THE EFFECT OF COGNITIVE AND AFFECTIVE INVOLVEMENT ON INTENTION TO USE AND WORD OF MOUTH: THE CASE OF ZOOM USERS IN INDONESIA

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ABSTRACT

Introduction/Main Objectives: This study investigates affective and cognitive involvement that reflects psychological ownership and consumer-brand identification in the use of zoom application.

Background Problems: The Zoom application was proposed because of its increasing popularity amid the Covid-19 pandemic. The selection of the zoom meeting application is the right way to find out how much the users want to continue this application both for themselves and to promote it to others by word of mouth (WOM).

Novelty: This study examines the effect of cognitive and affective involvement on continuance intention to use and WOM by examining the mediating role of consumers’ psychological ownership and consumer-brand identification.

Research Methods: 200 responses were analyzed using structural equation modeling (SEM) to test this study’s hypotheses.

Finding/Results: The findings support the mediating role of the extent of consumer’s psychological ownership in describing the effect of affective involvement and continuance intention to use of a brand. In addition, the results support the mediating role of the extent of consumer-brand identification in describing the relationship between affective involvement and continuance intention to use a brand and engage in WOM promotion.

Conclusion: These findings expand and unite existing theory on involvement and a continuing intention to use and engage in WOM.

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INTRODUCTION

Currently, virtual meeting applications have been in the spotlight. They have been needed for virtual meetings during the coronavirus pandemic since 2019 (COVID-19) which has had a global impact. Governments and companies have urged agencies and companies to work from home (WFH) (Dingel & Neiman, 2020). Prevention of the spread of COVID-19 has required a reliable and safe platform, and under these conditions, there have been many employees, students, and other members of the general public using virtual meeting applications like Zoom to WFH (Spinelli & Pellino, 2020). Consequently, according to data from Bloomberg, shares in Zoom have increased in value by up to 5% at the close of trading in New York (Grant, 2020). The popularity of virtual meeting applications shot up amid the COVID-19 pandemic. Such applications are widely used by people around the world to carry out learning and work activities while isolating themselves in their respective homes to prevent transmission of the virus. Data on the development of the Zoom application show that downloads continued to increase with WFH reaching its peak and the application was ranked first with 3.2 million new downloads (Buchholz, 2020).

The focus of this research is to spot factors affecting the continuance intention to use virtual meeting applications. Previous research has stated that continuance intention to use is central to the sustainable success of information systems and consumers’ attitudes (Susilo et al., 2022; Joo et al., 2017; Steelman & Soror, 2017). Then, Kuo and Smith (2018) explained that the purpose of continuance intention to use is an innovation designed through effective mechanisms and solutions to facilitate a job. Understanding the factors that drive the intention to use virtual meeting applications can help companies to understand the behavior of the applications’ users in making better decisions and learning systems during WFH that can be more effective and reliable to use.

This section summarizes the key findings on sustainable use of applications from a cognitive and affective perspective. According to Lee and Kwon (2011) factors affecting continuance intention to use are divided into two categories: affective and cognitive factors. Then, this point of view will consider proposed future-oriented factors influencing user behavior in resuming the application through affective and cognitive users (e.g., AlSaleh & Thakur, 2019; Patma et al., 2021). Cognitive factors are associated with mental processes that determine perception (Abdillah, 2009). Abdillah (2009) suggested that the application of information technology acceptance and adoption theory dominantly based on perceptual cognitive factors. On the other hand, affective factors relate to certain feelings and emotions (AlSaleh & Thakur, 2019).

The authors argue that the predictors of how individuals decide to proceed with an application need to be investigated. Previous studies have shown that online-related behaviors lack empirical data underlying emotional and cognitive processes (Brand et al., 2021; Ding, 2019; Yang et al., 2019). For the example, Yang et al. (2019) investigated the continuation factors of mobile learning by considering the need for self-determination and learning involvement, but they did not consider the affective and cognitive involvement of mobile learning. Ding (2019) argued that the continuance intention to use information systems from various points of view, but the researcher had not considered how affective and cognitive involvement can affect the continuance intention to use. Furthermore, recent research has focused on behaviors that are currently being regarded as potentially addictive, but, for these, there is limited scientific information regarding affective and cognitive
processes (Brand et al., 2021). According to a meta-analysis, affective and cognitive involvement are interesting aspects to research (Soni, 2017). This study found that there was an effect of involvement with television programs on affective and cognitive advertising withdrawal.

The consequence of this research is that continuance intention to use and word of mouth (WOM) are expected to answer the big question of using a sustainable virtual meeting application with a technology that affects both oneself and others through WOM. Continuance intention to use is a significant determinant of a company's market share and revenue that results in long-term viability and innovation success (Bhattacherjee, 2001; Bhattacherjee et al., 2008).

According to Hong et al. (2008), continuance intention to use indicates consumers' overall assessment of the use of certain technologies. In information systems research, continuance intention to use online services occurs with user behavior that is determined by conscious intentions and habitual mechanisms (Chiu et al., 2012; Limayem et al., 2007). Many empirical studies have proven that continuance intention to use is a strong predictor of future behavior (Al-Debei et al., 2014; Zhou et al., 2012). Furthermore, WOM is a medium that can be assessed when it has high innovation so that it can explain the continuance of the group (Kuo & Smith, 2018; Tuškej & Podnar, 2018; Zaichkowsky, 1994). However, it needs to be done through affective and cognitive processes. This is dissimilar to WOM as expressed by (Brown et al., 2005) where the researchers defined WOM as product information that can spread from one consumer to another. WOM communication has great importance for marketing research and it is a well-known integrated marketing communication tool because WOM plays an important role in shaping consumer attitudes and behavior (Harrison-Walker, 2001; Katz & Lazarsfeld, 1955).

This study adds psychological ownership and consumer-brand identification variables. Pierce et al. (2003) stated that the affective and cognitive elements are based on psychological ownership. The two schools of thought affective and cognitive have to do with the function of ownership (Dawkins et al., 2017). This study also argues that, when individuals have full involvement, affective and cognitive individuals will have high ownership of something. According to Dittmar (1992), ownership is a common thing for people to feel (psychologically) that there is a connection between oneself and various ownership targets, such as houses, cars, technology, or other people. Ownership has a dominant role in one's identity so, in the end, it can be an inseparable part of one's self (the extended self). Therefore, a sense of belonging has a psychological effect and behavior that will lead to the continuance intention to use what the individual is using.

