptions of government decisions and policies (Coursey, 1992).

Social Media and Conventional Media

The development of online technology has caused the emergence of two types of media in the digital era: conventional (analog) and digital (online) media. Conventional media, often called electronic media, uses equipment connected to electronics such as transmission satellites, transistors, and others. Because of dependency on electronic media, conventional media is also called analog media (Turow, 2020). As for the characteristics of analog media, among others, it generally communicates in one direction, uses the device hard, has limitations in data storage, and data is not durable. Social media, or what is known as *social media*, is part of new media. Social media is a medium that allows users to represent themselves, interact, collaborate, share, communicate with other users, and form social bonds virtually (Sari & Lubis, 2017). According to M. Terry, the definition of social media is a communication medium where users can create content together and use internet-based broadcasting technology, which is different from print media and broadcast media (Aditiawarman, 2019). Technological manufacturers design current devices to meet the needs of their users. The features on social media, such as *Facebook*, *Twitter*, and *Instagram*, are easy to understand and learn. This convenience makes media a primary need that is present almost daily in daily activities (Fitri, 2017).

Various researchers have studied the impact of social media. The use of social media and multitasking on social media significantly affect self-efficacy, particularly in terms of academic performance among adolescents (Mohammed, Ibrahim, & Yunus, 2021). Dependence on social media has also been felt by adolescents, especially during the COVID-19 pandemic. Social media paradoxically makes them feel lonely, thereby necessitating social media as a companion (De Rycker & Jamal, 2023). Furthermore, scholars are keen to explore the indirect variables that exist at any stage in the process between consuming political information on social media and political participation. The review results suggest that although social media is widely used for political information, exploration of the knowledge body in this domain has not received much attention and is reported rather superficially. An explicit analytical discussion on the review results with

identified knowledge gaps that call for further exploration and conclusion is offered (Tan, Firdaus, & Aksar, 2024).

Social media has characteristics that differentiate it from conventional media, namely 1) The message conveyed can be for one person or more. 2) Messages are conveyed freely without a *gatekeeper*. 3) Tends to deliver messages faster than other media. 4) The message's recipient determines the interaction time (Kurniawan, 2020). There are six unique characteristics for social media: 1) In communication between computer devices or other devices, a network that connects computer devices with other devices is usually required. 2) Information. Social media users can represent information related to identity and interact based on information. 3) Social media users access archives as containers for stored Information anytime, anywhere, and via any device. 4) Interactivity: Forming social media networks between users can build Interaction between users. 5). Social Simulation (*simulation of Society*) Social simulation is intended as a characteristic of Society in the virtual world. 6). content by users (*user-generated content*). In social media, content is owned based on the contribution of the account owner. The content is different from traditional media, which uses audiences only as objects; however, *User-Generated content*, in general, is a symbiotic relationship in new media culture for social media users to participate in developing the content created (Nasrullah, 2015). Social media also has properties that make it much more potent than conventional media, such as accessibility, interactivity, speed, longevity, and range (Taprial & Kanwar, 2012).

RESEARCH METHODS

This research uses the PRISMA flow diagram method based on research questions and keyword searches. PRISMA (preferred reporting items of systematic review and meta-analysis) is a set of guidelines for systematic review and meta-analysis research (Moher et al., 1999). This method is one of the best methods in published literature, such as peer-reviewed academic articles, to ensure a report's accuracy, transparency, and completeness (Page et al., 2021). The researcher aims to use this method so that readers can easily understand the evidence related to the topic and methods of this research.

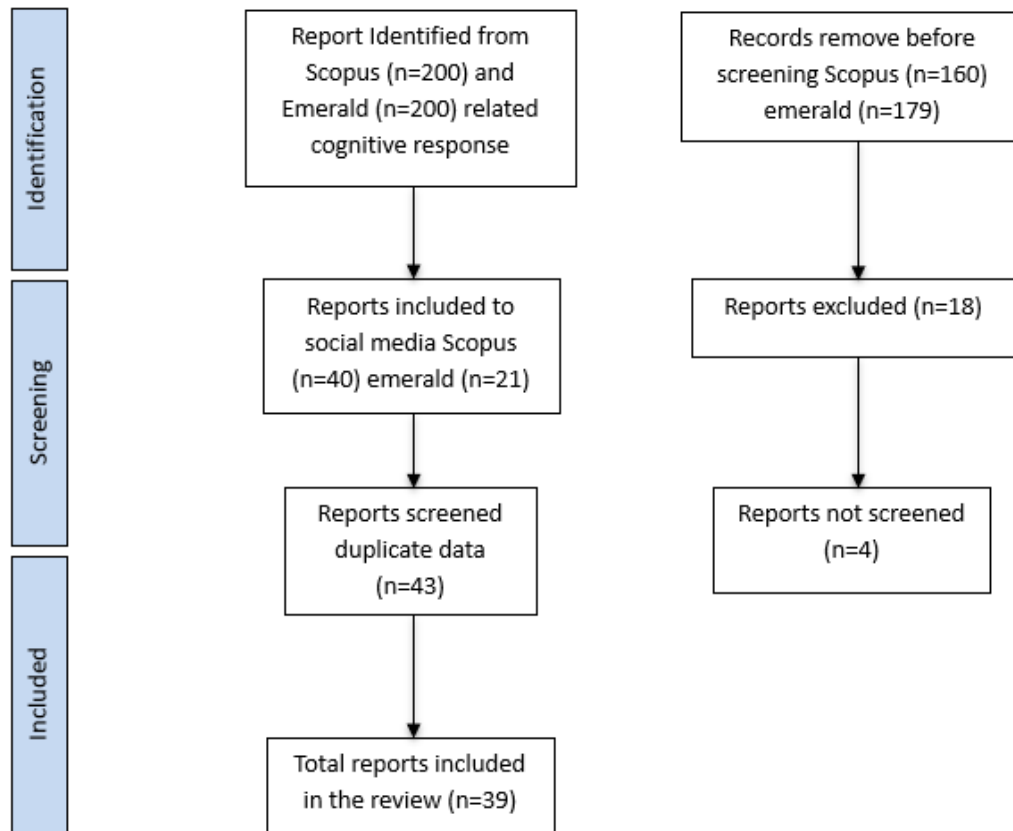


Figure 1: Trend and Pattern respond cognitive in the age of social media diagram PRISMA

The literature review on cognitive response in the digital age provides detailed and comprehensive Information. The researcher then conducted research through English language articles published and indexed via Scopus and Emerald. The research year selected is from 2000 to 2023. The reason for choosing the year begins from 2000 is because social media began to develop in 2000. To make it easier to search, researchers use keywords response cognitive and social media that appear in the title, abstract, or keywords in the article. Search focused on articles from journals or conference proceedings. Total for articles using cognitive responses in indexed journals Scopus and Emerald produced 200 articles. So, the researchers also included social media keywords. On Index Scopus, researchers found 41 articles related to cognitive response and social media, while for Emerald, researchers found 20 articles to get 61. The researchers used Rayyan AI to screen the articles to find duplicate data and a final review related to cognitive response theory and social media. So that the final results for the research were 39 articles. The following is the article data included in the literature review of this research.

