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## THE EFFECT OF BEHAVIOURAL INHIBITION/ACTIVATION AND NEUROTICISM ON THE DEVELOPMENT OF POSITIVE AND NEGATIVE WORD OF MOUTH ADVERTISING

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ABSTRACT

Word of mouth (WOM) is one of the most important tools for brand success. This study aimed to investigate the effect of behavioral inhibition/activation and neuroticism on creating positive and negative word of mouth advertisements (among women consuming household products in Ardabil city, Iran). In this research, 500 questionnaires were distributed among consumers through the convenience sampling method and 457 questionnaires were used. To test the research hypotheses, the structural equation model, especially the path analysis technique, was used. For this purpose, SPSS Amos software was used. The findings of the study showed that behavioral inhibition had a significant relationship with positive and negative word of mouth advertising; on the other hand, the relationship between behavioral activation and word of mouth advertising was rejected. Also, the results confirmed the effect of neuroticism on the development of positive and negative word of mouth advertising.

**Keywords:** behavioral inhibition, positive word of mouth advertising, negative word of mouth advertising, behavioral activation, neuroticism.

## INTRODUCTION

Individual and psychological characteristics have always been considered by researchers as factors influencing consumer behavior. The researchers categorized these types of factors as "internal influences." In studies, internal influences affecting consumer behavior have been considered with topics such as personal perception, learning, memory, motivation, personality traits, emotions, and attitudes (Hawkin and Mothersbaugh, 2010). Psychological characteristics play an important role in understanding and predicting consumer behavior (Matz and Netzer, 2017).

In recent years, the use of psychological concepts to study the emotional and cognitive responses of consumers has increased interest in this discussion (Solnais et al, 2013). Also, the introduction of discussions of neurophysiology into consumer behavior studies has created a new insight into psychology and mechanisms that stimulate behavior (Karmarkar and Yoon, 2016). Early studies in this field have examined how to reflect the values and concepts associated with marketing in the brain. This series of studies now focus on detailed measurements of consumer responses to pricing, brand, promotional messages, and other marketing-related factors (Hsu and Yoon, 2015; Plassmann and Karmarkar, 2015; Smidts et al, 2014). The study of stable psychological characteristics such as personality, focus, or

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recognition has a long history of consumer behavior research (Kotler and Armstrong, 2010). The combination of psychological traits (which differ among consumers) and psychological states (which vary over time among consumers) provide perceptions of the unique needs of consumers because they are related to specific concepts of a particular location or more persistent priorities and motivations (Matz and Netzer, 2017). One of the most important findings is that consumers show more positive cognitive, emotional, and behavioral responses to products, brands, and marketing promotions that are consistent with their psychological characteristics. It is also more likely that consumers will respond positively to ads that are consistent with their personality, especially when they are in a position that strengthens their Personality characteristics (Hirsh, Kang and Bodenhausen, 2012). Accordingly, the characteristics and psychological states of consumers have a significant impact on their approach to products, services, and even marketing advertisements. Mental states, mood, and personality traits affect post-consumption behavior and this effect extends to interpersonal communication among consumers. While it is clear that individuals are continuously promoting word of mouth advertising, and such communications have an important role in consumer behavior, there are still many vague points about the psychological reasons of the word of mouth advertising in contemporary marketing knowledge (Hauge Wien and Ottar Olsen, 2017). A part of this ambiguity is related to psychological factors affecting consumer behavior (Clark et al, 2008). Regarding the limited research on the role of psychological factors in the development of positive and negative word of mouth advertising, the purpose of this study is to investigate the effect of behavioral inhibition/activation and the personality trait of neuroticism on positive and negative word of mouth advertising.



## Theoretical Foundations:

#### • Word of mouth advertising:

One of the broadest concepts in consumer behavior is the word of mouth advertising (WOM), which plays an important role in shaping consumer behavior and attitudes. The study of the concept of word of mouth advertising is not a new topic in marketing science, and many scholars have focused on this concept in their studies (Verhagen, Nauta and Feldberg, 2013). According to Edelman (2010), consumers today do not rely solely on messages from official ads to make their purchasing decisions, and there are other factors such as word of mouth advertising which are effective in consumers and buyers purchasing decisions. Although impersonal messages or commercial messages, such as ads, are important in building awareness and interest in customers, linguistic promotions play a more important role in this field and can change the customer's approach and behavior to products and services.