Meanwhile, consumer-brand identification aims to expand the focus of target consumers (Hanna & Rowley, 2015; Zenker et al., 2017). Consumer-brand identification can help understand the key factors that contribute to successful brand value creation (Kucharska, 2017). Previous research has discussed how consumer-brand identification has an impact on individual consumer behavior including consumer purchasing decisions, brand preference, a psychological sense of brand community and brand commitment, consumer loyalty, consumer satisfaction, and a higher likelihood of repurchase (Ahearne et al., 2005; Bhattacharya et al., 1995; Casaló et al., 2008; Kim et al., 2001; Kuenzel & Vaux Halliday, 2008; Tildesley & Coote, 2009). The research has discussed how the identification of consumers who have an impact on individual consumer behavior, but it is also important to
know how the individuals feel involved affectively and cognitively so that it leads to continuance intention to use for themselves and others through WOM. Thus, it is important to add the WOM variable to the study to find out the extent of their affective and cognitive involvement so that they can decide to continue the application they use.

In addition, researchers in the field of marketing have defined brands as markers of consumer goods that are necessary in creating and communicating consumer identities (Kuenzel & Vaux Halliday, 2008; Rodhain, 2006). Thus, brand perception and social entities facilitate consumer-brand identification by brands (Scott & Lane, 2000). Tuškej and Podnar (2018) also argued that consumers who can identify brands tend to be more strongly committed to the brand and generate positive words from WOM. Therefore, this study attempts to investigate consumer-brand identification to prove the suitability process that is resuming an application through affective and cognitive involvement.

This modeling is based on flow theory to determine the extent to which individuals are fully involved in the application to produce psychological ownership of a brand and to determine the relationship between affective and cognitive involvement, psychological ownership, consumer-brand identification, and continuance intention to use the application. Flow theory emphasizes the importance of being fully focused and having a sense of enjoyment in the process that is taking place (Csikszentmihaly, 1990). Flow theory is described as satisfying psychological needs through a process of acceptance. Koufaris (2002), in his research, confirmed the dual identity of online consumers as shoppers and computer users because of the enjoyment of shopping and the perceived benefits of a site, thus predicting continuance intention to use. This means a website can influence the affective and cognitive responses of consumers. Also, this study uses an involvement theory approach, where this construct modifies the involvement of ego, product, brand, durability, response, low and high situations, and purchases (Beatty et al., 1988). This involvement variable is considered to be a motivating variable (Beatty & Smith, 1987). Based on this analysis, the questions in this study are structured as follows: Does affective involvement positively associate with psychological ownership? Does affective involvement positively associate with consumer-brand identification? Does cognitive involvement positively associate with psychological ownership? Does cognitive involvement positively associate with consumer-brand identification? Does psychological ownership positively associate with continuance intention to use? Does psychological ownership positively associate with WOM? Does psychological ownership mediate the relationship between affective involvement and continuance intention to use? Does psychological ownership mediate the relationship between cognitive involvement and continuance intention to use? Does consumer-brand identification positively associate with continuance intention to use? Does consumer-brand identification positively associate with WOM? Does consumer-brand identification mediate the relationship between affective involvement and continuance intention to use? Does consumer-brand identification mediate the relationship between cognitive involvement and continuance intention to use? Does consumer-brand identification mediate the relationship between affective involvement and WOM?
mediate the relationship between cognitive involvement and WOM.

Based on flow theory and social identity theory, this study advances the theoretical development of affective and cognitive involvement in continuance intention to use and WOM by proposing a mediation model that suggests affective and cognitive involvement affect continuance intention to use and WOM through psychological ownership and consumer-brand identification. In addition, this study will test and provide empirical evidence regarding the effect of affective and cognitive involvement on psychological ownership and consumer-brand identification, as well as to examine consumer-brand identification and psychological ownership on continuance intention to use of the application and WOM. As a result, the authors of this study believe that individuals’ involvement can act as a powerful predictor of WOM and continuance intention to use the application through the mediating mechanism of consumer-brand identification and psychological ownership. The purpose of this research is to see if cognitive and affective involvement have equal impacts on consumers’ attitudes toward their technology-related behavior. Finally, companies have to consider and stimulate consumers’ involvement, which will lead to a sense of psychological ownership and consumer-brand identity in order to generate continuance intention to use and WOM of a video conferencing application.

LITERATURE REVIEW

1. Flow theory

Flow theory (Csikszentmihalyi, 1975, 1990, 1997) was defined as “The holistic sensation that people feel when they act with total involvement”. Flow is characterized as a psychological condition of a person for whom activities intrinsically can cause pleasure, that is to say they are in a flow. People who are in a flow, turn to general experience modes when they are absorbed in activities. This mode is characterized by a narrowing focus of awareness, meaning irrelevant perceptions and thoughts are filtered out, with a loss of self-awareness, by response to clear goals and unambiguous feedback, and by a sense of control over the environment (Csikszentmihalyi, 1997). Fang et al. (2013) provided empirical evidence of flow theory by looking at game application users who feel bored if their skills in playing game applications are greater than the challenges faced. Instead, users tend to be frustrated if their skills to play a game application are insufficient for the challenge faced. Thus, the activity must provide an adequate level of challenge according to the skills of the individual. This means that pleasure appears at the boundary between boredom and anxiety when the challenge must be balanced with a person's capacity to act (Csikszentmihalyi et al., 1993). In recent years, the flow theory has also been studied in the context of computer and environmental media and has been recommended as a possible metric from the online consumer experience (Mahfouz et al., 2020; Cheng, 2021; Hameed et al., 2021). Thus, this study has used flow theory to provide a view of how a person experiences involvement in both cognitive and affective ways. When someone experiences a flow when using a virtual meeting application, this results in a situation where there is full absorption or involvement in the activity, so the user will strives to continue using the virtual meeting application for themselves and for others.
2. Affective and cognitive involvement, psychological ownership, and consumer-brand identification

Beatty et al. (1988) argued that the concept of involvement has had a major impact on consumer behavior research. This concept has also been incorporated into studies on consumer behavior as an important theory or perspective (Hawkins et al., 1983; Zaltman & Wallendorf, 1983). Beatty et al. (1988) defined involvement as the magnitude of an ego, product, brand, durable, response, situation, low, high, and purchase of something involving the individual. They also conceptualized two types of involvement, namely ego involvement and purchasing involvement. Ego involvement is defined as the importance of the product to the individual, his or her values, and self-concept. On the other hand, purchasing involvement relates to the level of concern or interest in making a purchase triggered by the need to consider a specific purchase (Hawkins et al., 1983).