Table 1: Data of response cognitive research in social media

No	Research title	Name of researcher	Year
1.	Advertising corporate social responsibility initiatives to communicate corporate image	Pomering, A., & Johnson, L. W.	2009
2.	Emotional and cognitive involvement of consumers with hotel brands on social networking sites	Su, N., Mariadoss, B. J., & Reynolds, D.	2019
3.	Consumer product evaluation: The interactive effect of message framing, presentation order, and source credibility	Buda, R., & Zhang, Y.	2000
4.	Drivers of the perceived social impact of the Super Bowl: mediation and moderation analyses	Wu, J., Orr, M., Inoue, Y., & Chang, Y.	2023
5.	The adverse effect of doctors' skepticism toward prescribing drugs	Johnson, D. S., Riley, B. K., & Sato, S.	2017
6.	Brand excellence: Measuring the impact of advertising and brand personality on purchasing decisions	Rajagopal	2006
7.	Inter - relationships among store images, store satisfaction, and store loyalty among Korean discount retail patrons	Koo, D. M.	2003
8.	What drives consumers' responses to brand crisis? The moderating roles of brand associations and brand-customer relationships	Jeon, J. O., & Baeck, S.	2016
9.	Exploring the cognitive, affective, and behavioral responses of Korean consumers toward mobile payment services: A text mining approach	Jung, M., Lee, Y. L., Yoo, C. M., Kim, J. W., & Chung, J. E.	2018
10.	Selective avoidance as a cognitive response: Examining the political use of social media and surveillance anxiety in avoidance behavior	Wang, Y., Ahmed, S., & Bee, A. W. T.	2023
11.	Framing effects on US adults' reactions to COVID-19 public health messages: Moderating role of source trust	Vaala, S. E., Ritter, M. B., & Palakshappa, D.	2022
12.	Social commerce: The critical role of argument strength and source dynamism of e-commerce	Li, W., Gao, L., & Ke, Y.	2014
13.	The impact of communication on human behavior in times of crisis	MacLeod, A.	2014
14.	Using the DEMATEL method to explore influencing factors for video communication and visual perceptions in social media	Tsai, C. J., & Shyr, W. J.	2022
15.	Managing the product-harm crisis in the digital era: The role of consumer online brand community engagement	Yuan, D., Lin, Z., Filieri, R., Liu, R., & Zheng, M.	2020
16.	A systematic review for netizens' response to the truth manipulation on social media	Akram, M., Nasar, A., & Arshad-Ayaz, A.	2023
17.	Attribution and attributional processes of organizations' environmental messages	Shin, S., & Ki, E. J.	2021
18.	Social media for message testing: A multilevel approach to linking favorable viewer responses with message, producer, and viewer influence on YouTube	Paek, H. J., Hove, T., & Jeon, J.	2013
19.	A study of users' EEG responses to different types of fashion films	Lee, C., & Lee, S.	2023
20.	Investigating sex offensive representation among politicians via Twitter	Veggi, S., & Zara, G.	2023
21.	Power of consumers using social media: Examining the influences of brand-related user-generated content on Facebook	Kim, A. J., & Johnson, K. K.	2016

22.	Break a story: Examining the effects of Instagram stories from news accounts on adolescents' political learning	Vermeer, S., & van den Heijkant, L.	2023
23.	A bibliometric analysis of disinformation through social media	Akram, M., Nasar, A., & Arshad-Ayaz, A.	2022
24.	A mixed methods inquiry into the role of Tom Hanks' COVID-19 social media disclosure in shaping willingness to engage in prevention behaviors	Myrick, J. G., & Willoughby, J. F.	2022
25.	Vulnerability to the effects of conflicting health information: Testing the moderating roles of trust in news media and research literacy	Nagler, R. H., Vogel, R. I., Rothman, A. J., Yzer, M. C., & Gollust, S. E.	2023
26.	Engagement and empathy discourses in corporate communication: The case of "The science of engagement"	Yeomans, L.	2015
27.	The impact of regulatory focus and message frame on consumers' responses to promotional campaigns on social networking sites (SNSs)	Han, K. S., & Lee, T. J.	2014
28.	Impact of mobile electronic word of mouth (EWOM) on consumers' purchase intentions in the fast-causal restaurant industry in Indonesia	Yan, X., Shah, A. M., Zhai, L., Khan, S., & Shah, S. A. A.	2018
29.	Examining the impact of online rejection among emerging adults with borderline personality pathology: Development of a novel online	Richmond, J. R., Edmonds, K. A., Rose, J. P., & Gratz, K. L.	2020
30.	How do travel influencers affect visit intention? The roles of cognitive response, trust, COVID-19 fear and confidence in vaccine	Seçilmiş, C., Özdemir, C., & Kılıç, İ.	2022
31.	The influence of psychological language words contained in microblogs on dissemination behaviour in emergency situations—mediating effects of emotional responses.	Lu, Y., Qiu, J., Jin, C., Gu, W., & Dou, S.	2022
32.	The synergistic effects of solutions journalism and corporate social responsibility advertising	Li, M.	2021
33.	Differential effects of traditional and social media use on COVID-19 preventive behaviors: The mediating role of risk and efficacy perceptions.	Ren, W., Zhu, X., & Hu, Y.	2022
34.	Think before you Share: Beliefs and emotions that shaped COVID-19 (Mis) information vetting and sharing intentions among WhatsApp users in the United Kingdom.	Lu, X., Vijaykumar, S., Jin, Y., & Rogerson, D.	2022
35.	Digital natives: Internal defense mechanism to distrust tourism advertisements	Choi, M., Choi, Y., & Kim, D. Y.	2023
36.	Social media in advertising campaigns: Examining the effects on perceived persuasive intent, campaign and brand responses	Voorveld, H. A., & van Noort, G.	2014
37.	Methodological issues in using data from social networking sites	Leng, H. K.	2013

Data Analysis

After determining the number of articles, researchers will utilize VosViewer to identify research patterns between cognitive responses and social media. VosViewer provides three types of data analysis: network visualization, overlay visualization, and density visualization. In network visualization, visualized terms connect, demonstrating their connections. If the path or network is printed thick, it shows a strong relationship between one term and another. On the other hand, if the connection between one term and another appears in thin print with small circles, it

indicates a weak relationship between the visualized terms. Overlay visualization functions to display research history. Darker visualization from bibliometric analysis indicates that the research has been conducted longer, whereas a more precise visualization suggests that the research was conducted more recently. Lastly, density visualization is used to demonstrate density or emphasize research groups. By seeing the results of this bibliometric analysis, researchers can find many areas of research that have been done or still need to be done. This way is handy for researchers conducting research.

Based on the results of data analysis using Vos viewer and connecting bibliographic articles, i.e., in the form of the article creator, keywords, bibliography, and citation in the article obtained, three clusters link cognitive responses to social media. A lot of the cluster-colored red cognitive response research is associated with research that relates to humans personally on social media. Meanwhile, studies with medium trends often connect cognitive response with cognition, communication, and COVID-19 in cases on social media. Other studies linked cognitive responses and social media, but only a little. The research carried out was on the topics of cognitive response and social networking, behavioral response, and research on behavior. Look at Figure 2.

