# A meta-analysis of the factors affecting eWOM providing behaviour

Elvira Ismagilova, University of Bradford, United Kingdom
Nripendra P. Rana, University of Bradford, United Kingdom
Emma Slade, University of Bristol, United Kingdom
Yogesh K. Dwivedi, Swansea University, United Kingdom

## **Abstract**

**Purpose-** Numerous studies have examined factors influencing eWOM providing behaviour. The volume of extant research and inconsistency in some of the findings makes it useful to develop an all-encompassing model synthesising results. Therefore, the aim of this study is to synthesise findings from existing studies on eWOM by employing meta-analysis, which will help to reconcile conflicting findings of factors affecting consumers' intention to engage in eWOM communications.

**Design/methodology/approach-** The findings from 51 studies were used for meta-analysis, which was undertaken using Comprehensive Meta-Analysis software.

**Findings-** Factors affecting eWOM providing behaviour were divided into four groups: personal conditions, social conditions, perceptual conditions, and consumption-based conditions. The results of meta-analysis showed that out of 20 identified relationships, 16 were found to be significant (opinion seeking, information usefulness, trust in web eWOM services, economic incentive, customer satisfaction, loyalty, brand attitude, altruism, affective commitment, normative commitment, opinion leadership, self-enhancement, information influence, tie strength, homophily, and community identity).

**Originality/value-** Applying meta-analysis helped reconciliation of conflicting findings, enabled investigation of the strengths of the relationships between motivations and eWOM providing behaviour, and offered a consolidated view. The results of this study facilitate the advancement of current knowledge of information dissemination on the Internet, which can influence consumer purchase intention and loyalty.

**Keywords:** Electronic word of mouth (eWOM), meta-analysis, motivations to provide eWOM, eWOM engagement

Paper type: Research paper

# 1. Introduction

With the advancement of Internet technologies, consumers increasingly use electronic word of mouth (eWOM) communications as a helpful tool when seeking information. eWOM is defined as the dynamic and ongoing information exchange process between potential, actual, or former consumers regarding a product, service, brand, or company, which is available to a multitude of individuals and institutions via the Internet (Dwivedi et al., 2020; Hennig-Thurau et al., 2004; Ismagilova et al., 2017). Numerous studies (e.g. Bairrada et al., 2018; Chen and Huang,

2013; Chiu et al., 2014; Japutra et al., 2018; Reimer and Benkenstein, 2016; Singh and Söderlund, 2020; Thakur, 2019; Wolny and Mueller, 2013; Wu and Wang, 2017; Wu et al., 2016) have examined factors influencing individuals to provide eWOM communications. Investigating consumers' motivations to provide eWOM helps researchers and practitioners to understand and encourage or discourage information assimilation on the Internet, which can influence consumers' purchase intentions, loyalty, and commitment (Dessart et al., 2019; Yan et al., 2018). However, insights from eWOM research on the topic of engagement in eWOM, particularly eWOM providing behaviour, have not always been cumulative, and some studies have reported conflicting results about the effect of factors, such as incentives (Hennig-Thurau et al., 2004; Yoo et al., 2013), opinion seeking (Magalhaes and Musallam, 2014; Nagy et al., 2017), involvement (Alhidari et al., 2015; Sohn, 2009), brand attitude (Rialti et al., 2017; Yeh and Choi, 2011), altruism (Horng, 2016; Reimer and Benkenstein, 2016), customer satisfaction (Luarn et al., 2015; Son et al., 2012), and self-enhancement (Magalhaes and Musallam, 2014; Tong et al., 2013) to name a few, on eWOM providing behaviour. Therefore, the aim of this study is to synthesise findings from existing studies on eWOM providing behaviour by employing meta-analysis to answer the research question: What factors are related to eWOM providing behaviour?

Engagement in eWOM communications is one of the popular areas in eWOM research (Chen et al., 2018; Naumann et al., 2020; Palmeira et al., 2020; Reimer and Benkenstein, 2016). Engagement is defined as "a customer's personal connection to a brand as manifested in cognitive, affective, and behavioural responses outside of the purchase situation" (So et al., 2014, p.310). eWOM engagement behaviours include eWOM seeking and eWOM providing (Ismagilova et al., 2017). Alwash et al. (2019) distinguish two levels of eWOM providing behaviour: shallow and deep. The shallow level involves consumers performing an action of low cognitive effort and takes place within a short duration. Examples of shallow eWOM providing behaviours include "liking" and sharing existing content (Alwash et al., 2019; Ananda et al., 2019), which are quickly undertaken with minimal effort. On the other hand, the deep level involves higher cognitive effort and takes a longer duration. Examples of deep eWOM providing behaviours include creating or producing content, such as reviews, and commenting on others' eWOM communications (Alwash et al., 2019; Ananda et al., 2019). This research focuses on eWOM providing behaviour at both levels.

Researchers have suggested that it is important to examine the common factors of eWOM providing behaviour across various product categories (Amed et al., 2019). The volume of extant research and inconsistency in some of the findings makes it useful to develop an all-encompassing model synthesising results relevant to this topic. Despite significant insight provided by previous research on eWOM communications (Floyd et al., 2014; Hong et al., 2017), a consensus regarding the factors affecting eWOM providing behaviour is yet to emerge (Amed et al., 2019), indicating the need for a systematic integration of this body of work, which will help to advance the knowledge of online information dissemination.

It is common to have mixed research results in social and behavioural studies (Hong et al., 2017). To find a common truth behind conceptually similar studies, researchers apply meta-

analysis. Meta-analysis is an important and powerful tool as some of the studies lack sufficient power to achieve statistically significant results (Geyskens et al., 2009; King and He, 2006; Pan et al., 2012). By combining findings from numerous independent studies on the same relationship into a single estimate, meta-analysis helps researchers to make more accurate conclusions in comparison with the ones presented in any primary study (Geyskens et al., 2009; Schmidt and Hunter, 2014).

Meta-analysis has been used in previous eWOM research (Table 1). Most of the meta-analysis studies on eWOM focused on eWOM persuasiveness and the impact of eWOM on sales/intention to buy. Previous meta-analysis studies (e.g. Babić Rosario et al., 2016; Ismagilova et al., 2019) provided clarity on the conflicting results of various factors in eWOM research and proposed valuable guidance on variable selections for future studies. For example, using 96 studies Babić Rosario et al. (2016) examined the effect of eWOM characteristics, volume, and valence on sales, finding that eWOM volume has a stronger impact on sales in comparison with eWOM valence. Another study by Ismagilova et al. (2019) investigated the effect of eWOM communication on consumer intention to buy. Previous studies in the eWOM field (e.g. Frasquet et al., 2015; Teng et al., 2017) had mixed findings regarding the effect of factors such as eWOM usefulness, valence, and volume on consumer behaviour. Utilising findings from 59 studies, Ismagilova et al. (2019) found that eWOM usefulness, valence, and volume have a significant impact on consumer buying intention. It was proposed that results of the meta-analysis could be used as a guideline for future empirical research.

While the previous studies discussed above are valuable, they do not explain why consumers engage in eWOM providing behaviour. This study will maximise the benefits of the existing research on eWOM and produce accumulated knowledge by assessing the empirical evidence across multiple studies on eWOM providing behaviour (Grewal et al., 2018). Similar to previous eWOM meta-analysis research (Babić Rosario et al., 2016; Floyd et al., 2014; Ismagilova et al., 2020; You et al., 2015), this study will reconcile conflicting results, which will advance eWOM research. The study will set the agenda for future research directions on factors related to eWOM providing behaviour. Based on this study, scholars will be able to deduce the variables to be selected for analysing consumers' eWOM providing behaviour. The findings will help to understand and predict information exchange behaviour on the Internet (Han, 2008), which in turn can help influence purchase decision and sales volume (Hennig-Thurau and Walsh, 2003).

**Table 1.** Summary of previous meta-analysis studies on eWOM

Study	Aim of the study	Number of	Techniques/Software
		studies used for	used for meta-
		meta-analysis	analysis
Floyd et al.	Investigate how valence and volume	26	Elasticities
(2014)	influence the elasticity of retailer sales.		
You et al.	Investigate the direct effect of eWOM	51	Elasticities
(2015)	on sales.		
Babić	Investigate the influence of platform	96	Correlation
Rosario et al.	characteristics, product characteristics,		coefficients
(2016)			

	and eWOM metrics on the relationship between eWOM and sales.		
Hong et al. (2017)	Investigate factors affecting helpfulness of online reviews.	42	Correlation coefficients, Comprehensive Meta- Analysis (CMA) 2.0
Ismagilova et al. (2019)	Investigate factors affecting intention to buy.	69	Correlation coefficients, Comprehensive Meta-Analysis (CMA) 2.0
Ismagilova et al. (2020)	Investigate the effect of characteristics of source credibility on consumer behaviour.	20	Correlation coefficients, Comprehensive Meta-Analysis (CMA) 2.0

The rest of the paper is structured as follows. Section 2 presents the framework and hypotheses development, followed by section 3 which describes the research methodology used for this study. Then, section 4 presents the findings from meta-analysis. The findings are discussed in section 5, outlining theoretical contributions of the research, as well as limitations and future research directions.

## 2. Framework and hypotheses

A number of studies have investigated the factors affecting eWOM providing behaviour. It has been argued that the literature on factors affecting eWOM providing behaviour is fragmented and discrete (Hennig-Thurau et al., 2004; Teng et al., 2016). Research has focused on various contexts, such as virtual communities (Chi-Hsing, 2014), online opinion platforms (Jin et al., 2010), and social networking sites (SNS) (Alhidari et al., 2015), as well as different products/services, such as laptops (Lii and Lee, 2012), fashion products (Saleem and Ellahi, 2017), digital cameras (Sohn, 2009), hotels (Yen and Tang, 2015), and restaurants (De Meyer and Petzer, 2014). As already mentioned, results from different studies regarding antecedents of eWOM providing behaviour have been contradictory. Different approaches have been taken by eWOM researchers to identify and conceptualise factors affecting eWOM providing behaviour. Some studies use specific theories and frameworks to categorise factors (Cui et al., 2014; Okazaki, 2009; Tong et al., 2013), such as social exchange theory (Cui et al., 2014), motivational theory (e.g. Tong et al., 2013), and uses & gratifications (U&G) theory (e.g. Plume and Slade, 2018), while others do not. As a result, studies have called for more research (Amed et al., 2019).

Previous eWOM research distinguishes various groups of consumer motivations based on the framework proposed by Palka et al. (2009), which used grounded theory to discuss individuals' motivations to disseminate information using mobile devices (Cheung et al., 2015; Luarn et al., 2015). According to this framework motivations can be classified according to five conditions: social, attitudinal (perceptual), resource-based, customer-based, and personal. These conditions were built from various constructs that can influence individuals' behaviour to disseminate information. Numerous studies adapted the framework by Palka et al. (2009) to study eWOM providing behaviour online (Cheung et al., 2015; Luarn et al., 2015). For

example, Luarn et al. (2015) used four of the conditions - they excluded resource-based motivations as they argued that the costs of disseminating information via the Internet are difficult to perceive, unlike costs associated with information dissemination through mediums such as mobile SMS.

Given the range of studies that have researched factors affecting eWOM providing behaviour from different viewpoints as well as theoretical underpinnings (e.g. Cui et al., 2014; Henning-Thurau et al., 2004; Jin et al., 2010; Okazaki, 2009; Tong et al., 2013), the use of one single background theory to inform the current study is problematic. Therefore, it is useful to consider all factors from a higher vantage point. To help in this endeavour, the classification framework provided by Palka et al. (2009), based on grounded theory, offers a broad framework to consider all the factors identified holistically. Based on the groupings of factors in other eWOM studies (Luarn et al., 2015; Palka et al., 2009), factors affecting eWOM providing behaviour were divided into four groups: personal conditions, social conditions, perceptual conditions, and consumption-based conditions.

Table 2 presents a description of the 20 factors, including a definition, different labels used for the same construct by different studies in the sample, and examples of some representative studies, specifying whether they found the effect of the construct on eWOM providing behaviour to be significant or not.

