

## **The influence of persuasion knowledge, third-person perception, and affect on coping behavior in the Instagram stories feature**

影響即時動態應對行為的說服性知識、第三方感知和情感

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**Abstract:** The purpose of this study was to introduce a novel augmented coping behavior model within the Instagram Stories feature. We employed a 3x3x3 research design that used 450 samples to manipulate the influence of three types of antecedents on the coping behaviors of people in Taiwan. The empirical results demonstrate that third-person perception and affect influence coping behavior through the interactive character of the Stories feature, and our results can be used to enhance the utilization of an elaboration likelihood model for the Instagram Stories feature. Moreover, the results show that persuasion knowledge does not influence coping behavior and that coping behavior can influence the persuasive effects of a narrative and electronic word-of-mouth. Hence, we explored and clarified the connections between “what audiences think,” “how audiences react,” and “how the Stories feature works”. The results provide useful managerial implications for businesses to use to enhance their marketing operations for the effective dissemination of official messages through the Stories feature.

**Keywords:** Coping behavior, stories feature, elaboration likelihood model,

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third-person perception, persuasion knowledge

**摘要：**本研究的目的是在 Instagram 的即時動態中，提出一個創新的增強型應對行為模型。我們執行 3x3x3 研究設計，以操作三種前因變數類型的應對行為效應，並蒐集 450 個臺灣使用者樣本。實證結果顯示，基於即時動態的即刻交互性的本質，第三方感知和情感會明顯影響到應對行為，而說服性知識卻不會影響應對行為。本研究結果會強化推敲可能性模型在 Instagram 即時動態的運用層面。此外，應對行為會影響敘述性說服效果和 e 化口碑。因此，我們即探究並澄清"閱聽者的想法"、"閱聽者的反應"，和"即時動態如何運作"之間的相互關聯性。本研究結果可為企業提供有用的管理意涵，企業可透過即時動態來傳播官方資訊，並強化其行銷運作的有效性。

**關鍵詞：**應對行為、即時動態、推敲可能性模型、第三方感知、說服性知識。

## 1. Introduction

The Instagram Stories feature (SF) is a new form of communication for Instagram users that was launched in August 2016. Amancio (2017) described it as a storytelling device that allows users to post about an event or thought instantly. A SF post remains on the platform for 24 hours. The desire to use this feature is influenced by the pleasure, convenience, relative advantage, and observability that users associate with it. According to the statistics portal Statista (2018b), the number of active users on Instagram, a photo- and video-based application, soared from 90 million in January 2013 to 1 billion in June 2018. This huge growth that Instagram has seen has altered the modes of interaction between audiences and brands. In particular, in June 2018, the Instagram SF was adopted by 400 million users worldwide each day. In contrast, the usage rate was 100 million per day in October 2016 at the launch of the feature (Statista, 2018a). Hence, the importance of this topic becomes clearer with the increasingly significant role of the Instagram SF in daily life. There is a growing interest in the effects that the stories posted by brands have on

audiences. Visual images, including dynamic images (e.g., videos) and static images (e.g., photographs), have become prevalent methods of communication (Newton, 2017). Thus, individuals are likely to share their own stories, express their feelings, or share other messages through visual images. With the emergence of social media platforms (SMPs), such as Facebook, Instagram, Snapchat, and Twitter, Romney and Johnson (2018) asserted that social interaction has become progressively dependent upon visual storytelling. In addition, an increasing number of individuals tend to receive information through social media (Casaló, Flavian, and Sergio, 2018), and thus, with the dominance of SMPs, visual storytelling has become increasingly vital.

Given the nature of this “perceived interactivity” in the Instagram SF, we argue that the SF should shed additional light on emotional responses and interpersonal relationships and that third-person perception (TPP) and affect (AFF) will play a critical role in influencing CB and this is the main focuses of our research. This study considers the implications of the perceived interactivity in the Instagram SF, and thus, provides a new perspective for coping behavior (CB) research (Romney and Johnson, 2018). It is appropriate to examine the proposed augmented coping behavior model and is our research motivation.

The aim of this study was to investigate the antecedents and consequences of CB. We sought to demonstrate the relationships between what audiences think (antecedent), how audiences react (CB), and how the SF works (consequences). The antecedent variables for CB included persuasion knowledge (PK), TPP, and AFF. The consequential variables incorporated narrative persuasion effect (NPE) and electronic word of mouth (e-WOM). In addition, this study investigated the factors that “prompt interactivity” in the SF, offering an alternate perspective on CB study (Romney and Johnson, 2018). Based on the essence of what prompts interactivity in the SF, we have determined that the SF highlights interpersonal relationships and emotional responses, and thus, TPP and AFF should play an imposing role in directing CB. The previous relevant literature has explored the causal relationship between PK, TPP, and CB or between e-WOM and CB, but AFF has not yet been included as an antecedent variable for CB nor has NPE yet

been regarded as a consequence variable for CB. As for the research gap of this study, the previous relevant literature has explored the causal relationship between PK, TPP, and CB or between e-WOM and CB. AFF had not been included as an antecedent variable of CB, and NPE had not been regarded as a consequence variable of CB. Therefore, there has been a gap in the research of the existing literature and helping to fill this gap is a main contribution of this study.

In our study, we have used that the elaboration likelihood model (ELM) proposed by Petty and Cacioppo (1986) to interpret the findings for the drivers of CB in the Instagram SF. In the ELM, when consumers positively seek for product/brand information and to shape attitude/behavior, the process is referred to as the central path, where consumers have the will or capability to handle the product-related message. However, when the consumer deals with the product/brand information with low engagement and low desire to shape an attitude/behavior, the process is referred to as the peripheral path, where the consumer does not have the will or ability to deal with the product-related message. The ELM indicates that different extents of self-relevance determine different information processing paths (Cyr, Head, Lim, and Stibe, 2018). Processing information with a high or low level of engagement relies on personal motivation, which is affected by personal relevance (Kruglanski and VanLange, 2012). The motivation that people have is more likely to be strengthened when a self-related stimulus resonates with them, and they also intend to engage in an activity or an interaction more actively once their motivation has been supported. Such a high level of engagement generates an enduring belief and attitude through a personal evaluation. People's attitudes are employed when dealing with information (Boninger, Krosnick, and Berent, 1995). When people tackle messages with high motivation, they are more likely to react to a message, such as a SF posted by a brand, based on a personal evaluation caused by high engagement.

In our study, we have extended the works of Ham (2017), Ham and Nelson (2016), and Ham, Nelson and Das (2015), proposing three routes for the

persuasion process: PK, TPP, and AFF, to organize the cognitive learning factor, the cognitive processing factor, and the cognitive appraisal factor, respectively. Among these studies, Ham *et al.* (2015) developed reliable scales for PK and CB, Ham and Nelson (2016) indicated that PK and TPP would positively influence CB, and Ham (2017) proposed that PK would positively influence two types of CB (approach and avoidance CB).

We proposed PK as the cognitive learning factor as individuals are active participants in cognitive learning contexts when they encounter many cognitive elements in the PK (Boerman, Willemsen, and Van Der Aa, 2017). Furthermore, TPP and AFF were deemed as a cognitive processing factor and cognitive appraisal factor, respectively. In addition, Ham (2017) proposed that CB is a dependent variable for exploring two driving factors, the cognitive processing factor and cognitive appraisal factor, by using the persuasion knowledge model (PKM). First, the cognitive processing factor is a procedure that handles all of the messages we receive from the environment. There are many messages, and an individual's brain works continuously (Tutaj and Reijmersdal, 2012). Perceived personalization and self-defense are two typical main cognitive processing mechanisms, and TPP can be deemed as a parallel term to perceived personalization (Ham and Nelson, 2016). Jang and Kim (2018) defined TPP as the assessment of individuals of the influence of phenomena on themselves and others while judging others who are dissimilar based on the self-enhancement theory. Second, the cognitive appraisal factor is an evaluation of an emotional situation wherein individuals will assess how an event will impact them, explain the different aspects of an event, and then reach a reaction based on that explanation (Kirmini and Campbell, 2004). AFF is one of the main emotional situations for conducting cognitive appraisals (Scherer, Shorr, and Johnstone, 2001). Yu, Hu and Cheng (2015) indicated that AFF is a feature of the connection between the individual and the environment rather than being comprised of only personal characteristics and elucidated the affect infusion model (AIM) to illustrate the influence of mood on the individual's ability to tackle information (Kim, Han, Park, and Park, 2016).

In our study, we further employed e-WOM and NPE as two main outcomes to online advertising efforts. This was inspired by the work of Lyons, Huebner and Hills (2016). They employed CB as a mediator between life satisfaction and predictors referring to personality characteristics and environmental events. Thus, there are significant relationships among these two significant predictors (personality characteristics and environmental events), one mediator (CB), and the outcome (life satisfaction). As for the discussions from Dessart (2018), Boerman *et al.* (2017), Wang, Yeh, Chen and Tsydypov (2016), and Hassan, Nadzim and Shiratuddin (2015), we have found that e-WOM and NPE were employed to represent the effects of advertising on social media. Thus, we have employed e-WOM and NPE as two main outcomes in our study.

CB has been defined as the mental and behavioral responses to events or problems (Okafor, Lucier-Greer, and Mancini, 2016; Snyder, 1999). This study has categorized CB into three sub-items: share, see more, and ignore (including blocks and reports) in the Instagram SF. Our study then expands the PKM to the Instagram platform setting by introducing the work of Ham (2017) and Ham and Nelson (2016). In summary, our study has been the first to encompass TPP and AFF in an investigation of audience responses to the Instagram SF.

As for the antecedents, PK refers to a perspective on marketing-related messages (Boerman *et al.*, 2017). Based on the PKM by Friestad and Wright (1994), individuals intend to respond to information from agents, for example salespeople, based on existing knowledge (Ham *et al.*, 2015). The PKM indicates that targets, such as consumers who obtain information, intend to cope with the information from agents through three types of knowledge (e.g., topic, agent, and PK), which we will consider in the Instagram SF (Friestad and Wright, 1994; Hwang and Zhang, 2018). Jang and Kim (2018) considered TPP as the judgements of individuals about the influence of circumstances on themselves and on others. In addition, the responses to messages depend on the evaluations of individuals of the influence that the messages have on themselves and others (Ham and Nelson, 2016). Moreover, AFF is a sensory understanding of an impression or image concerning a product or service experience (Kim *et al.*,

2016). These factors also play a role in the Instagram SF.

Berger (2014) indicated that e-WOM is the social sharing of messages between two or more online users. Social media have shifted the constraints and limitations of interpersonal communications, and they have developed various modes of interaction (Daugherty and Hoffman, 2014). With the persisting dependence of consumers on social media such as Instagram, Twitter, and Facebook, e-WOM has become more critical to the facilitation of message seeking, for example for a product message (Chu and Kim, 2018). In our study, NPE refers to the effect that a message has on peoples' beliefs, attitudes, and behaviors through the Instagram SF (Cho, Shen, and Wilson, 2014). Please note that narrative thinking promotes emotions that are positively connected with brands and images in individuals (Escalas, 2004).