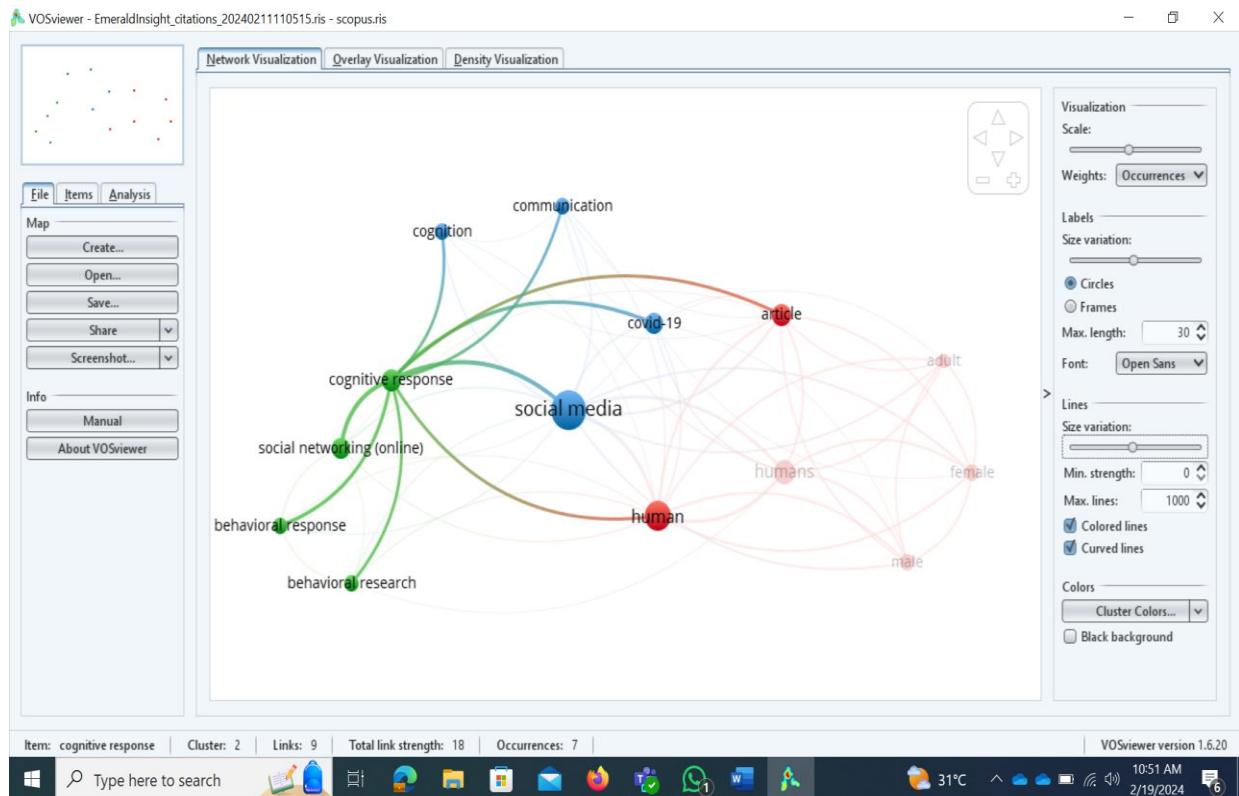


Figure 2: Network visualization bibliographic cognitive response

In Vos-viewer, a visualization overlay functions to visualize historical footsteps in research. Research on cognitive responses in the early social media era, from 2000 to 2018, researched much behavior: researchers and behavioral responses to stimulants that appear to impact cognitive responses. Meanwhile, from 2019 to 2021, research is on cognitive responses. Lots relate it to its impact stimulants towards social networking in the online world, especially on issues on social media. The latest research at this end seeks to determine the relationship between cognitive response and cognitive to social media issues, especially those related to COVID-19.

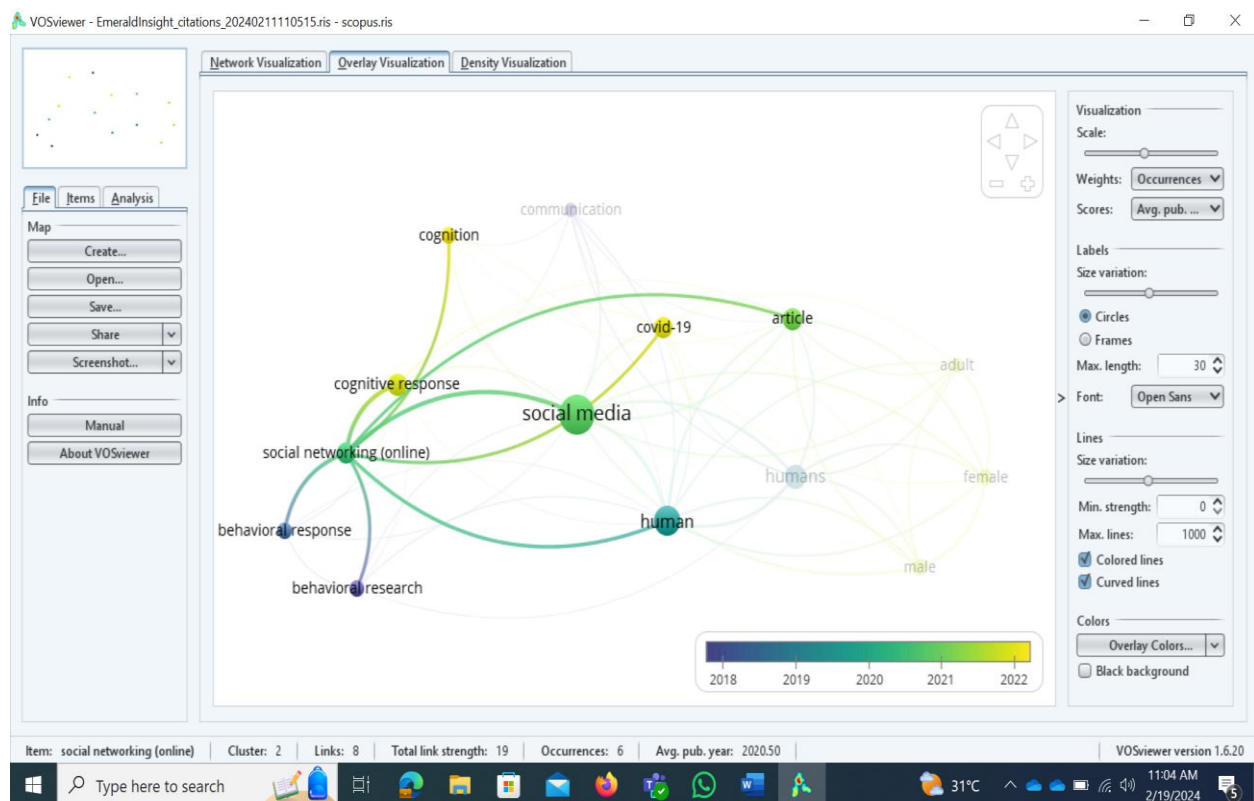


Figure 3: Overlay visualization of bibliographic cognitive response to social media

Meanwhile, density visualization means the density or centralization of topics within a network. In Fig, research on cognitive responses concentrates on social media. This research also attempted to link man's behavior and the response to this behavior. Several researchers have tried to separate how cognitive responses are related to the male and female genders in social media.



