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Marketplace rumor sharing among young consumers: the role of anxiety and arousal

Subin Sudhir and Anandakuttan B. Unnithan

Abstract

Purpose – *This study aims to explore rumor sharing behavior among young consumers by evaluating the role of state anxiety and arousal as fundamental triggers to rumor sharing behavior. This study asserts that young consumers share rumors for emotional regulation and information sharing reasons, and aims to explore rumor sharing dynamics along these factors.*

Design/methodology/approach – *Using established scales, this paper collects data from 394 respondents (age 18-25 years) who are enrolled in engineering or management colleges in India. Using these data, the paper conducts a PLS-SEM-based analysis using SmartPLS 3.0 to establish hypothesized relationships. PROCESS macro (Hayes, 2017) is used in SPSS to assess the role of mediators.*

Findings – *Major findings of the study indicate that young consumers share rumors for emotional regulation and information sharing. State anxiety and arousal were positively associated to the consumers' emotional regulation motivation, as well as their information sharing motivations. The findings illustrate that young consumers share rumors for managing their own emotions, as well as to help others who might be in need for such information. This assertion was further established by the mediating effect of these motivations on the relationship between the consumers' emotions and their intention to share the rumor.*

Research limitations/implications – *It was observed that that young consumers share rumors for emotional regulation and information sharing purpose. This contribution adds to the current research on motivations of rumor sharing. The paper highlights that rumor sharing is an outcome of emotional experiences, thereby contributing to "why" rumors are spread in the marketplace.*

Originality/value – *Rumors lack veracity, arise in contexts of uncertainty and influence perceptions, brand credibility and consumer loyalty. Thus it is critical to understand the dynamics of fast propagating rumors in the marketplace. This paper advances the theoretical understanding of the psychological factors driving rumor propagation among young consumers. The paper identifies and establishes the role of fundamental triggers of rumor sharing among young consumers.*

Keywords *Marketing, Anxiety, Arousal, Word of mouth, Rumor*

Paper type *Research paper*

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1. Introduction

Young consumers frequently engage in word-of-mouth (WOM) communications (Berger, 2014; Procter and Richards, 2002), which include product/service-related chit-chat, fan-talk, experience sharing, etc. WOM is defined as "informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers" (Westbrook, 1987). WOM has been established to be extremely important in consumer psychology (Abubakar *et al.*, 2016; Berger, 2014). WOM is also known to play a significant role in shaping behavior and attitudes among young consumers (Needham, 2008; McCasland, 2005; Ting *et al.*, 2011; Procter and Richards, 2002). Unfortunately, a significant part of such WOM is rumor (Dubois *et al.*, 2011). A rumor is defined as "a specific (or topical) proposition for belief, passed along from person to person, usually by word of mouth, without secure standards of evidence being present"

(Allport and Postman, 1947). Rumors spread swiftly (Oh *et al.*, 2013) and pose significant risk to marketplace information exchange.

The WOM channel is used by customers to communicate about numerous things. They share consumption experiences, gossip about a new ad, share information, share "fake news" and inadvertently exchange a lot of rumors (Berger, 2014). All such communication, irrespective of their content, is termed as WOM. Rumors are informational statements which lack evidential basis, but are relevant to the customer. It is difficult to often ascertain the element of truth in rumors, thereby making customers uncertain about its veracity (Rosnow, 1991). Rumors are unconfirmed at the time of transmission, but contain valuable information; thus, they are propagated among customers (Chen and Kutan, 2016). Thus, rumors are different from other WOM which can be easily confirmed, such as a product review or service experience. The recent phenomenon of "*fake news*" might seem similar to rumors, but research has established certain subtle difference (Allcott and Gentzkow, 2017).