Park and Young (1986) proposed that the existence of cognitive involvement (induced by utilitarian or cognitive motives) and affective involvement (derived from expressive values or affective motives) were different constructs. Mittal and Lee (1989) also distinguished between two different dimensions of involvement, namely the cognitive dimension (product importance, perceived risk) and the affective dimension (hedonic value). Ratchford (1987) defined affective as a "feel" that implies ego gratification, social acceptance, or sensory pleasure motives and ongoing affective processing. Meanwhile, cognitive was defined as the process of "thinking" associated with utilitarian motives and the consequences that are carried out with cognitive information processing. Putrevu and Lord (1994) stated that affective and cognitive involvement partially determine the relative effectiveness of comparative and non-compa-
ship behavior and consumer-brand identification processes, so they can know the process of resuming the application. The researchers argue that the gap in understanding affective and cognitive involvement with various outcomes is due to a lack of theory in explaining empirical testing (Avey et al., 2009). Hence, flow theory provides the focus needed to begin to bridge this gap.

Furthermore, in empirical research conducted by Lee and Faber (2007) on game players who stated that involvement occurred in situations that motivate users without any interference so that they can be fully involved in affective and cognitive ways. Their results also showed that individuals who embed brands in themselves tend to place products in a place that is special to them. Thus, this study assumes that individuals who experience full involvement in a product or brand, as consumers, tend to feel psychological ownership and identify with a brand. Therefore, this study builds the following hypotheses:

H1a: Affective involvement is positively associated with psychological ownership
H1b: Affective involvement is positively associated with consumer-brand identification
H1c: Cognitive involvement is positively associated with psychological ownership
H1d: Cognitive involvement is positively associated with consumer-brand identification

3. Psychological Ownership, Continuance Intention to Use, and WOM

Van Dyne and Pierce (2004) found that psychological ownership is positively related to organizational commitment, job satisfaction, self-esteem, and organizational citizenship behavior. Prior research has attempted to understand when, why and how consumers choose to adopt new technology (Davis, 1989; Srivasan et al., 2002), and such research usually focuses on the point in time at which a consumer purchases a new technology product (Van Ittersum & Feinberg, 2010). In this study, the researchers do not only test how consumers buy and adopt new technologies they also examine how consumers can have the extra-role behavior (i.e., WOM and continuance intention to use) of consumers.

Pierce et al. (1991) defined psychological ownership as a condition in which the individual feels that an object that is the target of ownership (whether real or not) is theirs. Dittmar (1992) proposed that psychological ownership arises because everything can satisfy a certain motive/ reason. The researcher also stated that ownership included self-awareness and perception of the world. Not only that, the concept of psychological ownership is also based on the work of focus regulation theory (Higgins, 1997, 1998). The researcher stated that individuals had two basic self-regulatory systems. The first was promotion the individual focuses on caring for achievements and aspirations and shows more willingness to take risks. Usually, promotion-focused individuals pursue goals that reflect their hopes and aspirations. The second was prevention individuals who are more concerned with duty and obligation and experience emotional anxiety and agitation are more focused on prevention.

The results of empirical research conducted by Avey et al. (2009) demonstrated that ownership had a positive effect on organizational citizenship behavior, so the organization had the potential to become an important target of psychological ownership. Thus, the intention to stay with the organization was positively related to psychological ownership. Their results also showed that promotion-oriented psychological ownership is measured by self-efficacy, accountability, ownership, and self-identity. Furthermore, being more involved and having high
psychological ownership meant that consumers would be more satisfied with a certain product or brand, so these consumers were more likely to resume use of these products and tended to carry out promotions through WOM.

As the involvement in the use of technology becomes more pervasive, the critical question is how do consumers correspond to the value in their use (Vargo & Lusch, 2004). Thus, this study also examines how consumers can engage in extra-role behavior through the consumer’s psychological state in influencing WOM and continuance intention to use. Based on empirical studies on the relationship between individual psychological conditions and outcomes (e.g., Kim & Beehr, 2017), it can be assumed that individual psychological ownership affects WOM and continuance intention to use.

Together, it can also be assumed that psychological ownership plays a mediating role in the relationship between affective and cognitive involvement with WOM and continuance intention to use. Based on previous research, this study proposes the following hypotheses:

H2a: Psychological ownership is positively associated with continuance intention to use

H2b: Psychological ownership is positively associated with WOM

H2c: There is an indirect relationship between affective involvement and continuance intention to use as mediated by psychological ownership

H2d: There is an indirect relationship between affective involvement and WOM as mediated by psychological ownership

H2e: There is an indirect relationship between cognitive involvement and continuance intention to use as mediated by psychological ownership

H2f: There is an indirect relationship between cognitive involvement and WOM as mediated by psychological ownership

4. Consumer-brand identification, continuance intention to use, and WOM

Perceived brands and social entities facilitate consumer-brand identification (Scott & Lane, 2000). Identification in this case is identification with an object that is implanted with meaning related to the individual. According to one study (Tuškej et al., 2013), consumer-brand identification is defined as a perception of the similarity between brands (marking an object with symbolic meaning). Aside from this view, most of the definitions of consumer-brand identification come from social identity theory based on social psychology. According to the social identity theory and categorization, individuals will identify with a social category when the social category increases their self-esteem, and when the individual identify, they will engage in positive pro-category (i.e., brand) behavior (Bhattacharya & Sen, 2003; Tajfel & Turner, 1985).

Kim et al. (2001) found the level of consumer-brand identification to be the extent to which brands express and enhance consumer identity. Therefore, consumer-brand identification occurs as a result of a subjective process of comparison between brand identity and consumer identity (Dutton et al., 1994). Individuals who use a brand are engaging in a form of creating and communicating their self-concept (Chaplin & John, 2005). In other words, consumers identify a brand by sharing personality traits in themselves and common values to build their social identity based on reference to a particular brand (Bagozzi & Dholakia, 2006; Carlson et al., 2009; Dholakia et al., 2004).

Empirical evidence shows that, when consumers identify a particular brand, they will
form a psychological relationship with the brand, exhibit favoritism, and work instinctively for the benefit of the brand (Hughes & Ahearne, 2010; Underwood et al., 2001). Tuškej et al. (2013) also revealed that consumer-brand identification not only has a positive effect on consumer commitment to that brand but it can also positively influence WOM. Most of the research in marketing suggests that WOM may be one of the most important responses that can emerge from efforts directed at customer relationships (Brown et al., 2005). Previous research suggests that an important aspect of WOM lies in the integration of brand positioning (underdog vs top dog). Meanwhile, the influence of top dog positioning has been associated with purchase intentions, real choices, and brand loyalty (Kirmani et al., 1999). Therefore, consumer involvement in a product or brand comes from identification by consumers to form appropriate values for themselves, so when consumer-brand identification of a product or brand is high, individuals tend to continue to reuse a product or brand and carry out promotions through WOM and continuance intention to use.