## **2. Literature review and hypothesis development**

Previous research has investigated CB to observe how people respond to situations and to link further individual responses to different topics through observation (Lyons *et al.*, 2016; Fransen, Verlegh, Kirmani, and Smit, 2015; Smit, Van Noort, and Voorveld, 2014). Smit *et al.* (2014) investigated CB to explore the issue of online behavioral advertising (OBA), cookies, and privacy. They classified CBs into two types: coping by approach (Raman and Pashupati, 2004) and by avoidance (McDonald and Cranor, 2010). Their empirical results showed that one third of participants decided to avoid OBA by withdrawing from using websites and cookies, and their engagement of privacy protection was not caused by an abundant knowledge of OBA or cookies but out of a concern for lacking an understanding of them (Gibs and Bruich, 2010; Hajli, 2014). Furthermore, Fransen *et al.* (2015) illustrated the ACE typology, which includes three negative types of CB that audiences use as resistance in confronting advertisements: avoiding, contesting, and empowering (Knowles and Linn, 2004). They also indicated strategies for neutralizing these negative reactions to advertisements individually. It is effective for brands to alleviate the resistance of individuals who are observing advertisements and to promote persuasion through

communicative intentions.

In this study, CB is viewed as a mediator. We adopted “see more” and “share” as the approach and used “ignore” as the avoidance for the Instagram SF. The main point of this study was to explore the CBs of audiences to their own cognitions (PK, TPP, and AFF) and to investigate the subsequent outcomes (e-WOM and NPE) in the Instagram SF. The cognitive learning, cognitive processing, and cognitive appraisal factors were used to investigate the effects of the antecedents on CB. As there are three steps in the standard pattern of reflective behavior: stimulus, reaction, and outcome, this study considered PK, TPP, and AFF as stimulus was, CB as reaction, and e-WOM and NPE as outcome. Lyons *et al.* (2016) used CB as a mediator between life satisfaction and predictors such as personality characteristics and environmental events. In their study, CB was classified into approach coping and avoidance coping. Note that there are a variety of significant relationships and different individual pathways among predictors (personality and environmental variables), mediators (approach coping and avoidance coping) and outcomes (life satisfaction)(Lyons *et al.*, 2016). In our study, PK and TPP are types of environmental events, and AFF is a type of personal characteristic, and the outcome in our study is e-WOM and NPE, which are types of life satisfaction. Thus, individual behavioral responses can be determined as a result of the survey or mediator of the research (Fransen *et al.*, 2015; Lyons *et al.*, 2016; Smit *et al.*, 2014).

In order to explore useful insights into different effects on CB using cognitive learning, cognitive processing, and cognitive appraisal factors, our study considered “what audiences think” as classified into three parts. First, PK was defined as to the interaction between audiences and events/objects in the Instagram SF (Boerman *et al.*, 2017). This was based on cognitive learning and PKM, which indicate that people intend to cope with an event, such as receiving information from an agent, concerning existing knowledge (Friestad and Wright, 1994). Second, TPP was defined as the interaction between audiences and other people in the Instagram SF (Ham and Nelson, 2016). This was based on the social penetration theory (SPT) proposed by Altman and Taylor (1973), which



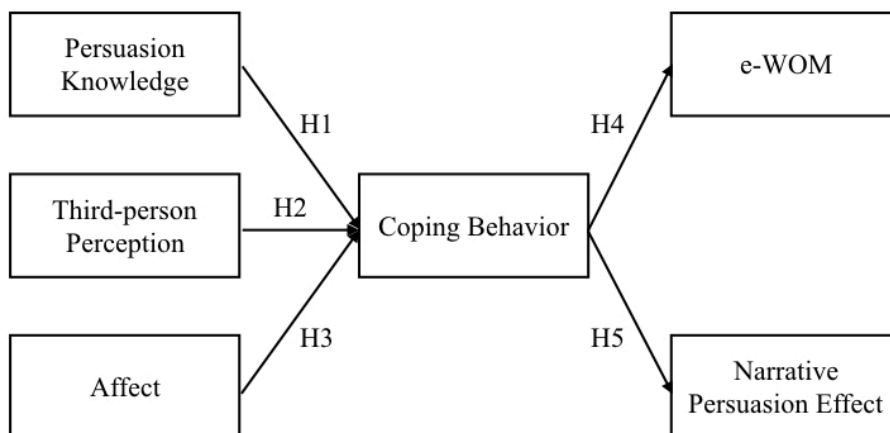
states that interpersonal relationships are dependent on intimacy levels from the cognitive process (Jang and Kim, 2018). Third, AFF was defined as the inner situations of the audience of the Instagram SF (Chen and Ng, 2016). This was based on the affect infusion model (AIM), which states that cognitive appraisal is influenced by mood and emotion (Forgas, 1995). Collectively, PK, TPP, and AFF show “what audiences think” while yielding a complete cognitive structure through the application of PKM, SPT, and AIM, respectively.

The structure of this study is presented in Figure 1. Figure 1 shows the processing of the investigated audiences of posts using the SF placed by brands and the effects that these posts had on Instagram audiences. First, the PK, TPP, and AFF that shaped judgement were accepted in order to obtain a deep understanding of the perceptions and cognitions of the Instagram audience. Second, based on PK, TPP, and AFF, the audience responses in the SF were investigated with the designed operation. Third, e-WOM and NPE were examined after the audience reacted to the SF.

Here we list all of the definitions of the variables in order to present their meanings as used in this study clearly. PK is a perspective or evaluation of marketing-related messages (Boerman *et al.*, 2017). TPP is the judgement of individuals regarding the influence of circumstances on themselves and others (Jang and Kim, 2018). AFF is the positive or negative sensory feelings from an impression or image concerning a product or service experience that encompasses both mood and emotion (Forgas, 1995; Kim *et al.*, 2016). CB is the individual mental and behavioral responses to events or problems (Okafor *et al.*, 2016; Snyder, 1999). e-WOM is the personal network sharing of positive or negative statements between two or more online users (Berger, 2014; Hennig-Thurau, Gwinner, Walsh, and Gremler, 2004). NPE is the effect of a message on a person’s beliefs, attitudes, and behaviors through stories (Cho *et al.*, 2014). Table 1 lists the abbreviations and definitions of the studied variables.

## **2.1 Relationship between PK and coping behavior**

PK provides individuals a way to identify, analyze, explicate, evaluate and



**Figure 1**

**The research framework of the study model**

**Table 1**

**Abbreviations and definitions of the studied variables**

<b>Variables</b>	<b>Abbreviations</b>	<b>Definitions</b>
persuasion knowledge	PK	PK is a perspective or an evaluation to marketing-related messages.
third-person perception	TPP	TPP is the individuals' judgements about the influence of circumstance on themselves and others.
affect	AFF	AFF is a positive or negative sensory feeling of an impression or an image concerned as a product or a service experience that encompasses both mood and emotion.
coping behavior	CB	CB is the individual mental and behavioral responses to events or problems.
e-word-of-mouth	e-WOM	e-WOM is personal network sharing of positive or negative statements between two or more online users.
narrative persuasion effect	NPE	NPE is an effect of a message treatment to peoples' beliefs, attitudes, and behaviors through stories.

remember the messages; they decide how to cope with the persuasion attempts (Ham, *et al.*, 2015). This is the type of cognitive learning mechanism that individuals encounter from persuasion knowledge providers in the Instagram SF. It is remarked by many cognitive elements, such as vocabulary, image, voice, and expressions of PK (Hamby and Brinberg, 2018). Cognitive learning indicates that people are active participants in the learning process. They proactively present assumptions, validate them, and solve problems through on persuasion knowledge in the situation (Matthes and Naderer, 2016). In order to meet the requirements and limitations in the Instagram SF, individuals also reorganize their experience and readjust or change their cognitive structures of the environment (Brandon, Beike, and Cole, 2017).

Based on Boerman *et al.* (2017), people consume such messages to catch marketers' purposes and persuasive intentions and to germinate viewpoints, i.e., PK. Individuals are desired to cope with an event, such as an advertisement, with prior knowledge in the PKM (Friestad and Wright, 1994). This could incorporate the knowledge linked to an activity or a product, the event maker, e.g., a brand, and the awareness of prior persuasion intention (Ham and Nelson, 2016). Therefore, knowledge owns an impact on the realization of an event or an object. Responses to messages intend to be based on evaluation that includes prior knowledge in the Instagram SF.

Knowledge of a subject embodies the judgement of the subject and its judgement is the effective predictor of this behavior. The usage of an judgement is vital for information processing, decision-making, and behavior (Boninger *et al.*, 1995). Since personal judgements are based on current knowledge, the judgements symbolize the personal evaluations of an event or a subject and that personal judgements could affect responses (Hamby and Brinberg, 2018). Also, interactions among the groups and information systems produce specific symbolic meanings that satisfy self-valued performance (Hsu, Fan, Chen, and Wang, 2013). Therefore, reactions and behaviors are linked to perceptions and experiences in the Instagram SF. The following hypotheses H1 was proposed:

*Hypothesis 1.* PK would positive influence coping behavior.

## **2.2 Relationship between TPP and coping behavior**

TPP posits that individuals believe they are less affected than others by a message or an event than others, which also applied to the Instagram SF (Jang and Kim, 2018). From self-enhancement theory, individuals are likely to refuse persuasion attempts considered unwanted and undesirable in order to improve their positive self-esteem by judging others are dissimilar to them (Jung and Park, 2018). That is a kind of cognitive processing mechanism that individuals are in charge of messages received from the SF environment and that is their brains handle a few of tasks continuously (Brinol, Rucker, and Petty, 2015). Since that information is encoded by individuals to give meaning and can be compared with their own interests, especially in the perceived personalization and self defense mechanism (Ham, 2017).

Individuals would like to develop misestimated expectations about the Instagram SF media effects of a message on themselves and others (Sun, Pan, and Shen, 2008). From self-enhancement motivation, individuals would like to contradict personal susceptibility to messages considered negative impacts and accept messages considered positive impacts (Gunther and Mundy, 1993; Perloff, 1989). They perceive themselves to boast stronger ability than others to refuse negative effects from Instagram SF media (Park and Salmon, 2005; Perloff, 1989). This would influence their subsequent behavioral responses. Therefore, TPP-based perspectives have an effect on individuals' judgements of SF messages and the perception of its effects on others represents the subjective evaluation of the subject (Chung, Munno, and Moritz, 2015). Evaluating perceived judgement can be employed to predict the behavior. Individuals intend to adopt an evaluation to process information, make a decision, and behave (Boninger *et al.*, 1995). In summary, personal judgements are based on the perception of its effects on others in the Instagram SF. Judgements, which are composed of conceptual disparity, result in diverse cognitive, attitudinal, and behavioral consequences (Chung *et al.*, 2015; Peiser and Peter, 2000). Hence, reactions and behaviors are connected with perceptions and experiences in the Instagram SF. The following hypotheses H2 was proposed.

*Hypothesis 2.* TPP would positive influence coping behavior.