Figure 4: Density visualization bibliographic cognitive response to social media

Furthermore, the results of the VosViewer research using map-based text obtained various research concepts on the relationship between cognitive responses and social media. Much research connects cognitive responses with responses from consumers and participants. A strong relationship also occurs in cognitive responses with attachment type of cognitive responses and the role and effects of cognitive responses on behavior. Apart from that, much research also places cognitive responses as a social medium. Some research places various variables as a stimulant or an affected object of cognitive responses, including adoption, performance, exploration, collaboration, challenge, cloud, determinant, and decision support systems; more details are seen in Figure 4.

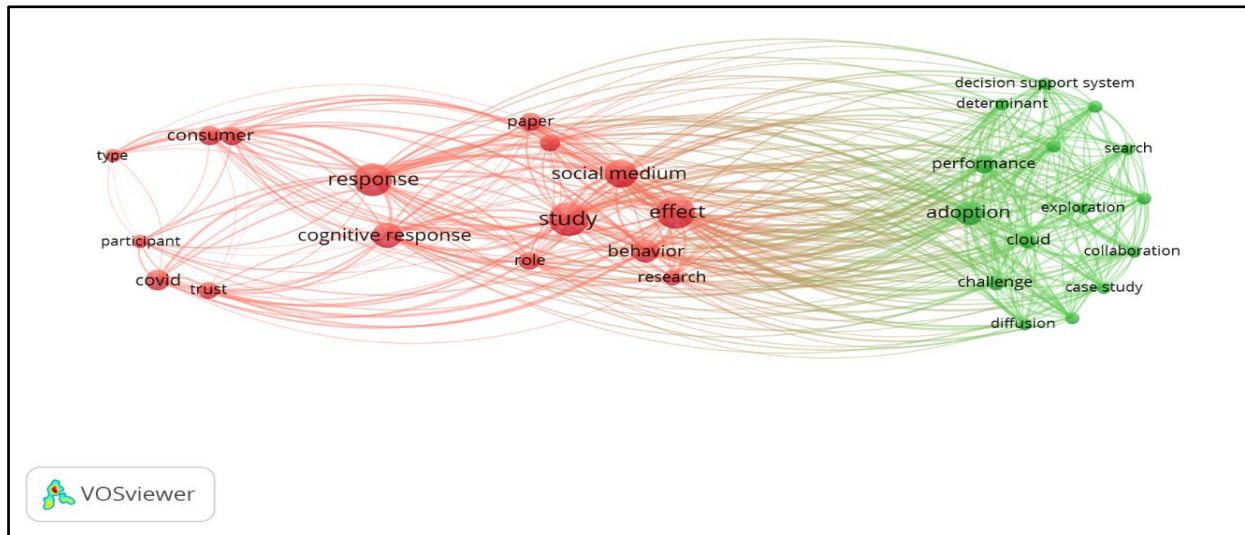


Figure 4: Network visualization bibliographic cognitive response-based text

In the overlay visualization, much of the history of cognitive response research in the era before 2014 discusses the relationship between consumers and cognitive responses. Then, between 2016 and 2018, research progressed to the effect of cognitive responses on behavior. Meanwhile, from 2018 to 2022, a significant amount of cognitive response research linked participants' cognitive responses and beliefs during the COVID-19 pandemic. For more details, see Figure 5.

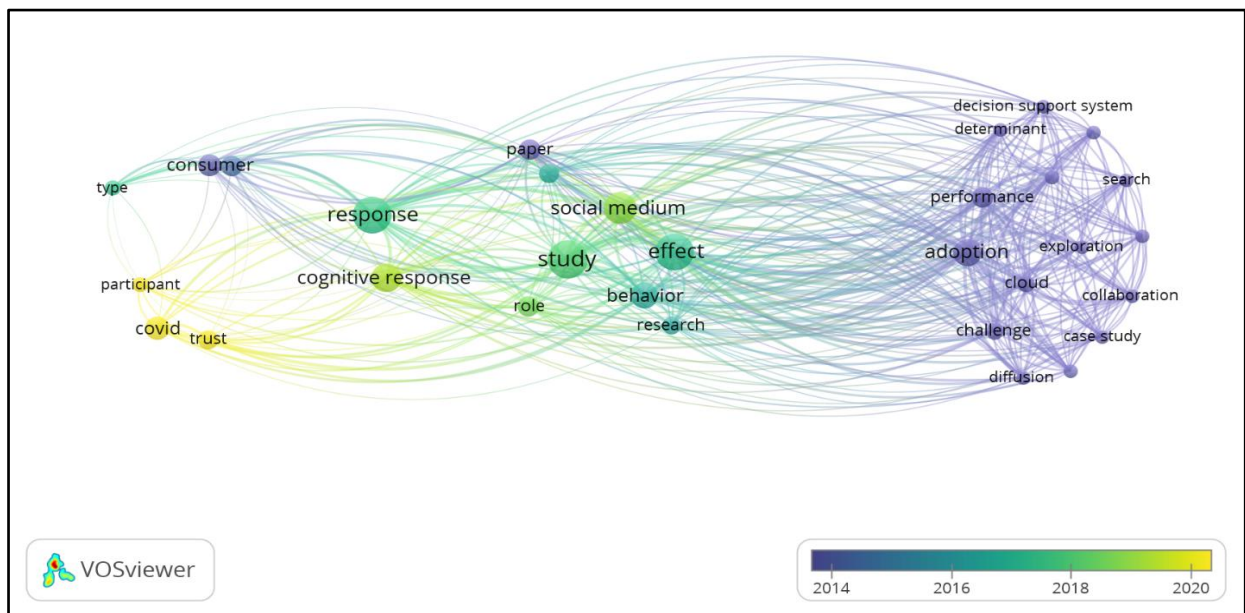


Figure 5: Overlay visualization bibliographic cognitive response-based text

For density visualization, there are five medium and large clusters for cognitive response research in the social media era. Cognitive response research concentrated on consumer topics, while in the second cluster, cognitive response research centered on trust participants in the pandemic era. In contrast, in the cluster, the third cognitive response is related to the response primarily from behavioral men. In the fourth cluster, cognitive response concentrated on research effects and roles of cognitive responses to the attachment to these behaviors and theories as a social medium. At the same time, the final cluster focused on various variables influenced by cognitive responses such as adoption, performance, exploration, cloud, challenge, or others for more details found in Figure 6.