**Table 2.** Factors affecting eWOM providing behavior

Category	Construct	Definition	References
Perceptual	Opinion	Behaviour focused on looking	Significant: Hennig-Thurau et
conditions	seeking	for eWOM communications.	al. (2004); Huang et al. (2013);
		Variables included: opinion	Kucukemiroglu and Kara
		seeking, obtain information,	(2015); Nagy et al. (2017); Sun
		advice seeking.	et al. (2006).
		-	Non-significant: Magalhaes
			and Musallam (2014).
	Information	The degree to which the	<b>Significant:</b> Bobkowski (2015);
	usefulness	information assists consumers	Frasquet et al. (2015); Huang et
		in making their purchase	al. (2013).
		decisions.	
		Variables included:	
		information usefulness,	
		helpfulness, diagnosticity.	
	Perceived	The uncertainty a consumer	Significant: Song and Sun
	risk	has in making a purchase	(2011); Tirunillai and Tellis
		decision.	(2012); Zhang and Lv (2010).
		Variables included: perceived	
		risk, risk reduction.	
	Trust in web	The subjective belief that a	<b>Significant</b> : Filieri et al. (2015);
	eWOM	party will fulfil their	Frasquet et al. (2015); Horng
	services	obligations.	(2016); Nusair et al. (2017).
		Variables included: trust in	
		web eWOM services,	
		perceived security.	

	Economic	Acquiring economic benefits	Significant: Hansen and Lee
	incentive	(e.g. money, web coupons, free delivery).  Variables included: economic incentive, remuneration, extrinsic reward, open market reward.	(2013); Hennig-Thurau et al. (2004); Horng (2016); Lee et al. (2013); Luarn et al. (2015); Son et al. (2012); Yoo et al. (2013). <b>Non-significant:</b> Cui et al. (2014); Reimer and Benkenstein (2016); Shen et al. (2011); Yen and Tang, (2015); Tong et al. (2013).
Consumption- based conditions	Involvement	The degree of psychological identification and emotional ties the receiver has with the product/service.  Variables included: involvement level, involvement.	Significant: Alhidari et al. (2015); Cui et al. (2014); De Meyer and Petzer (2014); Saleem and Ellahi (2017); Song and Sun (2011); Sotiriadis and van Zyl (2013); Wolny and Mueller (2013).  Non-significant: Sohn (2009).
	Customer satisfaction	A condition that happens as a result of a pleasant consumption fulfilment. Variables included: customer satisfaction, successful experience, open market satisfaction, satisfaction with service recovery.	Significant: Lii and Lee (2012); Luarn et al. (2015); Moliner- Velázquez et al. (2015); Shen et al. (2011); Ziegele and Weber (2015). Non-significant: Horng (2016); Lee et al. (2013); Son et al. (2012).
	Loyalty	Overall attachment with a favourable attitude manifested by repeated purchasing. Variables included: open market loyalty, customer loyalty.	<b>Significant:</b> Gumus and Bal (2016); Lee et al. (2013); Son et al. (2012).
	Brand attitude	Favourable attitude toward the brand.	<b>Significant:</b> Rialti et al. (2017). <b>Non-significant:</b> Yeh and Choi (2011).
Personal conditions	Altruism	The aim of increasing welfare of one or more person(s) other than oneself.  Variables included: altruism, altruistic motive, affection, outcome expectations (care about others), enjoyment in helping other consumers, satisfaction in helping other customers	Significant: Cheung and Lee (2012); Cui et al (2014); Kim (2017); Luarn et al. (2015); Okazaki (2009); Reimer and Benkenstein (2016); Tong et al. (2013); Yang (2013); Zhang and Lv (2010).  Non-significant: Horng (2016); Morrongiello et al. (2017); Yen and Tang (2015).
	Affective commitment	Emotional commitment derived from emotional attachment to, identification with, and involvement in an entity.	<b>Significant:</b> Jin et al. (2010); Li et al. (2016).
	Normative commitment	Motivated by the actor's moral obligation that they must fulfil.	<b>Significant:</b> Jin et al. (2010); Li et al. (2016).

	Opinion leadership	A domain-independent, trait- like set of personality characteristics that are stable over time and across respondent groups. Opinion leaders shape public opinion by selectively conveying mass media messages to their social networks.	Significant: Bobkowski (2015); Kucukemiroglu and Kara (2015); Sun et al. (2006).
	Self- enhancement	Presenting themselves positively, sharing information to look good. Variables included: extraversion, positive self-enhancement, image outcome expectations, self-presentation, self-improvement, self-expression.	Significant: Cheung and Lee (2012); Christodoulides et al., 2012; Cui et al (2014); Hennig-Thurau et al. (2004); Horng (2016); Kim (2017); Lee et al. (2013); Maceli et al. (2015); Magalhaes and Musallam (2014); Okazaki (2009); Son et al. (2012); Tong et al. (2013); Wu et al. (2016).  Non-significant: Horng (2016).
Social conditions	Influence of others	Influence of the behaviours, beliefs and practices of other users. Variables included: norms, normative influence, influence of others, normative pressure, subjective norms.	Significant: Chu and Kim (2011); Hansen and Lee (2013); Shan and King (2015).  Non-significant: Choi and Scott (2013); Magalhaes and Musallam (2014).
	Information influence	Capacity to accept information from another knowledgeable person to select a product or brand. Variables included: information influence, power.	Significant: Wu et al. (2016). Non-Significant: Chu and Kim (2011); Saleem and Ellahi (2017).
	Tie strength	The depth of a relationship between information source and information seeker. Variables included: tie strength, social interaction tie, perceived social relationships.	Significant: Luarn et al. (2015); Men and Muralidharan (2017); Niu et al. (2010); Wolny and Mueller (2013). Non-significant: Chu and Kim (2011); Hansen and Lee (2013).
	Homophily	The degree to which two or more individuals who interact are similar in certain attributes (e.g. beliefs, education, social status).  Variables included: homophily, rapport.	Significant: Saleem and Ellahi (2017).  Non-significant: Chu and Kim (2011); Hansen and Lee (2013).
	Reciprocity	Benefit for individuals to engage in social exchange; a person who offers help to others expecting returns in the future.	Significant: Cheung and Lee (2012); Horng (2016). Non-significant: Horng (2016).

Con	nmunity	Sense of belonging to the	<b>Significant:</b> Chi-Hsing (2014);
iden	ntity	virtual (online) community.	Yoo et al. (2013).
		Variables included:	Non-significant: Horng (2016).
		community identification,	
		social identification.	

Note: Some of the studies presented in the table have more than one data set

# 2.1 Perceptual conditions

Perceptual conditions are indicators of the subjectivity or objectivity of various perception attributes (Palka et al., 2009). The perceptual process is influenced by an individual's level of involvement, which has an impact on the information that they focus on and provide. The perceptual condition in this study included five categories: opinion seeking, information usefulness, perceived risk, trust in web eWOM services, and economic incentives.

*Opinion seeking*. Opinion seeking is defined as a behaviour focused on looking for eWOM communications (Hennig-Thurau et al., 2004). By providing eWOM, individuals can offer or solicit an opinion regarding how to solve a problem and they can obtain more specific and useful feedback (Magalhaes and Musallam, 2014). Some researchers suggest that many people who share information online also seek information online because of their desire for more knowledge (Sun et al., 2006). It is suggested that, because of the potential to acquire a large amount of information, people who seek information will engage in providing eWOM. Some studies (e.g. Kucukemiroglu and Kara, 2015; Nagy et al., 2017; Sun et al., 2006) investigated the link between opinion seeking and opinion providing. For instance, by conducting surveys with 1,000 consumers from Hungary, Nagy et al. (2017) found that online opinion seeking has a positive effect on providing opinions online. Thus, the following hypothesis can be formulated:

H1: Opinion seeking is positively related to eWOM providing behaviour.

Information usefulness. Information usefulness or helpfulness refers to the degree to which the information assists consumers in making their purchase decision (Davis, 1989). Previous studies (e.g. Bobkowski, 2015; Huang et al., 2013) found that perceived information usefulness can significantly affect consumer behaviour. Using information utility theory, Bobkowski (2015) found that perceived information usefulness has a significant positive impact on newssharing intention. Another study by Huang et al. (2013) found that perceived message usefulness is positively related to information sharing behaviour of Chinese consumers. By sharing information that is perceived as useful, individuals can contribute to the online environment. Thus, based on the above discussion the following is hypothesised:

H2: Information usefulness is positively related to eWOM providing behaviour.

**Perceived risk**. Perceived risk refers to the uncertainty a consumer has in making a purchase decision (Zhang and Lv, 2010). Previous research argues that if consumers can perceive a risk of consumption, they are more likely to search for information and spread it through the Internet (Zhang and Lv, 2010). A number of studies (Song and Sun, 2011; Tirunillai and Tellis, 2012; Zhang and Lv, 2010) investigated the link between perceived risk and eWOM related

behaviour. For example, Zhang and Lv (2010) found that perceived risk has a positive correlation with eWOM providing behavior and has a significant impact on it. Thus, based on the above discussion, the following hypothesis is proposed:

H3: Perceived risk is positively related to eWOM providing behaviour.

Trust in web eWOM services. Trust in web services refers to the subjective belief that a party will fulfil their obligations (Filieri et al., 2015; Frasquet et al., 2015). Researchers argue that if consumers trust consumer-generated media they will be more willing to talk to other people about the website and experience they had while using it. The more individuals are confident about the trustworthiness of a consumer-generated media website the more likely they will tell others about it, as the perceived risk of deception from this source of advice is low (Filieri et al., 2015). A number of studies (e.g. Filieri et al., 2015; Frasquet et al., 2015; Horng, 2016; Nusair et al., 2017) investigated the relationship between trust in web eWOM services and eWOM engagement behaviour. For example, using 1533 respondents from UK and Spain, Frasquet et al. (2015) found that consumer trust towards consumer-generated media positively influences eWOM in the context of apparel and consumer electronics. Based on the above discussion the following is hypothesised:

*H4: Trust in web eWOM services is positively related to eWOM providing behaviour.* 

Economic incentives. Economic incentives are considered to be an important external motivational factor (Henning-Thurau et al., 2004). When an individual considers that the reward exceeds the costs of conducting a certain behaviour, the behaviour tends to occur more often (Son et al., 2012). Previous research suggests that using money as a reward is an important extrinsic motivational factor, which helps to improve individuals' participation level and execution level (Orlikowski, 1993). Economic incentives in this context refers to the reward of economic benefits (e.g. money, web coups, free delivery) for participating in eWOM behaviours (Cui et al., 2014; Henning-Thurau et al., 2004). A study conducted by Henning-Thurau et al. (2004) found that economic incentives are an important factor in eWOM spreading and contribute to the sharing of experiences and knowledge online among consumers. Thus, based on the previous discussion the following is hypothesised:

H5: Economic incentive is positively related to eWOM providing behaviour.

## 2.2 Consumption-based conditions

Consumption-based conditions include consumption-related indicators (Chu and Kim, 2011; Luarn et al., 2015; Palka et al., 2009). Consumption-based conditions in this study included involvement, customer satisfaction, loyalty, and brand attitude.

*Involvement*. Involvement refers to the degree of psychological identification the receiver has with a product/service (Zaiehkowsky, 1985). It was found by Dichter (1966) that differences in product involvement influences motivation to spread WOM about products. If the degree of involvement is high, consumers will pay more attention to a particular product and its information. After the purchase, it is expected that consumers will have a greater emotional response and consequently a stronger desire to share information regarding this product

(Alhidari et al., 2015; Cui et al., 2014, De Meyer and Petzer, 2014; Saleem and Ellahi, 2017). Thus, the following hypothesis is proposed:

H6: Involvement is positively related to eWOM providing behaviour.

Customer satisfaction. Customer satisfaction is defined as a condition that happens as a result of a pleasant consumption fulfilment (Oliver, 1997). It has been found that customer satisfaction significantly affects consumer behaviour, such as attitude towards product, loyalty towards a brand, and intention to spread eWOM to name a few (Luarn et al., 2015; Moliner-Velázquez et al., 2015; Shen et al., 2011). Some studies (Luarn et al., 2015; Moliner-Velázquez et al., 2015; Shen et al., 2011) have investigated how satisfaction with service recovery affects behaviour connected to providing eWOM communications. As customers' expectations are exceeded, individuals feel a need to engage in eWOM providing behaviour to share with their positive experience. As a result, the following is hypothesised:

H7: Customer satisfaction is positively related to eWOM providing behaviour.