### **2.3 Relationship between AFF and coping behavior**

AFF refers to a positive or negative sense of an image or an impression about the targeted object or message (Forgas, 1995). It is the individuals' evaluation of an emotional situation when they assess their cognition in the Instagram SF environment (Ham, 2017). That type of cognitive appraisal mechanism allow a person to evaluate how the event will impact on them on their specific explanation to the SF post (Wachyudy and Sumiyana, 2018). Since that different emotions, mood, and sentiments will influence individuals to assess the Instagram SF post (Seo, Li, Choi, and Yoon, 2018). Under these, affect infusion model can play an important role since the mood of the individuals will significantly influence the tackle of the SF post (Yu *et al.*, 2015).

Based on the AIM, information judging is influenced by mood and emotion (Forgas, 1995). Different affective conditions provide message recipients slightly distinct information so that their decision-making could be altered (Raghunathan and Pham, 1999), including job satisfaction (Weiss, Nicholas, and Daus, 1999), shopping behavior (Mittal and Ross, 1998), attitude change or persuasion (Petty, DeSteno, and Rucker, 2001), etc. Affective states have a more important role than cognitive factors in ubiquitous media systems (Zhang, 2013). Therefore, affect influences peoples' judgements that messages should be processed, especially in increasingly intricate and unexpected situations likes the Instagram SF (Wachyudy and Sumiyana, 2018). It is brought out at first and make a swift response as individuals encounter a SF post (Lerner, Valdesolo, and Kassam, 2015). Similarly, the feelings about the subject mean the evaluation of the subject in the Instagram SF. The adoption of an evaluation is employed to decision-making, information processing, and subsequent behavior (Boninger *et al.*, 1995). Judgements symbolize the personal evaluations about issues and personal evaluation would affect reactions or responses in the Instagram SF (Kim *et al.*, 2016). The following hypotheses, H3 was therefore proposed.

*Hypothesis 3.* AFF would positive influence coping behavior.

## **2.4 Relationship between coping behavior and e-WOM**

Berger (2014) denoted e-WOM as the social sharing of messages (e.g., products or brands) between two or more cyber users. Based on the self-perception theory (Bem, 1967), users evaluate their psychological situation with their external behaviors. Therefore, behavior affects judgements of a subject, and this is deemed as attitude (Peter and Olson, 1987). After showing attitudes, mental states are linked to satisfaction and dissatisfaction, that has been examined as a reaction of their fulfilment (Oliver, 1997). Satisfaction provides a pleasurable level of fulfilment concerning a subject (brand or story in the Instagram SF) by way of perspectives on a product, service, or activity.

The positive relationship between satisfaction and WOM is investigated (Sweeney and Swait, 2008; Brown, Barry, Dacin, and Gunst, 2005; Oliver and Swan, 1989). Based on Casaló *et al.* (2018), an increasing number of users obtain message through social media (e.g., Instagram). Opinions or statements about subjects, such as products or services, are shared by Instagram SF in a variety of channel through the Internet. The current research classified e-WOM into two sub-items: brand and story. Shaikh, Karjaluo and Hakkinen (2018) indicated that brand satisfaction intended to influence brand e-WOM, and story satisfaction intended to influence story e-WOM. In summary, the CB (block or share) is the users' attitudes about the SF post. Their satisfaction levels are produced by their psychological situation; therefore, satisfaction is shaped by feelings and evaluation. Satisfaction levels are determined in the statements/comments made by users in the Instagram SF. Thus, H4 was proposed:

*Hypothesis 4.* Coping behavior would have a positive influence on e-WOM.

## **2.5 Relationship between coping behavior and NPE**

In the current study, CB was shown by four types: sharing, seeing more, blocking, and reporting in the Instagram SF. NPE was divided into reminiscence, purchase behavior, psychological, and awareness. Based on Prendergast, Ko and Yuen (2010), purchase intention could be higher for users who obtain shared

comments, experiences or interests, particularly positive messages, from a related forum. Social media, like Instagram, users can offer and share their expression about an SF post. Users' shared values have a positive impact on trusting belief (Wu, Chen, and Chung, 2010). Hajli (2014) indicated the significant influence of trusting belief on purchase intention. Trust enhances a relationship between shared opinions or suggestions and purchase intention.

In the extension of the theory of planned behavior, Pavlou and Fygenon (2006) illustrated that purchase intention promoted product purchase. Thus, the "share" in the Instagram SF is related to the purchase behavior. The psychological effect means an individual belief to a subject, such as favourable sense and amusing content (Lee, Lee, and Park, 2009). The "see more" in the Instagram SF is similar to the "learn more" in the Facebook used by Chen, Yeh and Chang (2018). It supplies a linkage for individuals to immediately seek more messages to subjects or products. Based on the study of Ashcroft and Hoey (2001), the reminiscence effect means the frequency of the recall of an advertisement (Lee *et al.*, 2009). Please note that people who are attracted by an object, like an advertisement, are more likely to seek related messages (Ashcroft and Hoey, 2001). The "see more" provides an opportunity in the Instagram SF. Mehta and Purvis (2006) indicated a relationship between liking and recall. The "see more" could augment or decline audience attention and interest about the watched Instagram SF. Hamilton (2015) argued that retrieval of memories is influenced by the methods in which they are reserved. The reminiscence effect elucidates the impact of memory retrieval on the frequency of recall. Thus, the "see more" in the Instagram SF is linked to the reminiscence effect. The awareness effect means attention (Ashcroft and Hoey, 2001). Audience attraction determines the awareness effect. The usage of the "block" or "report" in the Instagram SF refers to the end of story viewing, i.e., the halt of the information flow and the decrease of exposure to the story. Exposure to an advertisement in a social network has been proved to be positively related to awareness (Gibs and Bruich, 2010). Also, consumers can recognize cognitive information that influences stickiness so that marketing managers can employ to maximize the

volume of information scent and message framing (Chen, Hsu, and Wu, 2019). As a result, the “block” and the “report” are linked to the awareness effect. In short, the dimension of CB enjoys a relationship with the NPE in the Instagram SF. Thus, H5 was proposed:

*Hypothesis 5.* Coping behavior would positive influence NPE.

### **3. Methodology**

#### **3.1 Measurement and scale**

The questionnaire were designed as follows: firstly, based on the research of Pauwels, Aksehirli and Lackman (2016), e-WOM was divided into two types: brand (EW1) and story (EW2). Six items related to e-WOM were developed based on previous researches (Yen and Tang, 2019; Hwang and Zhang, 2018; Boerman *et al.*, 2017). Secondly, NPE were divided into four dimensions (Pozharliev, Verbeke, and Bagozzi, 2017; Lee *et al.*, 2009): awareness (NPE1), reminiscence (NPE2), psychological (NPE3), and purchase behavior (NPE4). The 12 items on NPE were developed in accordance with Lee *et al.* (2009) and Gupta, Singh and Sinha (2017). Thirdly, CB was divided into three dimensions based on Ham and Nelson (2016): share (CB1), see more (CB2), and ignore (CB3). The 9 items on coping behavior were developed from Ham and Nelson (2016). Fourthly, PK was divided into three dimensions (Brandon *et al.*, 2017; Friestad and Wright, 1994): agent (PK1), topic (PK2), and episodic (PK3). The nine items on PK were developed on the basis of Mo, Liu and Liu (2018); Brandon *et al.* (2017); and Hartmann, Apaolaza and Eisend (2016). Fifthly, the present study extended the out-group genres of TPP (Chung *et al.*, 2015) and divided it into three types: impact on self (TPP1), friends (TPP2), and family members (TPP3). Nine items were designed based on Ham and Nelson (2016). Lastly, in line with Kim *et al.* (2016), AFF was divided into three types: primitive (AFF1), descriptive (AFF2), and evaluative (AFF3). These were developed to nine items. All of the items were evaluated with 6-point Likert scales.



### **3.2 Research design**

As for the sampling method, we employed a designed sample structure of 450 samples of males and females numbering 207 (45.1%) and 243 (54.9%), respectively. As for age, those under 24 years old totaled 173 (38.4%), 25–44 years old totaled 237 (52.7%), and over 45 years old totaled 40 (8.9%). The geographical distribution of the population of the Instagram users among the different regions of Taiwan was: northern Taiwan totaled 214 (47.5%), central Taiwan totaled 86 (19.1%), southern Taiwan totaled 140 (31.0%), and eastern Taiwan and the outer islands totaled 10 (2.3%). Table 1 shows the sample structure. In detail, we designed the dispatch of our 450 samples as follows. For males, 80 participants were under 24 years old, 109 were 25–44 years old, and 18 were over 45 years old for a total of 207 males. For females, 93 participants were under 24 years old, 128 were 25–44 years old, and 22 were over 45 years old for a total of 243 females (Table 2).

We determined what ratio of the population that had engaged in Instagram use based on gender, age, and region from a survey of Taiwan's online users, and we then determined the sample structure and how many samples for each cell we needed in order to prove the representativeness of the samples. The number of Instagram users in Taiwan is estimated to be 6.46 million people, accounting for 27.1% of the total population of Taiwan in 2019. Among the Instagram users, the gender, age, and region volumes and ratios were obtained from NapoleonCat (2019). Among this population, 2.98 million males accounted for 46.1% and 3.48 million females accounted for 53.9%. As for age, we divided the Instagram users into three different age groups: there were 2.48 million (38.4%) under 24 years old, 3.4 million (52.5%) 25–44 years old, and 0.58 million (9.1%) over 45 years-old. A total of 91% of global Instagram users were aged under 44 years old. In other words, the number of older people using Instagram was less than one-tenth of users. As for the regions of Taiwan, Taiwan was divided into northern Taiwan, central Taiwan, southern Taiwan, and eastern Taiwan and the outer islands. Instagram users in the northern region accounted for 3.07 million (47.5%), users in the central region were 1.23 million (19.1%), users in the

southern region were 2.01 million (31.0%), and users in the eastern region and the outer islands were 0.15 million (2.3%).

To confirm the representativeness of the samples, quota sampling, which requires that the statistical features of the samples meet those of the population, was adopted for our study. The samples were classified by age and gender, the ordinary demographics that were deemed as segmentation variables. All samples were collected via SurveyCake, who boosted their statistical assistance through multiple online surveys in March 2019.

The research design was developed so that all of the respondents would participate in a three-factorial between-subjects experiment with 3 levels of PK (agent, topic, and episodic)  $\times$  3 levels of TPP (impact on self, family, and friends)  $\times$  3 levels of AFF (primitive, descriptive, and evaluative affects). Among the 450 samples in the sample structure, they were each randomly assigned to view one of 27 versions (3 $\times$ 3 $\times$ 3) of a targeted newsfeed to meet the representative sample. When the participants had finished watching, they provided the dependent variable measure: CB. PK was investigated by the respondents watching three types of SF posts: agent-, topic-, and episodic-based. The agent-based SF post consisted of the obvious and visible images of a brand, product, product description, and hash tags. The topic-based SF post showed mainly an activity with slogans, theme photographs, brief statements, and hashtags. The episodic-based SF post showed reminiscence themes with slogans, life philosophies, and hashtags. Each SF post was presented for about 15 seconds and in each type of SF post was embedded one type of TPP and AFF.