This study further proposes that consumer-brand identification has a mediating role in terms of the effects of affective and cognitive involvement on WOM and continuance intention to use. As previously explained, consumer affective and cognitive involvement will result in consumer-brand identification. Thus, consumers who identify with the brand are likely to have stronger continuance intention to use and generate WOM. The results of research by Tuškej et al. (2013b) show that consumer-brand identification fully mediates the impact of value appropriateness on brand commitment. Recent research conducted by Coelho et al. (2018) found that consumers who participate in social media brand communities can develop positive attitudes towards brands, such as trust and loyalty, and that consumer consumer-brand identification may have a fundamental role in changing consumer-brand relationship interactions. Thus, based on social identity theory (Tajfel & Turner, 1985), consumers with stronger consumer-brand identification are more likely to engage in pro-brand activities, such as WOM and continuance intention to use. So, this research tries to confirm previous research by building the following hypotheses:

H3a: Consumer-brand identification is positively associated with continuance intention to use

H3b: Consumer-brand identification is positively associated with WOM

H3c: There is an indirect relationship between affective involvement and continuance intention to use as mediated by consumer-brand identification

H3d: There is an indirect relationship between affective involvement and WOM as mediated by consumer-brand identification

H3e: There is an indirect relationship between cognitive involvement and continuance intention to use as mediated by consumer-brand identification

H3f: There is an indirect relationship between cognitive involvement and WOM as mediated by consumer-brand identification

Based on the background and theoretical basis previously described, the research framework proposed in this study is as follows:
METHOD, DATA, AND ANALYSIS

1. Samples and Data Collection Methods

This research was conducted using a survey approach (Cooper & Schindler, 2014), through an online questionnaire distributed to users of the Zoom application in Indonesia. The respondents were contacted to obtain their permission to collect data. Once the agreement was reached, the researchers shared the survey items. The survey took place in between May and June 2020. The survey was distributed to these Zoom users via personal and direct messages with the permission of the respondents. The Zoom users solicited survey participants via social media (e.g., group and personal messaging via Whatsapp and Instagram). There were 200 respondents who indicated their willingness to participate in the survey. The collection of samples used the purposive sampling technique, namely using the researcher's judgment in selecting cases bearing in mind the specific objectives (Neuman, 2014) required by this study a sample according to the following criteria users of the Zoom application with a minimum age of 17. Hair et al. (2014) detailed that the sample in a research model that has less than five or equal to five latent constructs with more than three indicators per each construct requires a minimum sample size of 100 observations. This study has six variables (independent and dependent) with the number of indicators for each construct between 3-10 indicators.

2. Measures and Research Variables

This study used the same variables as several extant studies. This means that some extant studies have tested the face and content validities. However, this study has made minor modifications so that the questionnaire’s items matched the content of this study, as presented in Table 1. The measurement of all constructs in this study used the previous measurements, so the researchers needed to translate them into Indonesian using the back translation procedure. Measurement of all variables in this study was carried out using a 5-point Likert scale. Respondents were asked to fill out a questionnaire using a Likert scale of 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). The affective and cognitive involvement of individuals were
measured using 10 question items (Zaichkowsky, 1994). The items included “For me, the virtual meeting application when I work from home becomes: very unenthusiastic-very enthusiastic” and “For me, the existence of the virtual application when working from home becomes: very unimportant-very urgent”.

The measurement of psychological ownership used the seven question items used by Van Dyne and Pierce (2004). The items included “I feel that the virtual meeting application is my favorite work from home application”. To measure consumer-brand identification three items were used (Tuškej et al., 2013). These items included “I feel that my values and the values of virtual meeting application are a perfect match”. Continuance intention to use was measured using three items (Bhattacherjee, 2001). The items included “I will use the virtual meeting application more often to facilitate my work.” WOM was measured using three items (Tuškej et al., 2013). Statement items included “I share my personal experiences regarding the virtual meeting application with other people I know”.

3. Data Analysis

Software called AMOS 26 Analysis of Moment Structures was used for this analysis (Arbuckle, 2019). As previously stated, the model of this study had been tested Indonesian context; as a result, it was necessary to conduct factor analysis to confirm the structure and relationships among the variables with regard to the underlying theory. Structural equation modelling (SEM) was used following a two-step approach (Anderson & Gerbing, 1988). In the first step, confirmatory factor analysis (CFA) was presented to test the fitness of the model with data and the validity of the constructs. In the second step, the structural model was presented in accordance with the theoretical framework, and hypotheses testing and model fitness of the entire framework are carried out.

### Table 1. Operational definitions

<table>
<thead>
<tr>
<th>Research variables</th>
<th>Operational Definitions</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Involvement</td>
<td>Affective is a form of “feel” that implies ego gratification, social acceptance, or sense pleasures motives and ongoing affective processing (Ratchford, 1987)</td>
<td>Zaichkowsky (1994)</td>
</tr>
<tr>
<td>Cognitive Involvement</td>
<td>Cognitive is defined as the process of “thinking” associated with utilitarian motives and the consequences that are carried out with cognitive information processing (Ratchford, 1987)</td>
<td>Zaichkowsky (1994)</td>
</tr>
<tr>
<td>Psychological Ownership</td>
<td>Psychological ownership (PO), defined as “a state in which individuals feel as though the target of ownership (or a piece of that target) is theirs (i.e., it is ‘MINE’)” (Pierce et al., 2003, p. 86).</td>
<td>Van Dyne and Pierce (2004)</td>
</tr>
<tr>
<td>Consumer-brand Identification</td>
<td>Consumer-brand identification as the extent to which brands express and enhance consumer identity (Kim et al., 2001)</td>
<td>Tuškej et al. (2013)</td>
</tr>
<tr>
<td>Continuance intention to use</td>
<td>Continuance intention is defined as “Users' intention to continue using the information system” (Bhattacherjee, 2001)</td>
<td>Bhattacherjee (2001)</td>
</tr>
<tr>
<td>Word of Mouth (WOM)</td>
<td>WOM defined as “informal, person-to-person communication between a perceived non-commercial communicator and a receiver regarding a brand, a product, an organization or a service (Harrison-Walker, 2001)</td>
<td>Tuškej et al. (2013)</td>
</tr>
</tbody>
</table>
RESULT AND DISCUSSION

As for the survey results, there were 200 respondents who matched the research criteria, and these 200 respondents met the minimum required for the sample. The descriptive statistics are presented in Table 2 and they show that 72 percent of the respondents who took part in the survey (144) were women. Male respondents were reported to be reluctant to engage in the survey, therefore their ratio is lower than their female counterparts. Analysis of age frequency reveals that a total of 164 respondents (82%) were between 20 and 30 years old.