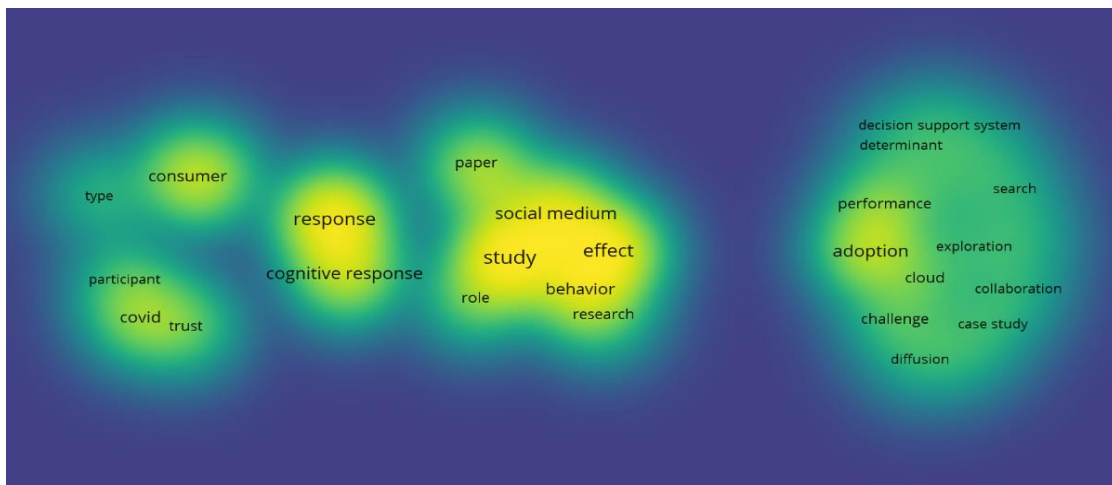


Figure 6: Density visualization bibliographic cognitive response-based text

DISCUSSION

After learning the research trends with the cognitive response theme in the social media era, the researcher will find patterns from themes that use cognitive responses in the era of social media. From the results analysis, cognitive response patterns are used on various big topics such as advertising, politics, news, sports, health, visual communication, travel, and organizational communication. Themes related to advertising Still many with 16 articles, then research related to Health, namely nine articles, Health Communication a total of 6 articles, then articles related to politics (4 articles) and news (4 articles), the remaining one article each spread across the themes of travel, sports and organizational communication.

Cognitive Responses in the Era of Social Media on Issues Advertising

Cognitive response was first used in connection with communication for the benefit of advertising. Since then, research has used this theory to solve communication problems in advertising. The more developed, though, had time to experience decline. In the era of social media, advertising themes are still used to develop a cognitive theory of due response. Own advertising develops broadcasting not only on television or radio but also on various social media platforms.

From the results analysis, two studies link corporate social responsibility with cognitive response theory (refer to Table 1: No. 1 & 32). Structure the central, enduring, and distinctive messages in corporate identity, which form cognitive and sustainable responses by promoting the corporate logo image (refer to Table 1: No. 1). Meanwhile, other research related to CSR and cognitive response is research on the impact of CSR on cognitive responses to news stories and advertisements. News story orientation dimensions, such as problem-oriented and solution-oriented, with relevant CSR advertising dimensions, such as irrelevant non-CSR, low CSR relevance, and high relevance, were tested on cognitive news story responses (refer to Table 1: No. 32).

Research on other cognitive responses has been conducted by connecting social network sites (SNS). The research of Su et al. (2019) tries to find a connection between four types of interactive consumer activities, such as viewing, liking, sharing, and commenting on hotel brands on social networking sites, which consist of brand attitude and brand-customer relationship. Brand is one of the dimensions contained in cognitive response theory (refer to Table 1: No. 2). At the same time, other studies compare the effect of SNS advertising on TV and social media on cognitive responses. Three dimensions are used to test cognitive response, perceived persuasive intent, campaign on SNS, and brand response (refer to Table 1: No. 36). Research from Han and Lee (2014) on social networking sites found that effects from regulatory focus consumers, such as prevention focus, promotion focus, positive message frames, and negative message frames in promotional messages on social media, are capable of influencing cognitive responses in consumers with balanced results _ between regulatory focus consumers and message frames (refer to Table 1: No. 27).

The brand response is researched through perceived persuasive intent, campaigns, and various dimensions. Rajapogal's (2006) research, for example, examines the impact of brand equity, brand personality, and media impact on brand purchasing decisions (refer to Table 1: No. 6). Brand attitude is one development from cognitive responses in the Belch model. Research from Jeon et al. (2016), which researched the factors of brand associations and customer relationships, has shown that they affect consumer response (refer to Table 1: No. 8). Meanwhile, Yuan's (2020) research found that consumer online brand engagement influences cognitive response and behavioral reactions through the affected brand's super recovery effort. This research was carried out when the product was experiencing times of crisis (refer to Table 1: No. 15). Kim and Johnson's (2016) research also produced results from brand impact when the brand is connected with user-generated content (UGC) and can activate cognitive and emotional responses from consumers. Brand results from user-generated content significantly influence behavior eWOM and consumer brand engagement (refer to Table 1: No. 22).

Regarding eWOM, Li et al.'s (2014) research produced findings that affect the argument strength and source dynamism of eWOM significantly influence consumers' affective and cognitive responses, thereby influencing the intention to buy from consumers (refer to Table 1: No. 12). Connecting research between eWOM, cognitive responses, and other social media was carried out by Yan et al. (2018). The results of their research show that the impact of social media marketing, especially on mobile eWOM, on the online dimensions of CBBE and intent behavior

towards the online fast-casual restaurant industry. Mobile eWOM (stimulus) can influence consumers' emotional, affective response, and cognitive responses. Furthermore, emotional affective and cognitive responses can impact response behavior (refer to Table 1: No. 28).

Other research on cognitive responses to social media is also available from various sources of messages. Source message is one of the cognitive response dimensions in the model Belch proposed (Belch, 1982). Research by Buda et al. (2000) on product evaluation from consumers shows that interactive order presentation, source credibility, and message framing can influence product evaluations carried out by consumers on advertisements on social media (refer to Table 1: No. 3). At the same time, Choi et al.'s (2023) research on the effects of advertisement tourism on social media discovered that the perception of credibility of digital native sources such as hashtags influences cognitive responses to accept or reject commercial Information (refer to Table 1: No. 35).

Other studies are scattered in various dimensions to research the impact on cognitive response. Koo's (2003) research, for example, examines how various characteristics of the discount retail environment and attitudes to the discounts affect consumer satisfaction and continue consumer loyalty. Attitude to discount is one of the concepts in cognitive response theory (refer to Table 1: No. 7). Meanwhile, Jung's et al. (2018) research shows that cognitive responses impact affective and behavioral responses to mobile payment services. Dimensions of cognitive response are seen in knowledge, opinions, beliefs, and thoughts (refer to Table 1: No. 9). Meanwhile, research by Han and Lee (2014) sees that the factor of understanding engagement as two-way communication and empathy is a cognitive process based on instinct and persuasive communication and not the concept of social communication, which relies on social and cultural differences, individual approaches, and beliefs. The research results contradict the opinion _ that engagement and empathy are more than consumer response cognitive (refer to Table 1: No. 27).

Besides research on advertising topics, research using cognitive responses and social media is also related to health. Most research links it to the COVID-19 pandemic (refer to Table 1: No. 11, 24, 30, 33 & 34). Mycrik and Willoughby's research uses mixed methods to find out how sources of messages from the COVID-19 announcement from celebrity Tom Hank can influence a good response from emotional and cognitive users on social media. The research results show how the source trust of the artist and his involvement in social media can influence attitude when related to COVID-9 (refer to Table 1: No. 23). Other research finds that with moderation of cognitive response and trust, users can create expert and attractive content regarding the COVID-19 vaccine intention to visit tourists to an area (refer to Table 1: No. 30).