Loyalty. Loyalty is defined as an overall attachment with a favourable attitude manifested by repeated purchasing (Oliver, 1999). Studies (Sichtmann, 2007; Walsh and Beatty, 2007) highlight several important consequences of loyalty, which include repeating purchase and recommendations to others (eWOM). If an individual has a psychological attachment towards a product/service/vendor/market, the individual will be willing to share their own experience with others (Son et al., 2012). Previous studies (Gumus and Bal, 2016; Lee et al., 2013; Son et al., 2012) have investigated the impact of loyalty on eWOM. For example, Son et al. (2012) investigated that open market loyalty has a positive effect on eWOM. As a result, the following hypothesis is proposed:

H8: Loyalty is positively related to eWOM providing behaviour.

Brand attitude. Brand attitude is defined as a favourable attitude toward the brand. Previous studies have found that consumers with strong loyalty to a brand usually create and spread positive information about the brand (Dick and Basu, 1994; Gounaris and Stathakopoulos 2004). Brand communities have members who are fans of a brand and also loyal toward the brand. Thus, most of the members actively engage in positive eWOM about the brand. It is argued by some researchers that the online setting - with readily available social networks and communication tools - helps participants to share positive eWOM about a brand (Yeh and Choi (2011). Additionally, it was found that eWOM generated by brand community members is not limited to the particular brand community. Loyal individuals pass the information they acquire from their peer community members to other people who do not belong to the community (Rialti et al., 2017; Yeh and Choi, 2011). A number of studies (e.g. Rialti et al., 2017; Yeh and Choi, 2011) investigated the connection between brand attitude and eWOM related behaviour. For example, Yeh and Choi (2011) studied the online community of MINI car fans, and found that online brand community members' brand attitude is positively related to their intention to provide eWOM. Thus, the following is hypothesised:

*H9: Brand attitude is positively related to eWOM providing behaviour.* 

#### 2.3 Personal conditions

Personal conditions refer to the determinants of personal aspects that can have an impact on consumer behaviour (Luarn et al., 2015; Palka et al., 2009). Personal conditions in this study included altruism, affective commitment, normative commitment, opinion leadership, and self-enhancement.

Altruism. Altruism is an important concept in social psychology and refers to the aim of increasing welfare of one or more persons other than oneself (Cui et al., 2014). Based on human nature, individuals intrinsically have a need to support or help others without seeking any rewards in return (Wasko and Faraj, 2005). Researchers argue that consumers have a similar need to help others in the online environment, which makes it one of the reasons individuals take part in social groups (Baethge et al., 2016). After purchasing a product or service, consumers may be motivated to share information about their experience in order to help other people to make a purchase decision or to help the company attract new customers (Engel et al., 1993). Studies concerning the dissemination of eWOM in the network and social media environment have highlighted altruism as an important factor related to eWOM providing behaviour (Cui et al., 2014; Kim, 2017; Luarn et al., 2015; Reimer and Benkenstein, 2016; Yang, 2013). It was found by Cui et al. (2014) that altruistic motive has a positive correlation with individuals' motivation to spread eWOM in the online feedback system. Thus, it is hypothesised:

H10: Altruism is positively related to eWOM providing behaviour.

Commitment. According to the social exchange literature, commitment is defined as "the attachment an individual feels to a collective entity, such as a relation, a group, or organisation" (Lawler and Yoon, 1996, p.90). Commitment has a number of forms. First, affective (emotional) commitment, which is referred to as emotional attachment to, identification with, and involvement in an entity. Another form is normative commitment, which is motivated by an individual's moral obligation that they must fulfil. Some studies (Jin et al., 2009, 2010; Li et al., 2006) investigated commitment in the context of online communities. According to this line of research, commitment has a significant effect on a user's decision to participate in online communities. Affective commitment refers to an individual user's sense of emotional attachment and involvement with an online community. Normative commitment refers to users' responsibility to stay in the online community and help others. The study conducted by Jin et al. (2010) found that eWOM providing behaviour in online platforms is influenced by affective and normative commitment. Thus, the following hypotheses are proposed:

H11: Affective commitment is positively related to eWOM providing behaviour.

H12: Normative commitment is positively related to eWOM providing behaviour.

*Opinion leadership*. Opinion leaders influence public opinion by providing persuasive messages to their social network (Lazarsfeld et al., 1944). Opinion leadership can be defined as a domain-independent, trait-like set of personality characteristics that are stable over time and across respondent groups (Bobkowski, 2015). An opinion leader is someone who enjoys

being the one to advertise certain products and brands to other people, shows behaviours such as online forwarding and chatting, and exchanges information with friends (Phelps et al., 2004). Opinion leaders influence the members of social communities and networks by disseminating information to other individuals (Chaney, 2001).

An increasing number of studies demonstrate that individuals' general behaviour and social media behaviour are related (Sheldon, 2013; Sun et al., 2006; Wright and Li, 2011). For example, extroverts and individuals who are less shy provide more communications on Facebook in comparison with introverts and people who are shyer (Sheldon, 2013). Thus, it can be seen that individuals replicate their off-line prosocial habits online (Wright and Li, 2011).

A number of studies (Bobkowski, 2015; Kucukemiroglu and Kara, 2015; Sun et al., 2006) investigated the relationship between opinion leadership and eWOM engagement behaviour. For example, using surveys of 250 American students in the context of music, Sun et al. (2006) found that opinion leadership positively influences eWOM providing behaviour. Thus, based on the above discussion it is hypothesised that:

H13: Opinion leadership is positively related to eWOM providing behaviour.

Self-enhancement. Individuals have a strong desire to maintain/increase the positivity of their self-concept (Leary, 2007). Self-enhancement (or self-improvement) refers to the situation when individuals try to present themselves positively by sharing information (Berger, 2014); this is classified as internally external motivation (Tong et al., 2007). It has been found that motivations for self-enhancement induce traditional WOM communications (Engel et al., 1993) and also eWOM communications (Wu et al., 2016). It is claimed that an individual's self-view influences their self-enhancement strategies (Gebauer et al., 2013). By using online feedback systems individuals have more chances to improve their image and obtain others' recognition by sharing information about product/services. It was found by previous research that the motivation of self-enhancement has a positive correlation with motivation to provide eWOM in online feedback systems (Cui et al., 2014). Thus, the following hypothesis is proposed:

H14: Self-enhancement is positively related to eWOM providing behaviour.

#### 2.4 Social conditions

Social conditions emphasise the determinants of eWOM providing behaviour in consideration of recipients and their anticipated responses to recommendations. It has been argued that social conditions are important in influencing consumer decision making (Dholakia et al., 2004). Based on the studies by Luarn et al. (2015) and Palka et al. (2009), the social condition in this study is inclusive of six categories: influence of others, information influence, tie strength, homophily, community identity, and reciprocity.

*Interpersonal influence* (*influence* of others and information influence). A number of studies found that eWOM is a powerful source of information due to interpersonal influence (Chu and Kim, 2011; Hansen and Lee, 2013; Shan and King, 2015). Interpersonal influence is defined

as a social factor playing a crucial role in influencing consumers' decision making (D'Rozario and Choudhury, 2000). Researchers distinguish two dimensions of interpersonal influence: normative and informational influences (Bearden et al., 1989). Normative influence (influence of others) is the tendency to conform to the expectations of others, and affects attitudes, norms and values (Burnkrant and Cousineau, 1975). Norms play an important part in improving knowledge seeking and knowledge sharing (Bock et al., 2006; Choi and Scott, 2013). Information influence is defined as the tendency to accept information from other individuals who are perceived to be knowledgeable, and use this information as a guide in product, brand and store search (Bearden et al., 1989). The dual-process theory emphasises the effect of informative and normative influences on the credibility and usefulness of eWOM messages, which contributes to eWOM providing behaviour.

Norms present a form of social capital. Norms motivate members to participate in virtual communities, which indicates that there is a positive relationship between community participation and norms. Norms enable cooperation for the mutual benefit of community members (Choi and Scott, 2013). According to the Theory of Planned Behaviour (Ajzen and Fishbein, 1980), eWOM communications should not simply be a function of the consumers' attitude towards the behaviour but also be influenced by social norms. Consumers with high subjective norms should feel that other members of the community/SNS expect them to engage in eWOM providing behaviour to contribute to the community (Shan and King, 2015).

In the social networking context, informational influence drives useful eWOM behaviour. Chu and Kim (2011) found that there is a positive relationship between information influence and eWOM providing behaviour. The previous research (e.g. Christodoulides et al., 2012; Chu and Kim, 2011; Hansen and Lee, 2013) argues that in SNS normative and informational influence can influence individual's eWOM behaviour. Thus, it is hypothesised that:

H15: Influence of others is positively related to eWOM providing behaviour.

H16: Information influence is positively related to eWOM providing behaviour.

Tie strength. Tie strength refers to the depth of a relationship between source and information seeker (Mittal et al., 2008). Using a network analysis framework, Brown and Reingen (1987) demonstrated the impact of social ties in information sharing. Social ties can be classified as strong or weak (Granovetter, 1973). Individuals with strong ties have strong and close relationships, and provide practical and emotional support (e.g. family and friends); individuals with weak ties have more distant and less personal social relationships (e.g. acquaintances and colleagues) (Pigg and Crank, 2004). Both strong and weak ties can affect consumers' product/service choice, although some researchers claim that strong ties have a stronger impact on individual decision making (Brown and Reingen, 1987). The perceived tie strength developed through SNS motivates individuals to engage with each other and disseminate product/service-related information. Extension of social influence in technology acceptance research has found that both types of ties influence perceived usefulness of eWOM and engagement in a virtual community, although strong ties had a greater influence. Consumers can decide to persuade others based on strength of tie felt towards a network (Hansen and Lee,

2013). Granovetter (1973) argued that tie strength can play a critical role in a wide range of information exchange and idea-sharing. Thus, perceived tie strength encourages eWOM behaviour (Chu and Kim, 2011). Based on the above discussion it is hypothesised that:

H17: Tie strength is positively related to eWOM providing behaviour.

*Homophily*. Homophily refers to the degree to which two or more individuals who interact are similar in certain attributes (e.g. beliefs, education, social status, age, gender) (Rogers and Bhowmik, 1970). It is highlighted that homophily is a distinct concept from tie strength between individuals, as it is a different social motivator (Brown and Reingen, 1987; Hansen and Lee, 2013); similarity might lead to strong ties (deep relationships) (Brown and Reingen, 1987). It is argued that interpersonal communications are more likely to occur between individuals who are similar (Lazarsfeld and Merton, 1954). Thus, the information exchange occurs more frequently between individuals with some common qualities (Rogers, 1995; Rogers and Bhowmik, 1970). As a result, individuals with a higher level of perceived homophily are more likely to engage in eWOM with each other in order to make a purchase decision (Chu and Kim, 2011). It was argued by previous research (Saleem and Ellahi, 2017) that SNS users' perceived homophily with their contact is positively related to their engagement in eWOM behaviours in SNS. Several studies have investigated the relationship between homophily and eWOM providing behaviour. For example, Saleem and Ellahi (2017) conducted a survey among Facebook users in the context of fashion products and found that there is a positive relationship between homophily and eWOM providing behaviour. Based on the above discussion the following hypothesis can be proposed:

H18: Homophily is positively related to eWOM providing behaviour.

**Reciprocity**. Reciprocity refers to the benefit for individuals to engage in social exchange. When providers of information do not know each other, this type of reciprocity is called generalised exchange (Ekeh, 1974). In this type of exchange, the person who provides information is expecting returns in the future. Previous studies (e.g. Cheung and Lee, 2012; Wasko and Faraj, 2000) found that people who share knowledge in online communities value reciprocity. For example, a study by Cheung and Lee (2012) found that the perception of the opportunity for reciprocity is positively related to one's eWOM intention in the context of online reviews of restaurants. Thus, it can be proposed that:

H19: Reciprocity is positively related to eWOM providing behaviour.

