Analyzing mental and perceptional factors influencing on customer satisfaction and its role on word-of-mouth: mediating role of customer commitment

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Abstract: This study aims to analyze mental and perceptional factors influencing on customer satisfaction and its role on word-of-mouth with regard to the mediating role of customer commitment. Statistical universe of the study is generally customers of sales web sites. Since statistical universe of this research is unlimited, it's been used convenience sampling method. To collect data, the questionnaire was used and was distributed in the volume via Telegram application. To analyze the collected data, SmartPLS Ver.3 was used and structural equations modelling (SEM) was employed. Results showed that factors of entertainment, perceived justice and subjective norms have a positive impact on customer satisfaction, whereas no significant relationship was found between perceived effort and customer satisfaction. Further, customer commitment mediates the relationship between customer satisfaction and WOM.

INTRODUCTION

In recent decades, penetration increase in Internet technology and telecommunication devices (such as mobile phone) has created significant changes in cultural and social communities. This is an advantage for marketing managers to understand social phenomenon and to create effective movement towards their customers. Because there are lots of evidences showing that marketers can get sales leverage from their customers through WOM (Chevalier and Mayzlin 2006).

WOM is an informal communication that involves good views dissemination from a firm, its products as well as advertisement for buying firm's products among relatives, friends and colleagues (Kumar et al., 2010; Lim and Chung, 2011). Therefore, WOM has potential to influence on purchase, customer expectations, customer views towards a brand and ultimate decision for buying (Bansal and Voyer 2000). As a result, WOM can influence on customer satisfaction. On the other hand, for consecutive years, customer satisfaction has been the main goal of firms, because it was supposed that customer satisfaction influences on customer retention and market share (Hensemark and Albinsson, 2004). Traditionally, satisfied customers are those who have less sensitivity to the price, are less influenced by competitors, purchase additional products or services and have longer loyalty (Zineldin, 2000).

With a glance at the literature, there are multiple factors investigated by researchers that influence on customer satisfaction but mental and perceptional factors that considerably influence on customer satisfaction are perceived effort, perceived justice, subjective norms and entertainment (San-Martin et al., 2015; Fierro et al., 2014).

Today, given the importance of virtual space and the Internet, particularly in developing countries such as Iran that has experienced considerable advances in this context over the past decade. Internet-based businesses are growing increasingly. Thus, most of researches in terms of marketing and business have shifted to this type of business. Sales websites are one of the core businesses based on the Internet and there is a need to focus on growing customers of these websites. According to what was discussed, the Internet and virtual space have provided novel opportunities for the prosperity of this type of businesses, particularly sales websites. Therefore, analyzing effective factors on customer satisfaction of such sales websites as well as the mediating role of customer commitment in the relationship between customer satisfaction and WOM seem to be essential. If sales websites and e-commerce can enhance customer commitment through improving customer satisfaction and in turn, improve WOM in physical and virtual space, they will achieve better performance, productivity and profitability.

LITERATURE REVIEW AND HYPOTHESES

Entertainment and customer satisfaction
Entertainment is the extent to which an activity is perceived as enjoyable intrinsically, regardless of its predictable consequences and compensations.

Customer satisfaction can derive from the purchased product or service as well as emotional and personal response relating to its utilitarian (Cyr et al 2006). When customers buy a service or product, they not only consider external motives and utilitarian but they also consider intrinsic motives and enjoyment feelings. Wolfinbarger and Gilly (2003) state that online customers can show an experience based on behavior (purchase for fun and entertainment). It is more likely for a customer to share an interesting email which has an entertainment aspect with other customers (Yang et al 2012).

Research conducted by San-Martín et al (2015) shows that entertainment can influence on customer satisfaction when buying a mobile phone. Therefore the following hypothesis is put forward:
H1: entertainment has a significant impact on e-shopper satisfaction.

Subjective norms and customer satisfaction
Subjective norms mean perceived social pressure for doing or not doing a behavior (Ajzen, 1991). In other words, subjective norms are identifiable ideas of others that it matters for an individual and is closed to him. It also affects the decisions influencing on personal behavior to do or not to do a behavior.
H2: subjective norms have a significant impact on e-shopper satisfaction.