Before testing the hypothesis, the first step the researchers took was to assess the goodness of fit (GOF) measurement model. The GOF evaluation results of the measurement model can be seen in Table 3. Overall, it shows that the GOF measurement model in this study has met the required criteria, namely the value of CMIN/DF = 1.565, RMSEA = 0.053, CFI = 0.971, and SRMR = 0.037. Therefore, the GOF measurement model in this study is acceptable.

To check for common method bias an additional analysis was performed, namely the Harman single factor test (Podsakoff et al., 2003). The Harman's single factor test results show that the GOF value is CMIN/DF = 6.974, RMSEA = 0.173, CFI = 0.669, and SRMR = 0.207. This means that the common method bias in this study is not significant.

### Table 2 Profile of Respondents

<table>
<thead>
<tr>
<th>Respondent Profiles</th>
<th>Frequency</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56</td>
<td>28%</td>
</tr>
<tr>
<td>Female</td>
<td>144</td>
<td>72%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;20</td>
<td>23</td>
<td>11.5%</td>
</tr>
<tr>
<td>20-30</td>
<td>164</td>
<td>82%</td>
</tr>
<tr>
<td>31-40</td>
<td>9</td>
<td>4.5%</td>
</tr>
<tr>
<td>&gt;40</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Frequency of Zoom application Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>102</td>
<td>51%</td>
</tr>
<tr>
<td>Medium</td>
<td>75</td>
<td>37.5%</td>
</tr>
<tr>
<td>High</td>
<td>23</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

### Table 3. GOF Analysis Results of the Measurement Model

<table>
<thead>
<tr>
<th>GOF Index</th>
<th>Expected value</th>
<th>Result</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>High and P-value $&lt; 0.05$</td>
<td>-</td>
<td>Low and P-value $&gt; 0.05$</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$&gt;0.08$</td>
<td>$&gt;0.06$</td>
<td>$&lt;0.06$</td>
</tr>
<tr>
<td>SRMR</td>
<td>$&gt;0.10$</td>
<td>$&gt;0.08$</td>
<td>$&lt;0.08$</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>$&gt;5$</td>
<td>$&gt;3$</td>
<td>$&gt;1$</td>
</tr>
<tr>
<td>CFI</td>
<td>$&lt;0.90$</td>
<td>$&lt;0.95$</td>
<td>$&gt;0.95$</td>
</tr>
</tbody>
</table>

Note: N=300; $\chi^2$ (CMIN) = chi-square discrepancy; DF = Degrees of Freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; GOF = Goodness of Fit.
The researchers also tested the construct validity, namely convergent validity and discriminant validity. In summary, the results of the convergent validity test can be seen in Table 4. Hair et al. (2014) have provided rules of thumb for convergent validity tests; if the factor loading value (λ) of the items are above 0.5, it can be categorized as acceptable. The results of our factor analysis showed that the 24 question items have factor loading values (λ) above 0.5, but there were four indicators that had factor loading values below 0.5, namely POW2, POW6, POW7, and WOM2. Therefore, we deleted those question items.

If the average variance extracted (AVE) values of each construct were above 0.5, they could be categorized as acceptable. The results show that the AVE values of each construct had values above 0.5. Regarding the discriminant validity test, Hair et al. (2014) have provided a rule of thumb that the Cronbach alpha value and composite reliability between 0.6 and 0.7 are still acceptable. Reliability test results indicate good and acceptable values. Therefore, the results of the convergent validity test in this study were acceptable. Furthermore, the results of the discriminant validity test could be seen in Table 5. The test results show that the square root of AVE values of each construct were greater than the correlation values between each construct. Therefore, the results of the discriminant validity test in this study are acceptable.

Table 4. Construct Validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicators</th>
<th>The statements</th>
<th>λ</th>
<th>AVE</th>
<th>α</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CogIn1</td>
<td>To me the Zoom application is (unimportant-important)</td>
<td>0.842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CogIn2</td>
<td>To me the Zoom application is (boring-interesting)</td>
<td>0.853</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CogIn3</td>
<td>To me the Zoom application is (irrelevant-relevant)</td>
<td>0.799</td>
<td>0.683</td>
<td>0.915</td>
<td>0.915</td>
<td></td>
</tr>
<tr>
<td>CogIn4</td>
<td>To me the Zoom application is (not exciting-exciting)</td>
<td>0.809</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CogIn5</td>
<td>To me the Zoom application is (means nothing-means a lot to me)</td>
<td>0.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AfcIn1</td>
<td>To me the Zoom application is (unappealing-appealing)</td>
<td>0.749</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AfcIn2</td>
<td>To me the Zoom application is (mundane-fascinating)</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AfcIn3</td>
<td>To me the Zoom application is (worthless-valueable)</td>
<td>0.829</td>
<td>0.637</td>
<td>0.895</td>
<td>0.898</td>
<td></td>
</tr>
<tr>
<td>AfcIn4</td>
<td>To me the Zoom application is (uninvolving-involving)</td>
<td>0.844</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AfcIn5</td>
<td>To me the Zoom application is (not needed-needed)</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POW1</td>
<td>Zoom is my favorite application when working from home (WFH).</td>
<td>0.882</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POW3</td>
<td>I feel a very high level of personal ownership on the Zoom app when working from home (WFH).</td>
<td>0.921</td>
<td>0.846</td>
<td>0.956</td>
<td>0.957</td>
<td></td>
</tr>
<tr>
<td>POW4</td>
<td>I feel that Zoom is my favorite application when working from home (WFH).</td>
<td>0.932</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POW5</td>
<td>Zoom is our favorite app when work from home (WFH).</td>
<td>0.943</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I feel that my identity and the identity of this Zoom application are very suitable

I have a lot in common with other people who use the Zoom app

I feel that my values and the values of the Zoom app match very match.

I share my personal experience regarding the Zoom app with other people I know

I share stories about this Zoom application with people I know

I want to continue using the Zoom app in the future

I recommend the Zoom app to my friends or anyone else.