In recent studies, word of mouth advertising is defined as a proposition that refers to unofficial communication among customers about the ownership, use or characteristics of certain goods and services and the sellers of those goods (De Matos and Rossi, 2008). Word of mouth advertising is very important in making important consumer decisions. Research results indicate that consumers are more likely to rely on word of mouth advertising in making their critical decisions because they perceive it as a reliable source. Therefore, word of mouth advertising is a key source of information for consumers (Sipilä et al., 2017). Word of mouth advertising can have a positive or negative impact on corporate loyalty and earnings (East, Hammond and Lomax, 2008). For example, positive word of mouth advertising will increase

the expected quality and brand attitude and lead to an increase in recommendations for product purchases. Instead, negative word of mouth advertising can demonize, increase rumors, and complain about the product, which could lead to a decline in sales and purchase intention (Kim et al., 2016).

Word of mouth advertising can be positive or negative. Positive word of mouth advertising includes good advice people give to others about products, services, or brands. Negative word of mouth advertising, however, is considered as one of the forms of complaints by consumers, including the negative advice that individuals make about products and services and brand names (Sweeney, Soutar and Mazzarol, 2012, 2014). In recent studies, researchers examine the negative word of mouth advertising as a new type of consumer complaint behavior. Researchers also suggest that there is a difference between consumer complaint behavior that occurs in a private environment, where consumers talk about their unfavorable experiences with others (for example, traditional word of mouth advertising), and that of in the public environment where consumers share their negative word of mouth advertising with more audiences (Gregoire et al, 2009).

#### • Neuroticism:

Neuroticism reflects a person's tendency toward poor emotional adaptation and is influenced by negative experiences such as anxiety, insecurity, and hostility. People with a high degree of neuroticism are disturbed and often show negative attitudes and the quality of their interaction in social situations with others is low. Neuroticism is the opposite of emotional stability, which means the tendency to calm, patience, and sense of security (Stock, Hippel and Gillert, 2016). Neuroticism is a personality trait that is described through an individual's tendency to assess the environment as a threatening factor or phenomenon that is difficult to control. This attitude towards the environment in neurotic individuals, making them vulnerable to depression, anxiety, and behavioral disorders (Slavish et al., 2018; Gurtman McGillivray and McNicol, 2014). Research has shown that individuals who experience high levels of neuroticism tend to be more susceptible to stress and they focus on negative factors caused by stressful situations. Neuroticism is a multidimensional feature with high reactivity to the stress, caused by repeated negative emotions. This negative impact, with the perception of a threatening environment that is associated with the inability to manage challenging events, leads to distress and more vulnerability to mood disorders (Barlow et al, 2014).

#### • Behavioral Inhibition/Activation:

In recent years, the focus on emotional, enthusiastic, and annoying systems has been enhanced as a basis for emotional and behavioral inclinations, and these systems are considered as persistent and fundamental personality traits (Cooper, Gomez, Buck, 2008). Some psychologists believe that the personality is based on the functioning of the nervous system, and the history of such discussions goes back to the work of Pavlov, who has viewed and distinguished particular tendencies and characteristics in classical conditioning and physiology. According to Pavlov's theory, behavioral processes can be explained through patterns of arousal and inhibition in the nervous system. If internal and external stimuli that cause arousal and inhibition, repeat more often, they will find a more stable form in the brain and lead to dynamic behaviors that are partially resistant to change and, due to their relatively

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stable form, can be part of a person's personality (Habibi Kaleyba, Farid and Babaee, 2017). After Pavlov, Eysenck paid special attention to the brain by presenting his viewpoint about personality. Gray continued the work of Pavlov and Eysenck and posed his theory of the psychological nerve of personality, which is known as the "reinforcement sensitivity theory" (Corr and Perkinst, 2006). Gray (1987) offers two systems for behavior and personality. The first system, the Behavioral Inhibition System (BIS), is related to avoidance behavior, meaning that individuals do not pursue any goals and achievements, but prefer to avoid it. On the other hand, the second system, the Behavioral Activation System (BAS), shows how individuals try to pursue their goals (Vella, Caruana and Pitt, 2012). According to Gray's theory, the neurological system determines the sensitivity of individuals to reinforcing events and experiences of different emotions. Behavioral Inhibition System (BIS) and Behavioral Activation System (BAS) are the basis of individual differences and the activity of each of these brainbehavioral systems stimulates different emotional responses in individuals (De Pascalis; Varriale and D'Antuono, 2010). Behavioral inhibition system is a system that responds to conditional stimuli, punishment, and lack of rewards, as well as new stimuli and intrinsic frightening stimuli. The activity of this system triggers the emotional state of anxiety and behavioral inhibition, passive avoidance, silence, increased attention, and excitement. The neural basis of this system and its activity is associated with anxiety (Habibi Kaleyba, Farid and Babaee, 2017). Behavioral activation system triggers movement towards the goal, response to rewarding stimuli, and escapes from punishment and experiences positive emotions such as hope, happiness, and euphoria (De Pascalis; Varriale and D'Antuono, 2010).