Perceived effort and customer satisfaction
Perceived effort is defined as customer perception of a firm's commitment and investment for providing solutions when a service failure occurs (Huang, 2008). Literature on perceived effort acknowledges that customers understand the firm's efforts for solving their problems that can have a positive impact on customer satisfaction (Karatepe, 2006). Research in this context shows that perceived effort has an impact on customer satisfaction (Fierro et al., 2014). Therefore the following hypothesis is put forward:
H3: perceived effort has a significant impact on e-shopper satisfaction.

Perceived justice and customer satisfaction
Perceived justice refers to how consumers evaluate justice in terms of firm's activities and in general, it is divided into three factors of distributive justice, procedural justice and interactive justice (Homburg and Furst, 2005). If customers perceive that they have overpaid, they will feel that they are being treated unfairly (Kau and Wu, 2012). Past research shows that there is a significant relationship between perceived justice and customer satisfaction (Jung &Seock, 2017; Fierro et al., 2014; Kau and Loh, 2006; Maxham and Netemeyer, 2002). Therefore, the following hypothesis is put forward:

H4: customer's perceived justice has a significant impact on e-shopper satisfaction.

Customer satisfaction, WOM and customer commitment
Customer satisfaction refers to the utilitarian, emotional and mental evaluation that is resulted from psychological state relating to customer purchase behavior (Oliver, 1981). Customer satisfaction has a close relationship with customer's attitudes and intentions, which form part of customer behavior (Holloway et al., 2005). It also affects positive behavioral intentions such as repurchase, loyalty and WOM (Gee et al., 2008).
Morgan & Hunt (1994) have defined commitment as a relationship between the sides which lie in the core of relationship marketing that it occurs only when the relationship is important. Therefore, commitment contributes to specific positive attitudes and there is strong relationship between commitment and customer satisfaction (Belanche et al., 2013; Chien-Lung Hsu et al., 2010; Casalo et al., 2007).

Past research on customer loyalty shows efforts for integrating the concept of cognitive commitment in trying to differentiate between real loyalty and fictional loyalty (Fullerton, 2005). There are two concepts for customer commitment such as affective commitment and calculative or continuous commitment, each of which has different individual consequences and content (Zins, 2001). Calculative commitment is a way in which the customer is forced to remain loyalty despite of his or her intention in order to refrain from extra costs (De Ruyter et al 1998). Affective commitment shows customer's sense of belonging and combining with service provider as emotional bonds (Fullerton, 2005; Rhoades et al., 2001).

Since WOM means any informal communication with others in terms of possession, use or characteristics of goods or services and sellers (Hennig-Thurauand Walsh, 2004), it has a direct impact on customer decisions about purchase and loyalty and thus researchers have conducted lots of research on the effects of this type of advertising on customer behavior over half of a century ago. Some of this research states a positive relationship between customer satisfaction, customer commitment and WOM (Chung & Siuk, 2017; San-Martin et al., 2015; Fierro et al., 2014). Further, in some of them, customer commitment has a direct impact on WOM (Rangriz, 2011). Therefore, the following hypothesis can be stated:
H5: customer commitment mediates the effect of customer commitment on WOM.

Hence, according to the literature and the hypotheses mentioned in the above, research

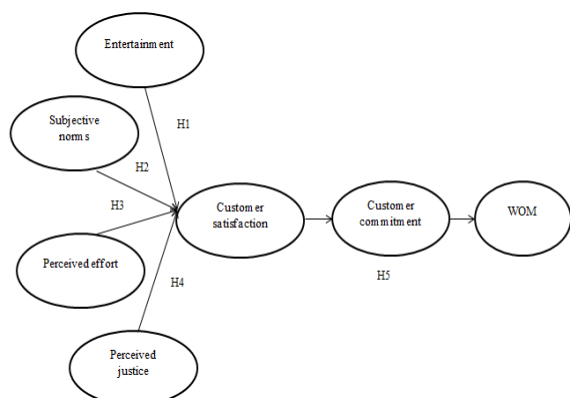conceptual model with concerning a set of cognitive variables that influence on WOM is provided in Fig. 1.