I will use the Zoom app more often to make my work easier.

Note: ConId = Consumer-brand Identification, WOM = Word of Mouth, COU = Continuance intention to use, POW = Psychological Ownership, ConId1 = Cognitive Involvement, AfcIn = Affective Involvement, AVE = Average Variance Extracted, α = Cronbach’s alpha, CR = Composite Reliability.

Table 5 Discriminant Validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cognitive Involvement</td>
<td>.827</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Affective Involvement</td>
<td>.783***</td>
<td>.798</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Psychological Ownership</td>
<td>.675***</td>
<td>.707***</td>
<td>.920</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Consumers’ Brand-Identification</td>
<td>.582***</td>
<td>.686***</td>
<td>.828***</td>
<td>.854</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Word of Mouth</td>
<td>.481***</td>
<td>.589***</td>
<td>.591***</td>
<td>.669***</td>
<td>.816</td>
<td></td>
</tr>
<tr>
<td>6. Continuance Intention to Use</td>
<td>.627***</td>
<td>.667***</td>
<td>.824***</td>
<td>.872***</td>
<td>.750***</td>
<td>.861</td>
</tr>
</tbody>
</table>

Note: the diagonal (bold) line is the square root of AVE of each construct. The correlation value between constructs is smaller than the square root of AVE of each construct.

In addition, we also performed an invariance analysis which can be seen in Table 6. The six-factor measurement model (configural invariance) was fit ($\chi^2 = 563,656$, df = 388, CFI = 0.955, TLI = 0.946, RMSEA = 0.048, SRMR = 0.068). This was statistically significant outperforming the 3-factor model ($\chi^2 = 641,346$, df = 206, Satorra-Bentler adjusted $\Delta\chi^2 = 77.69$, $\Delta$df = 182, p <0.05, CFI = 0.885, TLI = 0.871, RMSEA = 0.103, SRMR = 0.059), and one factor model ($\chi^2 = 1197,813$, df = 209, Satorra-Bentler adjusted $\Delta\chi^2 = 634.157$, $\Delta$df = 179, p <0.05, CFI = 0.669, TLI = 0.636, RMSEA = 0.173, SRMR = 0.1979).

The next step was to conduct a structural model analysis, namely by evaluating the GOF values of the structural model. Table 7 shows the GOF results of the structural model. Overall, Table 7 shows that more than two GOF values of the structural model had been met. Therefore, the research model is supported by the empirical data that we have obtained.
Table 6 Model Comparison Test for the Invariant Factor Measurement Model

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Model description</th>
<th>$x^2$</th>
<th>df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>Comparison to Model</th>
<th>Satorra-Bentler Corrected $\Delta x^2$</th>
<th>$\Delta df$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6-factor model</td>
<td>303.568</td>
<td>194</td>
<td>0.971</td>
<td>0.966</td>
<td>0.053</td>
<td>0.037</td>
<td>/</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>2</td>
<td>3-factor model</td>
<td>641.346</td>
<td>206</td>
<td>0.885</td>
<td>0.871</td>
<td>0.103</td>
<td>0.059</td>
<td>1</td>
<td>337.778</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>1-factor model</td>
<td>1197.813</td>
<td>209</td>
<td>0.669</td>
<td>0.636</td>
<td>0.173</td>
<td>0.1979</td>
<td>1</td>
<td>634.157</td>
<td>15</td>
</tr>
</tbody>
</table>

Test of multi-group invariance of 6-factors measurement model

<table>
<thead>
<tr>
<th>Test</th>
<th>Index</th>
<th>Expected value</th>
<th>Result</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Configural Invariance</td>
<td>563.656</td>
<td>388</td>
<td>0.955</td>
</tr>
<tr>
<td>5</td>
<td>Metric Invariance</td>
<td>578</td>
<td>404</td>
<td>0.955</td>
</tr>
<tr>
<td>6</td>
<td>Scalar Invariance</td>
<td>603.364</td>
<td>426</td>
<td>0.954</td>
</tr>
<tr>
<td>7</td>
<td>Residual (Full) Invariance</td>
<td>643.065</td>
<td>448</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Table 7. Results of the Structural Model GOF Analysis

<table>
<thead>
<tr>
<th>GOF Index</th>
<th>Expected value</th>
<th>Result</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>High and P-value &lt; 0.05</td>
<td>Low and P-value &gt; 0.05</td>
<td>-</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&gt;0.08</td>
<td>&gt;0.06</td>
<td>&lt;0.06</td>
</tr>
<tr>
<td>SRMR</td>
<td>&gt;0.10</td>
<td>&gt;0.08</td>
<td>&lt;0.08</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>&gt;5</td>
<td>&gt;3</td>
<td>&gt;1</td>
</tr>
<tr>
<td>CFI</td>
<td>&lt;0.90</td>
<td>&lt;0.95</td>
<td>&gt;0.95</td>
</tr>
</tbody>
</table>

Note: All models fitted using a maximum likelihood estimator. $\chi^2$ (CMIN) = chi-square discrepancy; DF = Degrees of Freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; GOF = Goodness of Fit

Figure 2 Path Analysis

\[ R^2 = 0.52 \]

\[ R^2 = 0.57 \]
The results of hypothesis testing can be seen in Figure 2, Table 8, and Table 9. The results of the analysis show that affective involvement and psychological ownership were statistically significant ($\beta = 0.653$, $p <0.01$). The coefficient of determination (R square) of affective involvement on psychological ownership is 0.52, which indicates that individual affective involvement contributes to individual psychological ownership by 52%. Therefore, H1a is supported. Affective involvement has a significant positive effect on consumer-brand identification with a value of $\beta = 0.756$ ($p <0.01$). The coefficient of determination (R square) of affective involvement on consumer-brand identification is 0.57, which indicates that individual affective involvement contributes to the identification of individual consumers by 57%. Therefore, H1b is supported.

