The relationships between loneliness, social identity and sensation-seeking with the tendency towards virtual social networks

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ABSTRACT--The present study investigated the relationships between loneliness, social identity and sensation-seeking with the tendency towards social networks. The population consisted of all students in Ahvaz Payam Noor University, from where173 participants were selected voluntarily. The research design was correlation, and regression was used for data analysis. Data were collected using Russell, Pella and Katrona's (1980)Loneliness questionnaire, Social Identity questionnaire of Jenkines(2008), a researcher-made Sensation-seeking questionnaire (2017), and a researcher-made Virtual Social Networks questionnaire (2018).The results of the study demonstrated that sensation-seeking positively predicted the tendency towards social networks; however, social identity and loneliness negatively did it. In addition, loneliness, sensation-seeking and social identity played the most important roles in predicting the tendency towards social networks.

Keywords: tendency to virtual social network, social identity, sensation seeking, loneliness

I INTRODUCTION

Nowadays,internet-based virtual social networks are the focus of scientists(Manca& Ranieri, 2015; Greenhow &Askari, 2015; Silius, et al., 2010); they are a major part of people's daily lives (Scott, 2016; Paliktzoglou&Suhonen, 2014; Grosseck, 2009). In the words, virtual social networks, such as Facebook, Twitter, and Instagram,. Absorbbillions of people (Wilson, Fornasier& White,2010). Virtual social networks constituted a revolution (Espuny, et al., 2011) and have developed communication and knowledge(Grosseck, 2009); In particular, they have attracted a large number of university students (George, 2017; Hamid, Chang &Kurnia, 2009). Some studies revealed that 75 percent (Zickuhr, Rainie, Purcell, Madden&Brenner,2012) or more than 95 percent (Madge,et al., 2009) of students use virtual social networks. Similarly, Popkins's study(2012) showed that people devote 5 to 6 hours a day to virtual social networks. Moreover, according to a study investigating8-18 year individuals, teenagers devote more than 6.5 hours, in average, to these kinds of applications (Wallace, 2015).

Research studies showed that many variables, including sensation-seeking, loneliness and social identity are related to virtual social networks. Sensation-seeking is one of the dimensions of personality which individuals possess to varying degrees. Sensation-seeking as a feature with different dimensions and components has received much attention since the second half of the 20th century. The most extensive studies on this feature and its components were initiated. by Zuckerman(2002). Some experts such as Velezmoro, Lacefield and Roberti

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(2010) believe that sensation-seeking occurs through searching for diverse, new, complex and passionate experiences and emotions, and the willingness to risk physically, socially, legally and financially to achieve these experiences. Individuals with sensation-seeking are aroused through new experiences and complex stimuli. They try to increase the intensity of stimulation received from these experiences (Roberti, 2004). Some people are strong sensation-seekers, but some people are week.On the other hand, some are located in the middle of the spectrum. Thus, sensation-seekers do some activities (e.g., drinking wine while driving) to achieve the approximate stimulation level (Zuckerman&Neeb, 1980). They communicate with different people, not for the sake of affecting them, but for stimulation. The strong sensation-seekers are permanently looking for new stimuli in their life. They are willing to put them at risk to gain their reputation, social prestige and even physical health (Legrand, Freixanet, Kaltenbach& Joly, 2007). In other words, sensation-seeking is an important characteristic which is associated with the extent to which social media is used; it appears through such behaviors. Sensation-seekers usually engage themselves with behaviors such as internet-based games so that they need the stimulation. Consequently, they can find so many friends by connecting to network (Lin &Tsai, 2002; Cooper, Frone, Russel& Muder,1995). Concerning the relationship between sensation-seeking and the tendency to virtual social networks, Singhwee's(2017) study revealed that there was a correlation between sensation-seeking, narcissism and social comparison using virtual social networks. Other researches, such as Lin and Tosun(2002) and Lajunen (2010), showed that there wasa correlation between sensation-seeking and the lack of inhibitionto access virtual social networks.