## • Behavioral activation and positive and negative word of mouth advertising:

Elliot and Thrash (2010) argue that a behavioral activation system is a strong one for pushing people into the behavior that increases positive outcomes. Research has shown that a high level of behavioral activation (BAS) has a positive correlation with the reduction of the negative effects of perceived positions (Reese et al., 2015; Hundt et al, 2013). Accordingly, the characteristics and psychological states of consumers can have a significant impact on their approach to products, services, and even marketing advertisements.

The theory of sensitivity to punishment and reward, which according to Gray's theory, is based on the activity of behavioral inhibition/activation system, plays an important role in social interactions and everyday word of mouth communication. Unfortunately, there are relatively few studies about the various social aspects that often face the negative consequences of BIS and BAS (Knyazev; Wilson and Slobodskay, 2008). Also, most authors argue that the behavioral activation system is considered as a response to motivations or some rewards and is associated with a positive feeling. So, if you consider this behavioral system as a motor vehicle, the BAS will be the same as the accelerator system and the BIS will be the same as the brake system (Vella, Caruana and Pitt, 2012).

Based on the above issues, the first and second hypotheses of the research are presented as follows:

H1: Behavioral activation affects positive word of mouth advertising.

H2: Behavioral activation affects negative word of mouth advertising.

• Behavioral inhibition and positive and negative word of mouth advertising:

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Behavioral inhibition system is a system that responds to conditional stimuli, punishment, and lack of rewards, as well as new stimuli and intrinsic frightening stimuli. The activity of this system triggers the emotional state of anxiety and behavioral inhibition, passive avoidance, silence, increased attention, and excitement (Habibi Kaleyba, Farid and Babaee, 2017). Early studies examined how the values and concepts associated with marketing reflecting in the brain. This field of study now focuses on detailed measurements of consumer responses to pricing, brand, promotional messages, and other marketing-related factors (Hsu and Yoon, 2015; Plassmann and Karmarkar, 2015; Smidts et al, 2014). One of these marketing factors is the word of mouth advertising. In recent years, researchers have confirmed the ability of word of mouth advertising (WOM) to have a positive and negative impact on the brand.

For this reason, today, marketers not only need to encourage consumers to publish the positive word of mouth advertising but also must propose ways to prevent the spread of negative word of mouth advertising (Yan, Zhou and Wu, 2018). Also, research on negative bias shows that negative information is generally more effective in attitudes and knowledge than negative information, and it has been shown that negative information affects the decisions and judgments of individuals. Therefore, it is expected that psychological features and behaviors such as behavioral inhibition system will be effective in the word of mouth advertising. In this way, the third and fourth hypotheses of the research are presented as follows:

H3: Behavioral inhibition affects positive word of mouth advertising.

H4: Behavioral inhibition affects negative word of mouth advertising.

#### • Neuroticism and positive and negative word of mouth advertising:

Neuroticism is a personality trait that is described through an individual's tendency to assess the environment as a threatening factor or phenomenon that is difficult to control. This attitude towards the environment in neurotic individuals, making them vulnerable to depression, anxiety, and behavioral disorders (Slavish et al., 2018; Gurtman McGillivray and McNicol, 2014). Neuroticism is the tendency to experience negative emotions, including emotional instability and extreme responsiveness to stress and negative environmental stimuli (John, Naumann and Soto, 2008). Since several studies have shown that neuroticism is more closely associated with negative emotions, researchers have paid little attention to the relationship between neuroticism and positive emotions. Contrary to previous research, Ng (2009), in his research showed that neuroticism is also associated with positive emotions. Also, he proved that the direction and extent of this relationship depended on the situation. In an unfavorable situation, there is an inverse relationship between neuroticism and positive emotions, while in the optimal situation, there is no relationship between neuroticism and positive emotions (Reese, Zielinski and Veilleux, 2015; Hundt et al., 2013).