Cognitive involvement on psychological ownership is not supported ($\beta = 0.083$, $p = 0.426$), so H1c is not supported. Cognitive involvement on consumer-brand identification is not supported ($\beta = 0.046$, $p = 0.698$), so H1d is not supported. The results showed that cognitive involvement has positive direct effects on continuance intention to use ($\beta = 0.649$, $p <0.001$) and WOM ($\beta = 0.545$, $p <0.001$). In contrast to the study's initial model, cognitive involvement as represented in perceived functional aspects of consumer’s psychological resources does not appear to be a major predictor of psychological ownership and brand identification. Instead, Affective Involvement is the only aspect of involvement that predicts psychological ownership and brand identification. The findings are in line with earlier empirical testing that found a direct effect of cognitive involvement on an individual's attitude and intention to adopt technology (Agarwal & Karahanna, 2000; AlSaleh & Thakur, 2019; Koufaris, 2002; Kulviwat et al., 2007). The feature of cognitive involvement shows the Zoom application’s significance as a virtual meeting medium, based on its perceived functional features. People who are more cognitively engaged, for example, are more likely to believe that the Zoom application can improve their usage (for example, because they can find lower-cost products and/or have more options to examine). Another aspect of cognitive involvement knowledge was associated with continuance intention to use and WOM. However, inconsistent with our prediction, it demonstrated a direct relationship rather than an indirect relationship through consumer’s brand identification and psychological ownership. The researchers did not necessarily expect knowledge to be directly associated with continuance intention to use and WOM, but the findings are in line with self-determination theory (Deci & Ryan, 2000). Continuance intention to use and WOM are enhanced when people feel autonomy and competent about themselves in various domains such as intention to use and WOM regarding an application. This could be the reason that knowledge is more strongly related to a sense of autonomy and competence as each individual develops independently than it is related to engaging affectively on psychological resources. This could be a reason why cognitive involvement in using an application was directly associated with continuance intention to use and WOM.

Furthermore, the results of the analysis showed that psychological ownership has a positive effect on continuance intention to use ($\beta = 0.424$, $p <0.01$), so H2a is supported. Psychological ownership has positive effect on WOM ($\beta = 0.171$, $p <0.05$), so H2b is supported. Psychological ownership makes individuals perceive the target of ownership as an extension of themselves (Dittmar, 1992). According to Van Dyne and Pierce (2004), psychological
ownership is carried out by individuals who feel the prerogative recognized by the individual. Therefore, individuals with psychological ownership can produce stronger positive attitudes and behavior (e.g., continuance intention to use and WOM).

The researchers tested the H2c, H2d, H2e, H2f, H3c, H3d, H3e, and H3f hypotheses using a bootstrapping technique (Preacher & Hayes, 2008) with the AMOS Graphics 26 analysis tool to analyze the mediating mechanisms of the psychological ownership construct and consumer-brand identification. Since the analysis of H1c and H1d pathways is not supported, then hypothesis testing of the mediation mechanism of H2e, H2f, H3e, and H3f could not be continued. The results of our analysis showed that psychological ownership significantly mediated the relationship between affective involvement and continuance intention to use (ab = 0.356, p < 0.001), 95% CI [0.183, 0.769]. Since zero is not contained in the

<table>
<thead>
<tr>
<th>Indirect Paths</th>
<th>Estimate (ab)</th>
<th>BC 95% CI</th>
<th>P-Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>H2c</td>
<td>0.356</td>
<td>0.183</td>
<td>0.769</td>
<td>0.001</td>
</tr>
<tr>
<td>H2d</td>
<td>0.142</td>
<td>-0.039</td>
<td>0.508</td>
<td>0.186</td>
</tr>
<tr>
<td>H2e</td>
<td>0.043</td>
<td>-0.442</td>
<td>0.237</td>
<td>0.714</td>
</tr>
<tr>
<td>H2f</td>
<td>0.017</td>
<td>-0.071</td>
<td>0.224</td>
<td>0.44</td>
</tr>
<tr>
<td>H3c</td>
<td>0.596</td>
<td>0.338</td>
<td>1.357</td>
<td>0.001</td>
</tr>
<tr>
<td>H3d</td>
<td>0.593</td>
<td>0.283</td>
<td>1.332</td>
<td>0.001</td>
</tr>
<tr>
<td>H3e</td>
<td>-0.034</td>
<td>-1.027</td>
<td>0.248</td>
<td>0.787</td>
</tr>
<tr>
<td>H3f</td>
<td>-0.034</td>
<td>-1.126</td>
<td>0.244</td>
<td>0.772</td>
</tr>
</tbody>
</table>

Note: BC= bias corrected, CI= confidence interval; ***p < 0.001, **p < 0.01, *p < 0.05. □ p > 0.1, Sig = Significant, N/A = Not Significant.
confidence interval range (Preacher & Hayes, 2008), H2c is therefore supported. This is in line with the findings of previous studies which reported a relationship between individual psychological conditions, individual behavior, and performance. This is consistent with previous research showing that individual psychological ownership affects behavior and performance. Simultaneously, psychological ownership plays a mediating role. Consistent with the research results from Pierce et al. (2009), individual behavior and performance are the result of individual psychological ownership. Wagner et al. (2003) showed that individual ownership behavior has a positive effect on the financial performance of the work group. In addition, Park et al. (2015) support the mediating role of psychological ownership levels in explaining the relationship between leadership behavior and individual performance levels. In line with the results of their study, the findings of this study indicate that individuals provide better behavior and performance when they have a feeling of psychological ownership.

Psychological ownership did not significantly mediate the relationship between affective involvement and WOM (ab = 0.142, p = 0.186), 95% CI [-0.039, 0.508]. This means H2d is not supported. A possible explanation is that when individuals form ownership ties to objects including physical, informational or social objects, they can attempt to mark that ownership as exclusive to themselves. According to Brown et al. (2005) “the stronger an individual's psychological ownership of an object, the more likely he will be involved in territorial behavior”. Therefore, it can be concluded that when a person's psychological ownerships get stronger, that person will become territorial, which means, in the end, they will not engage in WOM. Consumer-brand identification has a positive effect on continuance intention to use (β = 0.612, p <0.01), so H3a is supported. Consumer-brand identification has a positive effect on WOM (β = 0.614, p <0.01), so H3b is supported. This is in line with previous research conducted by Hughes and Ahearne (2010); Underwood et al. (2001), who showed that, when an individual identifies with a particular brand, the individual will form a psychological relationship with the brand which ultimately shows favoritism, and works instinctively for the benefit of the brand (e.g., continuance intention to use and WOM).

Our analysis showed that consumer-brand identification significantly mediates the relationship between affective involvement and continuance intention to use (ab = 0.596, p <0.01), 95% CI [0.338, 1.357]. Therefore, H3c hypothesis is supported. Consumer-brand identification significantly mediates the relationship between affective involvement and WOM (ab = 0.593, p <0.01), 95% CI [0.283, 1.332]. Therefore, H3d is supported. The results of this study confirm the social identity theory of Tajfel and Turner (1985) who showed that, when individuals identify strongly with a brand with personality traits in themselves and common values to build their social identity based on a particular reference brand, they will generate positive brand behavior (e.g., continuance intention to use and WOM).