Loneliness is another variable which affects the tendency towards virtual social networks. The research studies on loneliness date back to 1970s with the publication ofWeiss' (1973)work. Research has showed that adolescence is the peak time for loneliness; about 20-50% loneliness is reported in this period (Heinrich &Gullone, 2006;Antognoli-Toland, 2000). In addition, some experts (e.g., Pila & Perman,1982) believe that the experience of emotional and social withdrawal is the most crucial stage in the history of studies on loneliness.Weiss(1973) definedloneliness asa response to the lack of particular communication or relationship. Loneliness is an unpleasant feeling which is experienced because of self-monitoring of personal social networks. In psychological manuscriptsloneliness is considered as an unpleasant feeling of missing or losing a companion, negative and unpleasant aspects of lost relationships. Furthermore, it might occur when one loses a relationship with another individual.

Similarly, the studies conducted by Bayraktar, Duygu and Hopcan (2013), Genuisand Genuis (2005) and MorahanMartin (1999) revealed that the tendency towards virtual social networks played a role in freedom from loneliness. Moreover, parallel, Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay and Scherlis (1998)showed that overuse of the Internet caused reduction in family relationships, isolation from social networks and increase in loneliness and depression.There is also a research study conducted byLeung and Lee (2005)whichshowed that social interactions increased the extent of isolation. The results ofa study doneby Davis, FlettandBesser(2002)demonstrated that the more time people spent using the Internet, the more they lost the social connection to their surroundings context. In addition, in study carried out by Nalwa and Anand (2003), the loneliness among the internet users was significantly higher than the group who used the internet less.

It must be noted that social identity is one of the effective causes of the individuals' tendencies towards the virtual social contexts. Tajfel(1974 &1981)called social identity as a central construction in understanding

interpersonal communication and a key element to accumulate an individual and his social groups. Some experts such as Xinyue, Xingchao, Li, Pengchengand Hao (2018) believe that social networks play an important role in construction, management and reconstruction of social identity. The individual's social identity is determined according to his memberships in different social groups. This is because identity is made by social and cultural interrelationships and social and cultural forces. Therefore, people are considered as a tool serving society and culture. Moreover, they manifest their existence by those tools(Myers, 2009). Social identity is formed by social proponents' psychological needs; it is a prerequisite of any social life. Social identity provides the means for sustained and meaningful psychological relationship with others which is the core of social life. Individuals without a framework for social identity determination would be like each other; neither of them can bond meaningfully and sustainably (Erikson, 1968).Hence, the society would not be created without social identity. The social and personal identities are the inevitable engagements. Therefore, social life is not imaginable without a vivid framework of personal and social identity in which we can understand who other individuals are and who we are. According to the abovementioned introduction, the research question(i.e., what the predictor variables to virtual social networks are) was examined.

II METHODOLOGY

2.1. Participants

All students of psychology at Payam Noor University made the research statistical population. One hundred and seventy three candidates (i.e., 126 females and 47 males) were voluntarily selected.

2.2. Data collection

The following questionnaires were used to collect data. Revised Loneliness questionnaire of Russell, peplau and Cutrona (1980) was translated into Persian by Shokrkon and Mirderikv and (1999, cited in Pasha&Esmaeeli, 2008). This questionnaire consisted of 20 items based on a four-point Likret scale (i.e., never= 1 to often= 4). The scoring of some items (i.e., 1,4,5,6,9,10,15,16,19 and 20)were calculated in reverse. Pasha, and Esmaeeli (2008) reported the reliabilityas0.75 and 0.71 using Cronbach alpha and split_ half method, respectively. Moreover, concurrent validity with regard to anxiety test turned out to 0.4 .

Social Identity questionnaire was adopted from Jenkines theory(2008) which was translated by Safarinia and Roshan (2012). This questionnaire consisted of 20 items;10 items represented personal characteristics and other 10 items represented social dimension. In a study conducted by Safarinia and Roshan(2012), the reliability of the total questionnaire was reported as 0.74. Furthermore, the reliability of items turned out between 0.51 and 0.58 which is satisfactory. In addition, the results of the face validity of the questionnaire, factor analysis and main component analysis through varimax supported the existence of a factor higher than one(i.e., social identity) (Cited in Safarinia, Agha Yusefi&Mostafaee, 2015).