Our design facilitated the discernment of the effects of PK on CB. The mobile device has become the main instrument for interactions on social networks. This study emphasized the effects of PK, TPP, and AFF on initial audience responses rather than general actions. Hence, the CB in our study was narrowly defined and distinct from normal behavior.

As for the experimental procedure, an online experiment was employed to explore the effects of the Instagram SF. Prior studies have employed online experiments (Chen *et al.*, 2018; Deters and Mehl, 2013). The CBs of the

participants were observed while they watched of the SF post on Instagram. Each audience member was randomly confronted with one of 27 specifically designed SF posts; therefore, they were each randomly assigned to an SF post until the end of the experiment. After watching the SF post, they were asked to choose an option: “see more,” “share,” or “ignore.”

**Table 2**  
**Sample structure of our study**

Items	Under 24 years-old		25-44 years-old		Over 45 years-old		Total (%)
	Male	Female	Male	Female	Male	Female	
North Taiwan	38	44	51	61	10	10	214 (47.5%)
Central Taiwan	15	18	21	25	3	4	86 (19.1%)
South Taiwan	25	29	34	39	6	7	140 (31.0%)
East Taiwan and Islands	2	2	2	3	0	1	10 (2.3%)
Sub-total	80 (17.8)	93 (20.7)	108 (24.0)	128 (28.4)	19 (4.2)	22 (4.9)	207 (M, 46.1%) 243 (F, 53.9%)
Total	173 (38.4%)		236 (52.5)		41 (9.1)		450 (100.0%)

*Note.* Total male is 207 (46.1%) and total female is 243 (53.9%).

#### 4. Empirical results

In the pre-test survey, 24 people, including 10 males and 14 females, were invited to participate. The demographic characteristics of the participants were classified into several groups with respect to gender, age, and region of residence. The proportion of women to men in this survey was 60% to 40%. For the age distribution, the number of 18 to 24-year-old respondents accounted for up to 91.7% of the samples. As for region of residence, close to 95.8% of the individuals in this pre-test survey lived in northern Taiwan. In addition, a Cronbach's  $\alpha$  and the items for a total correlation was employed to examine the reliability of the pre-test survey. Table 3 shows that the Cronbach's  $\alpha$  value for each individual construct in the survey was 0.818, 0.821, 0.943, 0.708, 0.959,

and 0.918 for PK, TPP, AFF, CB, EW, and NPE, respectively, and all were greater than 0.7, indicating that each construct has met a standard level of internal consistency and reliability.

As also shown in Table 3, of the 450 valid questionnaires collected in March 2019, males accounted for 43.2% and females, the remainder. A total of 5.5% of the participants were under 18 years old, 34.6% were 18–24 years old, 36.1% were 25–34 years old, 17.3% were 35–44 years old, 3.8% were 45–54 years old, and 2.6% were over 55 years old. Table 4 shows the means, standard deviations, and Pearson correlation matrices of the variables.

We further conducted a one-way ANOVA (analysis of variance) to examine whether the sample characteristics would affect the results (e-WOM and NPE) as it can indicate if a sample is representative or not. We adopted age, gender, and region as the characteristics that may affect results. The results for e-WOM indicated p-values for gender, age, and region that were 0.004, 0.296, and 0.394, respectively. As for NPE, the p-values for gender, age, and region were 0.257, 0.070, and 0.837, respectively. These results show that age and region in Taiwan are insignificant in their effect on e-WOM and NPE ( $p\text{-value} > 0.05$ ).

#### **4.1 Common method variance analysis**

Based on Podsakoff, MacKenzie, Lee and Podsakoff (2003), common method variance (CMV), spurious correlations between two variables evaluated by the same method, is a potential issue in self-reported surveys in behavioral research. The present study avoided the risk of a spurious relationship between the independent and dependent variables by employing a cover photo at the interval between them. Using a Harman's one-factor test with an unrotated method, eight factors with eigenvalues were obtained that were greater than 1.0 rather than a single factor for all the items. Table 5 demonstrates that these eight factors accounted for 72.21% of the total variance. None were significant since the percentage of explained variance regarding the first factor, 49.176, did not exceed 0.5 (Malhotra, Kim, and Patil, 2006). Hence, CMV was not a serious issue.

**Table 3**  
**Demographics characteristics of 450 samples**

Characteristics	Category	Count	Percentage (%)	Cumulative percentage (%)
<b>Gender</b>	Male	195	43.2	43.2
	Female	255	56.8	100.0
<b>Age</b>	Under 18 years old	25	5.5	5.5
	18 ~ 24 years old	155	34.6	40.1
	25 ~ 34 years old	163	36.1	76.3
	35 ~ 44 years old	78	17.3	93.6
	45 ~ 54 years old	17	3.8	97.3
	Above 55 years old	12	2.7	100.0
<b>Region</b>	Northern Taiwan	195	43.5	43.5
	Central Taiwan	103	22.8	66.3
	Southern Taiwan	146	32.4	98.7
	Eastern Taiwan and islands district	6	1.3	100.0
<b>Total</b>	--	450	100.0	100.0

**Table 4**  
**Means, standard deviations, and Pearson correlation matrices of the variables**

Variables	Mean	Standard Deviation	A	B	C	D	E	F
A. persuasion knowledge	3.42	1.01	1.000					
B. third-person perception	3.25	0.98	0.757	1.000				
C. affect	3.57	1.10	0.740	0.679	1.000			
D. coping behavior	3.18	0.97	0.666	0.669	0.753	1.000		
E. e-WOM	3.20	1.07	0.667	0.700	0.628	0.700	1.000	
F. narrative persuasion effect	3.31	1.08	0.778	0.760	0.845	0.843	0.810	1.000

**Table 5**  
**Common method variance analysis of this study**

Number of factors	Factor loading	Percentage of explained variance	Accumulation percentage of explained variance
1	25.571	49.176	49.176
2	2.692	5.177	54.353
3	2.208	4.247	58.600
4	1.836	3.530	62.130
5	1.726	3.320	65.450
6	1.336	2.569	68.019
7	1.104	2.124	70.142
8	1.076	2.069	72.211

#### 4.2 Reliability and validity analysis

This study showed that the Cronbach's  $\alpha$ -values for PK, TPP, AFF, CB, e-WOM, and NPE (0.826, 0.848, 0.935, 0.725, 0.925, and 0.931, respectively) all exceeded 0.5, which shows that the internal consistency of the factors has been held (Nunnally, 1978). In addition, as argued by Fornell and Larcker (1981), the value of CR should be at least 0.6, which is considered as the primary standard for an acceptable fit of the data. The higher the value of CR, the less difficultly the factor has in measuring this variable. The CR values for PK, TPP, AFF, CB, e-WOM, and NPE (0.782, 0.812, 0.915, 0.713, 0.910, and 0.907, respectively) wholly exceeded the fundamental level. CR was calculated with the following formula:  $CR = (\text{sum of standardized loading})^2 / [(\text{sum of standardized loading})^2 + (\text{sum of measurement error})]$ . In order to interpret the proportion of precisely elucidated variance within an examined measurement, the values of the average variance extracted (AVE) from each variable (0.544, 0.591, 0.781, 0.500, 0.834, and 0.709) were computed by the formula as follows:  $AVE = (\text{sum of square standardized loadings})^2 / [(\text{sum of square standardized loading})^2 + (\text{sum of measurement error})]$ . Each value of AVE for each construct was at least 0.5, which is a value proposed by Fornell and Larcker (1981). The discriminant validity among the measures can be held. Finally, the loading ( $\lambda$ ) values were

0.768, 0.799, and 0.788 for PK; 0.892, 0.742, and 0.772 for TPP; 0.875, 0.925, and 0.931 for AFF; 0.915, 0.887, and 0.277 for CB; 0.918 and 0.938 for e-WOM; and 0.880, 0.860, 0.883, and 0.894 for NPE. The construct validity of the measures still stood. Table 6 lists the results of the reliability and validity analysis.

**Table 6**  
**Results of reliability and validity analysis**

Variables	Items	Cronbach's $\alpha$	Loading	CR	AVE
Persuasion Knowledge (PK)	PK1	0.826	0.768	0.782	0.544
	PK2		0.799		
	PK3		0.788		
Third-person Perception (TPP)	TPP1	0.848	0.892	0.812	0.591
	TPP2		0.742		
	TPP3		0.772		
Affect (AFF)	AFF1	0.935	0.875	0.915	0.781
	AFF2		0.925		
	AFF3		0.931		
Coping Behavior (CB)	CB1	0.725	0.915	0.713	0.500
	CB2		0.887		
	CB3		0.277		
e-WOM (EW)	EW1	0.926	0.918	0.910	0.834
	EW2		0.938		
Narrative Persuasion Effect (NPE)	NPE1	0.931	0.880	0.907	0.709
	NPE2		0.860		
	NPE3		0.883		
	NPE4		0.894		

### 4.3 Hypothesis test with SEM approach

### **4.3.1 The overall model evaluation**

The empirical study employed structural equations modeling (SEM)(Joreskog and Sorbom, 1993). For this SEM model, the examination of overall model fit is divided into two kinds of measurement: absolute measurements and incremental measurements. Absolute measurements are used to confirm the degree of predicting covariance or related matrix. The indicators include  $\chi^2$  / degree of freedom (df), goodness of fit index (GFI), root mean square of residual (RMSR), root mean square error of approximation (RMSEA), and incremental fit index (IFI). Such fitness criteria were employed to inspect the validity of the model.

Based on Bagozzi and Yi (1988), the proportion of  $\chi^2$  and df is supposed to be between 2 and 5. The lower the proportion, the fitter the model (Bianchi and Bivona, 2002). The  $\chi^2$ /df of our model in this study was calculated at 4.323, which reached the acceptable interval. Some scholars indicate that the value of GFI and AGFI should be above 0.9 (Bentler and Bonett, 1980). Some indicate that each outcome of GFI and AGFI is supposed to be at least 0.8 (MacCallum and Hong, 1997; Doll, Xia, and Torkzadeh, 1994). As for this model, the outcomes of GFI and the AGFI, which were 0.878 and 0.823 separately, did cater to the recommended value. With reference to the viewpoint of Bagozzi and Yi (1988), the advised value seemed too strict to fit the model. The more the items measured, the harder the appropriateness of the model.

The RMSEA and the RMSR indicate the symptom about the fit of the model with unknown but optimally chosen parameter values for the population covariance matrix. The estimation of the RMSEA is acceptable as it is lower than 0.05 (McDonald and Ho, 2002). Additional level of the RMSEA, illustrated by Browne and Cudeck (1993), is below 0.1. As for to the RMSR, Hu and Bentler (1999) indicate that the value of the RMSR should be lower than 0.08. The results of the RMSR and the RMSEA were 0.051 and 0.086, respectively.

As for incremental measurements, Bollen (2014) advises that the CFI is supposed to be referred so as to make the variance more stable. The fit of the



model become more ideal once the value of the CFI is close to one, which indicates that it can effectively optimize the level of centrality. As for the NFI and IFI, which are used to compare the value of  $\chi^2$  between the proposed model and the independent model. All of them should be higher than 0.9 (Bentler and Bonett, 1980). The consequences about the CFI, the IFI, and the NFI were all exceed the threshold for the acceptable fit of the model of this study.