Fig. 1: Research conceptual model

METHODOLOGY

Sample

Statistical universe of this research is generally Internet sales websites and their customers in Iran. Given the high volume of the statistical universe, it was used convenience sampling method. To specify sample volume, at first, respondents were asked whether they have made any purchase via the Internet websites at least for once. If the response was positive, the questionnaire would be given to them. To collect data, an Internet questionnaire was designed and was sent to respondents via Telegram application. Finally after the refinery of questionnaires and removing incomplete ones, data extracted was analyzed using SmartPLS Ver.3 and overall, 384 questionnaires were analyzed.

Measures

To measure research variables, a standard questionnaire was used. Therefore, entertainment was evaluated using 4 items adopted from Cyr et al., (2006) and Nysveen et al., (2005). Subjective norms were evaluated using 3 items adopted from Nysveen et al., (2005), Yang (2010) and Venkatesh and Davis (2000). Perceived effort, perceived justice and customer commitment were evaluated using 3, 7 and 2 items adopted from Karatepe (2006), DeWitt et al., (2008) and Cater and Cater (2010) respectively. Customer satisfaction was evaluated using 6 items adopted from Montoya-Weiss et al., (2003) and Bennett et al., (2005). Finally, WOM was evaluated using 4 items adopted from Harris and Goode (2004) and Zeithaml et al., (1996).

Demographical information

In this research, demographical information of the research consists of three items including gender, age and education. In terms of gender, 189 persons out of 384 persons are male (i.e. 49.22) and the rest are female. In terms of age, 90, 222, 52, 12 and 8 persons out of 384 persons are between 20-29, 30-39, 40-49, 50-59 and above 60 years old respectively. In terms of education, 39, 148, 154, 23, 15 and 5 out of 384 persons have Ph.D, MD, BD, AD, Diploma and high school degree respectively.

RESULTS

Reliability of the measures was assessed using Cronbach alpha (see table 1), according to which, reliability was assessed greater than .6 for all measures and thus, the reliability was assured (Hair et al., 2013). To assess validity of the measures, convergent and discriminant validities were applied (see table 1). Results showed that in terms of convergent validity (average variance extracted or AVE and composite reliability), all measures were estimated greater than 0.5 and 0.7 respectively, thus convergent validity of the measures were assured (Hair et al., 2013). Further, in terms of discriminant validity, since the squared root of each estimated AVE is greater than corresponding inter-construct correlations (i.e. the squared root of each estimated AVE, shown in the dimeter of table 2, is greater than correlations in its corresponding column), discriminant validity was assured (Fornell & Larcker, 1981; Hair et al., 2013). Moreover, the variation inflation factors (VIF) was also estimated below 5, this indicates that in terms of estimation of PLS-SME model, no issue could be generated by collinearity (Hair et al., 2013).

In addition, regarding fitting indices, SRMR obtained 0.082 which means lesser than 0.1. Therefore, the model of this research is appropriate.

Hypothesis testing

According to results derived from SEM analysis shown in table 3, H1, H2, H3 and H4 are supported because t-value in all of these hypotheses were estimated greater than 1.96.

Regarding H5, according to Baron & Kenny (1986) and Sobel test, the estimated path coefficients between customer satisfaction and customer commitment (a) as well as between customer commitment and WOM (b) are multiplied and the output is divided into standard error (SE) value. The result is called as the mediator's t-value. In this research, the mediator's t-value was estimated as 6.89 which is greater than 2.58, thus given the existence of significant relationship between customer satisfaction and customer commitment as well as between customer commitment and WOM, with 99% significance, customer commitment mediates the relationship between customer satisfaction and WOM.