To measure sensation-seeking, Sensation-seeking questionnaire (Sevari,2007, adopted from Arnett ,1994) was used. The scoring procedure was through a four-point Likert scale, including absolutely agree(4), agree(3), absolutely disagree (2) and disagree (1). This instrument consisted of 14 items and two factors (i.e., modernity

included ten items, and episodic included four items) which was distributed to 150 Payam Noor University candidates (i.e., 121 females and 29 males in Ahvaz). The Cronbach alpha coefficients showed that the reliability of total questionnaire was 0.714, that ofthe first factor was 0.706 and that of the second factor was 0.6. It must be noted that the validity of the questionnaire was calculated by using affirmative factor analysis.

(RMSEA= 0.08 ‹IFI=0.90, CFI=0.90)

Sevari's (2018, adopted from Koranteng, Wiafe&Kuada, 2018) eight-item questionnaire was utilized to examine the tendency to virtual social networks. The four-point likert scale included absolutely agree (4), agree (3), absolutely disagree (2), and disagree (1). The reliability of total questionnaire was 0.85. In addition, the validity of the questionnaire was calculated by an confirmatory factor analysis(RMSEA= 0.06 , CFI=0.90, IFI=0.90).

III RESULTS

In thissection,first the descriptive statistics are discussed. Theninferential statisticsare presented.

Table1: The correlation between social identity, sensation-seeking and loneliness with the tendency to virtual social networks

	$\overline{x}$	Sd	1	2	3	4
1.Social virtual networks	24.87	7	1			
2. Social identity	65.15	10.07	-0.26	1		
3. Sensation-seeking	49.66	7.45	0.38	-0.20	1	
4. loneliness	50.33	5.36	-0.39	-0.22	0.70	1

As Table 1 shows, socialidentityand loneliness are negatively correlated with the tendency toward social virtual networks. However, sensation-seeking is positively related to the tendency towards virtual social networks.

Table2: The regression analysis of predicator variables of the tendency to social virtual networks (i.e., loneliness, social identity and sensation-seeking) through step wise method

predictors	R	R^2	β	F	t	p
loneliness	0.39	0.15	0.38	30.23	5.50	000
Loneliness	-	0.18	0.35	18.96	4.90	000
Social identity	0.43	-	-0.18	-	-2.58	0.01
Loneliness	-	-	0.21	-	2.16	0.03
social identity	0.45	0.20	-0.17	14.28	-2.45	0.01
sensation-seeking	-	-	0.20	-	2.05	0.04

Table 2 shows that loneliness and sensation- seeking positively predict the tendency to social virtual networks. While, social identity negatively predicts the tendency to social virtual networks. As social identity is added to loneliness, the coefficient square is changed from 0.15 to 0.18. Similarly, when social identity and

sensation-seeking are added to loneliness, the coefficient square changes from 0.18 to 0. 20. It means that social identity and sensation-seeking variables added only 0.02 to the prediction of criteria variable. Moreover, according to Beta values, loneliness, sensation-seeking and social identity have the highestroles in predicting the criterion variable, respectively.