Neuroticism reflects a person's tendency toward poor emotional adaptation and is influenced by negative experiences such as anxiety, insecurity, and hostility. People with a high degree of neuroticism are disturbed and often show negative attitudes and the quality of their interaction in social situations with others is low. Neuroticism is the opposite of emotional stability, which means the tendency to calm, patience, and sense of security (Stock, Hippel and Gillert, 2016). Research has shown that individuals who experience high levels of neuroticism tend to be more susceptible to stress and they focus on negative factors caused by stressful situations (Barlow et al, 2014).



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Based on the above issues, the fifth and sixth hypotheses of the research are presented as follows:

H5: Neuroticism affects positive word of mouth advertising.

H6: Neuroticism affects negative word of mouth advertising.

## Conceptual model of research

After studying the research background, the conceptual model of the research was designed according to Figure 1. As can be seen, behavioral inhibition/activation and neuroticism as independent variables and word of mouth advertising as a dependent variable play important roles in this issue.

### **RESEARCH METHODOLOGY**

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The present study is applied research. In terms of data collection, it is a descriptive research of the field studies. In terms of the relationship between research variables, it is considered as a correlation. The statistical population of this study was all married home appliances consumers in Ardebil. As the statistical population of the study is unlimited, the sample size in unlimited societies is estimated at 384 people based on the Morgan-Krejcie table. 500 questionnaires were distributed by the available sampling method. Finally, 457 questionnaires were used for analysis. In this study, the data collecting tool was a standard questionnaire containing 17 main questions and was designed based on the five Likert scales. To evaluate the validity of the measuring tool, the experts in this field were first helped to design and set the questions. Also, Cronbach's alpha coefficient and convergent validity and reliability were used. The results showed that Cronbach's alpha coefficient of all variables was higher than 0.8, which is higher than the standard coefficient (0.7). Also, in the convergent and composite validity, the variance of the questionnaire (AVE) of all variables was over 0.5 and the composite reliability (CR) of all variables was greater than 0.7.

Accordingly, in all tests, the validity of the research instrument was confirmed. To test the research hypotheses, structural equation modeling was used. SPSS 24 software was used for descriptive statistics and Amos23 software was used for the structural equation and confirmatory factor analysis.

To investigate the reliability of the questionnaire, Cronbach's alpha and combined reliability (CR) were used. Also, convergent validity (AVE) was used to evaluate validity. The results are presented in Table 2.

Considering the obtained values for the reliability and validity of indices results (table 2), the research is at an acceptable level. Therefore, the reliability and validity of the research tool are confirmed.

## RESULTS

Of the total of 457 statistical samples, the highest percentage of the sample (46.24%) were 30-40 years old. Regarding the level of education, the highest percentage of the sample (52.5%) had a bachelor's degree and the lowest percentage of the sample had an elementary education. The collected data about the research variables indicate that among the variables studied, positive word of mouth advertising variable has the highest mean (3.67) and neuroticism variable has the lowest mean (2.53). Descriptive findings of the research variables are presented in Table 3.

#### Research conceptual model:

The first step in the modeling of structural equations is the design of the model in the software environment. According to the conceptual model of research in the Amos software environment, the conceptual model of the research was described and illustrated in Figure 2. According to the structural equation modeling, the question is whether the empirical data collected to support the theoretical model or not.

Therefore, in this method, some indicators are introduced as a fit index, which indicates the consistency of the theoretical model and empirical data. The status of fit indicators is shown in Table 4. Regarding the generality of the obtained indicators, the consistency of experimental data with a conceptual model can be accepted.

According to the results and information presented in table 4, the chi-square value is 8%. Given the fact that this statistic is larger than 5%, it can be admitted that empirical data show the suitable fit of a conceptual model. This situation shows a good status for other fit indicators such as goodness of fit index, modified goodness of fit index, root mean square error, and so on. Considering the generality of the obtained indicators, the consistency of experimental data with a conceptual model can be accepted.

Considering the general fit of the research conceptual model, it is time to examine the research hypotheses. The main basis for modeling structural equations is on the regression, for this purpose, the significance of the coefficient of each relationship defined in the model is considered. In the output of Amos, another part of the outputs investigate the significance of these regression relations. This output is reported in Table 5.