Table 1: Convergent validity

Constructs	Cronbach	CR	AVE	R^2
Customer commitment	0.882	0.994	0.895	0.801
Perceived effort	0.765	0.846	0.650	
Entertainment	0.866	0.909	0.714	
Perceived justice	0.871	0.901	0.566	
Customer satisfaction	0.927	0.943	0.734	0.772
Subjective norms	0.847	0.908	0.766	
WOM	0.889	0.923	0.750	0.593

Table 2: Discriminant validity

Constructs	Customer commitment	Perceived effort	Entertainment	Perceived justice	Customer satisfaction	Subjective norms	WOM
Customer commitment	0.946						
Perceived effort	0.418	0.806					
Entertainment	0.717	0.458	0.845				
Perceived justice	0.779	0.502	0.736	0.752			
Customer satisfaction	0.895	0.461	0.753	0.652	0.857		
Subjective norms	0.685	0.457	0.721	0.701	0.721	0.875	
WOM	0.770	0.381	0.673	0.728	0.830	0.696	0.866

Table 3: Hypothesis testing result

Constructs	β	t-value	Results
Entertainment → Customer satisfaction	0.204	4.535**	Verified
Subjective norms → Customer satisfaction	0.162	3.570**	Verified
Perceived effort → Customer satisfaction	-0.003	0.095	Verified
Perceived justice→ Customer satisfaction	0.590	16.421**	Verified
Customer satisfaction → Customer commitment	0.895	80.200**	Verified
Customer commitment → WOM	0.770	31.696**	Verified

:**$P<0.01$ |t|>1.96 Significant at $P<0.05$, |t|>2.58 Significant at $P<0.01$

DISCUSSION

This research aims to analyze effective factors on customer satisfaction and its role in WOM with a focus on the mediating role of customer commitment. Results showed that factors of entertainment, perceived justice and subjective norms have a positive and significant impact on customer satisfaction, whereas perceived effort has no significant impact on customer satisfaction. Further, customer commitment mediates the relationship between customer satisfaction and WOM. In addition, among variables influencing on customer satisfaction, perceived justice has the highest impact (0.59). Furthermore, a considerable amount of variance in the constructs analyzed is explained by the research model. Therefore, 77.2, 80.1 and 59.3 of the variance are explained by customer satisfaction, customer commitment and WOM respectively.

In terms of the factors influencing on customer satisfaction, according to the findings of Davis et al., (1992) and Cyr et al., (2006), entertainment is an intrinsic motive for purchase. In addition, based on the results achieved by San-Martin et al., (2015), entertainment influences on customer satisfaction when buying (specifically mobile phones), thus findings of this research are consistent with previous research in this regard (e.g. San-Martin et al 2015, Davis et al 1992 and Cyr et al 2006). According to Karatepe (2006) and Fierro et al., (2014), their findings acknowledge the impact of perceived effort on customer satisfaction,

while our findings do not match with them. In terms of the impact of perceived justice on customer satisfaction, our research findings are consistent with Jung and Seock (2017), Kau and Loh (2006), Fierro et al., (2014). Regarding subjective norms, our findings are parallel with San-Martin et al., (2015). Finally, in this paper, it was also shown that customer commitment mediates the relationship between customer satisfaction and WOM. This finding is parallel with Jung and Seock (2017), Fierro et al., (2014), San-Martin et al., (2015). Further, it is also along with Rangriz (2011) in which he showed that customer satisfaction has a significant impact on WOM.

Managerial implications

Today, as growing E-business, knowing effective factors on customer satisfaction has become particularly important, because customer satisfaction in such businesses is different from any other type of business (i.e. non e-business). In e-business, most of the time, there is no face-to-face interaction. Instead, web site appeal and factors giving utilitarian to customers become more important. Therefore, we suggest managers and practitioners to design their websites inspired from factors giving enjoyment and utilitarian to customers.

One of the most important points remained inattentive in Iran is that after service failure in delivering e-services, most of Iran's e-firms have low performance in service recovery and providing

alternative solutions to their customers. This hurts the firm's prestige and its customer satisfaction rate. Thus, we recommend to managers and practitioners to be very active in quickly responding to service failure through focusing on the "contact us" section in their web sites.

A considerable part of the justice that customers feel in e-business emerges in the amount of their payment. In this regard, we recommend managers and practitioners to create justice feeling in customers through making price and discounts transparent in their web sites. On the other hand, since the role of WOM in e-business is very important, customer commitment is enhanced through continuous customer satisfaction and thus WOM is also spread. Continuous Attention to these factors contributes to increased WOM and subsequently increasing firm's profitability.