Meanwhile, Ren et al. (2022) researched the impact of traditional media and social media on behavior to prevent oneself from contracting COVID-19. The dimensions researchers use are perceived severity, susceptibility, efficacy, and direct/indirect facilitation of stimulants to cognitive responses that moderate to prevention self from COVID-19 (refer to Table 1: No. 33). Other research on COVID-19 also tested the impact of various Information regarding the Health Communication crisis in the COVID-19 case (Information false vs. half-false Information vs. truth information) on cognitive and emotional responses as well as predicting the examination of Information and intentions of sharing Information on social media (refer to Table 1: No. 32). Meanwhile, research from Valaa et al. (2022) tests the impact of emotional appeals and content

frames regarding social distancing tweets and fear of the vaccine, which has little influence on emotional and cognitive responses for social media users to gain hope and benefits from the COVID-19 vaccine (refer to Table 1: No. 11).

Apart from COVID-19, Health Communication research also links cognitive responses to social media. Use trusted sources of Information such as doctors and use skeptical statements to medication and increase the sale of supplement food. This research uses two variables to test the impact of sources of Information, namely expertise (high vs low expertise) and skepticism about the use of medication (present vs absent) (refer to Table 1: No. 5). Other research examines how information conflict in Health Communication can impact emotional and cognitive responses, thereby influencing the receipt of Public Health information. Two exposure variables used in this research are trust in news in the media and research literacy (refer to Table 1: No. 25). Tests regarding emotional, parasympathetic, and cognitive responses were also carried out using chat social interaction with groups of adults as independent variables. The research results were obtained that animosity, feelings _ of great annoyance, lousy mood, and significant threat to social needs are responses to participants before deciding to accept or reject Information on social media chat (refer to Table 1: No. 31).

Apart from advertising and health, some of the topics researchers also researched regarding cognitive responses and social media are user behavior and emotions. Tsai and Shyr (2022) research that perception from visual communication content can influence cognitive responses to that content. The dimensions of perception that influence is liking the video, feeling satisfied and attractive, a good sense of shape contour, good visual characteristics, and a good sense of color (refer to Table 1: No. 14). Other research classifying Viewer comments were coded as message-oriented, video feature-relevant, and audience-generated thoughts on social media (refer to Table 1: No. 18). Various types of film styles influence thought processes, cognitive responses, and consequences that evoke an emotional response. The film's style is divided into six categories: fiction / well-made, fiction / user-generated content, documentary / well-made, documentary / UGC, art / well-made, and art / UGC (refer to Table 1: No. 19). Other research uses emotional effects as a mediator connection between cognitive responses and dissemination behaviors on Weibo. The result is that words expressing significant severity and vulnerability influence the user's cognitive and emotional responses. Weibo's perceptions and users are like emotions positive and negative increase significantly and influence the positive behavior of users. Positive and negative emotions play a role in mediation and are partial in perceptual responses, cognitive responses, and behavior spread (refer to Table 1: No. 31). Other research has found that environmental Social Network Society (SNS) favors fast emotional responses compared to cognitive responses (refer to Table 1: No. 37).

Research using themes such as political lots intersect with cognitive responses on social media. Wang et al.'s (2023) research uses selective avoidance as a cognitive response to test social media use and anxiety supervision in behavior avoid politics on social media. Selective avoidance is this social media behavior, such as expressive use of social media news and political discussions, and attitude psychology, such as anxiety supervision refer to (Table 1: No. 10). Bibliometric analysis research was also conducted to see how evolution and netizens' cognitive

responses were associated with constructed truth, informativeness, and manipulation from social media. His research focuses on disinformation, misinformation, fake news, and propaganda (refer to Table 1: No. 16). Another study was conducted by Akram et al. regarding social media disinformation trends and their impact on cognitive responses in 2017. The research showed five psychosocial and political factors: influencing individual user perception, providing easy access to radicalism using personal profiles, social media use to influence political opinions, lack of critical social media literacy, and hoax proliferation of disinformation (refer to Table 1: No. 23). Research from Veggi and Zara (2023) regarding sexual harassment among politicians on Twitter discovered that the average political share is less likely to upload optimistic content about sexual harassment compared to the average upload on Twitter. Instead, nuanced negative emotions dominate the narrative, leading to the perpetuation of abuse rather than eliciting a cognitive response (refer to Table 1: No. 20).

Research on politics is sometimes also connected to inside news about cognitive response and social media. Vermeer and van den Heijkant (2023) research on Instagram stories on news accounts for learning political age teenagers find that High interactivity in stories on Instagram is influential and significant towards cognitive responses such as issue-specific knowledge. However, there is no significant difference between emotional response and behavioral response. Political interest increases Because of results from the interactivity of Instagram stories (refer to Table 1: No. 22). Meanwhile, other research shows that celebrity news published on social media can increase cognitive responses and encourage the prevention of contagious diseases (refer to Table 1: No. 24). Likewise, the effects of exposure to conflicting Information mediated by trust in the news media and research literacy can impact emotional and cognitive responses (refer to Table 1: No. 25). At the same time, the investigation of news story orientation interacts with relevant advertisements, including in the category of research that uses the news as a topic related to the news. The research results show that news stories directly impact affective and cognitive responses. Other findings show that Solution -oriented stories can produce a more positive impact and interest in the issue, the efficacy of users, the intention to share stories on social media or researching the problem, a supportive attitude to advertising and brand, intent to purchase, and intention to recommend (refer to Table 1: No. 32).

The rest of the research is on various topics such as sports, travel, and Organizational Communication. Research from Wu et al. (2023) tests how affected credibility sources, such as holders and suitable sports event organizers, attribute related events to perceived social impact visitors of major sporting events and is mediated by event involvement (refer to Table 1: No. 4). Shin and Ki's (2021) research in organizational topics examines how specific messages can improve motivation felt intrinsic whereas unclear messages increase motivation perceived as extrinsic. Intrinsic motives that are felt positively capable influence curly message imagination, attitude organization, credibility message, credibility organization, and image friendly environment organization. In contrast, extrinsic motives are felt to influence these aspects negatively (refer to Table 1: No. 17).

CONCLUSION

There are many research patterns regarding cognitive responses in the social media era related to COVID-19 because from 2019 to 2022, the world is being hit by COVID-19 pandemic. Generally, research connects cognitive response and trust. Apart from that, research also focuses on effects from or mediated by cognitive responses to participants' social media users at a time case. If seen from the trend developing theme _ from 2000 to now, many themes related to advertising were used as the background of cognitive response at the beginning of its emergence, which was also used to solve advertising problems. Other frequently used themes related to cognitive responses besides advertising are Health Communication, politics, and news.

Although Cognitive response is a theory researcher have long used, the emergence of social media has begun to develop this theory with variations in its dimensions related to the dimensions of participation of social media visitors. It is hoped that further research can develop the dimensions of the cognitive theory of this response from side exposure, cognitive response, or attitude as moderation. Concept of knowledge other disciplines, such as computer-mediated communication, educational communication, and others, can be used to develop this theory and improve solving problems in social media.

ACKNOWLEDGMENT

I am incredibly grateful to Dr. Dadang Sugiana, Dr. Asep Sunarya, and Dr. Ira Mirawati for their advice on this research article part of my dissertation titled *The Influence of Exposure to Social Media Content on Online Learning Engagement Intentions through Cognitive Responses and Online Learning Attitudes in students*.