Community identity. Identification refers to the process in which individuals see themselves as one with another person or group of people (Nahapiet and Ghoshal, 1998). Identification is also defined as an individual's sense of belonging and a positive feeling toward a virtual community (Chiu et al., 2006). Previous research has suggested that identification has a positive effect on the intention to provide information in online brand communities (Yeh and Choi, 2011). It also provides a strong motive towards eWOM behaviour (Hennig-Thurau and Walsh, 2003). Some studies (e.g. Chi-Hsing, 2014; Horng, 2016; Yoo et al., 2013) investigated the link between community identity and eWOM related behaviour. For example, Horng (2016) found that identification is positively associated with a higher level of participation

intention by both passive and active users in online communities. Thus, the following is hypothesised:

*H20: Community identity is positively related to eWOM providing behaviour.* 

## 3. Method

#### 3.1 Literature search method

In order to perform a meta-analysis, peer-reviewed journal articles on eWOM communications in the marketing context were collected. To avoid publication bias, this research employed a multi-channel literature search (Scopus, Web of Science, and EBSCO). Keywords such as "Electronic word-of-mouth" OR "Electronic word of mouth" OR "eWOM" OR "Internet word-of-mouth" OR "Internet word-of-mouth" OR "Online word-of-mouth" OR "Virtual word-of-mouth" OR "vWOM" OR "Virtual word of mouth" were used. Through this process more than 590 articles published between 2000 and 2017 were identified.

Taking into consideration the research aim, several selection criteria were applied to the initial 590 articles garnered from the search. To be included in the final sample the article needed to be a published or working academic paper and should be focused on eWOM providing behaviour. As a result of these criteria, 78 articles remained in the collection. However, the articles also needed to contain the relevant statistical details for meta-analysis (sample size, Pearson correlation, and significance of the relationships), which resulted in the removal of 27 studies. Therefore, a total of 51 articles remained based on the criteria specified (see Appendix 1).

It is argued by Kirca et al. (2005) that meta-analysis can be conducted with at least three studies. In total 128 factors influencing intention to provide eWOM communications were identified. However, from a detailed review of these articles it was found that only 20 factors were examined three or more times and had reported correlations with intention to engage in eWOM communications, and thus could be included in the analysis. Some studies used different labels for the same construct, discovered through close examination of the measurement scales. For instance, information usefulness was also named as information helpfulness or diagnosticity.

## 3.2. Meta-analysis

As the number of studies in eWOM research is growing dramatically, it is important to analyse and discuss their collective insight, to enable more generalisable conclusions in comparison with the ones presented in any single primary study (Geyskens et al., 2009; Schmidt and Hunter, 2014). Meta-analysis is an alternative to a qualitative and descriptive literature analysis

(Glass 1976), providing an opportunity to critically evaluate and statistically combine results of previous studies (Chang and Huang, 2020; Jeyaraj et al., 2020; Fagard et al., 1996).

Meta-analysis originated from Fisher's "combining p values" method (Glass, 1976). Meta-analysis has become a popular and valuable tool for researchers, which helps to quantitatively integrate research findings from a large number of studies (Floyd et al., 2014). This technique allows a mathematical combination of correlations between two or more variables in order to reconcile inconsistent findings (Hong et al., 2017). To run meta-analysis, a trial version of Comprehensive Meta-analysis Software (see <a href="https://www.meta-analysis.com/">https://www.meta-analysis.com/</a>) was used. This software is a popular tool among researchers to perform meta-analysis (e.g. Hong et al., 2017).

In order to conduct the meta-analysis, effect sizes were extracted from the included studies. The effected size can be defined as "the degree to which the phenomenon is present in the population or the degree to which the null hypothesis is false" (p.9, Cohen, 1988). In the current paper we used the correlation coefficient r as the effect size. The meta-analysis includes the following steps. First step includes calculation of the Fisher's Z and combination of effect sizes. Second step includes testing the significance of the combined effect sizes. The p-value associated with the combined effect size shows its statistical significance (Hong et al., 2017). Based on the result of Q-statistics, which rejects the homogeneity assumption across studies (Martin, 2008), this study adopted random-effect model for meta-analysis.

By using correlation coefficients between each pair of variables and sample size, Comprehensive Meta-Analysis Software generates a cumulative correlation coefficient (Avg (r)), effect sizes (p(ES)), Z-value, and 95% lower and upper confidence interval levels. In line with previous research on meta-analysis (e.g. Dwivedi et al., 2019; Jeyaraj et al., 2006), variables for the current study were only selected if the relationships between the independent and dependent construct had been investigated by at least three or more previous studies using different datasets (Kirca et al., 2005). The reason for this restriction was to obtain appropriate correlation coefficients.

## 4. Results

The results of meta-analysis (Table 3) indicates that 16 out of the 20 hypothesised relationships were found to be significant overall. Particularly strong correlations were found between intention to engage in eWOM and economic incentives (r=0.420), self-enhancement (r=0.458), information usefulness (r=0.446), affective commitment (r=0.563), normative commitment (r=0.468), customer satisfaction (r=0.445), altruism (0.397), opinion seeking (r=0.594), opinion leadership (r=0.425), brand attitude (r=0.708), and community identity (r=0.563). Correlations between intention to engage in eWOM and tie strength (r=0.223), information influence (r=0.311), homophily (r=0.172), loyalty (r=0.348), and trust in web eWOM services (r=0.376) were weaker.

 Table 3. Results of meta-analysis

Category	Factors	Number of studies	Sample size	Avg (r)	Z-value	p(ES)	95% L(r)	95% H(r)
Perceptual	Opinion seeking	9	3462	0.594	6.481	0.000	0.444	0.712
conditions	Information usefulness	3	2627	0.446	2.705	0.007	0.131	0.679
	Perceived risk	3	629	0.047	0.105	0.916	-0.677	0.724
	Trust in web eWOM services	4	2490	0.376	10.558	0.000	0.312	0.438
	Economic incentive	12	5162	0.420	7.833	0.000	0.323	0.508
Consumption-	Involvement	8	2549	0.490	1.435	0.151	-0.194	0.853
based	Customer satisfaction	8	2957	0.445	3.579	0.000	0.213	0.629
conditions	Loyalty	5	762	0.348	2.657	0.008	0.095	0.559
	Brand attitude	3	422	0.708	2.253	0.024	0.114	0.929
Personal	Altruism	12	4194	0.397	7.218	0.000	0.297	0.488
conditions	Affective commitment	3	880	0.563	4.58	0.000	0.349	0.721
	Normative commitment	3	880	0.468	2.722	0.006	0.141	0.702
	Satisfaction in Helping other customers	4	769	0.583	5.32	0.000	0.398	0.722
	Opinion leadership	4	944	0.425	2.609	0.009	0.112	0.661
	Self-enhancement	14	5698	0.458	7.385	0.000	0.348	0.555
Social	Influence of others	5	2100	0.289	1.361	0.173	-0.130	0.620
conditions	Information influence	3	1179	0.311	5.107	0.000	0.196	0.418
	Tie strength	6	2162	0.223	2.758	0.006	0.065	0.369
	Homophily	3	1024	0.172	2.890	0.040	0.056	0.284
	Reciprocity	3	496	0.002	0.016	0.987	-0.239	0.243
	Community identity	4	775	0.563	3.809	0.000	0.300	0.746

[Legend: Avg: Average, ES: Effect Size, H(r): Higher Correlation, L(r): Lower Correlation]

**Table 4.** Results of the hypotheses testing

Hypothesis	Result
H1: Opinion seeking is positively related to eWOM providing behaviour.	Supported
H2: Information usefulness is positively related to eWOM providing behaviour.	Supported
H3: Perceived risk is positively related to eWOM providing behaviour.	Not supported
H4: Trust in web eWOM services is positively related to eWOM providing	Supported
behaviour.	
H5: Economic incentive is positively related to eWOM providing behaviour.	Supported
H6: Involvement is positively related to eWOM providing behaviour.	Not supported
H7: Customer satisfaction is positively related to eWOM providing behaviour.	Supported
H8: Loyalty is positively related to eWOM providing behaviour.	Supported
H9: Brand attitude is positively related to eWOM providing behaviour.	Supported
H10: Altruism is positively related to eWOM providing behaviour.	Supported
H11: Affective commitment is positively related to eWOM providing behaviour.	Supported
H12: Normative commitment is positively related to eWOM providing behaviour.	Supported
H13: Opinion leadership is positively related to eWOM providing behaviour.	Supported
H14: Self-enhancement is positively related to eWOM providing behaviour.	Supported
H15: Influence of others is positively related to eWOM providing behaviour.	Not supported
H16: Information influence is positively related to eWOM providing behaviour.	Supported
H17: Tie strength is positively related to eWOM providing behaviour.	Supported
H18: Homophily is positively related to eWOM providing behaviour.	Supported
H19: Reciprocity is positively related to eWOM providing behaviour.	Not supported
H20: Community identity is positively related to eWOM providing behaviour.	Supported

# 4.1 Perceptual conditions

The results showed that four out of five factors from the perceptual conditions category affect eWOM providing behaviour, namely opinion seeking, information usefulness, trust in web eWOM services, and economic incentive. Opinion seeking was found to be significantly related to eWOM providing behaviour (H1 supported). According to this finding opinion seekers may also be opinion providers (Sun et al., 2006), because they gain substantial knowledge while searching for information provided by others and can provide an opinion to other people based on the gathered information. Additionally, people who engage in eWOM seeking behaviour understand the importance of eWOM for decision making. It was also found that information usefulness is positively related to eWOM providing behaviour (H2 confirmed). Individuals tend to provide eWOM communications if they perceive that the provided information will be useful, so that it can help other people making a purchase decision (Huang et al., 2013).

Hypothesis H4 focused on trust in web eWOM services. The results of meta-analysis demonstrate that trust in web eWOM services is positively related to eWOM providing behaviour (H4 supported). Trust is an important factor in establishing long-term customer relationships (Chen et al., 2014). Based on the results of this study consumers are more likely to engage in eWOM providing behaviour if they trust eWOM services.

It was found that economic incentives are positively related to eWOM providing behaviour, supporting H5. When a platform provider offers an incentive, the consumer is more likely to share their experience with others on the network (Hansen and Lee, 2013). By conducting

qualitative research Son et al. (2012) found that people want to receive economic rewards related to their eWOM activities.

Based on the meta-analysis it was also found that perceived risk was not related to eWOM providing behaviour (H3 rejected). It can be concluded that the degree of uncertainty a consumer has in making a purchase decision does not correlate with eWOM providing behaviour. Providing eWOM might have connotations of providing reviews based on experience rather than asking questions to reduce uncertainty about the purchase decision.

## **4.2 Consumption-based conditions**

The results of the meta-analysis showed that three out of 4 factors from the consumption-based conditions category showed significant results. Customer satisfaction was found to have a positive relation with eWOM providing behaviour (H7 supported). This might be explained through the confirmation/disconfirmation paradigm; a customer will be motivated to share positive experiences with others if the product or service performance exceeds their expectations (Jones and Reynolds, 2006). Additionally, customer satisfaction contains an emotional dimension. Thus, the satisfaction which is based on emotions leads to recommendation behaviour (Martin et al., 2008).

Loyalty was found to have a positive relation with eWOM providing behaviour (H8 supported). This is congruent with previous research in marketing that found that customer loyalty toward a vendor leads to customer WOM activities toward the vendor (Bloemer et al., 1998). A correlation between brand attitude and eWOM providing behaviour was also supported by the results of meta-analysis (H9 supported). Brand attitude increases eWOM providing behaviour as a brand community is often comprised of brand enthusiasts and so engagement can be explained by social identity theory (Yeh and Choi, 2011).

Involvement provided unexpected results. It was found that its correlation effect size is non-significant when performing meta-analysis with a wide 95% confidence interval (-0.194 to 0.853) (H6 rejected). Some researchers (Shang et al., 2006) claim that cognitive and affective involvement does not lead to eWOM providing behaviour. Since anonymity in virtual communities may decrease the social norm of information exchange, even highly involved consumers may not feel any obligation to engage in eWOM communications (Shang et al., 2006; Sohn, 2009).

#### 4.3 Personal conditions

The results of the meta-analysis showed that all factors from the personal conditions category performed satisfactorily under meta-analysis. Altruism was found to be significantly related to eWOM providing behaviour (H10 supported). Writing about product/service experiences helps to fulfil an enjoyment of helping other consumers. Consumers can benefit other community members by helping them with their purchase decision and saving them from negative experiences (Cheung and Lee, 2012). The thought of helping others is a fulfilling return to the contributors. Providing a product review can give information receivers the opportunity to make a better-informed purchase decision. Thus, a consumer who feels good when helping

other consumers is likely to be motivated to engage in eWOM providing behaviour (Tong et al., 2013).