REFERENCES

Ajzen, I., (1991). "The theory of planned behavior". *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.

Bansal, H., Voyer, P., 2000. World-of-mouth processes within services purchase decision context. Journal of Service Research, volume3, issue 2, pp. 166-177.

Belanche, D., Casaló, L.V., Guinalíu, M., 2013. The Role of Consumer Happiness in Relationship Marketing. J. Relatsh. Mark, volume 12, issue 2, pp. 79–94.

Casalo, L.V., Flavián, C., Guinalíu, M., 2007. The Influence of Satisfaction, Perceived Reputation and Trust on a Consumer's Commitment to a Website. J. Mark. Commun, volume 13, pp. 1–17.

Chevalier, J.A., Mayzlin, D., 2006a. Online user reviews influence consumers' decision to purchase. Mark. News, volume 40, pp. 17–17.

Chevalier, J.A., Mayzlin, D., 2006b. The Effect of Word of Mouth on Sales: Online Book Reviews. J. Mark. Res. JMR, volume 43, pp. 345–354.

Chien-Lung Hsu, Chia-Chang Liu, Yuan-Duen Lee, 2010. Effect of Commitment and Trust Towards Micro-Blogs on Consumer BehavioralIntention: A Relationship Marketing Perspective. Int. J. Electron. Bus. Manag, volume 8, pp. 292–30.

Cyr, D., Head, M., Ivanov, A., 2006. Design aesthetics leading to m-loyalty in m-commerce. Inf. Manag, volume 43, pp. 950–963.

Davis, F.D., Bagozzi, R.P., Warshaw, P.R., 1992. Extrinsic and intrinsic motivation to use computers in the workplace. J. Appl. Soc. Psychol, volume 22, pp. 1111–1132.

De Ruyter, K., Wetzels, M. and Bloemer, J. (1998), ''On the relationship between perceived servicequality, service loyalty and switching costs'', International Journal of Service IndustryManagement, Vol. 9 No. 5, pp. 436-53.

Fierro, J.C., Polo, L. M., Oliván, F.J.D., (2014). From dissatisfied customers to evangelists of the firm: A study of the Spanish mobile service sector, BRQ Business Research Quarterly,volume 17, pp. 191-204.

Fishbein, M., Ajzen, I., 2010. Predicting and Changing Behaviour: The Reasoned Action Approach. Psychology Press, New York.

Fullerton, G. (2005), ''How commitment both enables and undermines marketing relationships'',European Journal of Marketing, Vol. 39 No. 11-12, pp. 1372-88.

Gee, R., Coates, G., Nicholson, M., 2008. Understanding and profitably managingcustomer loyalty. Mark. Intell. Plan, volume 26, issue 4, pp. 359–374.

Hair, J.F., Ringle, C.M., &Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet, Journal of Marketing Theory and Practice,volume 19, issue 2, pp. 139-152.

Hansemark, O.C. and Albinsson, M. (2004), ''Customer satisfaction and retention: the experienceof individual employees'', Managing Service Quality, Vol. 14 No. 1, pp. 40-57.

Hasbullah, N.A., Osman, A., Abdullah, S., Salahuddin, S.N., Ramlee, N.F., Soha, H.M., (2016). The Relationship of Attitude, Subjective Norm and Website Usability on Consumer Intention to Purchase Online: An Evidence of Malaysian Youth, Procedia Economics and Finance, volume 35, pp. 493 – 502.

Holloway, B.B., Wang, S., Parish, J.T., 2005. The role of cumulative online purchasing experience in service recovery management. J. Interact. Mark. volume19, issue 3, pp. 54–66.

Homburg, C., Fürst, A., 2005. How organizational complaint handling drives customerloyalty: an analysis of the mechanistic and the organic approach. J. Mark. volume69, issue 3, pp. 95–114.

Huang, W., 2008. The impact of other-customer failure on service satisfaction. International Journal of Service Industry Management, volume 19, pp. 521-536.