According to the findings in Table 5, the level of significance obtained for the first hypothesis is less than the error value of 0.05, hence this is not confirmed. Therefore, behavioral activation has a meaningful relationship with the word of mouth advertising. For the second hypothesis, the value of the significance level is less than 0.05. Therefore, this hypothesis is confirmed. The path coefficient obtained for this hypothesis is +0.37 and it can be said that behavioral activation has a positive relationship with negative word of mouth advertising. Behavioral inhibition hypotheses have a significant relationship with positive word of mouth advertising. Behavioral inhibition has a significant relationship with negative word of mouth advertising. The significance level obtained for these two hypotheses is less than 0.05. Therefore, the two hypotheses are confirmed. About the fifth and sixth hypotheses of the research, the significance level is less than 0.05. Therefore, hypotheses 5 and 6 are confirmed. The path coefficient obtained for the fifth hypothesis is -0.20 and it can be stated that neuroticism has an inverse effect on negative word of mouth advertising. Also, the path coefficient of the sixth hypothesis is -0.33 and it can be stated that neuroticism has an inverse effect on positive word of mouth advertising.

#### DISCUSSION AND CONCLUSION

In recent years, researchers have confirmed the positive and negative effects of word of mouth advertising (WOM) on the brand. For this reason, marketers today not only need to encourage



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consumers to the word of mouth advertising but also should propose ways to prevent the negative word of mouth advertising (Yan, Zhou and Wu, 2018).

Therefore, word of mouth advertising has become one of the major studies in theoretical foundations of marketing, and for this purpose, several studies have examined this concept from different perspectives. However, there are still many vague points about the psychological causes of the word of mouth advertising in contemporary marketing knowledge (Wien and Olsen, 2017). Considering that in the field of investigation, word of mouth advertising is the only field of motivation that has been studied from the psychological point of view, most studies have been limited to this area. By studying the theoretical foundations in the field of motivation for the word of mouth advertising, four general motivations can be identified: concern for other consumers, helping companies, social benefits and using power (Durkin Mckenna and Cummins 2012). Therefore, the effect of psychosocial concepts, especially personality concepts, on word of mouth advertising has been less widely considered. For this purpose, to fill the theoretical vacuum in this field, in the present study, the relationship between psychological and personality variables, behavioral inhibition/activation and the personality trait of neuroticism with positive and negative word of mouth advertising was evaluated.

In the first hypothesis, the effect of behavioral activation on positive word of mouth advertising was evaluated. The results of some studies indicate that a high level of behavioral activation (BAS) has a positive relationship with the reduction of the negative effects of perceived positions (Hundt et al., 2013; Reese, Zielinski and Veilleux, 2015). Also, there is a direct relationship between increasing behavioral activation and reducing emotional adjustment problems (Reese, Zielinski and Veilleux, 2015). On the other hand, Elliot and Thrash (2010) stated that a behavioral activation system is a strong drive to behavior that increases the positive returns of individuals. However, the results of the data analysis in this study showed that behavioral activation affects positive word of mouth advertising.

according to the analysis, the second hypothesis of the research based on the positive and significant effect of the behavioral activation variable on negative word of mouth advertising is confirmed. Studies showed that behavioral inhibition activity primarily affects social interactions by raising anxiety and depression symptoms and attaining higher levels in the lifetime of a person (Wilson and Slobodskaya 2008 Knyazev, 2009). Based on the theoretical foundations in explaining these results, it can be said that probably due to the very low level of satisfaction with existing products, behavioral activation in the statistical population is acted to create motivations such as helping others, using power and even altruistic behavior and it is increased in the level of negative word of mouth advertising among consumers.

The behavioral inhibition system and its relationship with positive and negative word of mouth advertising were investigated in the third and fourth hypotheses of the research. The behavioral inhibition system is the basis of the emotional dimension of anxiety, which leads to inhibition and avoidance of responses to punishment signs and new stimuli (Hundt et al., 2013). The results of the statistical analysis of the third and fourth hypotheses of the research showed that behavioral inhibition has a positive and significant effect on positive and negative word of mouth advertising. Depending on the basics of the word of mouth advertising, anxiety can be considered as a factor in the creation of messages in the field of consumer goods. Accordingly, anxiety is the basis for communicating positive messages or issuing negative

messages, and behavioral inhibition can lead to issue positive and negative messages about consumer goods by increasing the control of anxiety. Also, the behavioral inhibition system has the role of the decision-maker in situations where the person generally has conflicting goals (Bijttebier, 2009). When the decision mechanism chooses one of the avoidance or facing approaches, the discovery of conflict by the behavioral inhibition system will have three distinct effects:

1- This suppresses avoidance and facing behavior. 2- Increases the tendency to avoid. 3- Raises the risk assessment behavior (Corr, 2004). It can be said that behavioral inhibition has strengthened behavior concerning word-of-mouth propagation variables. Also, conflict resolution by behavioral inhibition system is accompanied by an increase in the sense of fear and failure in the individual and thus leads to avoidance behavior, and this factor justifies the effect of the inhibitory factor on the negative word of mouth advertising variable. Analysis of the fifth and sixth hypotheses showed that neuroticism harms positive and negative word of mouth advertising. Accordingly, it can be said that neuroticism individuals are less likely to the positive or negative word of mouth advertising compared to the other people.