Despite the lack of certainty associated with rumors, they are known to influence perceptions, brand credibility and consumer loyalty (Kimmel, 2004). In 2008, a rumor about the sudden death of Apple CEO, Steve Jobs, resulted in a loss of $9bn in market value for Apple (Dubois et al, 2011). The rumor was later found to be untrue, but the damage was done. Such rumors have plagued even the most iconic brands such as Coca-Cola, Procter & Gamble and McDonald's. Thus, it is critical to understand the dynamics of fast propagating rumors, especially among young consumers who engage in WOM communication without authenticating the source and veracity of information. Despite the significance of rumors, there is dearth of studies on the factors driving rumor sharing (Dubois *et al.*, 2011).

This paper explores the role of two psychological factors – state anxiety and arousal – in rumor propagation among young consumers. Rimé (2009) suggested that consumers share 90 per cent of their emotions with others, and Berger and Milkman (2012) found a strong association between emotions and virality of content. Anxiety is considered critical for rumor propagation (Aricat, 2018; Rosnow, 1991), whereas arousal is known to influence interpersonal interaction and WOM (Huang *et al.*, 2017; Berger, 2011). We assert that rumors causing higher anxieties and arousal will be shared more frequently. To explain the role of these emotions, the study suggests that:

■ emotional regulation; and

■ information sharing will be critical motivations of rumor sharing (DiFonzo and Bordia, 2017).

Thereby, the paper explains the rumor sharing dynamics using emotions and motivations identified from extant literature. The paper collects data from 394 consumers, aging 18-25 years, to conduct a partial least squares-structural equation modeling (PLS-SEM) analysis.

2. Theoretical background and hypotheses

2.1 State anxiety and rumor propagation

Anxiety is defined as "an affective state – acute or chronic – that is produced by, or associated with, apprehension about an impending, potentially disappointing outcome" (Rosnow, 1991). Anxiety is a fundamental trigger to rumor sharing (Jia *et al.*, 2017; DiFonzo and Bordia, 2017). Rumors originate and thrive in situations of uncertainty and ambiguity, which often leads to heightened anxieties. Spielberger (1966) categorized anxiety as state anxiety (A-state) and trait anxiety (A-trait). State anxiety is the emotional state upon encountering external stimuli, whereas trait anxiety explains the anxiety proneness of an individual's personality traits. State anxiety often is a manifestation of potential threat, risk or danger associated with the occurrence of an event described in the rumor (DiFonzo and Bordia, 2017). Rumors elicit

feelings of anxiety in the consumers mind because they often illustrate harmful/dangerous events. The rate at which a rumor propagates is illustrated by the amount of anxiety felt by the consumers (Rosnow, 1991), indicating that the more anxious one feels, the more prone he/she would be to share the rumor (Kamins *et al.*, 1997), to manage these anxieties. When young consumers encounter a rumor, they feel high state anxiety, which motivates them to share the rumor and thereby reduce this heightened state anxiety. Recent studies have ascertained the role of anxiety in marketplace behavior among young consumers (Pahlevan Sharif and Yeoh, 2018; Roberts and Roberts, 2012). Hence rumors evoking stronger state anxiety will be shared more often.

2.2 Arousal and rumor propagation

Arousal is "said to occur when an input change produces a measurable incrementing of a physiological or behavioral indicator over a baseline" (Pribram and McGuinness, 1975). Arousal is a continuous state of alertness ranging from sleep (low arousal) through relaxation, alertness and finally excitement (high arousal) (Barrett and Russell, 1998). Low arousal is characterized by relaxation and high arousal by heightened activity (Heilman, 1997). Arousal is often an activating feeling that consumers experiences while encountering a rumor. Studies have identified that arousal leads to greater transmission of WOM (Huang *et al.*, 2017; Berger, 2011; Berger and Milkman, 2012). Berger (2011) reported that arousal increases social transmission of information. Highly aroused state of activation provides support for action (Picard *et al.*, 2016; Davidson, 1993) and often such action is sharing the rumor with others. Young consumers who encounter a highly arousing rumor will share them due to the associated activation mechanisms. Hence rumors that are highly arousing will be shared more often.