BIODATA

Mariko rizkiansyah is a senior lecturer at Bina Nusantara University, Indonesia. He began his career as a journalist at MNCTV. He manages the content of broadcasting courses at Bina Nusantara University, his research interests include education, social media and new media technology. Email: mariko.rizkiansyah@unpad.ac.id

Dadang Sugiana is an associate professor at Padjajaran University. His research interests include communication development and communication training. Email: dadang.sugiana@unpad.ac.id

Asep Suryana is an assistant professor at Padjajaran University. His research interests include marketing communication. Email: a.suryana@unpad.ac.id

Ira Mirawati is an assistant professor at Padjajaran University. His research interests include manajemen communication. Email: ira.mirawati@unpad.ac.id

REFERENCES

- Aditiawarman, M. (2019). *Hoax and hate speech in the middle world*. Toggak Tuo.
- Akram, M., Nasar, A., & Arshad-Ayaz, A. (2023). A systematic review for netizens' response to the truth manipulation on social media. *Knowledge Management & e-Learning*, 15(2), 322-342.
- Belch, G. (1982). The effects of television commercial repetition on cognitive response and message acceptance. *Journal of Consumer Research*, 9(1), 56-65.
- Belch, G. E. (1981). An examination of comparative and noncomparative television commercials: The effects of claim variation and repetition on cognitive response and message acceptance. *Journal of Marketing Research*, 18(3), 333-349.
- Brucks, M., Armstrong, G. M., & Goldberg, M. E. (1988). Children's use of cognitive defenses against television advertising: A cognitive response approach. *Journal of Consumer Research*, 14(4), 471-482.
- Buda, R., & Zhang, Y. (2000). Consumer product evaluation: the interactive effect of message framing, presentation order, and source credibility. *Journal of Product & Brand Management*, 9(4), 229-242.
- Calder, B. (1978). Cognitive response, imagery, and scripts: What is the cognitive basis of attitude? *Advances in Consumer Research*, 5(1), 630-634.
- Choi, M., Choi, Y., & Kim, D. Y. (2023). Digital natives: Internal defence mechanism to distrust tourism advertisements. *Current Issues in Tourism*, 26(16), 2692-2707.
- Coursey, D. H. (1992). Information credibility and choosing policy alternatives: An experimental test of cognitive-response theory. *Journal of Public Administration Research and Theory*, 2(3), 315-331.
- Dardis, F., Baumgartner, F., Amber E. Boydstun, Suzanna DeBoef, & Fuyuan Shen. (2008). Media framing of capital punishment and its impact on individuals' cognitive responses. *Mass Communication & Society*, 11(2), 115-140.
- Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford: Oxford University Press.
- Fitri, S. (2017). Positive and negative impact of social media on children's social change. *Naturalistic: Jurnal Kajian Penelitian Pendidikan dan Pembelajaran*, 118-123.
- Greenwald, A. G., Brock, T.C., & Ostrom, T. M. (2013). *Psychological foundations of attitudes*. Academic Press.
- Han, K. S., & Lee, T. J. (2014). The impact of regulatory focus and message frame on consumers' responses to promotional campaigns on social networking sites (SNSs). *International Journal of Applied Engineering Research*, 9(22), 14835-14845.
- Hynes, N., & Wilson, J. (2016). I do it, but don't tell anyone! Personal values, personal and social norms: Can social media play a role in changing pro-environmental behaviours? *Technological Forecasting and Social Change*, 111, 349-359.
- Jeon, J. O., & Baeck, S. (2016). What drives consumer's responses to brand crisis? The moderating roles of brand associations and brand-customer relationship strength. *Journal of Product & Brand Management*, 25(6), 550-567.

- Johnson, D. S., Riley, B. K., & Sato, S. (2017). The adverse effect of doctors' skepticism toward prescription drugs. *International Journal of Pharmaceutical and Healthcare Marketing*, 11(3), 222-234.
- Jung, M., Lee, Y. L., Yoo, C. M., Kim, J. W., & Chung, J. E. (2018). Exploring the cognitive, affective, and behavioral responses of Korean consumers toward mobile payment services: A text mining approach. In Yamamoto, S., & Mori, H. (Eds.), *Human interface and the management of information. Interaction, visualization, and analytics* (Vol. 10904, pp. 624–642). HIMI 2018. Lecture Notes in Computer Science. Springer, Cham.
- Kılıç, İ., Seçilmiş, C., & Özdemir, C. (2023). The role of travel influencers in volunteer tourism: an application of the cognitive response theory. *Current Issues in Tourism*, 27(2), 200-216.
- Kim, A. J., & Johnson, K. K. (2016). Power of consumers using social media: Examining the influences of brand-related user-generated content on Facebook. *Computers in Human Behavior*, 58, 98-108.
- Koo, D. M. (2003). Inter-relationships among store images, store satisfaction, and store loyalty among Koreadiscout retail patrons. *Asia Pacific Journal of Marketing and Logistics*, 15(4), 42-71.
- Kurniawan, A. (2020, January 28). Understanding social media – History, function, role, types, characteristics, growth, impact, experts. *Guru Pendidikan.co.id*.
- Lavidge, R. J., & Steiner, G. A. (1961). A model for predictive measurements of advertising effectiveness. *Journal of Marketing*, 25(6), 59-62.
- Lee, C., & Lee, S. (2023). A study of users' EEG responses to different types of fashion films. *Journal of the Korean Society of Clothing and Textiles*, 47(2), 323-336.
- Leng, H. K. (2013). Methodological issues in using data from social networking sites. *Cyberpsychology, Behavior, and Social Networking*, 16(9), 686-689.
- Li, W., Gao, L., & Ke, Y. (2014). Social commerce: The critical role of argument strength and source dynamism of eWOM. *PACIS 2014 Proceedings*, 60.
- Li, M. (2021). The synergistic effects of solutions journalism and corporate social responsibility advertising. *Digital Journalism*, 9(3), 336-363.
- Lu, Y., Qiu, J., Jin, C., Gu, W., & Dou, S. (2022). The influence of psychological language words contained in microblogs on dissemination behaviour in emergency situations—Mediating effects of emotional responses. *Behaviour & Information Technology*, 41(6), 1337-1356.
- Lu, X., Vijaykumar, S., Jin, Y., & Rogerson, D. (2022). Think before you Share: Beliefs and emotions that shaped COVID-19 (Mis) information vetting and sharing intentions among WhatsApp users in the United Kingdom. *Telematics and Informatics*, 67, 101750.
- MacLeod, A. (2014). The impact of communication on human behaviour in times of crisis. *Journal of Business Continuity & Emergency Planning*, 8(2), 134–140.
- Mandolfo, M., Baisi, F., & Lamberti, L. (2023). How did you feel during the navigation? Influence of emotions on browsing time and interaction frequency in immersive virtual environments. *Behavior & Information Technology*, 42(8), 1216-1229.
- Meirick, P. (2002). Cognitive responses to negative and comparative political advertising. *Journal of Advertising*, 31(1), 49-62.