#### **RESTRICTIONS AND SUGGESTIONS**

This study has some restrictions that will improve in the future. First, to collect accurate data, a questionnaire was used. Given that psychological and personality concepts were evaluated, researchers had to use questions that could lead to a lack of concentration of respondents when answering questions. Second, because the respondents were women, according to the national culture, there were certain restrictions on the communication and distribution of the questionnaire among them. Third, our study was limited to the home appliance industry, therefore in generalizing the results of this research caution should be taken to other industries. Therefore, in future investigations, other industries, especially the tourism industry can be examined. Fourth, in various situations, several factors influence the psychological and personality responses of individuals (for example, environmental conditions, feelings, and emotions of the individual, etc.) that we did not consider them in this study. It is suggested that these factors be taken into consideration in future research. In this study, we examined the relationship between behavioral inhibition and activation with positive and negative word of mouth advertising. It is suggested, the relationship between psychological concepts and positive and negative electronic word of mouth advertising (e-WOM) be investigated in future research. Also, our study was limited to Iran. Several research results showed that cultural values and factors influenced the type of behavior and the type of psychological responses of individuals. Therefore, it is suggested that the present study be conducted in another country with several different cultures, and the results are compared with the present study.

## References

- Barlow, D. H., Ellard, K. K., Sauer-Zavala, S., Bullis, J. R., & Carl, J. R. (2014). The origins of neuroticism. Perspectives on Psychological Science, 9(5), 481–496.
- Bijttebier, P. (2009). Gray's reinforcement sensitivity theory as a framework for research on personality psychopathology associations. Clin Psychol Rev. 976: 1-47.



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  - Clark, Andrew E., Paul Frijters, and Michael A. Shields. (2008). "Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles." Journal of Economic Literature, 46(1):95-144.
  - Cooper, Gomez, Buck. (2008). "The relationships between the BIS and BAS, and responses to anger". Journal of Personality and Individual Difference, 16: 46-52.
  - Corr, P. J. (2004). Reinforcement sensitivity theory and personality. Personality Individual Differences. 28: 317-322.
  - Corr, P. J., and Perkinst, A, M. (2006). "The role of theory in the Psychophysiology of personality: From IVAN PAVLOW to Jeffrey Gray". International Journal of Psychophysiology, 31: 69-78.
  - De Matos, C. A., & Rossi, C. A. V. (2008). Word-of-mouth communications in marketing: A meta-analytic review of the antecedents and moderators. Journal of the Academy of Marketing Science, 36(4), 578–596.
  - De Pascalis, V.; Varriale, V. and D'Antuono, L. (2010). "Event-related components of the punishment and reward sensitivity". Clinical Neurophysiology, 121: 60-76.



- Durkin, M., Mckenna, S., & Cummins, D. (2012). Emotional connections in higher education marketing. International Journal of Educational Management, 26(2), 153-161.
- East, R., Hammond, K., & Lomax, W. (2008). Measuring the impact of positive and negative word of mouth on brand purchase probability. International Journal of Research in Marketing, 25(3), 215e224. <u>http://dx.doi.org/10.1016/j.ijresmar.2008.04.001</u>.
- Edelman, D. C. (2010). Branding in the digital age. Harvard Business Review, 88(12),62e69.
- Elliot, A. J., and Thrash, T. M. (2010). "Approach and avoidance temperament as basic dimensions of personality". *Journal of Personality*, 78: 865-906.
- Gregoire, Y., Tripp, T. M., & Legoux, R. (2009). When customer love turns into lasting hate: the effects of relationship strength and time on customer revenge and avoidance. Journal of Marketing, 73(6), 18e32. <u>http://dx.doi.org/10.1509/</u> jmkg.73.6.18.
- Gurtman, C. G., McNicol, R., & McGillivray, J. A. (2014). The role of neuroticism in insomnia. Clinical Psychologist, 18, 116–124.
- Habibi Kaleybar, R., Farid, A., Babaee, D. (2017). Mediator Role of Achievement Goals Between Behavioral Inhibition / Activation System and Creative Thinking., 4(7), 43-56 (*In Persian*)