2.3 Rumor sharing as emotional regulation

Emotional regulation has been identified as a key motivator for rumor propagation (DiFonzo and Bordia, 2017). We define emotional regulation as the motivation of a consumer to share a rumor to control the emotional experiences arising out of the rumor encounter. Rumor sharing as emotional regulation asserts that sharing a rumor often helps the consumer control extreme emotions elicited by a rumor encounter. Rumor sharing is known to help manage uncertainties and anxieties (Rosnow, 1991). Rumors about uncertain situations concerning important events cause heightened emotions (anxiety or arousal) among consumers (Bordia *et al.*, 2004). Rumors often act as ready-made explanations of ambiguous situations (DiFonzo and Bordia, 2017), thereby helping people to make sense of the situation and controlling these heightened emotions. DiFonzo and Bordia (2017) explained that such emotions are controlled by rumor propagation. Young consumers engage in rumor propagation as a mechanism to make sense of what is happening, and thereby reduce their emotions. In uncertain situations where consumers feel heightened emotions, rumor sharing acts as a mechanism to make sense and get better control. This causes wide transmission of rumors for emotional regulation. Thus this study hypothesizes:

H1. While encountering a rumor, the consumer's emotional regulation motivation will be positively related to their intention to share the rumor.

Extant literature has suggested that rumors are shared as a mechanism to manage anxieties (Zhu and Smith, 2016; Pezzo and Beckstead, 2006). DiFonzo and Bordia (2017) highlighted that rumor sharing helps manage dissonance and thereby anxieties. Rumors about harmful events create anxiety among consumers. Such anxieties are controlled by consumers by sharing the rumor (Rosnow, 1991). Hence, it can be asserted that rumors that cause higher state anxieties will be shared more frequently, as they help in emotional regulation. Thus the study hypothesizes:

H2. State anxiety experienced while encountering a rumor will be positively related to the consumer's emotional regulation motivation of rumor sharing.

H2a. While encountering a rumor, the consumer's emotional regulation motivation will mediate the relationship between experienced state anxiety and their intention to share the rumor.

Berger (2011) identified that arousal leads to greater sharing of WOM. Behavioral activation is an outcome of arousal felt by an individual. Pribram and McGuinness (1975) suggested that arousal is an energized state, whereas activation is the task-related mobilization of arousal, often leading to interpersonal communication. Berger and Milkman (2012) highlighted that WOM sharing is related to the arousal experience by individuals. They suggested that novelty, surprise and awe are factors that lead to sharing of content. It has been established in extant literature that arousing content is shared more often among consumer s (Yang and Wang, 2015, Feitosa and Botelho, 2017). We assert that such sharing is because consumers feel a need to control this arousal. Thus, arousal-oriented action can be assumed to regulate the temporary state of disequilibrium caused by arousing content of the rumor. Consumers will share arousing rumors to manage these heightened emotions. Thus the study hypothesizes:

H3. Arousal experienced while encountering a rumor will be positively related to the consumer's emotional regulation motivation of rumor sharing.

H3a. While encountering a rumor, the consumers' emotional regulation motivation will mediate the relationship between experienced arousal and their intention to share the rumor.

2.4 Rumor as information sharing

Information sharing motivation is another key motivator for rumor propagation (DiFonzo and Bordia, 2017). We define information sharing as the motivation of consumers to share rumors to communicate the information contained in the rumor. Rumors as often shared for the information contained in them (Oh *et al.*, 2013; Zhao *et al.*, 2016). Rumors arise in situations where there is lack of information and sharing them might be useful to the recipient. It could also add to the consumer's social acceptance for having shared the information (DiFonzo and Bordia, 2017). Research has asserted that people share rumors as it is likely to be of use to the recipient (Weenig *et al.*, 2001). Often such rumor sharing is for altruistic reasons (Stevens and Fiske, 1995). Berger and Milkman (2012) suggested that people share content because it contains useful information. Hence it can be understood that consumers share rumors because they can be used as useful information by recipients. The study asserts that rumor sharing is a mechanism of information sharing. Thus the study hypothesizes:

H4. While encountering a rumor, the consumers' information sharing motivation will be positively related to their intention to share the rumor.