### 4.3.2 Results of research hypothesis

Table 7 shows the coefficient and significant relationship and offers a reasonably evidence for the study. Persuasion knowledge ( $H_1$ :  $\beta_1= 0.147$ , t-value = 0.889), third-person perception ( $H_2$ :  $\beta_2= 0.383$ , t-value = 2.738) and affect ( $H_3$ :  $\beta_3= 0.452$ , t-value = 8.027) had positive significant effects on coping behavior. Eventually, coping behavior had positive significant effects on e-WOM ( $H_4$ :  $\beta_4= 0.866$ , t-value = 23.281) and narrative persuasion effect ( $H_5$ :  $\beta_5= 0.999$ , t-value = 28.243).

We have also provided the bootstrapping samples as coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and collinearity detection (VIF) in Table 7. First,  $R^2$  measures variance, which is explained in each of the endogenous constructs and is therefore a measure of the model's explanatory power (Ramli, Latan, and Solovida, 2019).  $R^2$  is also referred to as in-sample predictive power.  $R^2$  ranges from 0 to 1, with higher values indicating a greater explanatory power. As a guideline,  $R^2$  values of 0.02, 0.13, and 0.26 can be considered small, medium, or large, respectively (Ashrafi, Ravasan, Trkman, and Afshari, 2019). Acceptable  $R^2$  values are based on the context, and in some disciplines, an  $R^2$  value as low as 0.10 is considered satisfactory. Based on the empirical results in Table 7, the modeled constructs explain a mediate amount of 48.6% (e-WOM) and 71.0% (NPE) variance, followed by CB. The modeled constructs for CB explain a mediate amount of 44.3% (PK), 44.7% (TPP), and 56.7% (AFF) variance. They all lie at satisfactory levels above 0.26.

Second, Cohen (1988) proposed effect size ( $f^2$ ) to assess how the removal of certain predictor constructs affect an endogenous construct's  $R^2$  value. The effect

size for each structural path is estimated by the change in  $R^2$  that would occur if the structural path was omitted from the model (Risher and Hair, 2017). Thus, calculated effect sizes were examined for each of the structural paths, and they were somewhat redundant to the size of the path coefficients (Hair, Risher, Sarstedt, and Ringle, 2019). These were calculated as follows:  $f^2 = [(R^2 \text{ of structural path included}) - (R^2 \text{ of structural path excluded})] / [1/(R^2 \text{ of structural path included})]$  (Ashrafi *et al.*, 2019). As a rule of thumb,  $f^2$  values higher than 0.02, 0.15, and 0.35 show that the model has small, medium, or large effect sizes, respectively (Cohen, 1988). Based on the empirical results in Table 7, the achieved effect sizes of 0.015, 0.133, and 0.328 (for CB as the dependent variable) represent weak and moderate redundancy and effect size. Therefore, the results show that PK, TPP, and AFF successfully explained the effects that CB has on how well an SF post works.

Third, the variance inflation factor (VIF) was employed to assess the collinearity of the formative indicators. VIF values above 5 present critical collinearity issues among predictor constructs. However, collinearity issues can occur at lower VIF values of 3–5. Ideally, VIF values should be close to 3 and lower (Hair *et al.*, 2019). VIF must be examined to ensure that it does not bias the regression results. If collinearity is a problem, a frequently used option is to create higher-order models that can be supported by theory (Ramli *et al.*, 2019). Based on the empirical results in Table 7, there was no collinearity problem as VIF is smaller than 3, and the CB variable is paired to two dependent variables (e-WOM and NPE).

**Table 7**  
**Results of research hypothesis**

Hypothesis Path	Coefficient	T-value	R <sup>2</sup>	VIF	f <sup>2</sup>
H <sub>1</sub> : Persuasion Knowledge → Coping Behavior	β <sub>1</sub> = 0.147	0.889	0.443	2.9	0.015
H <sub>2</sub> : Third-person Perception → Coping Behavior	β <sub>2</sub> = 0.383	2.738***	0.447	2.5	0.133
H <sub>3</sub> : Affect → Coping Behavior	β <sub>3</sub> = 0.452	8.027***	0.567	2.4	0.328
H <sub>4</sub> : Coping Behavior → e-WOM	β <sub>4</sub> = 0.866	23.281***	0.486	1.0	1.504
H <sub>5</sub> : Coping Behavior → Narrative persuasion effect	β <sub>5</sub> = 0.999	28.243***	0.710	1.0	3.878

Notes.  $\chi^2/df = 4.323$ ; GFI = 0.878; AGFI = 0.823; RMSR = 0.051; RMSEA = 0.086; CFI = 0.952; IFI = 0.952; NFI = 0.939

Based on one-tailed test: for t-value greater than 1.96 or smaller than -1.96 (\*); for t-value greater than 2.33 or smaller than -2.33(\*\*); for t-value greater than 2.58 or smaller than -2.58(\*\*\*)

### **4.3.3 Mediating effect analysis**

The mediation effect is usually based on the three-stage analysis proposed by Baron and Kenny (1986). Zhao, Lynch and Chen (2010) then amend the Baron and Kenny (1986) approach. In addition, Efron (1979) proposes the bootstrap method which the number of existing samples is amplified by repeated sampling, so that the distribution of their number of times is closer to the way of population distribution. With the computer application of structural equation model, the bootstrap method becomes the latest famous method to explore the mediation effect. Then, the bootstrap method is conducted in a virtual manner, and the confidence interval can be calculated when repeated extractions 1000 times (Efron and Tibshirani, 1993). As for SEM model, when we detect and analyze the mediation effect, we can use the bootstrap method to obtain the confidence interval of the indirect effect, which can be called the mediation effect if the 95% confidence interval does not contain zero and reaches a significant level. If the direct effect in the 95% confidence interval contains 0, it indicates that the direct effect is not significant, with a full mediation effect. If the indirect effect and the direct effect in the 95% confidence interval are not included in 0, and all reach a significant level, then the total effect in the 95% confidence interval does not contain 0, reaching a significant level, and it can be considered as a partial mediation effect (Mackinnon, 2008; Nitzl, Roldán, and Cepeda, 2016; Preacher and Hayes, 2008).

Six types of the serial mediation effect were examined through the bootstrap method from the PK (TPP, AFF) to EWOM (NPE) of the study. They were a mediation effect of CB between PK and EWOM (case 1), a mediation effect of CB between PK and NPE (case 2), a mediation of CB between TPP and EWOM (case 3), a mediation effect of CB between TPP and NPE (case 4), a mediation of CB between AFF and EWOM (case 5), a mediation effect of CB between AFF and NPE (case 6), respectively. The results are listed in Table 8.

We can find that they owned total mediation effects in the case 1, case 2, case 3, and case 5. For example, case 1 showed that the confidence interval

(0.507~0.763) of the indirect effect (0.625;  $0.625 = 0.817 \times 0.765$ ) did not contain 0 and had a significant effect ( $p < 0.05$ ), indicating that CB had a mediation effect between PK and NPE. The confidence interval (-0.029~0.288) of the direct effect from PK to NPE (0.127) contained 0, up to an insignificant effect, and the confidence interval (0.676~0.815) of the total effect (0.752), which included the direct effect and indirect effect ( $0.752 = 0.625 + 0.127$ ) did not contain 0, thus achieving significant results. These outcomes showed that the CB was a total mediation effect between PK and NPE. Similar results can be obtained in case 2, 3, and 5.

Additionally, we can find that partial mediation effects were present in case 2 and case 6. For example, case 2 showed that the confidence interval (0.517~0.749) of the indirect effect (0.631;  $0.631 = 0.827 \times 0.763$ ) did not contain 0 and had a significant effect ( $p < 0.05$ ), indicating that CB had a mediation effect between PK and NPE. The confidence interval (0.122~0.390) of the direct effect from PK to NPE (0.250) did not contain 0, up to a significant effect, and the confidence interval (0.824~0.920) of the total effect (0.881), which included the direct effect and the indirect effect ( $0.881 = 0.631 + 0.250$ ) did not contain 0, thus achieving significant results. These outcomes showed that the coping behavior (CB) is a partial mediation effect between PK and NPE. Similar results can be obtained in case 6.

#### **4.3.4 Moderating Effects**

In the one-way ANOVA,  $p$ -value presented different genders of the audiences had different e-WOM. Therefore, the gender was employed as a moderator variable to examine the moderating effect. Chi-square difference test is adopted to perform the overall model comparison between groups (Bollen and Long, 1993). Empirical results illustrated that  $\chi^2$  within these two sub-groups were 347.608 and 460.678 ( $df = 127$ ; Chi-square difference=113.07), and their degrees of freedom difference smaller than 1. Thus, gender promised to a moderator variable for  $113.07 > \chi^2_{0.05,1}$ .

From the results of Table 9, the path from the PK to CB showed no

**Table 8**  
**Empirical result of serial mediation effects**

Effects	Contents	Estimate	<i>p</i> -value	Confidence interval
Case 1: PK → CB → EWOM				
Indirect effect	PK → CB → EWOM	0.625	<i>p</i> < .05	0.507 ~ 0.763
Direct effect	PK → CB	0.817	<i>p</i> < .05	0.747 ~ 0.869
	CB → EWOM	0.765	<i>p</i> < .05	0.607 ~ 0.904
	PK → EWOM	0.127	<i>p</i> > .05 ( <i>p</i> = .119)	-0.029 ~ 0.288
Total effect	PK → EWOM	0.752	<i>p</i> < .05	0.676 ~ 0.815
Case 2: PK → CB → NPE				
Indirect effect	PK → CB → NPE	0.631	<i>p</i> < .05	0.517 ~ 0.749
Direct effect	PK → CB	0.827	<i>p</i> < .05	0.763 ~ 0.875
	CB → NPE	0.763	<i>p</i> < .05	0.625 ~ 0.881
	PK → NPE	0.250	<i>p</i> < .05	0.122 ~ 0.390
Total effect	PK → NPE	0.881	<i>p</i> < .05	0.824 ~ 0.920
Case 3: TPP → CB → EWOM				
Indirect effect	TPP → CB → EWOM	0.595	<i>p</i> < .05	0.453 ~ 0.771
Direct effect	TPP → CB	0.855	<i>p</i> < .05	0.809 ~ 0.898
	CB → EWOM	0.695	<i>p</i> < .05	0.521 ~ 0.885
	TPP → EWOM	0.203	<i>p</i> > .05 ( <i>p</i> = .053)	-0.006 ~ 0.389
Total effect	TPP → EWOM	0.797	<i>p</i> < .05	0.730 ~ 0.849
Case 4: TPP → CB → NPE				
Indirect effect	TPP → CB → NPE	0.738	<i>p</i> < .05	0.623 ~ 0.871
Direct effect	TPP → CB	0.857	<i>p</i> < .05	0.811 ~ 0.896
	CB → NPE	0.861	<i>p</i> < .05	0.725 ~ 0.986
	TPP → NPE	0.127	<i>p</i> > .05 ( <i>p</i> = .074)	-0.010 ~ 0.261
Total effect	TPP → NPE	0.864	<i>p</i> < .05	0.819 ~ 0.902
Case 5: AFF → CB → EWOM				
Indirect effect	AFF → CB → EWOM	0.893	<i>p</i> < .05	0.721 ~ 1.105
Direct effect	AFF → CB	0.894	<i>p</i> < .05	0.804 ~ 0.892
	CB → EWOM	0.998	<i>p</i> < .05	0.860 ~ 1.259
	AFF → EWOM	0.010	<i>p</i> > .05 ( <i>p</i> = .065)	-0.446 ~ 0.026
Total effect	AFF → EWOM	0.903	<i>p</i> < .05	0.600 ~ 0.731
Case 6: AFF → CB → NPE				
Indirect effect	AFF → CB → NPE	0.590	<i>p</i> < .05	0.447 ~ 0.730
Direct effect	AFF → CB	0.857	<i>p</i> < .05	0.813 ~ 0.894
	CB → NPE	0.688	<i>p</i> < .05	0.528 ~ 0.833
	AFF → NPE	0.321	<i>p</i> < .05	0.171 ~ 0.487
Total effect	AFF → NPE	0.910	<i>p</i> < .05	0.877 ~ 0.940