- Hauge Wien, A & Ottar Olsen, S, (2017) Producing word of mouth a matter of selfconfidence? Investigating a dual effect of consumer self-confidence on WOM. Australasian Marketing Journal (AMJ) 25:1, 38-45.
- Hawkins, D & Mothersbaugh, D 2010. Consumer Behaviour. Building Marketing Strategy. Eleventh Edition. McGraw Hill Irwin.
- Hirsh JB, Kang SK, Bodenhausen GV(2012): Personalized persuasion: tailoring persuasive appeals to recipients' personality traits. Psychol. Sci, 23:578-581.
- Hsu M, Yoon C (2015): The neuroscience of consumer choice. Curr Opin Behav Sci, 5:116-121.
- Hundt, N. E., Brown, L. H., Kimbrel, N. A., Walsh, M. A., Nelson-Gray, R., & Kwapil, T. R. (2013). Reinforcement sensitivity theory predicts positive and negative affect.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big five trait taxonomy. In O. P. John, R. W., Robins, & L. A. Pervin (Eds.), Handbook of Personality: Theory and Research (3rd ed., 114-158). New York, NY: Guilford Press.
- Karmarkar, U. R., & Yoon, C. (2016). Consumer neuroscience: advances in understanding consumer psychology. Current Opinion in Psychology, 10, 160-165.
- Kim, S. J., Wang, R. J., Maslowska, E., & Malthouse, E. C. (2016). "Understanding a fury in your words": The effects of posting and viewing electronic negative word-of-mouth on purchase behaviors. Computers in Human Behavior, 54, 511-521. doi:10.1016/j.chb.2015.08.015
- Knyazev, G. G., Wilson, G. D., & Slobodskaya, H. R. (n.d.).(2008). Behavioral activation and inhibition in social adjustment. The Reinforcement Sensitivity Theory of Personality, 415-430.
- Kotler P, Armstrong G: Principles of Marketing. Pearson education; (2010).
- Matz, S. C., & Netzer, O. (2017). Using Big Data as a window into consumers' psychology. Current Opinion in Behavioral Sciences, 18, 7-12.
- Ng, W. (2009). Clarifying the relation between neuroticism and positive emotions. Personality and Individual Differences, 47(1), 69-72.
- Plassmann H, Karmarkar UR(2015): Consumer neuroscience: revealing meaningful relationships between brain and consumer behavior. In Cambridge Handbook of Consumer Psychology. Edited by Lamberton C, Norton M, Rucker D. Cambridge University Press.

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  - Reese, E. D., Zielinski, M. J., & Veilleux, J. C. (2015). Facets of mindfulness mediate behavioral inhibition systems and emotion dysregulation. Personality and Individual Differences, 72, 41-46.
  - Sipilä, J., Herold, K., Tarkiainen, A., & Sundqvist, S. (2017). The influence of word-of-mouth on attitudinal ambivalence during the higher education decision-making process. Journal of Business Research, 80, 176-187. doi:10.1016/j.jbusres.2017.07.014.
  - Slavish, D. C., Sliwinski, M. J., Smyth, J. M., Almeida, D. M., Lipton, R. B., Katz, M. J., & Graham-Engeland, J. E. (2018). Neuroticism, rumination, negative affect, and sleep: Examining between- and within-person associations. Personality and Individual Differences, 123, 217222.
  - Smidts A, Hsu M, Sanfey AG, Boksem MA, Ebstein RB, Huettel SA, Kable JW, Karmarkar UR, Kitayama S, Knutson B, Liberzon I, Lohrenz T, Stallen M, Yoon C: (2014)Advancing consumer neuroscience. Mark Lett, 25:257-267.
  - Solnais, C., Andreu-Perez, J., Sánchez-Fernández, J., & Andréu-Abela, J. (2013). The contribution of neuroscience to consumer research: A conceptual framework and empirical review. Journal of Economic Psychology, 36, 68-81.
  - Stock, R. M., Hippel, E. V., & Gillert, N. L. (2016). Impacts of personality traits on consumer innovation success. Research Policy, 45(4), 757-769.
  - Sweeney, J. C., Soutar, G. N., & Mazzarol, T. (2012). Word of mouth: Measuring the power of individual messages. European Journal of Marketing, 46(1/2), 237–257.
  - Sweeney, J. C., Soutar, G. N., & Mazzarol, T. (2014). Factors enhancing word-of-mouth influence: Positive and negative service-related messages. European Journal of Marketing, 48(1/2), 336–359.
  - Vella, J., Caruana, A., & Pitt, L. F. (2012). The effect of behavioral activation and inhibition on CRM adoption. International Journal of Bank Marketing, 30(1), 43-59.
  - Verhagen, T., Nauta, A., & Feldberg, F. (2013). Negative online word-of-mouth: behavioral indicator or emotional release? Computers in Human Behavior, 29(4), 1430e1440.
  - Wien, A. H., & Olsen, S. O. (2017). Producing word of mouth a matter of self-confidence? Investigating a dual effect of consumer self-confidence on WOM. Australasian Marketing Journal (AMJ), 25(1), 38-45.
  - Yan, Q., Zhou, S., & Wu, S. (2018). The influences of tourists' emotions on the selection of electronic word of mouth platforms. Tourism Management, 66, 348-363.