It is known that consumers share messages because of altruistic reasons (to help others) (Berger, 2014). Rumors that increase state anxiety would account for altruistic behavior or to help others make wiser choices (Sundaram *et al.*, 1998). Studies have shown that WOM is shared as helpful information (Hennig-Thurau *et al.*, 2004). Consumers who find a rumor to be anxiety provoking (due to potentially harmful information) might share the rumor with others as a mechanism to keep others safe. Literature suggests that anxiety provoking rumor sharing is done to inform others of some impending danger (Weenig *et al.*, 2014; Weenig *et al.*, 2001). Rumors causing heightened anxieties will be perceived as harmful for self and others, and such rumors will then be shared to inform others about an impending threat or danger. Thus this study hypothesizes:

H5. State anxiety experienced while encountering a rumor will be positively related to the consumer's information sharing motivation of rumor sharing.

H5a. While encountering a rumor, the consumers' information sharing motivation will mediate the relationship between experienced state anxiety and their intention to share the rumor.

Weingarten and Berger (2017), and Berger and Schwartz (2011) highlighted that arousing, entertaining, interesting and surprising content gets shared more often. Such content is shared more often because of its ability to arouse the consumer and generate activation (Berger and Milkman, 2012). Arousing content would become a good conversation, topic as it provides social currency (Hughes, 2005). Thus arousal can lead to rumor transmission as it contains information which is entertaining, intriguing as well as the novel (Berger, 2011). Furthermore, people get aroused by the distress of others, which will lead to altruism (Piliavin *et al.*, 1982). Such behavior is an outcome of "empathic arousal" (Hoffman, 1981). Encountering a rumor that is potentially harmful will drive empathetic arousal, which in turn could motivate information sharing (Dovidio *et al.*, 2017). Hence, for both interesting and stressful rumors, arousal can lead to sharing of the rumor as information. Thus this study hypothesizes:

H6. Arousal experienced while encountering a rumor will be positively related to the consumer's information sharing motivation of rumor sharing.

H6a. While encountering a rumor, the consumers' information sharing motivation will mediate the relationship between experienced arousal and their intention to share the rumor.

3. Research methodology

Data for empirical investigation were collected from engineering and management students in India. The respondents belonged to 18-25 years age group and 54.5 per cent of the sample was men. The study used a convenient sampling method, wherein students were intercepted in their campuses during break sessions and requested to participate in the study. A total of six major Indian universities were visited for collecting data. The respondents were each given a paper–pencil questionnaire and were pursued to participate in the study, without any monetary rewards. The questionnaire started with a rumor message which respondents had to read. Eight such rumor messages were assigned randomly to respondents, all rumors were adapted from rumors that had circulated in the marketplace and evaluated by a panel of academic experts. Internet archives (www.snopes.com/www.hoax-slayer.com) were used to identify the initial pool of rumors. After having read the rumor, participants now had to respond to items capturing their state anxiety, arousal and intention to share the rumor. Having completed the part of the questionnaire on intention to share, the respondents were then required to answer whether emotional regulation or information sharing was an important motivator in their decision to share the rumor. This order was key to ensure that the motivation items did not bias the respondent's intention to share. A total of 394 useful responses were collected from students. The sample size ($n = 394$) was adequately larger than the criterion mentioned by Hair *et al.* (2014):

- based on a minimum expected R^2 of 0.1, test significance level at 1 per cent and a maximum complexity of 2 (as in the hypothesized model);

- based on the ten-times rule (Barcelay *et al.*, 1995); and

- based on statistical power analysis as suggested by Cohen (1992), which was tested using G*power software.