Furthermore, it was found that affective commitment has a positive relationship with consumers' eWOM providing behaviour (H11 confirmed). This result is in line with previous eWOM marketing research, where affective commitment is a crucial element that promotes loyalty and sharing behaviour (Cheung and Lee, 2012). It was also found that normative commitment has a significant relation with eWOM providing behaviour (H12). The results suggest that normative commitment plays a very significant role in communication behaviour on online opinion platforms. Users will contribute eWOM as they think that it is the right thing to do (Jin et al., 2010).

Support was provided for H13, which states that opinion leadership is positively related to eWOM providing behaviour. Consumer research shows that opinion leaders and individuals who generally show some opinion leadership qualities engage in eWOM providing behaviour more than individuals who do not identify as opinion leaders (Bobkowski, 2015; Sun et al., 2006). Self-enhancement was also found to positively affect eWOM providing behaviour (H14 supported). Writing online reviews can be related to a desire to improve reputation, as consumer-opinion platforms have enormous potential for reaching a high number of people. Based on the motivation theory, it can be argued that some individuals are willing to contribute their experience because they want to be viewed as experts by a large group of consumers (Cheung and Lee, 2012).

## 4.4 Social conditions

The results of the meta-analysis showed that four out of six factors from the social conditions category showed significant results. Information influence is positively related to eWOM providing behaviour, supporting H16. The findings can be explained by the importance that individuals who are more susceptible to information influence give to the information transmitted (Cleveland et al., 2011). Thus, by understanding the importance of information in the decision-making process they engage in eWOM providing behaviour (Saleem and Ellahi, 2017).

Tie strength was found to have a positive correlation with eWOM providing behaviour, supporting H17. Individuals with stronger social ties are more likely to engage in discussions related to product/services with their peers in comparison with individuals who have weak social ties (Men and Muralidharan, 2017). It can be explained by learning and socialisation theories (Moschis and Churchill, 1978), which argue that stronger ties are more powerful in transferring knowledge and more influential than weak ties. As a result, having strong social ties encourages individuals to share their experiences about the product/service. This finding is in line with previous studies (e.g. Men and Muralidharan, 2017) that tie strength has a positive effect on peer communication about products/services/companies on social media. Homophily was also found to have a positive relation with eWOM providing behaviour (H18 supported). A higher level of similarity between the members of online communities encourages individuals to share their experiences. The results are similar to traditional WOM

communications. Historically, WOM increases with higher tie strength and homophily (Brown and Reingen, 1987).

Community identity was found to be significantly related to eWOM providing behaviour (H20 supported). The findings can be explained by motivation theory and social capital theory. A high sense of belonging and positive attitude towards the community and its members positively influence an individual's behaviour to provide eWOM communications.

Influence of others and reciprocity did not perform as expected. The relation between the influence of others and eWOM providing behaviour was not supported by meta-analysis (H15 rejected). It can be explained by people's use of SNS in a private environment and not in work environments. According to Choi and Scott (2013) norms are more important in organisations as they form the basis for organisational culture. Thus, influence and obligations for others could be more important in formal relationships than in informal relationships on SNS (Choi and Scott, 2013). Based on the result of meta-analysis, H19 was rejected as it was found that reciprocity does not relate to eWOM providing behaviour. Reciprocity is not important to individuals because they do not feel the need to receive help from others through this medium (Horng, 2016).

## 5. Discussion

The present study offers a synthesis of findings from existing studies on eWOM providing behaviour by employing meta-analysis and answers the research question as to what factors are related to eWOM providing behaviour. Factors affecting eWOM providing behaviour were divided into 4 groups: perceptual conditions, consumption-based conditions, personal conditions, and social conditions. It was found that of 20 identified relationships 16 (i.e. opinion seeking, information usefulness, trust in web eWOM services, economic incentive, customer satisfaction, loyalty, brand attitude, altruism, affective commitment, normative commitment, opinion leadership, self-enhancement, information influence, tie strength, homophily, and community identity) demonstrated significant meta-analysis results. These findings shed light on what factors affect eWOM providing behaviour.

#### **5.1** Theoretical contributions

It has been argued that the literature on eWOM providing behaviour is fragmented and has contradictory findings (Hennig-Thurau et al., 2004; Teng et al., 2016). From a theoretical perspective, this study enriches the literature on eWOM providing behaviour in the following ways.

First, this study extends the framework developed by Palka et al. (2009) and categorises factors related to eWOM providing behaviour at both deep and shallow levels. Additionally, meta-analysis enabled extraction of conclusive observations across various product/service categories (e.g. laptops, fashion products, restaurants) and contexts (e.g. various SNS, countries) (Green, 2005; Grewal et al., 2018). Factors related to eWOM providing behaviour were divided into four groups: personal conditions, social conditions, perceptual conditions, and consumption-based conditions. Based on the definitions of the conditions (Luarn et al.,

2015; Palka et al., 2009) additional factors (opinion seeking, perceived risk, trust in web eWOM service, involvement, loyalty, brand attitude, normative commitment, affective commitment, opinion leadership, reciprocity, and community identity) from eWOM literature were added to these four groups. Thus, the current study extended the previous framework and provided a holistic approach to study and classify factors related to eWOM providing behaviour in various contexts.

Second, the current study integrated existing research and reconciled previous conflicting findings, which offered cumulative insights into eWOM providing behaviour. A number of studies (e.g. Hennig-Thurau et al., 2004; Yoo et al., 2013) have examined factors affecting eWOM providing behaviour but they have varied findings. The findings of this research have indicated that well investigated factors such as perceived risk (perceptual conditions), involvement (consumption-based conditions), and influence of others and reciprocity (social conditions) do not relate to eWOM providing behaviour. Other factors, which some of the previous studies found to be non-significant (e.g. economic incentives (perceptual conditions), customer satisfaction (consumption-based conditions), and altruism and self-enhancement (personal conditions)) showed significant relationships with eWOM providing behaviour based on the results of this meta-analysis.

Finally, the meta-analytic review was able to indicate the most influential factor related to eWOM providing behaviour as it facilitates investigation of the strengths of the relationships between motivations and eWOM providing behaviour. It was found that brand attitude (consumption-based conditions) has the strongest relationship with eWOM providing behaviour (r=0.708, p=0.024). Thus, findings from this meta-analysis can be used as a guideline for researchers to select constructs for analysing consumers' eWOM providing behaviour. Results of meta-analysis provide researchers with an opportunity to visualise the point of convergence and divergence, which can lead to development and examination of future research questions in the general context. This helps to advance the knowledge of online information dissemination.

## **5.2 Limitations**

This research was conducted in a similar way to other studies (e.g. Hong et al., 2017) in order to provide an overview of previous findings, which are disseminated across a great number of empirical studies of eWOM research. However, there are some limitations which need to be mentioned. During the data collection stage, it was noticed that not all published studies on eWOM communications provide enough data which can be used in order to conduct a meta-analysis. As a result, these studies were not included in this research.

A further limitation of this study is that the studies for this research were collected only from Scopus, Web of Science, and EBSCO databases. A wider range of databases could be employed by future research. Also, this study only considered quantitative studies and excluded qualitative studies. Thus, future studies could include both types of studies in the meta-analysis. The current study calculated the availability bias in order to determine how many insignificant effects needed to exist to change the significant correlations. By using the approach described

by Hunter and Schmidt (2004) it was found that a minimum of 40 insignificant effects is needed.

Additionally, this study did not take into consideration the analysis of moderating variables due to an insufficient number of studies on moderating effects. Despite the above limitations, this is the first comprehensive study of factors influencing intention to provide eWOM communications, which provides a platform for obtaining a consolidated view of factors affecting consumers' intention to engage in eWOM communications, advancing current knowledge of information dissemination on the Internet.

#### **5.3 Future research directions**

The findings of this meta-analysis study provide several avenues for future research. It has been found that economic incentives play an important role in eWOM providing behaviour. However, future studies should investigate the effect of economic incentives over time. Some studies argue that it should not be considered as a long-term solution for the increase in eWOM engagement behaviour (Horng, 2016). As there is an argument that these types of incentive are effective only in the short term, future research is advised to conduct longitudinal studies on the effect of economic incentives and eWOM providing behaviour.

For factors related to consumption-based conditions, future research could investigate the moderating role of product type (high price vs. low price, searched vs. experienced) on the effect of motivations to provide eWOM. Additionally, as it has been found that satisfaction has a significant relation to eWOM providing behaviour, future research should investigate the moderating role of convenience (time and effort individuals invest in purchasing products/services), product value (utilitarian vs. hedonic) and type of social media (e.g. social networks, review sites, blogs).

Furthermore, future studies should investigate more factors related to personal conditions. According to the Theory of Planned Behaviour, attitude plays an important role in individuals' behaviour. Thus, future studies are advised to investigate how attitude towards providing eWOM would affect eWOM providing behaviour in various contexts. Additionally, future studies could consider how various neutralisation techniques prevent consumers from eWOM providing behaviour. It has been argued that emotions play an important role in consumer engagement. Consumer emotions refer to the state of mind, which arises from cognitive and affective appraisals of consumption activities (Bagozzi et al., 1999; Santini et al., 2020). Thus, future research should investigate how emotions affect eWOM providing behaviour. Specifically, studies should consider the effect of various emotions (e.g. positive vs. negative, various appraisals of emotions). Most of the studies do not distinguish between positive and negative or mixed eWOM providing behaviour. Thus, future studies could investigate how emotions are connected to these types of eWOM providing behaviour.

For factors related to social conditions, future studies should consider the effect of moderators on eWOM providing behavior. For instance, the context in which eWOM providing behaviour takes place should be investigated as a moderator. Some studies argue that motivations of users vary depending on the types of online community (Lampe et al., 2010) and sense of belonging

(Chu et al., 2019). Also, future research could compare eWOM behaviour between communities with strong ties (e.g. WeChat's friends' circles) and weak ties (e.g. Weibo's followers) (Chu et al., 2019).

Future research could also investigate which categories of factors (perceptual conditions, consumption-based conditions, personal conditions, and social conditions) affect eWOM providing behaviour at shallow (liking, sharing) and deep (providing or creating content) levels. This will improve understanding of information dissemination online. Finally, future research can focus on consequences of eWOM providing behaviour. The examples of the consequences could be change in consumer attitude, information adoption, purchase intention, and panic buying behaviour, to name a few.

**Acknowledgement**: We would like to thank the Editor, Regional Editor, Associate Editor and reviewers for their constructive and valuable comments that helped to significantly improve the quality of this manuscript.

**Appendix 1.** Summary of studies included in meta-analysis

No.	Study	Factors Investigated	Method(s) of analysis	Sample	Country	Context
1	Alhidari et al. (2015)	Belief in self- reliance, involvement, risk- taking, eWOM on SNS, purchase intention	Structural equation modeling	247 university students	USA	SNS
2	Bobkowski (2015)	Information usefulness, opinion leadership	Regression analysis (PROCESS macro)	N1=270 social media users, N2=275 social media users	USA	Social media
3	Cheung and Lee (2012)	Self- enhancement, satisfaction in helping others, reciprocity, sense of belonging, moral obligation, knowledge self- efficacy	Partial Least Squares (PLS)	203 users of openrice.com	Hong Kong	Restaurants
4	Chi-Hsing (2014)	Community identity, web service quality, purchase intention	Regression analysis	225 respondents	Taiwan	Virtual communities
5	Choi and Scott (2013)	Trust, Influence of others, obligations, identification, knowledge sharing, eWOM quality	Partial Least Squares (PLS) method	221 students	South Korea and the USA	SNS Facebook
6	Christodoulide s et al. (2012)	Perceived co- creation, perceived empowerment, perceived community, self- enhancement, brand equity	SEM	202 consumers	NA	Brand related UGC
7	Chu and Kim (2011)	Influence of others, Tie strength, Information influence, Homophily, trust, eWOM in SNS	SEM	363 undergraduate students	USA	SNS
8	Cui et al. (2014)	Economic incentives, altruism, involvement, self-enhancement,	SEM	220 respondents	China	Online feedback system

		influencing the company, execution cost,				
		spread intention				
9	De Meyer and Petzer (2014)	Involvement, restaurant patronage habits, demographic characteristics	Correlation analysis, t- test, ANOVA	264 respondents	South Africa	Restaurants
10	Filieri et al. (2015)	Trust in web eWOM services, recommendation adoption, perceived source credibility, information quality, perceived website quality, user satisfaction with previous experience, user experience and proficiency	SEM	366 respondents	European countries	Tourism
11	Frasquet et al. (2015)	Enjoyment, information usefulness, trust in web eWOM services, brand trust, brand attachment, length of brand relationship, ease of use, security, gender, age, country of residence, product category, online purchase intention	Multiple regression analysis	1533 multichannel retail shoppers	UK and Spain	Apparel and consumer electronics
12	Gumus and Bal (2016)	Loyalty, design quality, service quality, information quality, system quality	t-test, regression analysis	242 students	Turkey	NA
13	Hansen and Lee (2013)	Influence of others, tie strength, homophily, economic incentive, enjoyment, game factors, attitude towards advertising,	SEM	158 university students	USA	Social network games

		attitude towards the brand				
14	Hennig- Thurau et al. (2004)	Economic incentive, self-enhancement, platform assistance, venting negative feelings, concern for other consumers, social benefits, helping the company, advise seeking	Multiple regression analysis	2063 respondents	Germany	Web-based consumer opinion platforms
15	Horng (2016)	Economic incentive, altruism, enjoyment, self-enhancement, customer satisfaction, community identity, trust in eWOM services, reciprocity, tenure, interaction, types of users	Regression analysis	177 and 116 members of virtual community FunP	Taiwan	Virtual community
16	Huang et al. (2013)	Information usefulness, openness, relationship strength, atmosphere characteristics, authority, interest, interaction, volume, tone, trust, purchase intention	SEM	549 respondents	China	Hotels
17	Jin et al. (2010)	Affective commitment, Normative commitment, calculative commitment, self-enhancement, extrinsic reward, enjoyment in helping company, enjoyment in helping other consumers	Smart Partial Least Squares (PLS)	456 users of dianping.com	China	Opinion platforms