*Note.* PK is persuasive knowledge; TPP is third-person perception; AFF is affection; CB represents coping behavior; EWOM is e-word-of-mouth; NPE is narrative persuasive effect.

significance in both groups. The  $p$ -values of other paths from the AFF to CB, from the CB to e-WOM and from the CB to NPE were all significant. As to the path from the TPP to CB, the female group revealed greater significant  $p$ -value than the male group. Furthermore, the estimate of the path from the TPP to CB in the male group (0.325) was higher than that of in the female group (0.497). The estimate of the path from the AFF to CB in the male group (0.593) is greater than that of in the female group (0.454).

The main paths of these two groups were different. In the male samples, the primary path was from the AFF to NPE through CB (AFF-CB-NPE). A different path was shown in the female samples. The primary path was from the TPP to NPE through CB (TPP-CB-NPE).

## **5. Conclusions**

The empirical results in our augmented CB model support four of our hypotheses. Namely, that TPP and AFF shaped CB. However, PK provided a non-significant result (H1). This study found that participants responded to an SF post made by a brand through TPP and AFF rather than PK, indicating that the responses of individuals are determined through self-related assessment and self-emotional status rather than an understanding of the SF post. Consistent with the ELM, self-related criteria (e.g., TPP and AFF) trigger the motivation of individuals and further enhance their engagement. This approach led the participants to deal with the information through the central path, thus influencing CB through the Instagram SF. While PK represents comprehension of a message sent by a brand, such knowledge does not appertain to self-related characteristics but to object-oriented understanding and reaches a limited degree of motivation. This message-processing mechanism leads individuals to tackle information through the peripheral path, and this has little impact on CB. Therefore, TPP and AFF lead to different results for CB as compared to PK.

An understanding of the SF post made by brands did not have an effect on subsequent reactions. Chen (2018) suggested that an awareness of a commercial effort had little influence on the responses of Instagram audiences since they

**Table 9**  
**Model comparison between groups in t-value**

Path	Male Group			Female Group		
	Estimate	t-value	<i>p</i>	Estimate	t-value	<i>p</i>
PK → CB	0.059	0.362	0.717	0.048	0.263	0.792
TPP → CB	0.325	2.618	0.009**	0.497	3.136	0.002**
AFF → CB	0.593	6.274	***	0.454	6.653	***
CB → EWOM	0.860	15.429	***	0.863	17.304	***
CB → NPE	0.999	24.526	***	0.996	18.745	***

Note.  $\chi^2/df= 2.737$  (male); 3.627 (female).

were accustomed to the ubiquitousness of promotion-oriented information. The subtle innate character of the messages affected audience receptivity. The level of comprehension of the SF post was not viewed as a significant matter. Kruglanski and VanLange (2012) contended that personal relevance contributes to motivation.

The evaluations by individuals of the influence messages have on themselves and others affect their responses to the SF posts made by brands. Ham and Nelson (2016) agreed that personal rather than social CB is shaped by TPP. This observation has been supported by social penetration theory. The Instagram SF is a platform where users can present private information to those with whom they have reached a certain level of intimacy. In particular, users' responses to the SF posts shown by brands tend to be based on their judgements of a post's influence on themselves and others. The sensory awareness of the usage of the SF by brands shapes the audience's CB. The AIM indicates the involvement of emotion and mood in tackling messages. Entertainment is viewed as one of the main reasons for the use of the Instagram SF. It can be assumed that audiences' responses to posts in the SF are influenced by feelings. In other words, individuals would prefer to make emotional or affective responses in their appraisals of confrontational situations or events. Decisions are often reached through a combination of external information and internal cognition. In our

study, the audience's CB surrounding the brands' usage of the SF shaped the related descriptions that were dispatched on the Instagram website. Each type of CB shows a different type of evaluation of a subject.

As for the academic contributions of this study, the previous relevant literature has explored the causal relationship between PK, TPP, and CB or between e-WOM and CB. AFF had not been included as an antecedent variable of CB, and NPE had not been regarded as a consequence variable of CB. Therefore, a research gap in the existing literature had formed. This provides the main academic contribution of this study. We then proposed three routes for the persuasion procedure—PK, TPP, and AFF—to highlight the drivers of CB in the Instagram SF; that is, the cognitive learning factor, the cognitive processing factor, and the cognitive appraisal factor, respectively. The empirical outcomes of our augmented CB model support most of the hypotheses. TPP and AFF influence CB in the Instagram SF (H2a and H3a). However, PK displays the opposite outcome (H1a). Based on the ELM, high and low engagement with information is influenced by motivation (Petty and Cacioppo, 1986). These results support the ELM in that the peripheral paths (TPP and AFF) obviously tend to influence CB in the Instagram SF; however, the central path (PK) does not influence CB. Thus, the higher the number of respondent reactions, the more likely it is for positive or negative comments to go viral. The audience's CB influences psychological status regarding the Instagram SF. The following details reveal additional information.

As for practical contributions and managerial implications, the audience's CB with the SF posts made by brands also has an influence on purchase behavior. When individuals share an SF post, the shared values have a positive effect on trust (Wu *et al.*, 2010), which is related to purchase intention (Hajli, 2014). With an extension of the theory of planned behavior (Pavlou and Fygenon, 2006), purchase behavior has been found to be affected by purchase desire intensity. Using the "see more" option is related to psychological and reminiscence effects and has been explained as an interest in an issue or object (Ashcroft and Hoey, 2001). Liking is related to recall (Mehta and Purvis, 2006). Impressive memory



has a considerable effect on memory retrieval (Hamilton, 2015). CB, which halts or expands the flow of information, is related to the awareness effect. The levels of information flow represent the levels of exposure, which have a positive relationship with awareness (Gibs and Bruich, 2010). In addition, does “how they cope” have a positive influence on “the effects of the SF post” or not? The consequential variables can include NPE and e-WOM. The relationship between the CB regarding the Instagram SF, e-WOM, and NPE is worth exploring in the future.

Further findings of this study illustrate that CB has a significant influence on e-WOM and NPE in the Instagram SF. Thus, the greater the number of respondent responses, the more likely it is for positive or negative comments to go viral. The audience’s CB influences their psychological status concerning to the Instagram SF. As for the impact of CB on e-WOM, an audience’s CB refers to a personal evaluation regarding an issue or message based on self-perception theory (Bem, 1967). Namely, the attitudes of individuals toward an event result from their actions and behaviors, developing a psychological status encompassing satisfaction or dissatisfaction. As noted by Shaikh *et al.* (2018), the satisfaction of individuals exerts an effect on e-WOM. As for the impact of CB on NPE, the sharing of these SF posts has an effect on purchase behavior. When users share a SF post, the shared values generate a positive effect on trust (Wu *et al.*, 2010), which is linked to purchase intention (Hajli, 2014). Based on an extension of the theory of planned behavior, purchase behavior has been found to be affected by purchase desire intensity. The use of the “see more” option in the Instagram SF has been linked to psychological and reminiscence effects. It has been employed to indicate an interest in an event or object. Preference is related to recall. Impressive memory has a considerable effect on memory retrieval (Hamilton, 2015). CB, which halts or expands the flow of information, has a connection with the awareness effect in the SF. The degree of information flow indicates the degree of exposure, and that enjoys a positive causal relationship with awareness in due course.

For a more comprehensive understanding, future studies should also

compare the effects of the Instagram SF on multiple social media platforms. According to Statista (2017), Adidas was included in a study on the statistical ranking of various types of industries. The statistical findings of the current study indicate a degree of representativeness; however, narrowing the scope of the study would be an option for a more detailed discussion. A survey could analyze the use of the Instagram SF by a specific industry. It is recommended that advanced analytics be used in future research. In a future study with a sufficient budget and time, a sample of 1,000 participants would be appropriate for decreasing the likelihood of bias.

## References

- Altman, I. and Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York, NY: Holt, Rinehart and Winston.
- Amancio, M. (2017). *Put it in your Story: Digital storytelling in Instagram and snapchat stories*. (Ph.D dissertation), Uppsala University.
- Ashcroft, L. and Hoey, C. (2001). Public relationship, marketing and the Internet: Implications for information professionals. *Library Management*, 22(1/2), 68-74.
- Ashrafi, A., Ravasan, Z. A., Trkman, P., and Afshari, S. (2019). The role of business analytics capabilities in bolstering firms' agility and performance. *International Journal of Information Management*, 47(1), 1-15. doi: 10.1016/j.ijinfomgt.2018.12.005
- Bagozzi, R. P. and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Baron, R. M. and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 74(3), 183-200.
- Bentler, P. M. and Bonett, D. G. (1980). Significance tests and goodness of fit in

- the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586-607.
- Bianchi, C. and Bivona, E. (2002). Opportunities and pitfalls related to e-commerce strategies in small–medium firms: a system dynamics approach. *System Dynamics Review: The Journal of the System Dynamics Society*, 18(3), 403-429.
- Boerman, S. C., Willemsen, L. M., and Van Der Aa, E. P. (2017). This post is sponsored: Effects of sponsorship disclosure on persuasion knowledge and electronic word of mouth in the context of Facebook. *Journal of Interactive Marketing*, 38(1), 82-92.
- Bollen, K. A. (2014). *Structural equations with latent variables*. Hoboken, NJ: John Wiley and Sons.
- Bollen, K. A. and Long, J. S. (1993). *Testing structural equation models*. Newbury Park, CA: Sage.
- Boninger, D. S., Krosnick, J. A., and Berent, M. K. (1995). Origins of attitude importance: Self-interest, social identification, and value relevance. *Journal of Personality and Social Psychology*, 68(1), 61-80.
- Brandon, N. R., Beike, D. R., and Cole, H. E. (2017). The effect of the order in which episodic autobiographical memories versus autobiographical knowledge are shared on feelings of closeness. *Memory*, 25(6), 744-751.
- Briñol, P., Rucker, D. D., and Petty, R. E. (2015). Naïve theories about persuasion: implications for information processing and consumer attitude change. *International Journal of Advertising*, 34(1), 85-106. doi: 10.1080/02650487.2014.997080.
- Brown, T. J., Barry, T. E., Dacin, P. A., and Gunst, R. F. (2005). Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the Academy of Marketing Science*, 33(2), 123-138.