3.1 Measures used

State anxiety was measured using six items adapted from Marteau and Bekker (1992). The state anxiety measures were based on a shorter version of the STAI. Items measured the extent to which the consumer felt anxious after reading the message. State anxiety was measured on a four-point Likert scale as originally proposed by Marteau and Bekker (1992) (1 – strongly disagree and 4 – strongly agree).

Arousal was measured using four items adapted from Mehrabian and Russell (1974). Items measured the extent to which the consumer was feeling aroused after reading the rumor. The items were measured using a four-point Likert scale (1 – strongly disagree and 4 – strongly agree).

Measures for emotional regulation motivation and information sharing motivation were adapted from Sudhir and Unnithan (2014) and measured using a four-point Likert scale (1 – strongly disagree and 4 – strongly agree). Emotional regulation motivation was measured using six items that measured the consumer's motivation to share the rumor to manage their emotions after reading the rumor. Information sharing motivation was measured using five items which captured their motivation to share the rumor for altruistic reasons. Intention to share was measured using four items which measured the consumer's intention to share the rumor with family members, friends, on social media and on internet forums.

Table I provides details of all items used in the study for measuring respective constructs. The study modified the original Likert scale format used for arousal, intention to share, emotional regulation motivation and information sharing motivation and used a consistent

Table I Reliability and validity indices				
Constructs and items	Outer loadings	AVE	CR	CA
State anxiety		0.543	0.875	0.836
1 After reading the above message I feel calm*	0.710			
2 After reading the above message I am tense	0.838			
3 After reading the above message I feel upset	0.824			
4 After reading the above message I am relaxed*	0.710			
5 After reading the above message I feel content*	0.520			
6 After reading the above message I am worried	0.771			
Arousal		0.518	0.811	0.703
1 After reading the above message I feel stimulated	0.758			
2 After reading the above message I am excited	0.702			
3 After reading the above message I feel alert	0.703			
4 After reading the above message I am active	0.715			
Emotional regulation motivation		0.550	0.880	0.836
1 I will feel relaxed after sharing this message	0.670			
2 I am worried about others and sharing this message will help keep them safe	0.688			
3 Sharing this message will make me feel in control of the situation	0.775			
4 Sharing this message will create a pleasant mood in me	0.829			
5 Sharing this message will make me feel confident	0.739			
6 I am motivated to share this message and reduce my anxiety regarding the product	0.739			
Information sharing motivation		0.576	0.868	0.807
1 I will share this message to inform others	0.510			
2 I will share this message as it will be useful to others	0.868			
3 By sharing the above message I will be able to help others make wise choices	0.854			
4 I will share this message to get feedback on the message	0.792			
5 I will be able to help others by sharing this message	0.714			
Intention to share		0.540	0.822	0.720
1 I will share the above message with my immediate family members	0.827			
2 I will share the above message with my friends	0.815			
3 I will share the above message on social media	0.672			
4 I will share the above message on public review websites	0.602			

Note: *Reverse coded items

four-point Likert scale format. The rationale for this modification was to eliminate response sets (Chang, 1994) which were found in prior pilot samples. It is well documented that using even pint Likert scale formats eliminates the confounding effect of response sets without influencing scale reliability and validity (Nunnally and Bernstein, 1967; Chang, 1994).

4. Data analysis

PLS-SEM (SmartPLS 3.1) was used to analyze the data. PLS-SEM is a well-accepted method in the marketing scholarship (Hair *et al.*, 2014). Data analysis was conducted in two parts. The first part focused on establishing reliability and validity of the data. The second part involved testing of hypotheses. The following sections explain these methods in detail.