## Figure 1: Conceptual model of the research



## Figure 2: Conceptual model-driven in Amos environment

Variables	Items	Reference
	I am easily disturbed.	Stock, Hippel & Gillert (2016) Wien & Olsen (2017)
Neuroticism	I often feel frustrated.	Stock, Hippel & Gillert (2016) Wien & Olsen (2017)
	I'm not comfortable and feel embarrassed in public.	Stock, Hippel & Gillert (2016) Wien & Olsen (2017)

Table 1: Variables and research iten	Table	1:	Variables	and	research	items
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	I am often depressed.	Stock, Hippel & Gillert (2016) Wien & Olsen (2017)
	I'm worried about doing something wrong.	(1994) Carver & White
Behavioral inhibition	I'm worried when I think my performance is weak.	(1994) Carver & White
mmonton	I feel a lot of discomfort when I think someone is angry with me.	(1994) Carver & White
	If I have a good chance to achieve the things I want, I'll be using it immediately.	Hosseini, Shahqalian, Abdollahi (2017)
Behavioral	When I do my work well, I like to keep doing that.	Hosseini, Shahqalian, Abdollahi (2017)
activation	Winning a race or competition excites me.	Hosseini, Shahqalian, Abdollahi (2017)
	I'm always looking for new excitement and emotional experiences.	Hosseini, Shahqalian, Abdollahi (2017)
	I usually recommend buying some appliances from some companies to others.	Sweeney & Swait (2008)
Positive Word-of- mouth	I often talk to friends about the advantages and attributes of the appliance of companies.	Sweeney & Swait (2008)
advertising	I usually encourage friends and acquaintances to buy products from this company.	Sweeney & Swait (2008)
Negative	I am doing negative word of mouth advertising about the products of this company.	Casidy & Shin (2015)
Word-of- mouth	I often criticize the products of this company.	Casidy & Shin (2015)
advertising	I will often warn others not to use the products of this company.	Casidy & Shin (2015)

## Table 2: Reliability of the questionnaire

variables	AVE	CR	Cronbach's alpha
behavioral activation	0/645	0/789	0/734
negative word of mouth	0/543	0/823	0/791
Positive word of mouth	0/687	0/913	0/834
behavioral inhibition	0/743	0/875	0/745
neuroticism	0/589	0/769	0/791

## Table 3: Descriptive findings of the research variables

<b>1</b>	0		
variables	average	Standard deviation	variance
behavioral activation	3.5	0.867	0/752
negative word of mouth	3.21	0.956	0/913
Positive word of mouth	3.67	0.876	0/767
behavioral inhibition	3.44	0.652	0/452
neuroticism	2.53	1.21	1/630

## Table 4. The results of the fitting indices of the conceptual model

indices	result	Acceptable range
$\mathbf{X}^2$	0.080	Over 0.05



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GFI	~	Over 0.9
AGFI	0.92	Over 0.9
NFI	0.94	Over 0.9
CFI	0.95	Over 0.9
RFI	0.94	Over 0.9
IFI	0.95	Over 0.9
RMSEA	0.07	Under 0.1
CMIN/df	2.32	Between 1 and 3

# Table 5: Results of the hypothesis test

hypothesis	t-value	path coefficient	significance	Result
H1: Behavioral activation affects positive word of mouth advertising.	2.45	0.42	***	Not rejected
H2: Behavioral activation affects negative word of mouth advertising.	3.23	0.37	***	Not rejected
H3: Behavioral inhibition affects positive word of mouth advertising.	4.78	0.59	***	Not rejected
H4: Behavioral inhibition affects negative word of mouth advertising.	4.89	0.57	***	Not rejected
H5: Neuroticism affects positive word of mouth advertising.	3.87	~0.33	***	Not rejected
H6: Neuroticism affects negative word of mouth advertising.	2.56	~0.20	0.004	Not rejected