- Browne, M. W. and Cudeck, R. (1993). Alternative ways of assessing model fit. *Sage Focus Editions*, 154(1), 136-136.
- Casaló, L. V., Flavián, C., and Sergio, I. S. (2018). Influencers on Instagram: Antecedents and consequences of opinion leadership. *Journal of Business Research*. doi:10.1016/j.jbusres.2018.07.005
- Chen, G. M. and Ng, Y. M. M. (2016). Third-person perception of online comments: Civil ones persuade you more than me. *Computers in Human Behavior*, 55(4), 736-742.
- Chen, H. (2018). College-Aged Young Consumers' Perceptions of Social Media Marketing: The Story of Instagram. *Journal of Current Issues and Research in Advertising*, 39(1), 22-36.
- Chen, T. Y., Hsu, F. M., and Wu, S. Y. (2019). Examine the effect on website stickiness using cognitive information cues. *Corporate Management Review*, 39(1), 49-81.
- Chen, T. Y., Yeh, T. L., and Chang, C. I. (2018). How different advertising formats and calls to action on videos affect advertising recognition and consequent behaviors. *The Service Industries Journal*, 1-22. doi:10.1080/02642069.2018.1480724
- Cho, H., Shen, L., and Wilson, K. (2014). Perceived realism: Dimensions and roles in narrative persuasion. *Communication Research*, 41(6), 828-851.
- Chu, S. C., and Kim, J. (2018). The current state of knowledge on electronic word-of-mouth in advertising research. *International Journal of Advertising*, 37(1), 1-13.
- Chung, M., Munno, G. J., and Moritz, B. (2015). Triggering participation: Exploring the effects of third-person and hostile media perceptions on online participation. *Computers in Human Behavior*, 53(3), 452-461.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cyr, D., Head, M., Lim, E., and Stibe, A. (2018). Using the elaboration likelihood model to examine online persuasion through website design. *Information and Management*, 55(7), 807-821.

- Daugherty, T. and Hoffman, E. (2014). eWOM and the importance of capturing consumer attention within social media. *Journal of Marketing Communications*, 20(1-2), 82-102.
- Dessart, L. (2018). Do ads that tell a story always perform better? The role of character identification and character type in storytelling ads. *International Journal of Research in Marketing*, 35(2), 289-304.
- Deters, F. G. and Mehl, M. R. (2013). Does posting Facebook status updates increase or decrease loneliness? An online social networking experiment. *Social Psychological and Personality Science*, 4(5), 579-586.
- Doll, W. J., Xia, W., and Torkzadeh, G. (1994). A confirmatory factor analysis of the end-user computing satisfaction instrument. *MIS Quarterly*, 18(4), 453-461.
- Efron, B. (1979). Bootstrap methods: Another look at the Jackknife. *The Annals of Statistics*, 7(1), 1-26.
- Efron, B. and Tibshirani, R. (1993). *An introduction to the Bootstrap*. New York, NY: Chapman and Hall/CRC.
- Escalas, J. E. (2004). Narrative processing: Building consumer connections to brands. *Journal of Consumer Psychology*, 14(1), 168-180.
- Forgas, J. P. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological bulletin*, 117(1), 39-66.
- Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fransen, M. L., Verlegh, P. W., Kirmani, A., and Smit, E. G. (2015). A typology of consumer strategies for resisting advertising, and a review of mechanisms for countering them. *International Journal of Advertising*, 34(1), 6-16.
- Friestad, M. and Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, 21(1), 1-31.
- Gibs, J. and Bruich, S. (2010). *Advertising effectiveness: Understanding the*

- value of a social media impression*. New York, NY: The Nielsen Company.
- Gunther, A. C. and Mundy, P. (1993). Biased optimism and the third-person effect. *Journalism Quarterly*, 70(1), 58-67.
- Gupta, H., Singh, S., and Sinha, P. (2017). Multimedia tool as a predictor for social media advertising-a YouTube way. *Multimedia Tools and Applications*, 76(18), 18557-18568.
- Hair, J., Risher, J., Sarstedt, M., and Ringle, C. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. doi: 10.1108/EBR-11-2018-0203
- Hajli, M. N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387-404.
- Ham, C. D. (2017). Exploring how consumers cope with online behavioral advertising. *International Journal of Advertising*, 36(4), 632-658. doi: 10.1080/02650487.2016.1239878.
- Ham, C. D., Nelson, M. R., and Das, S. (2015). How to measure persuasion knowledge. *International Journal of Advertising*, 34(1), 17-53. doi: 10.1080/02650487.2014.994730.
- Ham, C. D. and Nelson, M. R. (2016). The role of persuasion knowledge, assessment of benefit and harm, and third-person perception in coping with online behavioral advertising. *Computers in Human Behavior*, 62(4), 689-702.
- Hamby, A. and Brinberg, D. (2018). Cause-related marketing persuasion knowledge: Measuring consumers' knowledge and ability to intercept CrM promotions. *Journal of Consumer Affairs*, 52(2), 373-392. doi: 10.1111/joca.12167.
- Hamilton, D. L. (2015). *Cognitive processes in stereotyping and intergroup behavior*. London, England: Psychology Press.
- Hartmann, P., Apaolaza, V., and Eisend, M. (2016). Nature imagery in non-green advertising: The effects of emotion, autobiographical memory, and consumer's green traits. *Journal of Advertising*, 45(4), 427-440.

- Hassan, S., Nadzim, S. Z. A., and Shiratuddin, N. (2015). Strategic use of social media for 85 small business based on the AIDA model. *Procedia-Social and Behavioral Sciences*, 172(2), 262-269.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., and Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the internet?. *Journal of Interactive Marketing*, 18(1), 38-52.
- Hsu, F. M., Fan, C. T., Chen, T. Y., and Wang, S. W. (2013). Exploring perceived value and usage of information systems in government context. *Chia Da Management Review*, 33(2), 75-104.
- Hu, L. T. and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hwang, K. and Zhang, Q. (2018). Influence of parasocial relationship between digital celebrities and their followers on followers' purchase and electronic word-of-mouth intentions, and persuasion knowledge. *Computers in Human Behavior*, 87(1), 155-173.
- Jang, S. M. and Kim, J. K. (2018). Third person effects of fake news: Fake news regulation and media literacy interventions. *Computers in Human Behavior*, 80(2), 295-302.
- Jöreskog, K. G. and Sörbom, D. (1993). *LISREL 8: Structural equation modeling with SIMPLIS command language*. Chicago, IL: Scientific Software International, Inc.
- Jung, Y. and Park, J. (2018). An investigation of relationships among privacy concerns, affective responses, and coping behaviors in location-based services. *International Journal of Information Management*, 43(1), 15-24. doi: 10.1016/j.ijinfomgt.2018.05.007.
- Kim, H. K., Han, S. H., Park, J., and Park, J. (2016). Identifying affect elements based on a conceptual model of affect: a case study on a smartphone. *International Journal of Industrial Ergonomics*, 53(2), 193-204.
- Kirmini, A. and Campbell, M.C. (2004). Goal seeker and persuasion sentry: How

- consumer targets respond to interpersonal marketing persuasion. *Journal of Consumer Research*, 31(3), 573-582.
- Knowles, E. S. and Linn, J. A. (2004). *Resistance and persuasion*. Mahwah, NJ: Psychology Press.
- Kruglanski, A. W. and Van Lange, P. A. M. (2012). *Handbook of theories of social psychology*. London, England: Sage.
- Lee, J. W., Lee, C. S., and Park, Y. S. (2009, November). *Research on the advertisement effect of push type mobile advertisement*. Paper presented at 2009 Fourth International Conference on Cooperation and Promotion of Information Resources in Science and Technology, Beijing, China. Abstract retrieved from <https://ieeexplore.ieee.org/abstract/document/5361838>
- Lerner, J. S., Li, Y., Valdesolo, P., and Kassam, K. S. (2015). Emotion and decision making. *Annual Review of Psychology*, 66(5), 799-823.
- Lyons, M. D., Huebner, E. S., and Hills, K. J. (2016). Relations among personality characteristics, environmental events, coping behavior and adolescents' life satisfaction. *Journal of Happiness Studies*, 17(3), 1033-1050.
- MacCallum, R. C. and Hong, S. (1997). Power analysis in covariance structure modeling using GFI and AGFI. *Multivariate Behavioral Research*, 32(2), 193-210.
- MacKinnon, D. P. (2008). *Introduction to statistical mediation analysis*. New York, NY: Lawrence Erlbaum Associates.
- Malhotra, N. K., Kim, S. S., and Patil, A. (2006). Common method variance in IS research: A comparison of alternative approaches and a reanalysis of past research. *Management Science*, 52(12), 1865-1883.
- Matthes, J. and Naderer, B. (2016). Product placement disclosures: Exploring the moderating effect of placement frequency on brand responses via persuasion knowledge. *International Journal of Advertising*, 35(2), 185-199. doi: 10.1080/02650487.2015.1071947.
- McDonald, A. M. and Cranor, L. F. (2010). *Americans' attitudes about internet*



- behavioral advertising practices*. Paper presented at the Proceedings of the 9th annual ACM workshop on Privacy in the electronic society, Chicago, IL.
- McDonald, R. P. and Ho, M. H. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods*, 7(1), 64-82.
- Mehta, A. and Purvis, S. C. (2006). Reconsidering recall and emotion in advertising. *Journal of Advertising Research*, 46(1), 49-56.
- Mittal, V. and Ross Jr, W. T. (1998). The impact of positive and negative affect and issue framing on issue interpretation and risk taking. *Organizational Behavior Human Decision Processes*, 76(3), 298-324.
- Mo, Z., Liu, M. T., and Liu, Y. (2018). Effects of functional green advertising on self and others. *Psychology and Marketing*, 35(5), 368-382.
- NapoleonCat. (2019). Instagram users in Taiwan, March 2019. Retrieved from <https://napoleoncat.com/stats/instagram-users-in-taiwan/2019/03>
- Newton, C. (2017). Facebook launches stories to complete its all-out assault on Snapchat. Retrieved from <https://www.theverge.com/2017/3/28/15081398/facebook-stories-snapchat-camera-direct>
- Nitzl, C., Roldán, J. L., and Cepeda, C. G. (2016), Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models. *Industrial Management and Data Systems*, 119(9), 1849-1864.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed). New York, NY: McGraw-Hill.
- Okafor, E., Lucier-Greer, M., and Mancini, J. A. (2016). Social stressors, coping behaviors, and depressive symptoms: A latent profile analysis of adolescents in military families. *Journal of Adolescence*, 51(1), 133-143.
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York, NY: Irwin-McGraw-Hill.
- Oliver, R. L. and Swan, J. E. (1989). Equity and disconfirmation perceptions as influences on merchant and product satisfaction. *Journal of Consumer*

- Research*, 16(3), 372-383.
- Park, H. S., and Salmon, C. T. (2005). A test of the third-person effect in public relations: Application of social comparison theory. *Journalism Mass Communication Quarterly*, 82(1), 25-43.
- Pauwels, K., Aksehirli, Z., and Lackman, A. (2016). Like the ad or the brand? Marketing stimulates different electronic word-of-mouth content to drive online and offline performance. *International Journal of Research in Marketing*, 33(3), 639-655.
- Pavlou, P. A. and Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS Quarterly*, 30(1), 115-143.
- Peiser, W. and Peter, J. (2000). Third-person perception of television-viewing behavior. *Journal of Communication*, 50(1), 25-45.
- Perloff, R. M. (1989). Ego-involvement and the third person effect of televised news coverage. *Communication Research*, 16(2), 236-262.
- Peter, J. P. and Olson, J. C. (1987). *Consumer behavior: Marketing strategy perspective*. Homewood, IL: Richard D. Irwin.
- Petty R. E., Cacioppo J. T. (1986). The Elaboration Likelihood Model of Persuasion. In R. E. Petty & J. T. Cacioppo (Eds.), *Communication and persuasion: Central and peripheral routes to attitude change* (pp. 1-24). New York, NY: Springer.
- Petty, R. E., DeSteno, D., and Rucker, D. D. (2001). The role of affect in attitude change. In J. P. Forgas (Ed.), *Handbook of affect and social cognition* (pp. 212-233). Mahwah, NJ: Erlbaum.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Pozharliev, R., Verbeke, W. J., and Bagozzi, R. P. (2017). Social consumer neuroscience: Neurophysiological measures of advertising effectiveness in a social context. *Journal of Advertising*, 46(3), 351-362.