4.1 Reliability and validity

Reliability of the measures was established by evaluating Cronbach's alpha (CA) and composite reliability (CR) values. Table I shows the CA and CR values for all constructs. It was observed that all CA values were well above 0.7, and all CR values were well above 0.8; thus establishing reliability of the measures (Hair *et al.*, 2014).

To establish convergent validity of the model, Hair *et al.* (2014) suggested that average variance extracted (AVE) for each construct must be above the minimum threshold of 0.5. Table I shows that the AVE values are above the required threshold of 0.5 (Hair et al, 2014, Fornell and Larcker, 1981). Furthermore, the factor loadings of each item (reported in Table I) were adequate to establish convergent validity (Hair *et al.*, 2010).

Discriminant validity of the model was assessed by comparing the square root of AVE and inter-construct correlations (Fornell and Larcker, 1981). To establish discriminant validity, the square root of AVE must be greater than all inter-construct correlations. Table II reports the square root of AVE (across the diagonal) and the inter-construct correlations, which satisfies the Fornell–Larcker criterion (Fornell and Larcker, 1981). Discriminant validity was also tested using the Heterotrait-Monotrait ratio of correlations (HTMT) criterion (Henseler *et al.*, 2015), which suggests a maximum threshold of 0.9 to establish discriminant validity. Table II reports the HTMT (maximum) values for each construct, and all values are within the 0.9 threshold. Thus the scales display adequate reliability and validity indices to proceed to evaluating the hypotheses.

4.2 Hypotheses tests

The analyses of hypotheses tests were conducted using bootstrapping with 1,000 resamples (Chin, 1998) to ensure that the significance values could be ascertained using PLS-SEM.

To assess the goodness of the model, we initially examined the R^2 values. The model yielded acceptable R^2 values for emotional regulation motivation (R^2 = 0.119), information

Table II Discriminant validity					
Variables	State anxiety	Arousal	Emotional regulation motivation	Information sharing motivation	Intention to share
State anxiety	0.737[a]				
Arousal	0.121	0.720[a]			
Emotional regulation motivation	0.298	0.210	0.742[a]		
Information sharing motivation	0.315	0.307	0.571	0.759[a]	
Intention to share	0.347	0.276	0.553	0.675	0.735[a]
HTMT	0.410[b]	0.390[b]	0.704[b]	0.829[b]	0.829[b]

Notes: [a]Square root of AVE displayed along the diagonal; [b]Highest HTMT values reported for each construct

sharing motivation ($R^2 = 0.173$) and intention to share ($R^2 = 0.497$). The predictive relevance of the model was assessed using the Stone–Geisser's Q^2 value (Geisser, 1974; Stone, 1974), after using blindfolding methods (Hair $et\ al.$, 2014). The Stone–Geisser's Q^2 values are required to be greater than zero for adequate predictive relevance. Emotional regulation motivation ($Q^2 = 0.061$), information sharing motivation ($Q^2 = 0.096$) and intention to share ($Q^2 = 0.260$) displayed adequate Q^2 values. Cohen's effect size (f^2) values indicate the effect of each exogenous variable in the model (Cohen, 1988). All f^2 values were well above the minimum threshold of 0.2 as prescribed by Cohen (1988). Table III provides a summary of the hypothesis tests and the effect sizes (f^2) for each path in the PLS-SEM model.

All six hypotheses tested using the PLS-SEM model were supported. $H1$ states the positive influence of young consumer's emotional regulation motivation on their intention to share the rumor, which found significant support from the analysis ($H1$; $\beta = 0.273***$). It was also established that state anxiety ($H2$; $\beta = 0.277***$) and arousal ($H3$; $\beta = 0.176***$) are both significantly associated to the consumer's emotional regulation motivation. $H4$ states that consumer's information sharing motivation will positively influence their intention to share the rumor, which was also established ($H4$; $\beta = 0.533***$). State anxiety ($H5$; $\beta = 0.282***$) and arousal ($H6$; $\beta = 0.273***$) were found to positively influence the consumer's information sharing motivation. In sum, all hypotheses under this section of analysis found support as hypothesized. Figure 1 provides the conceptual model and results of PLS-SEM analysis.