18	Kim (2017)	Altruism, self-enhancement,	ANOVA, ANCOVA, regression analysis	222 undergraduate students	USA	Restaurants
19	Kucukemirogl u and Kara (2015)	Opinion seeking, opinion leadership, innovativeness, social capital, trust	SEM	149 college students	USA	Facebook
20	Lee et al. (2013)	Economic incentives, self-enhancement, customer satisfaction, loyalty	SEM PLS	260 respondents	South Korea	Open Market
21	Li et al. (2016)	Affective commitment, normative commitment	Partial Least Square	d24 community members	Taiwan	Restaurants
22	Lii and Lee (2012)	Customer satisfaction, trust, purchase intention, perceived fairness,	ANCOVA	290 students	Taiwan	Laptop
23	Luarn et al. (2015)	Tie strength, economic incentive, altruism, customer satisfaction, subjective norm, expressiveness, social support, commitment, perceived social benefit, perceived value, narcissism, image-building, achievement, memorial record	Regression analysis	650 respondents	Taiwan	SNS
24	Maceli et al. (2015)	Self- enhancement, gender, venting negative feelings, concern for others, trust	t-test	233 students	USA	Aggregate platforms
25	Magalhaes and Musallam (2014)	Influence of others, self- enhancement, venting negative feelings, concern for others, social	Regression analysis	1192 responses	NA	Twitter

		1 0 1 1 1	1			
		benefits, helping				
		the company,				
		collective power,				
		advice seeking				
26	Men and	Tie strength,	SEM	328 American	USA and	Social media
	Muralidharan	social media		and 304	China	
	(2017)	dependency,		Chinese social		
		organisation-		media users		
		public				
		relationships,				
		trust, satisfaction,				
		commitment				
27	N 1'		CEM	226	G .	D ( '1 1
27	Moliner-	Customer	SEM	336	Spain	Retail shops
	Velázquez et	satisfaction, age,		respondents		
	al. (2015)	external		who		
		attributions,		experience a		
		unstable		service failure		
		attributions,				
		uncontrollable				
		attributions,				
		service recovery				
		efforts				
28	Morrongiello	Altruism, self-	SEM	753	France	Tourism
20	et al. (2017)	confidence, ego-	SEN	respondents	Trunce	Tourism
	Ct al. (2017)	reinforcement,		respondents		
		· ·				
		vengeance,				
		helping the				
		company, other				
		clients honesty,				
		other companies				
		honesty,				
		collective				
		conscientiousness				
		, e-reputation				
29	Nagy et al.	Opinion seeking,	SEM	1000	Hungary	NA
	(2017)	opinion adoption,		respondents		
		satisfaction		•		
30	Niu et al.	Tie strength,	ANOVA	167	China	NA
	(2010)	involvement,	111,0 / 11	respondents		
	(2010)	material		Tespondents		
		incentive, return				
		incentive, social				
		interaction, depth				
		of eWOM,				
<u> </u>		frequency				
31	Nusair et al.	Trust in web	SEM	298 travellers	USA	Tourism
	(2017)	eWOM services,				
		customer values,				
		willingness to				
		share knowledge,				
		switching costs				
32	Okazaki	Self-	SEM	121 personal	Japan	PC-based
22	(2009)	enhancement,		computer	Jupun	community
	(2007)	satisfaction in		WOM and		sites, chat, or
	1	Saustaction III	l	vv Orvi allu	<u> </u>	sites, chat, or

		helping other consumers, desire, social identity, inherent novelty seeking,		150 mobile WOM users		email versus mobile-based community sites, chat, or text
		opinion leadership				messaging
33	Reimer and Benkenstein (2016)	Economic incentives, altruism, attitude towards the company	ANOVA, regression analysis	200 university students	Germany	Restaurants
34	Rialti et al. (2017)	Brand attitude, engagement, consumers' satisfaction, consumers' trust, gender	SEM	121 females and 129 males	Various countries	American sportswear brand
35	Saleem and Ellahi (2017)	Information influence, homophily, involvement, expertness, trustworthiness, Facebook usage frequency, purchase intention	Regression analysis (PROCESS macro)	503 Facebook users	Various countries	Fashion products
36	Shan and King (2015)	Influence of others, consumer brand relationship, attitude	Multiple regression analysis	166 undergraduate students	USA	Personal computer
37	Shen et al. (2011)	Economic incentives, customer satisfaction, venting negative feelings, platform assistance, helping the company, positive self-enhancement, concern for other consumers, platforms of eWOM	Regression analysis	381 respondents	China	SNS
38	Sohn (2009)	Involvement, valence, perceived information value, social network density	ANCOVA	121 undergraduate students	USA	Digital camera
39	Son et al.	Self-	PLS	260	South	Open

	oustoman				
	customer				
	satisfaction,				
	loyalty, open				
40 G 1G	market reward	CEM	500 : :	G 41	
40 Song and Sun	Involvement,	SEM	502 university	South	
(2011)	perceived risk, tie		students	Korea	
	strength,				
	information				
	credibility, search				
	effort, product				
	involvement,				
41 Sotiriadis and	perceived risk	Daguagian	500 users of	Emma	Twitter
	Involvement,	Regression		Europe	1 witter
van Zyl	source credibility,	analysis	Twitter	and South	
(2013)	communications			Africa	
	frequency, source				
42 Sun et al.	expertise,	SEM	250 11	TICA	Maraira
	Opinion seeking,	SEM	250 college students	USA	Music
(2006)	opinion		students		
	leadership, innovativeness,				
	·				
	internet usage, music				
	involvement				
43 Tirunillai and	Perceived risk,	Regression	NA	NA	Stocks
Tellis (2012)	volume, valence,	analysis	INA	INA	Stocks
44 Tong et al.	Economic Economic	Multiple	168 students	Hong	Online
(2013)	incentives, self-	regression	100 students	Kong	feedback
(2013)	enhancement,	analysis		Rong	systems
	satisfaction in	analy sis			Systems
	helping other				
	customers,				
	perceived				
	cognitive cost,				
	perceived				
	execution cost,				
	internet				
	experience,				
	opinion				
	leadership				
45 Wolny and	Tie strength,	Logistic	192	NA	Fashion
Mueller	involvement,	regression	respondents		
(2013)	advice seeking,	analysis	with		
	need for social		experience of		
	interaction,		engaging with		
	attitude towards		fashion brands		
	behaviour,		online		
	subjective norm				
46 Wu et al.	Information	ANCOVA,	198 and 115	USA	Hotel, dining
(2016)	influence, self-	regression	respondents		
<b></b>	enhancement,	analysis			
47 Yang (2013)	enhancement, Subjective norms,	analysis SEM	835 college	China	SNS
47 Yang (2013)	enhancement,	·	835 college students	China	SNS

47	Yeh and Choi (2011)	perceived pleasure, market mavenism, help the company, social media use, social media eWOM, viral marketing attitude Brand attitude, community identification, cognition-based community trust, affect-based	SEM	172 community members	NA	Cars (MINI Cooper)
48	Yen and Tang	community trust Extraversion,	Regression	252	NA	Hotels
	(2015)	altruism, dissonance reduction, platform assistance, economic incentives, eWOM engagement	analysis	respondents		
49	Yoo et al. (2013)	Economic incentive, community identity, intrinsic motives, personal site identification, social site identification, e-Loyalty	Partial Least Square	257 community members	South Korea	Online communities
50	Zhang and Lv (2010)	Satisfaction in helping other consumers, perceived risk	Regression analysis	127 college students	China	NA
51	Ziegele and Weber (2015)	Customer satisfaction, valence, credibility of eWOM	ANOVA, SEM	487 respondents	Germany	Domestic appliances

# References

Alhidari, A., Iyer, P., and Paswan, A. (2015), "Personal level antecedents of eWOM and purchase intention, on social networking sites", *Journal of Customer Behaviour*, Vol. 14 No. 2, pp. 107-125.

Alwash, M., Savarimuthu, B. T. R., and Parackal, M. (2019), "Shallow vs. Deep customer engagement - A study of brand value propositions in Twitter", In Proceedings of the 27th

- European Conference on Information Systems (ECIS), Stockholm & Uppsala, Sweden, June 8-14, 2019. ISBN 978-1-7336325-0-8 Research Papers.
- Amed, S., Mukherjee, S., Das, P., and Datta, B. (2019), "Triggers of positive eWOM: exploration with web analytics", *Marketing Intelligence & Planning*, Vol. 37 No. 4, pp. 433-450.
- Ananda, A. S., Hernández-García, Á., Acquila-Natale, E., and Lamberti, L. (2019), "What makes fashion consumers "click"? Generation of eWoM engagement in social media", *Asia Pacific Journal of Marketing and Logistics*, Vol. 31 No. 2, pp. 398-418.
- Babić Rosario, A., Sotgiu, F., De Valck, K., and Bijmolt, T. H. (2016), "The effect of electronic word of mouth on sales: A meta-analytic review of platform, product, and metric factors", *Journal of Marketing Research*, Vol. 53 No. 3, pp. 297-318.
- Baethge, C., Klier, J., and Klier, M. (2016), "Social commerce—state-of-the-art and future research directions", *Electronic Markets*, Vol. 26 No. 3, pp. 269-290.
- Bagozzi, R. P., Gopinath, M., and Nyer, P. U. (1999) "The role of emotions in marketing", *Journal of the Academy of Marketing Science*, Vol. 27 No. 2, pp. 184-206.
- Bairrada, C., Coelho, F. and Coelho, A. (2018), "Antecedents and outcomes of brand love: utilitarian and symbolic brand qualities", *European Journal of Marketing*, Vol. 52 No. 3/4, pp. 656-682.
- Bearden, W. O., Netemeyer, R. G., and Teel, J. E. (1989), "Measurement of consumer susceptibility to interpersonal influence", *Journal of Consumer Research*, Vol. 15 No. 4, pp. 473-481.
- Berger, J. (2014), "Word of mouth and interpersonal communication: A review and directions for future research", *Journal of Consumer Psychology*, Vol. 24 No. 4, pp. 586-607.
- Bloemer, J., De Ruyter, K., and Peeters, P. (1998), "Investigating drivers of bank loyalty: The complex relationship between image, service quality and satisfaction". *International Journal of Bank Marketing*, Vol. 16 No. 7, pp. 276-286.
- Bobkowski, P. S. (2015), "Sharing the news: Effects of informational utility and opinion leadership on online news sharing", *Journalism & Mass Communication Quarterly*, Vol. 92 No.2, pp. 320-345.
- Brown, J. J., and Reingen, P. H. (1987), "Social ties and word-of-mouth referral behaviour", *Journal of Consumer Research*, Vol. 14 No. 3, 350-362.
- Chang, C. C., and Huang, M. H. (2020), "Antecedents predicting health information seeking: A systematic review and meta-analysis", *International Journal of Information Management*, Vol. 54, 102115.
- Chaney, I. M. (2001), "Opinion leaders as a segment for marketing communications", *Marketing Intelligence & Planning*, Vol. 19 No. 5, pp. 302-308.
- Chen, H. N., and Huang, C. Y. (2013), "An investigation into online reviewers' behaviour", *European Journal of Marketing*, Vol. 47 No. 10, pp. 1758-1773.