- Preacher, K. J. and Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Prendergast, G., Ko, D., and Yuen, S. Y. V. (2010). Online word of mouth and consumer purchase intentions. *International Journal of Advertising*, 29(5), 687-708.
- Raghunathan, R. and Pham, M. T. (1999). All negative moods are not equal: Motivational influences of anxiety and sadness on decision making. *Organizational Behavior Human Decision Processes*, 79(1), 56-77.
- Raman, P. and Pashupati, T. K. (2004). Online privacy: The impact of self perceived technological competence. *Enhancing Knowledge Development in Marketing*, 5(1), 26-27.
- Ramli, N. A., Latan, H., and Solovida, G. T. (2019). Determinants of capital structure and firm financial performance- A PLS-SEM approach: Evidence from Malaysia and Indonesia. *Quarterly Review of Economics and Finance*, 71(1), 148-160. doi: 10.1016/j.qref.2018.07.001.
- Risher, J. and Hair J. (2017). The robustness of PLS across disciplines. *Academy of Business Journal*, 1(1), 47-55.
- Romney, M. and Johnson, R. G. (2018). Show me a story: Narrative, image, and audience engagement on sports network Instagram accounts. *Information, Communication and Society*, 1-16. doi:10.1080/1369118X.2018.1486868
- Scherer, K. R., Shorr, A., and Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research*. London, UK: Oxford University Press.
- Seo, Y., Li, X., Choi, Y. K., and Yoon, S. (2018). Narrative transportation and paratextual features of social media in viral advertising. *Journal of Advertising*, 47(1), 83-95. doi: 10.1080/00913367.2017.1405752.
- Shaikh, A. A., Karjaluoto, H., and Häkkinen, J. (2018). Understanding moderating effects in increasing share-of-wallet and word-of-mouth: A case study of Lidl grocery retailer. *Journal of Retailing and Consumer Services*, 44(1), 45-53.

- Smit, E. G., Van Noort, G., and Voorveld, H. A. (2014). Understanding online behavioral advertising: User knowledge, privacy concerns and online coping behavior in Europe. *Computers in Human Behavior*, 32(1), 15-22.
- Snyder, C. R. (1999). *Coping: The psychology of what works*. New York, NY: Oxford University Press.
- Statista. (2017). Leading brands ranked by number of Instagram followers as of December 2017 (in millions). Retrieved from <https://www.statista.com/statistics/253710/leading-brands-ranked-by-number-of-instagram-followers/>
- Statista. (2018a). Number of daily active Instagram Stories users from October 2016 to June 2018 (in millions). Retrieved from <https://www.statista.com/statistics/730315/instagram-stories-dau/>
- Statista. (2018b). Number of monthly active Instagram users from January 2013 to June 2018 (in millions). Retrieved from <https://www.statista.com/statistics/253577/number-of-monthly-active-instagram-users/>
- Sun, Y., Pan, Z., and Shen, L. (2008). Understanding the third-person perception: Evidence from a meta-analysis. *Journal of Communication*, 58(2), 280-300.
- Sweeney, J., and Swait, J. (2008). The effects of brand credibility on customer loyalty. *Journal of Retailing and Consumer Services*, 15(3), 179-193.
- Tutaj, K. and van Reijmersdal, E. A. (2012). Effects of online advertising format and persuasion knowledge on audience reactions. *Journal of Marketing Communications*, 18(1), 5-18.
- Wachyudy, D., and Sumiyana, N. (2018). Could affectivity compete better than efficacy in describing and explaining individuals' coping behavior: An empirical investigation. *Journal of High Technology Management Research*, 29(1), 57-70. doi: 10.1016/j.hitech.2018.04.006.
- Wang, T., Yeh, R. K. J., Chen, C., and Tsydypov, Z. (2016). What drives electronic word-of-mouth on social networking sites? Perspectives of social capital and self-determination. *Telematics and Informatics*, 33(4), 1034-1047.

- Weiss, H. M., Nicholas, J. P., and Daus, C. S. (1999). An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organizational Behavior Human Decision Processes*, 78(1), 1-24.
- Wu, J. J., Chen, Y. H., and Chung, Y. S. (2010). Trust factors influencing virtual community members: A study of transaction communities. *Journal of Business Research*, 63(9-10), 1025-1032.
- Yen, C. L. A. and Tang, C. H. H. (2019). The effects of hotel attribute performance on electronic word-of-mouth (eWOM) behaviors. *International Journal of Hospitality Management*, 76(1), 9-18.
- Yu, J., Hu, P. H., and Cheng, H. (2015). Role of affect in self disclosure on social network websites: A test of two competing models. *Journal of Management Information Systems*, 32(2), 239-277.
- Zhang, P. (2013). The affective response model: A theoretical framework of affective concepts and their relationships in the ICT context. *MIS Quarterly*, 37(1), 247-274.
- Zhao, X., Lynch Jr, J. G., and Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.

## Appendix: Survey questionnaires

Variables/Constructs	Measurements	References
<b>Persuasion Knowledge</b>		
Agent-based Stories feature	<ol style="list-style-type: none"> <li>1. I comprehend the characteristics of the publisher posting the Stories feature.</li> <li>2. I comprehend the background of the publisher posting the Stories feature.</li> <li>3. I comprehend the goals of the publisher posting the Stories feature.</li> <li>4. I comprehend the subject of the Stories feature posted.</li> <li>5. I comprehend the content of the Stories feature posted.</li> <li>6. I comprehend the mean of the Stories feature posted.</li> </ol>	Brandon <i>et al.</i> (2017); Mo <i>et al.</i> (2018)
Topic-based Stories feature	<ol style="list-style-type: none"> <li>7. Something shows up in my head suddenly when viewing the content of the Stories feature posted.</li> <li>8. Something shows up in my head suddenly when experiencing the visual or the acoustic effect of the Stories feature posted.</li> <li>9. Something shows up in my head suddenly when viewing the publisher posting the Stories feature.</li> </ol>	
Episodic-based Stories feature		
<b>Third-person Perception</b>		
Impact on self	<ol style="list-style-type: none"> <li>1. The content of the Stories feature posted has a powerful impact on me.</li> <li>2. The publisher of the Stories feature posted has a powerful impact on me.</li> <li>3. The visual or acoustic effect of the Stories feature posted has a powerful impact on me.</li> <li>4. The content of the Stories feature posted has a powerful impact on my friends.</li> <li>5. The publisher of the Stories feature posted has a powerful impact on my friends.</li> <li>6. The visual or acoustic effect of the Stories feature posted has a powerful impact my friends.</li> <li>7. The content of the Stories feature posted has a powerful impact on family members.</li> <li>8. The publisher of the Stories feature posted has a powerful impact on family members.</li> <li>9. The visual or acoustic effect of the Stories feature posted has a powerful impact on family members.</li> </ol>	Chung <i>et al.</i> (2015)
Impact on friends		
Impacts on family members		

**Affect**

- Primitive affection  
 1. The content of the Stories feature posted is vivid.  
 2. The publisher of the Stories feature posted is likable.  
 3. The visual or acoustic effect of the Stories feature posted is vivid.  
 4. The content of the Stories feature posted is simple, plain, and uncomplicated.  
 5. The publisher of the Stories feature posted is elaborate.  
 6. The visual or acoustic effect of the Stories feature posted is simple, plain, and uncomplicated.
- Descriptive affection  
 7. The content of the Stories feature posted is attractive and interesting.  
 8. The publisher of the Stories feature posted seems superior.  
 9. The visual or acoustic effect of the Stories feature posted is attractive and interesting.
- Evaluative affection

Kim *et al.*  
(2016)**Coping Behavior**

- Share  
 1. I am likely to share Stories feature because of its content.  
 2. I am likely to share Stories feature because of its publisher.  
 3. I am likely to share Stories feature because of its visual or acoustic effect.  
 4. I'd like to see more Stories feature because of its content.  
 5. I'd like to see more Stories feature because of its publisher.  
 6. I'd like to see more Stories feature because of its visual or acoustic effect.  
 7. I'd like to ignore Stories feature because of its content.  
 8. I'd like to ignore Stories feature because of its publisher.  
 9. I'd like to ignore Stories feature because of its visual or acoustic effect.
- See more
- Ignore

Ham and  
Nelson  
(2016)**Electronic Word-of-Mouth**

- Brand Word-of-Mouth  
 1. I am likely to say positive or negative things about the brand from the Stories feature posted.  
 2. I would recommend the brand of Stories feature to my friends and relatives.  
 3. I would mention this brand of Stories feature to others through online platforms.
- Stories Word-of-Mouth  
 4. I am likely to say positive or negative things about the content of the Stories feature posted.  
 5. I would recommend the Stories feature to my friends and relatives.

Boerman *et al.*  
(2017);  
Hwang and  
Zhang,  
(2018)

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	6. I would mention this Stories feature to others through online platforms.	
<b>Narrative Persuasion Effect</b>		
Awareness	1. What a Stories feature posted expresses about gets more views. 2. The visual or acoustic effect of a Stories feature posted get more views 3. 3. The publisher who posts the Stories feature gets more views. 4. This Stories feature shows up in my head usually.	Lee <i>et al.</i> (2009); Gupta <i>et al.</i> (2017)
Reminiscence	5. I can remember the content of the Stories feature posted. 6. I can remember who posts the Stories feature.	
Psychological	7. The Stories feature is likable. 8. The publisher who posts the Stories feature is helpful. 9. The Stories feature is helpful.	
Purchasing behavior	10. I have an intention to search more Stories feature about the publisher. 11. I want to connect to the website attached by Stories feature through the internet or the wireless internet. 12. I will make an advanced purchase of Stories feature.	

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