To investigate the mediation hypotheses ($H2a$, $H3a$, $H5a$ and $H6a$), separate analysis was conducted using PROCESS macro (Hayes, 2017) in SPSS. The PLS-SEM mediation analysis is inadequate in proving individual mediation effects from the multiple mediator model. Preacher and Hayes (2008) suggested that for multiple mediator models, bootstrapping must be used to overcome the multivariate normality assumption imposed by Sobel (1982) test. Table IV captures the results of mediation analysis. The bootstrapped indirect effect of a variable is significant if the 95 per cent confidence intervals (CI) do not

Table III Results of PLS-SEM analysis and hypotheses tests

	Hypothesis	f^2	Standard β	SE	t-statistic	p-value	Decision
H1	Emotional regulation motivation → Intention to share the rumor	0.083	0.273	0.047	5.296	0.000	Supported
H2	State anxiety → Emotional regulation motivation	0.086	0.277	0.046	5.966	0.000	Supported
H3	Arousal → Emotional regulation motivation	0.035	0.176	0.047	3.743	0.000	Supported
H4	Information sharing motivation → Intention to share the rumor	0.381	0.533	0.041	13.006	0.000	Supported
H5	State anxiety → Information sharing motivation	0.095	0.282	0.044	6.383	0.000	Supported
H6	Arousal → Information sharing motivation	0.089	0.273	0.046	5.929	0.000	Supported

Figure 1 Conceptual model and hypotheses

					95% CI		
	Hypothesis	Direct effect	Indirect effect	SE	LL	UL	Decision
H2a	State anxiety → Emotional regulation motivation → Intention to share	0.096***	0.058	0.029	0.109	0.224	Supported (partial mediation)
H3a	Arousal → Emotional regulation motivation → Intention to share	0.049[NS]	0.047	0.015	0.021	0.082	Supported (full mediation)
H5a	State anxiety → Information sharing motivation → Intention to share	0.096***	0.048	0.018	0.015	0.087	Supported (partial mediation)
H6a	Arousal → Information sharing motivation→ Intention to share	0.049[NS]	0.082	0.020	0.045	0.123	Supported (full mediation)

Table IV Results of mediation hypotheses tests

Notes: ***$p < 0.001$; [NS] Direct effect not significant at 95 per cent

contain zero. Bootstrapping was conducted using 5,000 resamples and the indirect effects were estimated.

It can be seen from Table IV that all four hypotheses satisfy this criterion, and that information sharing motivation and emotional regulation motivation mediate the role of anxiety and arousal. Furthermore, the direct effects of state anxiety on intention to share were significant (95 per cent), whereas those of arousal were not significant. In sum, the analysis indicated that all hypothesized relationships were empirically established. The next section will illustrate the contributions of this study.

5. Discussion

The study explored the rumor sharing dynamics among young consumers. Based on the theorizing and subsequent data analysis, it can be concluded that emotional regulation motivation is a key motivator for the young consumer's to share rumors. Young consumers engage in rumor sharing to manage their emotions of anxiety and arousal. Rumors in the marketplace cause heightened anxieties among young consumers as they portray harmful to dangerous events, such anxieties cause sharing the rumor to manage these emotions. State anxiety is the transient state of apprehension, fear or unease about the rumor content. Young consumers share rumors that cause high state anxiety for emotional regulation. Thus it can be understood that anxiety provoking rumors will be shared by young consumers so that they can reduce and manage these anxieties. At times, rumors are novel, surprising and interesting which create high arousal. Consumers thereby share these rumors to manage this high arousal and associated activation. Highly arousing will motivate the consumer to share these rumor for emotional regulation. These first set of results clearly indicates that emotional regulation is a fundamental reason why young consumer's engage in rumor sharing (DiFonzo and Bordia, 2017). Both anxiety provoking and arousing rumors are shared by young consumers as a mechanism to regulate these emotions.