CONCLUSION

The focus of this study to examine whether and how cognitive and affective involvement are equally influential on consumers’ attitude and behavior toward the Zoom application. Our study provides empirical evidence that psychological ownership mediates the relationship between affective involvement on continuance intention to use, but there is insufficient evidence regarding WOM. This study also provides empirical evidence that consumer-
brand identification mediates the relationship between affective involvement and continuance intention to use and WOM. The findings of this study provide further insight that psychological ownership is not sufficient in encouraging WOM; it also requires consumer-brand identification as an important antecedent in the relationship between affective involvement and WOM.

To explain this relationship, this study used flow theory and social identity theory as the main theoretical framework. This study follows the logic of flow theory to suggest that affective involvement and cognitive involvement encourage individuals to develop psychological ownership and consumer-brand identification, which in turn encourages continuance intention to use and WOM. The idea that cognitive and affective involvement have a major impact on consumers' outcomes is well supported by our empirical data. In particular, the results showed that affective commitment has a positive direct effect on psychological ownership and consumer-brand identification, and it has a positive indirect effect on continuance intention to use. Consumers' brand-identification and psychological ownership induce them to affect their continuance intention to use the application.

Surprisingly, psychological ownership was found to not mediate the relationship between affective involvement and WOM. Individuals with a higher feeling of psychological ownership were more likely to continue using it. Nevertheless, the results for the relationship between psychological ownership and WOM did not support it. This reveals that individuals who have strong psychological ownership tend to behave territorially (Avey et al., 2009; Dawkins et al., 2017; Pierce et al., 2001; van Dyne & Pierce, 2004), which in turn makes them reluctant to in WOM. These findings suggest that individuals who have affective attachment to the the Zoom application based on emotion rather than reasoning need to be reached using advertising tactics to boost the use of applications. For example, eBay employs emotion to attract people to its site by depicting the emotional exhilaration associated with winning an online auction in its advertising. Given the numerous advantages of online use and promotion (more information, more options, price comparisons), similar online company failures might be attributed to the predominance of emotion over rational reasoning.

The relationship between cognitive involvement in psychological ownership and consumer-brand identification is not significant. According to its observed functional characteristics, the attribute of cognitive involvement demonstrates the Zoom application's value as a virtual meeting medium. People who are more cognitively engaged, for example, are more likely to feel that the Zoom application will improve their usage.

**RESEARCH IMPLICATIONS**

**1. Theoretical contributions**

This research adds to the growing body of knowledge on consumer involvement and its outcomes, but it focuses on the role of a mediating mechanism, which is particularly important. First, based on flow theory and social identity theory, this study advances the theoretical development of affective and cognitive involvement to continuance intention to use and WOM by proposing a mediation model that suggests affective and cognitive involvement affect continuance intention to use and WOM through psychological ownership and consumer-brand identification. This study significantly improves the prediction of continuance intention to use and WOM by integrating cognitive, affective, and psychological resources (i.e., consumer’s brand-identification and psychological ownership).
Second, our study confirms the results of previous studies which concluded that consumers’ attitudes toward technology adoption are influenced by affective involvement (Bosnjak et al., 2007; Kulviwat et al., 2007; Soni, 2017). Pleasure is an affective dimension that describes how comfortable, pleasant, delighted, or satisfied a person feels in a given circumstance (Menon & Kahn, 2002). The considerable influence of pleasure on the decision to acquire technology products is well documented (e.g., Agarwal & Karahanna, 2000; Bosnjak et al., 2007; Kulviwat et al., 2007). This study contributes to a better theoretical understanding of the involvement that affects consumers’ attitudes regarding the continuance intention to use and WOM. Finally, the methodology used in this research involved a more rigorous assessment of the role of cognition, affective involvement, and social factors in technology acceptance. For example, the technology used in this study was challenging enough to evoke strong dominance-related emotions. Finally, this study's methodology included a more thorough examination of variables. The methodology used in this study, for example, conducted measurement invariance test and compared some models (e.g., 6-factors, 3-factors, and 1-factor model) to ensure that this research has a good and strong model.

2. Practical implications

This study has shown that the main trigger of psychological ownership of brands and consumer brand-identification is affective involvement. To encourage consumers’ continuance intention to use and WOM of a video conferencing application, companies have to encourage affective involvement which in turn creates a feeling of consumer brand-identification. Psychological ownership does not promote WOM about a video conferencing application. Affective involvement which in turn awakens feelings of psychological ownership will only encourage continuance intention to use if an individual’s psychological ownership becomes stronger, they become territorial, which does not promote WOM. Thus, to allow positive affective involvement, companies must ensure that the message format is consistent with expectations or preferences implied in the level of affective involvement that characterizes the product (e.g., an emotional appeal for an affectively engaging product). The audience would be moved beyond the more simply emotive focus that may otherwise prevail while considering such a product after processing that information. For example, eBay employs emotion to attract people to its site by depicting, in its advertising, the emotional exhilaration associated with winning an online auction. Given the numerous benefits of internet purchasing (more information, more options, and price comparisons), it is indeed possible that the predominance of emotion over rational reasons is to be accounted. As a result, marketers should adjust their advertising efforts to communicate the appropriate element or combination of factors depending on the target market in order to establish effective advertising strategies. Some target markets may process information affectively.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This research has several limitations. First, one potential limitation is that respondents assess affective and cognitive involvement, psychological ownership, consumer-brand-identification, and continuance intention to use and WOM at one time which may raise concerns about common method bias (Podsakoff et al., 2003). Following the recommendations of Podsakoff et al. (2003) on how to reduce the
common method bias, the researcher can then collect measurements of the independent and dependent variables from individuals at different times. Second, this study collected data using a self-administered survey approach, which may result in common method bias, although the researchers examined common methods bias based on a Harman single-factor model. To control this potential problem, further testing should be carried out with the same target sample in the longitudinal approach. Third, to prevent the problem of response bias to social desirability bias, several common method bias factors can be applied, namely by adding a common method bias latent marker variable in the research model. Finally, one of the weaknesses of this study is found in the sample, the majority of which consists of women. Our respondents indicate that 82% of respondents are 20 to 30 years old. It is possible that the characteristics of the sample did not represent the characteristics of total population of Zoom users. Thus, our results might not be generalizable for organizations having balanced gender and age compositions. Therefore, in future studies, using more balanced sample in terms of gender and age would enhance the generalizability of the data.

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