Jung, Y. N., Seok, Y., (2017). Effect of service recovery on customers' perceived justice, satisfaction, and word-of-mouth intentions on online shopping websites. Journal of Retailing and Consumer Services, volume 37, pp. 23–30.

Karatepe, O., 2006. Customer complaints and organizational responses: the effects of complaints-perceptions of justice on

satisfaction and loyalty. Hospitality Management, volume 25, pp. 69-90.

Katz, E., Blumler, J., Gurevitch, M., 1974. Utilization of mass communication by the individual. In: Blumler, J., Katz, E. (Eds.), The Uses of Mass Communications: Current Perspectives on Gratifications Research, 25. Sage, Beverly Hills, pp. 19–32.

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., Tillmanns, S., 2010. Undervalued or overvalued customers: capturing total customer engagement value. Journal of Service Research, volume 13, pp. 297-310.

Kuo, Y.F., Wu, C.M., 2012. Satisfaction and post-purchase intentions with servicerecovery of online shopping websites: perspectives on perceived justice andemotions. Int. J. Inf. Manag, volume 32, issue 2, pp. 127–138.

Li, Y.M., Yeh, Y.S., 2010. Increasing trust in mobile commerce through design aesthetics. Comput. Human Behav,volume 26,issue 4, pp. 673–684.

Lim, B.C., Chung, C.M., 2011. The impact of word-of-mouth communication on attribute evaluation. Journal of Business Research, volume 64, pp. 18-23.

Morgan, R.M., Hunt, S.D., 1994. The Commitment-Trust Theory of Relationship Marketing. J. Mark, volume 58, issue 20.

Nysveen, H., Pedersen, P.E., Tohorbjornsen, H., 2005. Intentions to use mobile services: antecedents and cross-service comparisons. J. Acad. Mark. Sci, volume 33, pp. 330–346.

Oliver, R.L., 1981. Measurement and evaluation of satisfaction process in retailer selling.J. Retail, volume 57, issue 3, pp. 25–48.

Reydet , S., Carsana, L., (2017). The effect of digital design in retail banking on customers' commitment and loyalty: The mediating role of positive affect Journal of Retailing and Consumer Services, volume 37, pp. 132–138.

Rhoades, L., Eisenberger, R. and Armeli, S. (2001), ''Affective commitment to the organization: thecontribution of perceived organizational support'', Journal of Applied Psychology, Vol. 86, No. 5, pp. 825-36.

San-Martín, S., Prodanova, J., Jiménez, N., (2015). The impact of age in the generation of satisfaction and WOM in mobile shopping, Journal of Retailing and Consumer Services, volume 23, pp. 1–8.

Sweeney, J.C., Soutar, G.N., 2001. Consumers perceived value: the development of a multiple item scale. Journal of Retailing, volume 77, pp. 203–220.

vanDoorn, J., Lemon, K.N., Mittal, V., Nass, S., Pick, D., Pirner, P., Verhoef, P., 2010. Customer engagement behaviour: theoretical foundations and research directions. Journal of Service Research, volume 13, pp. 253-266.

Vlontzos, G., Duquenne, M.N., (2014). Assess the impact of subjective norms of consumers' behaviour in the Greek olive oil market, Journal of Retailing and Consumer Services, volume 21, pp. 148–157.

Werner, P., 2004. Reasoned action and planned behaviour. In: Peterson, S.J., Bredow, T.S. (Eds.), Middle Range Theories: Application to Nursing Research. Lippincott Williams & Wilkins, Philadelphia, pp. 125–147.

Wolfinbarger, M., Gilly, M.C., 2003. e-TailQ: dimensionalizing, measuring and predicting etail quality. J. Retail, volume 79, pp. 183–198.

Yang, H., Zhou, L., Liu, H., 2012. Predicting young American and Chinese consumers' mobile viral attitudes, intents, and behavior. J. Int. Consum. Mark. volume24, issue (1–2), pp. 24–42.

Zineldin, M. (2000), TRM Total Relationship Management, Studentlitterarur, Lund.

Zins, A.H., (2001). ''Relative attitudes and commitment in customer loyalty models'', International Journal of Service Industry Management, Vol. 12 No. 3, pp. 269-94.