IV DISCUSSION AND CONCLUSION

The current study showed that loneliness positively predicted the tendency to virtual social networks. The results of the research studiescarried out by Genuisand Genuis (2005), Leung and Lee (2005),Bayraktar, Duygu and Hopcan (2013) and Morahan-Martin (1999) revealed that the tendency towards virtual social networks play a role in freedom of learning.Parallel, Kraut, et al. (1998)supported the findings of the present study. The findings of the present the study can be accounted for by referring to the fact that human being is a complex creature with different dimensions;different variables would affect his behaviors and functions directly or indirectly. Psychologists believe that a behavior which an individual shows isbased on important factors (e.g., personalaffective and social factors). One of the factors which affectthe individuals'behavior, the strategy and the extent of communicationis theamountof loneliness. Basically, using the Internet and virtual social networks are influenced by some factors. With regard to this issue,Ryan and Xenos(2011) showed that there wasa correlation between the use of virtual social networks (e.g., Facebook) and family's severe loneliness. Moreover, Ryan andXenos (2011) clarifiedthat induviduals suffer from loneliness when using social networks to compensate the gap originated from the lack of communication with others (i.e., due to weaknesses in social skills). In the present century, human beingsencountera world called cyberspace which is distinct from the real world. The cyberspace has the potentialto optimize activities and to enable the humans to apply themfor political, economic, social, cultural, industrial, health and even military purposes. What is vivid is that proper and beneficial use ofcyberspace requires observance of norms; the failure to do so is harmful. If the individualsdealing with such a space are not trained, personal, social and family damages would be inevitable. In line with the present issue,MohammadbeigiandSalehi(2011) believe that addictive use of such virtual social networks has been a great challenge for families. In other words, social networks and friend groups are a source to pave the way for individuals to use the Internet more and more. Therefore, the Internet was created not only as a strategy to encounterloneliness, but also as an appropriate contextfor social communication. Deters and Mehl (2013) claimed that active use of social networks is effective inreducingloneliness and increasingthe social capitals. However, Addictive use of virtual social networks turned to huge challenge for families (Mohammadbeigi& Salehi, 2011).

Other findings of the current studydemonstrated thenegative relationship between social identity and the tendency to virtual social networks. More specifically,it must be statedthat one of the media which is effective for the formation of social identity is virtual social space (e.g., Telegram, Line,Instagram,What's App). Virtual social networks are some applications which permit a lot of users to engagein an activity with common purposes (Shen& Reilly, 2012). To take the theoretical research frameworks into account, it is obvious that the emergenceof this technology constructed a fundamental transformation in communication among people; interaction is fundamental in social identity formation. This technology provides the individuals with their needs,

desiresand reflectionsontheir own identity. In addition,itprovides a new opportunityfor communication, interaction and understanding in the virtual social world. In other word, the new communication dominates the present societyvirtual communitiesform the individuals'identities. Lee and Lee (2010) claimed that the students are the most frequent social network users. Moreover, theyare exposed tomore tensions which are derived from classical and modern identitiesand the challenges of information society. In fact, the issue of identity among the students is very significant. With regard to thereview of the literature, the studies done in the field of identity and virtual space pointed to direct and predictive correlation between the two categories.

Moreover, the current study showed that there wasa positive relationship between sensation-seeking and the tendency to virtual social networks. The results of the investigations conducted bySinghwee(2017),Lin (2002) andTosunandLajunen (2010)supportthe results of the present study. To explain the findings of the study, it must be statedthat searching through the social networks is evaluated as a superior technological experience. Zukerman (1979) introduced sensation-seeking as a traitwith some features including the exploration of new, complex and varied experiencesand the interests in physical, social and riskyeconomic behaviors which involve four aspects of experience seekingadventuring,seeking anti-inhibition behaviors and tiredness acceptance.Since social media can face the individuals with new and different phenomena,it can satisfy the sensation-seekers' sense of variety. Therefore, using the virtual networks can absorb sensation seekers. Therefore, the sensation seekers' sense of variety ismet in social networks;theyare away from the reallife. Sensation-seekers require to have new and varied experiences. Searching for the interesting experiences is the characteristic of these people. On the other hand, the excitement of social networks and internet applications and the novelty and variety of themcan be a factor in attracting sensation-seekers to them.In fact, virtual social networks and the internet can absorbsensation-seekers with regard to theirparticular futures.

This research, as with other research, had some limitations. Perhaps the most important limitation of this study is its type of research design. The present study was based on correlational research which should be cautious when inferring causal relationships from research results. Considering the population and sample of the present study, it is necessary to be careful in generalizing the results.The results showed that the greater the feeling of loneliness, the greater the tendency to virtual social networks, so to reduce the tendency to social networking, it is appropriate to identify areas of loneliness and fill in people's messages properly. On the other hand, the content of the cyberspace should be enriched in order to grow social identity and to design appropriate and productive programs for people seeking emotion.

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