- Chen, T., Drennan, J., Andrews, L., and Hollebeek, L. (2018), "User experience sharing: Understanding customer initiation of value co-creation in online communities", *European Journal of Marketing*, Vol. 52 No. 5/6, pp. 1154-1184.
- Cheung, C. M., and Lee, M. K. (2012), "What drives consumers to spread electronic word of mouth in online consumer-opinion platforms?", *Decision Support Systems*, Vol. 53 No. 1, pp. 218-225.
- Cheung, C. M., Liu, I. L., and Lee, M. K. (2015), "How online social interactions influence customer information contribution behavior in online social shopping communities: A social learning theory perspective", *Journal of the Association for Information Science and Technology*, Vol. 66 No. 12, pp. 2511-2521.
- Chi-Hsing, T. (2014), "The antecedent of social identification and its effects on behavioral intention of transaction virtual community members", *Proceedings for the Northeast Region Decision Sciences Institute (NEDSI)*, 899-923.
- Chiu, C. M., Hsu, M. H., and Wang, E. T. (2006), "Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories", *Decision Support Systems*, Vol. 42 No. 3, pp. 1872-1888.
- Chiu, H. C., Pant, A., Hsieh, Y. C., Lee, M., Hsioa, Y. T., and Roan, J. (2014), "Snowball to avalanche: Understanding the different predictors of the intention to propagate online marketing messages", *European Journal of Marketing*, Vol. 48 No. 7/8, pp. 1255-1273.
- Choi, J. H., and Scott, J. E. (2013), "Electronic word of mouth and knowledge sharing on social network sites: A social capital perspective", *Journal of Theoretical and Applied Electronic Commerce Research*, Vol. 8 No. 1, pp. 69-82.
- Chu, S. C., and Kim, Y. (2011), "Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites", *International Journal of Advertising*, Vol. 30 No. 1, pp. 47-75.
- Chu, S. C., Lien, C. H., and Cao, Y. (2019), "Electronic word-of-mouth (eWOM) on WeChat: examining the influence of sense of belonging, need for self-enhancement, and consumer engagement on Chinese travellers' eWOM", *International Journal of Advertising*, Vol. 38 No. 1, pp. 26-49.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, 2<sup>nd</sup> edition, Hillsdale, New Jersey.
- Cui, J., Wang, L., Feng, H., and Teng, Y. (2014), "Empirical study of the motivations of e-WOM spreading on online feedback system in China", *Pacific Asia Conference on Information Systems*, 24-28 July, Chengdu, China.
- Davis, F. D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS quarterly*, Vol. 13 No. 3, pp. 319-340.
- De Meyer, C. F., and Petzer, D. J. (2014), "Product involvement and online word-of-mouth in the South African fast food industry", *Journal of Global Business and Technology*, Vol. 10 No. 1, pp. 205-212.

- Dessart, L., Aldás-Manzano, J., and Veloutsou, C. (2019), "Unveiling heterogeneous engagement-based loyalty in brand communities", *European Journal of Marketing*, Vol. 53 No. 9, pp. 1854-1881.
- Dholakia, U. M., Bagozzi, R. P., and Pearo, L. K. (2004), "A social influence model of consumer participation in network-and small-group-based virtual communities", *International Journal of Research in Marketing*, Vol. 21 No. 3, pp. 241-263.
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... & Kumar, V. (2020), "Setting the future of digital and social media marketing research: Perspectives and research propositions", *International Journal of Information Management*, 102168. DoI: https://doi.org/10.1016/j.ijinfomgt.2020.102168
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., and Williams, M. D. (2019), "Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model", *Information Systems Frontiers*, Vol. 21 No. 3, pp. 719-734.
- Ekeh, P. (1974), Social Exchange Theory: The Two Traditions, Harvard University Press.
- Engel, J.F., Blackwell, R.D. and Miniard, P.W. (1993). *Consumer Behavior*. New York, NY: Dryden
- Fagard, R. H. (1996), "Athlete's heart: A meta-analysis of the echocardiographic experience", *International Journal of Sports Medicine*, Vol. 17 No. 3, pp.140-144.
- Filieri, R., Alguezaui, S., and McLeay, F. (2015), "Why do travellers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth", *Tourism Management*, Vol. 51, pp. 174-185.
- Floyd, K., Freling, R., Alhoqail, S., Cho, H. Y., and Freling, T. (2014), "How online product reviews affect retail sales: A meta-analysis", *Journal of Retailing*, Vol. 90 No.2, pp. 217-232.
- Frasquet, M., Ruiz-Molina, M. E., and Molla-Descals, A. (2015), "The role of the brand in driving online loyalty for multichannel retailers", *The International Review of Retail, Distribution and Consumer Research*, Vol. 25 No. 5, pp. 490-502.
- Gebauer, J. E., Wagner, J., Sedikides, C., and Neberich, W. (2013), "Agency-communion and self-esteem relations are moderated by culture, religiosity, age, and sex: Evidence for the "self-centrality breeds self-enhancement" principle", *Journal of Personality*, Vol. 81 No. 3, pp. 261-275.
- Geyskens, I., Krishnan, R., Steenkamp, J. B. E., and Cunha, P. V. (2009), "A review and evaluation of meta-analysis practices in management research", *Journal of Management*, Vol. 35 No. 2, pp. 393-419.
- Glass, G. V. (1976), "Primary, secondary, and meta-analysis of research", *Educational Researcher*, Vol. 5 No. 10, pp. 3-8.

- Green, S. (2005), "Systematic reviews and meta-analysis", *Singapore Medical Journal*, Vol. 46 No. 6, pp. 270-274.
- Grewal, D., Puccenelli, N., and Monroe, K. B. (2018), "Meta-analysis: Integrating accumulated knowledge", *Journal of the Academy of Marketing Science*, Vol. 46, pp. 9–30.
- Gumus, H., and Bal, V. (2016), "Analysis of the effect of quality components of web 2.0 enabled e-commerce websites on electronic word-of-mouth marketing (eWOM) and on customer loyalty", *Annals of the University of Oradea, Economic Science Series*, Vol. 25 No. 1, pp. 979-986.
- Hansen, S. S., and Lee, J. K. (2013), "What drives consumers to pass along marketer-generated eWOM in social network games? Social and game factors in play", *Journal of Theoretical and Applied Electronic Commerce Research*, Vol. 8 No. 1, pp. 53-68.
- Hennig-Thurau, T., and Walsh, G. (2003), "Electronic word-of-mouth: Motives for and consequences of reading customer articulations on the Internet", *International Journal of Electronic Commerce*, Vol. 8 No. 2, pp. 51-74.
- 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*, Vol. 18 No. 1, pp. 38-52.
- Hong, H., Xu, D., Wang, G. A., and Fan, W. (2017), "Understanding the determinants of online review helpfulness: A meta-analytic investigation", *Decision Support Systems*, Vol. 102, pp. 1-11.
- Horng, S. M. (2016), "A study of active and passive user participation in virtual communities", *Journal of Electronic Commerce Research*, Vol. 17 No. 4, pp. 289-311.
- Huang, L., Shao, J., and Wang, W. (2013), "Research on the relationships between hotel internet word-of-mouth and customers' behavior intention based on trust", *Sixth International Conference on Information Management, Innovation Management and Industrial Engineering*, 23-24 November, Xi'an, China.
- Hunter, J.E. and Schmidt, F.L. (2004), "Methods of Meta-Analysis: Correcting Error and Bias in Research Findings", Sage, New York, NY
- Ismagilova, E., Dwivedi, Y., Slade, E. and Williams, M. (2017), *Electronic Word-of-Mouth in the Marketing Context: A State of the Art Analysis and Future Directions*, Springer. Doi: https://doi.org/10.1007/978-3-319-52459-7.
- Ismagilova, E., Slade, E. L., Rana, N. P., and Dwivedi, Y. K. (2019), "The effect of electronic word of mouth communications on intention to buy: A meta-analysis", *Information Systems Frontiers*, pp. 1-24. DoI: https://doi.org/10.1007/s10796-019-09924-y
- Ismagilova, E., Slade, E., Rana, N. P., and Dwivedi, Y. K. (2020), "The effect of characteristics of source credibility on consumer behaviour: A meta-analysis". *Journal of Retailing and Consumer Services*, Vol. 53. DoI: https://doi.org/10.1016/j.jretconser.2019.01.005
- Japutra, A., Ekinci, Y., Simkin, L., and Nguyen, B. (2018), "The role of ideal self-congruence and brand attachment in consumers' negative behaviour: Compulsive buying and external trash-talking", *European Journal of Marketing*, Vol. 52 No. 3/4, pp. 683-701.

- Jeyaraj, A. (2020), "DeLone & McLean models of information system success: Critical metareview and research directions", *International Journal of Information Management*, Vol. 54, 102139.
- Jeyaraj, A., Rottman, J. W., and Lacity, M. C. (2006), "A review of the predictors, linkages, and biases in IT innovation adoption research", *Journal of Information Technology*, Vol. 21 No. 1, pp. 1-23.
- Jin, X.-L., Xiang, L., Lee, M. K. O., Cheung, C. M. K., Zhou, Z., and Zhao, D.-T. (2010), "Electronic word-of-mouth contribution continuance in online opinion platforms: The role of multiple commitments", *Pacific Asia Conference on Information Systems*, 24-28 July, Chengdu, China.
- Kim, E. E. K. (2017), "The impact of restaurant service experience valence and purchase involvement on consumer motivation and intention to engage in eWOM", *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 18 No. 3, pp. 259-281.
- King, W. R., and He, J. (2006), "A meta-analysis of the Technology Acceptance Mode", *Information & Management*, Vol. 43 No. 6, pp. 740-755.
- Kirca, A. H., Jayachandran, S., and Bearden, W. O. (2005), "Market orientation: a metaanalytic review and assessment of its antecedents and impact on performance", *Journal of Marketing*, Vol. 69 No. 2, pp. 24-41.
- Kucukemiroglu, S., and Kara, A. (2015), "Online word-of-mouth communication on social networking sites: An empirical study of Facebook users", *International Journal of Commerce and Management*, Vol. 25 No. 1, pp. 2-20.
- Lampe, C., Wash, R., Velasquez, A., and Ozkaya, E. (2010), "Motivations to participate in online communities". In *Proceedings of the SIGCHI Conference on Human factors in Computing Systems* (pp. 1927-1936).
- Lawler, E. J., and Yoon, J. (1996), "Commitment in exchange relations: Test of a theory of relational cohesion", *American Sociological Review*, Vol. 61 No. 1, pp. 89-108.
- Lazarsfeld, P. F., Berelson, B., and Gaudet, H. (1944), "The people's choice", New York: Duell, Sloan, and Pearce.
- Lazarsfeld, P., and Merton, R. K. (1954), "Friendship as social process: A substantive and methodological analysis", In M. Berger, T. Abel, and C. Page (Eds.), Freedom and control in modern society (pp. 18-66). New York: Octagon Books
- Leary, M. R. (2007), "Motivational and emotional aspects of the self", *Annual Review of Psychology*, Vol. 58, pp. 317-344.
- Lee, J., Lee, J.-N., and Tan, B. C. Y. (2013), "The contrasting attitudes of reviewer and seller in electronic word-of-mouth: A communicative action theory perspective", *Asia Pacific Journal of Information Systems*, Vol. 23 No. 3, pp. 105-129.
- Lii, Y. S., and Lee, M. (2012), "The joint effects of compensation frames and price levels on service recovery of online pricing error", *Managing Service Quality: An International Journal*, Vol. 22 No. 1, pp. 4-20.