- Moher, D., Cook, D. J., Eastwood, S., & Olkin, I. R. (1999). Improving the quality of reports of meta-analyses of randomized controlled trials: the QUOROM statement. *The Lancet*, 354(9193), 1896-1900.
- Mohammed, M. T. S., Ibrahim, F., & Yunus, N. (2021). Exploring the relationship of social media usage and multitasking of social media on self-efficacy and academic performance. *Jurnal Komunikasi: Malaysian Journal of Communication*, 37(1), 227-243.
- Myrick, J. G., & Willoughby, J. F. (2022). A mixed methods inquiry into the role of Tom Hanks' COVID-19 social media disclosure in shaping willingness to engage in prevention behaviors. *Health Communication*, 37(7), 824-832.
- Nagler, R. H., Vogel, R. I., Rothman, A. J., Yzer, M. C., & Gollust, S. E. (2023). Vulnerability to the effects of conflicting health information: Testing the moderating roles of trust in news media and research literacy. *Health Education & Behavior*, 50(2), 224-233.
- Paek, H. J., Hove, T., & Jeon, J. (2013). Social media for message testing: A multilevel approach to linking favorable viewer responses with message, producer, and viewer influence on YouTube. *Health Communication*, 28(3), 226–236
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, 71.
- Palda, K. S. (1966). The hypothesis of a hierarchy of effects: A partial evaluation. *Journal of Marketing Research*, 3(1), 13-24.
- Pomering, A., & Johnson, L. W. (2009). Advertising corporate social responsibility initiatives to communicate corporate image: Inhibiting scepticism to enhance persuasion. *Corporate Communications: An International Journal*, 14(4), 420-439.
- Rajagopal. (2006). Brand excellence: measuring the impact of advertising and brand personality on buying decisions. *Measuring Business Excellence*, 10(3), 56-65.
- Rarasati, & Pradekso, T. (2019). The effect of exposure to news of marine animals dead due to plastic waste and the zero waste campaign on behavior to reduce the use of plastic bags. *Online Interaction*, 7(4), 295-304.
- Ren, W., Zhu, X., & Hu, Y. (2022). Differential effects of traditional and social media use on COVID-19 preventive behaviors: The mediating role of risk and efficacy perceptions. *Journal of Health Psychology*, 27(8), 1861-1874.
- Richmond, J. R., Edmonds, K. A., Rose, J. P., & Gratz, K. L. (2020). Examining the impact of online rejection among emerging adults with borderline personality pathology: Development of a novel online group chat social rejection paradigm. *Personality Disorders: Theory, Research, and Treatment*, 11(5), 301-311.
- Rycker, A. D., & Jamal, F. U. A. (2023). Do social media and messaging aps influence loneliness? The case of young Malaysian higher education students during the COVID-19 pandemic. *Jurnal Komunikasi: Malaysian Journal of Communication*, 39(1), 1-20
- Sajithra, K., & Patil, D. (2013). Social media – History and components. *IOSR Journal of Business and Management (IOSR-JBM)*, 7(1), 69-74.

- Sari, M. P., & Lubis, E. E. (2017). Fenomena penggunaan media sosial instagram sebagai komunikasi pembelajaran agama Islam oleh mahasiswa Fisip Universitas Riau. *Jurnal Online Mahasiswa*, 4(2), 1-13.
- Seçilmiş, C., Özdemir, C., & Kılıç, İ. (2022). How travel influencers affect visit intention? The roles of cognitive response, trust, COVID-19 fear and confidence in vaccine. *Current Issues in Tourism*, 25(17), 2789-2804.
- Shen, L. (2010). The effect of message frame in anti-smoking public service announcements on cognitive response and attitude toward smoking. *Health Communication*, 25(1), 11-21.
- Shin, S., & Ki, E.-J. (2021). Attribution and attributional processes of organizations' environmental messages. *International Journal of Market Research*, 63(5), 576-596.
- Smith, R. E., & Swinyard, W. R. (1988). Cognitive response to advertising and trial: Belief strength, belief confidence and product curiosity. *Journal of Advertising*, 17(3), 3-14.
- Statista. (2024, February 2). Social media & user-generated content. <https://www.statista.com/markets/424/topic/540/social-media-user-generated-content/#overview>
- Strauss, C. (1989). Who gets ahead? Cognitive response to heteroglossia in American Political Culture. *American Ethnologist*, 17(2), 312-328.
- Su, N., Mariadoss, B. J., & Reynolds, D. (2019). Emotional and cognitive involvement of consumers with hotel brands on social networking sites. *Journal of Hospitality and Tourism Insights*, 2(4), 377-390.
- Taprial, V., & Kanwar, P. (2012). *Understanding social media*. Ventus Publishing.
- Tan, J. J., Firdaus, A., & Aksar, A. I. (2024). Social media for political information: A systematic literature review. *Jurnal komunikasi: Malaysian Journal of Communication*, 40(1), 77-98
- Taylor-Carter, M., Doverspike, D., & Alexander, R. (1995). Message effects on the perception of the fairness of gender-based affirmative action: A cognitive response theory-based analysis. *Social Justice Research*, 8, 285-303.
- Tsai, C. J., & Shyr, W. J. (2022). Using the DEMATEL method to explore influencing factors for video communication and visual perceptions in social media. *Sustainability*, 14(22), 15164.
- Turow, J. (2020). *Media today: Mass communication in a converging world*. New York: Routledge.
- Vaala, S. E., Ritter, M. B., & Palakshappa, D. (2022). Framing effects on US adults' reactions to COVID-19 public health messages: Moderating role of source trust. *The American Behavioral Scientist*, 00027642221124664.
- Veggi, S., & Zara, G. (2022). Investigating sex offending representation among politicians through Twitter. *The Journal of Forensic Psychiatry & Psychology*, 34(1), 131-141
- Vermeer, S., & van den Heijkant, L. (2023). Break a story: Examining the effects of Instagram stories from news accounts on adolescents' political learning. *Journalism Studies*, 25(9), 1029-1052.
- Voorveld, H. A., & van Noort, G. (2014). Social media in advertising campaigns: Examining the effects on perceived persuasive intent, campaign and brand responses. *Journal of Creative Communications*, 9(3), 253-268.

- Wang, Y., Ahmed, S., & Ting Bee, A. (2023). Selective avoidance as a cognitive response: Examining the political use of social media and surveillance anxiety in avoidance behavior. *Behavior & Information Technology*, 3(3), 590-604.
- Wu, J., Orr, M., Inoue, Y., & Chang, Y. (2023). Drivers of the perceived social impact of the Super Bowl: mediation and moderation analyses. *International Journal of Sports Marketing and Sponsorship*, 24(5), 837-852.
- Yan, X., Shah, A. M., Zhai, L., Khan, S., & Shah, S. A. A. (2018). Impact of mobile electronic word of mouth (EWOM) on consumers purchase intentions in the fast-causal restaurant industry in Indonesia. *Proceedings of the 51st Hawaii International Conference on System Sciences*.
- Yeomans, L. (2015). Engagement and empathy discourses in corporate communication: The case of "the science of engagement". *Romanian Journal of Communication and Public Relations*, 17(3), 27-39.
- Yuan, D., Lin, Z., Filieri, R., Liu, R., & Zheng, M. (2020). Managing the product-harm crisis in the digital era: The role of consumer online brand community engagement. *Journal Of Business Research*, 115, 38-47.
- Zhu, Q., Skoric, M., & Shen, F. (2018). I shield myself from them: Selective avoidance on social media during political protests. In K. Koc-Michalska, & D. Lilleker (Eds.), *Digital politics: Mobilization, engagement and participation* (pp. 112-131). Routledge.