Information sharing motivation is the other motivation that was studied in this paper. The key assertion here was that young consumers will share rumors as a mechanism to share valuable information contained in these rumors (DiFonzo and Bordia, 2017). The results indicate that young consumers will share rumors as they are motivated to let others know what information is contained in the rumor. This is interesting as often rumors don't have evidential basis for the claims they make (Rosnow, 1991) despite which information in the rumor is considered valuable by young consumers. This is probably an important factor why rumors are spread fast (Oh et al., 2013). Rumors which are anxiety provoking can often be generalized to be creating apprehension, fear or unease. Young consumers will share this (potentially harmful) information to fellow consumers to protect them from harm. Thus anxiety provoking rumors are shared as information to keep others safe or for altruistic purposes (Weenig et al., 2014). Rumors that are arousing will also be shared as information

to fellow consumers. Such arousing rumors are understood to be shared as a consequence of empathetic arousal (Piliavin *et al*., 1982; Dovidio *et al*., 2017), or due to the novel content (Berger, 2011; Berger and Milkman, 2012). In sum, these findings illustrate the cognitive and emotional process involved in rumor sharing among young consumers.

5.1 Theoretical contribution

The paper explores rumor sharing behavior among young consumers with a view on their felt state anxiety and arousal. It was observed that state anxiety and arousal both play an important role in rumor propagation. Young consumers share rumors to manage their emotions or to share information present in the rumor. These findings provide various theoretical contributions. First, the paper explains that young consumers share rumors for emotional regulation and information sharing purposed. This contribution adds to the current research on motivations of rumor sharing (DiFonzo and Bordia, 2017), by providing insights into emotional regulation and information sharing. Second, rumor sharing is due to the emotions (state anxiety and arousal) that consumers experience during the rumor encounter. We highlight that rumor sharing is an outcome of emotional experiences, thereby contributing to "why" rumors are spread in the marketplace. Finally, the paper illustrates that rumor sharing is not a casual/meaningless activity among young consumers, but an activity which is driven by intrinsic (emotional regulation) or extrinsic (information sharing) motives. The paper advances the theoretical understanding of the psychological factors leading to rumor sharing among young consumer and addresses the gap in marketing scholarships understanding of rumor sharing (Dubois *et al*., 2011).

5.2 Managerial contribution

Managerial contributions of these findings are multifold. First, the paper illustrates key motivations for young consumers to engage in rumor propagation. These findings can be helpful for managers wanting to manage the spread of rumors. State anxiety and arousal are the key elements which need to be controlled to control the spread of a rumor. Strategies for combatting rumor spreading must be addressed to reduce state anxiety and arousal felt among younger consumers. Second, brands which use pre-announcement rumors, such as the launch of a new gadget, must incorporate elements in the campaign to enhance the emotionality of such content to attain a viral reach. Finally, the paper provides practitioners with an understanding of the cognitive elements of emotional regulation and empathetic altruism that causes rumor spread, which can be incorporated in designing viral campaigns and content to attain maximum virality.

6. Limitations and future directions

This paper has few limitations that can be addressed in future. First, data were collected from college students. Future studies must have a wider audience of young consumers across different economic and educational backgrounds to access the effects of education and income. Second, this paper used an experimental setting to gather data. It would be promising to identify rumors under circulation in social media groups and assess the sharing dynamics in a real world setting. Third, this study estimated the role of state anxiety and arousal as emotional triggers to rumor sharing. Future research must assess other basic emotions (e.g. anger, guilt and sadness) or positive and negative effect as fundamental triggers to rumor sharing. Finally, the paper explores only emotional regulation and information sharing motivations. Future research must assess the role of other motivations (e.g. self-enhancement and relationship management) in rumor sharing among young consumers.

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