- Lindgreen, A., Dobele, A., and Vanhamme, J. (2013), "Word-of-mouth and viral marketing referrals: What do we know? And what should we know?", *European Journal of Marketing*, Vol. 47 No. 7, pp. 1028-1033.
- Lis, B. (2013), "In eWOM we trust a framework of factors that determine the eWOM credibility", *Business & Information Systems Engineering*, Vol. 5 No. 3, pp. 129–140
- Luarn, P., Yang, J. C., and Chiu, Y. P. (2015), "Why people check in to social network sites", *International Journal of Electronic Commerce*, Vol. 19 No. 4, pp. 21-46.
- Maceli, K. M., Baack, D. W., and Wachter, M. K. (2015), "The impact of gender on electronic word-of-mouth communication", *Academy of Marketing Studies Journal*, Vol. 19 No. 3, pp. 281-295.
- Magalhaes, R., and Musallam, B. (2014), "Investigating electronic word-of-mouth motivations in the middle East: Twitter as medium and message", *Journal of Electronic Commerce in Organizations*, Vol. 12 No. 3, pp. 40-59.
- Martin, C. M. (2008). A Meta-Analytic Investigation of the Relationship Between Emotional Intelligence and Leadership Effectiveness, East Carolina University.
- Men, L. R., and Muralidharan, S. (2017), "Understanding social media peer communication and organization—public relationships: Evidence from China and the United States", *Journalism & Mass Communication Quarterly*, Vol. 94 No. 1, pp. 81-101.
- Moliner-Velázquez, B., Ruiz-Molina, M. E., and Fayos-Gardó, T. (2015), "Satisfaction with service recovery: Moderating effect of age in word-of-mouth", *Journal of Consumer Marketing*, Vol. 32 No. 6, pp. 470-484.
- Morrongiello, C., N'Goala, G., and Kreziak, D. (2017), "Customer Psychological Empowerment as a Critical Source of Customer Engagement", *International Studies of Management & Organization*, Vol. 47 No. 1, pp. 61-87.
- Moschis, G. P., and Churchill Jr, G. A. (1978), "Consumer socialization: A theoretical and empirical analysis". *Journal of Marketing Research*, Vol. 15 No. 4, pp. 599-609.
- Nagy, A., Kemény, I., Szűcs, K., Simon, J., and Kiss, V. (2017), "Are opinion leaders more satisfied? Results of a SEM model about the relationship between opinion leadership and online customer satisfaction", *Society and Economy*, Vol. 39 No. 1, pp. 141-160.
- Naumann, K., Bowden, J., and Gabbott, M. (2020), "Expanding customer engagement: The role of negative engagement, dual valences and contexts", *European Journal of Marketing*, DoI: doi.org/10.1108/EJM-07-2017-0464
- Niu, H., Wang, X., and Sun, N. (2010), "Influences of external incentives on consumers' positive electronic word-of-mouth intention", *Marketing Science Innovations and Economic Development*, pp. 236-244.
- Nusair, K., Hua, N., Ozturk, A., and Butt, I. (2017), "A theoretical framework of electronic word-of-mouth against the backdrop of social networking websites", *Journal of Travel & Tourism Marketing*, Vol. 34 No. 5, pp. 653-665.

- Okazaki, S. (2009), "Social influence model and electronic word of mouth PC versus mobile internet", *International Journal of Advertising*, Vol. 28 No. 3, pp. 439-472.
- Oliver, R. L. (1999), "Whence consumer loyalty?", *Journal of Marketing*, Vol. 63 No. 4, pp. 33-44.
- Oliver, R. L., Rust, R. T., and Varki, S. (1997), "Customer delight: Foundations, findings, and managerial insight", *Journal of Retailing*, Vol. 73 No.3, pp. 311-336.
- Palka, W., Pousttchi, K., and Wiedemann, D. G. (2009), "Mobile word-of-mouth A grounded theory of mobile viral marketing", *Journal of Information Technology*, Vol. 24 No. 2, pp. 172-185.
- Palmeira, M., Spassova, G. and Quoidbach, J. (2020), "You're not yelping your case: the unexpected social consequences of word of mouth", *European Journal of Marketing*, Vol. 54 No. 2, pp. 419-447.
- Plume, C. J., and Slade, E. L. (2018), "Sharing of sponsored advertisements on social media: A Uses and Gratifications perspective", *Information Systems Frontiers*, Vol. 20 No. 3, 471-483.
- Reimer, T., and Benkenstein, M. (2016), "Altruistic eWOM marketing: More than an alternative to monetary incentives", *Journal of Retailing and Consumer Services*, Vol. 31, pp. 323-333.
- Rialti, R., Zollo, L., Pellegrini, M. M., and Ciappei, C. (2017), "Exploring the antecedents of brand loyalty and electronic word of mouth in social-media-based brand communities: Do gender differences matter?", *Journal of Global Marketing*, Vol. 30 No. 3, pp. 147-160.
- Saleem, A., and Ellahi, A. (2017), "Influence of electronic word of mouth on purchase intention of fashion products on social networking websites", *Pakistan Journal of Commerce & Social Sciences*, Vol. 11 No. 2.
- Santini, F., Ladeira, W. J., Pinto, D. C., Herter, M. M., Sampaio, C. H., and Babin, B. J. (2020), "Customer engagement in social media: A framework and meta-analysis", *Journal of the Academy of Marketing Science*, pp. 1-18. doi.org/10.1007/s11747-020-00731-5
- Santos, J. R. A. (1999), "Cronbach's alpha: A tool for assessing the reliability of scales", *Journal of Extension*, Vol. 37 No. 2, pp. 1-5.
- Schmidt, F. L., and Hunter, J. E. (2014), *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*, Sage publications.
- Shan, Y., and King, K. W. (2015), "The effects of interpersonal tie strength and subjective norms on consumers' brand-related eWOM referral intentions", *Journal of Interactive Advertising*, Vol. 15 No. 1, pp. 16-27.
- Shang, R. A., Chen, Y. C., and Liao, H. J. (2006), "The value of participation in virtual consumer communities on brand loyalty", *Internet Research*, Vol. 16 No. 4, pp. 398-418.
- Sheldon, P. (2013), "Voices that cannot be heard: Can shyness explain how we communicate on Facebook versus face-to-face?" *Computers in Human Behavior*, Vol. 29 No. 4, 1402-1407.

- Shen, W., Cai, J., and Li, L. (2011), "Electronic word-of-mouth in China: A motivational analysis", *International Conference on E-Business and E-Government*, 6-8 May, Shanghai, China.
- Sichtmann, C. (2007), "An analysis of antecedents and consequences of trust in a corporate brand", *European Journal of Marketing*, Vol. 41 No. 9/10, pp. 999-1015.
- Singh, R. and Söderlund, M. (2020), "Extending the experience construct: An examination of online grocery shopping", *European Journal of Marketing*. DoI: <a href="https://doi.org/10.1108/EJM-06-2019-0536">https://doi.org/10.1108/EJM-06-2019-0536</a>
- So, K. K. F., King, C., and Sparks, B. (2014), "Customer engagement with tourism brands: Scale development and validation", *Journal of Hospitality & Tourism Research*, Vol. 38 No. 3, pp. 304-329.
- Sohn, D. (2009), "Disentangling the effects of social network density on electronic word-of-mouth (eWOM) intention", *Journal of Computer-Mediated Communication*, Vol. 14 No. 2, pp. 352-367.
- Son, J. E., Kim, H. W., and Jang, Y. J. (2012), "Investigating factors affecting electronic word-of-mouth in the open market context: A mixed methods approach", *Pacific Asia Conference on Information Systems*, 11-15 July, Hochiminh City, Vietnam.
- Song, S. W., and Sun, J. H. (2011), "Understanding negative electronic word-of-mouth (eWOM): Social ties and key determinants", *Korean Management Science Review*, Vol. 28 No. 3, pp. 95-112.
- Sotiriadis, M. D., and van Zyl, C. (2013), "Electronic word-of-mouth and online reviews in tourism services: The use of Twitter by tourists", *Electronic Commerce Research*, Vol. 13, No. 1, pp. 103-124.
- Sun, T., Youn, S., Wu, G., and Kuntaraporn, M. (2006), "Online word-of-mouth (or mouse): An exploration of its antecedents and consequences", *Journal of Computer-Mediated Communication*, Vol. 11 No. 4, pp. 1104-1127.
- Teng, S., Khong, K. W., Chong, A. Y. L., and Lin, B. (2017). "Examining the impacts of electronic word-of-mouth message on consumers' attitude", *Journal of Computer Information Systems*, Vol. 57 No. 3, pp. 238–251.
- Thakur, R. (2019), "The moderating role of customer engagement experiences in customer satisfaction—loyalty relationship", *European Journal of Marketing*, Vol. 53 No. 7, pp. 1278-1310.
- Tirunillai, S., and Tellis, G. J. (2012), "Does chatter really matter? Dynamics of user-generated content and stock performance", *Marketing Science*, Vol. 31 No. 2, pp. 198-215.
- Tong, Y., Wang, X., Tan, C.-H., and Teo, H.-H. (2013), "An empirical study of information contribution to online feedback systems: A motivation perspective", *Information & Management*, Vol. 50 No. 7, pp. 562-570.

- Walsh, G., and Beatty, S. E. (2007), "Customer-based corporate reputation of a service firm: scale development and validation", *Journal of the Academy of Marketing Science*, Vol. 35 No. 1, pp. 127-143.
- Wasko, M. M., and Faraj, S. (2000), ""It is what one does": Why people participate and help others in electronic communities of practice", *The Journal of Strategic Information Systems*, Vol. 9 No. 2-3, pp. 155-173.
- Wasko, M. M., and Faraj, S. (2005), "Why should I share? Examining social capital and knowledge contribution in electronic networks of practice", *MIS Quarterly*, Vol. 29 No. 1, pp.35-57.
- Wolny, J., and Mueller, C. (2013), "Analysis of fashion consumers' motives to engage in electronic word-of-mouth communication through social media platforms", *Journal of Marketing Management*, Vol. 29 No. 5-6, pp. 562-583.
- Wright, M. F., and Li, Y. (2011), "The associations between young adults' face-to-face prosocial behaviors and their online prosocial behaviors", *Computers in Human Behavior*, Vol. 27 No.5, 1959-1962.
- Wu, L., Mattila, A. S., Wang, C. Y., and Hanks, L. (2016), "The impact of power on service customers' willingness to post online reviews", *Journal of Service Research*, Vol. 19 No. 2, pp. 224-238.
- Wu, R. and Wang, C. (2017), "The asymmetric impact of other-blame regret versus self-blame regret on negative word of mouth: Empirical evidence from China", *European Journal of Marketing*, Vol. 51 No. 11/12, pp. 1799-1816.
- Yan, Q., Wu, S., Zhou, Y., and Zhang, L. (2018), "How differences in eWOM platforms impact consumers' perceptions and decision-making", *Journal of Organizational Computing and Electronic Commerce*, Vol. 28 No. 4, pp. 315-333.
- Yang, H. (2013), "Market mavens in social media: Examining young Chinese consumers' viral marketing attitude, eWOM motive, and behavior", *Journal of Asia-Pacific Business*, Vol. 14 No. 2, pp. 154-178.
- Yeh, Y.-H., and Choi, S. M. (2011), "Mini-lovers, maxi-mouths: An investigation of antecedents to eWOM intention among brand community members", *Journal of Marketing Communications*, Vol. 17 No. 3, pp. 145-162.
- Yen, C. L. A., and Tang, C. H. H. (2015), "Hotel attribute performance, eWOM motivations, and media choice", *International Journal of Hospitality Management*, Vol. 46, pp. 79-88.
- Yin, D., Bond, S., and Zhang, H. (2014), "Anxious or angry? Effects of discrete emotions on the perceived helpfulness of online reviews", *MIS Quarterly*, Vol. 38 No. 2, pp. 539-560.
- Yoo, C. W., Sanders, G. L., and Moon, J. (2013), "Exploring the effect of e-WOM participation on e-Loyalty in e-commerce", *Decision Support Systems*, Vol. 55 No. 3., pp. 669-678.
- You, Y., Vadakkepatt, G. G., and Joshi, A. M. (2015), "A meta-analysis of electronic word-of-mouth elasticity", *Journal of Marketing*, Vol. 79 No. 2, pp. 19-39.

- Zhang, Y., and Lv, T. (2010), "Analysis of the relationship between involvement and the internet word-of-mouth", *Proceedings 2010 2nd IEEE International Conference on Network Infrastructure and Digital Content*, 24-26 September, Beijing, China.
- Ziegele, M., and Weber, M. (2015), "Example, please! Comparing the effects of single customer reviews and aggregate review scores on online shoppers' product evaluations", *Journal of Consumer Behaviour*, Vol. 14 No. 2, pp. 103-114.