

Research Article

A STUDY ON THE EFFECT OF INTERNET ON CHANGING PERSONALITY TRAITS OF YOUTH IN IRAN

Elahe Vadoodi

Department of Communication of Ashtian Islamic Azad University, Ashtian, Iran

**Author for Correspondence*

ABSTRACT

The aim of the research is to study the effect of internet on the personality traits of the youth. It attempts to find an answer to the questions that: what is the function of internet in forming our behavior? Are they able to make changes in personality traits of youth in Iran?

To answer these questions five hypotheses were developed which, using standard tests of neo personality traits, compare the emotional instability, openness, extraversion, agreeableness, conscientiousness, between the youth who use internet and those who don't use.

This research is of descriptive type, and its study design is an ex-post facto (causal-comparative). The population includes all students of the Science and Research University. The size of the sample, which was selected using a relative stratified sampling method proportional to the population size, is 300 people according to Cochran formula.

To collect data, one questionnaire was used: standard questionnaire of personality traits; also to analyze the data in two scopes of data, descriptive and inferential analyses with emphasis on the assumptions of statistical model T, two independent groups have attempted to analyze the data, the main results of which are as follows:

All hypotheses used in this research other than openness were confirmed and also the relationship between the dependent variable of the research (emotional instability, extraversion, agreeableness and conscientiousness) and independent variable (internet) has been affirmed.

The relationship of variables in openness was not significant and it has been confirmed that the two groups had the same openness.

Keywords: *Internet, Behaviour Changes, Personality, Emotional Instability, Agreeableness, Conscientiousness, and Extraversion, Openness, - Conscience, Youth*

INTRODUCTION

The Internet has profoundly changed the human experience. We use the Web to find information, buy and sell products, watch television shows, seek mates, search for entertainment, and participate in political spheres (Zúñiga *et al.*, 2009; Zúñiga *et al.*, (in press); Park *et al.*, 2009).

We use it to connect with others – three-quarters of American adults have been online, with even more teens (93%) reporting they do so, and almost all Internet users say one of their primary purposes for going online is for communication (Jones & Fox, 2009). The Internet is part of our everyday lives, and who we are guides how we use it.

People once went online seeking the anonymity it offered (McKenna & Bargh, 2000); they now more often use the Internet to socialize with people they do know and expand their circle of friends (Jones, 2009). Two of the primary tools that enable these connections are social networking sites and instant messages (Ellison *et al.*, 2007; Jones, 2009; Lenhart, 2009; Raacke & Bonds-Raacke, 2008; Valenzuela *et al.*, 2009).

More than half of America's teens and young adults send instant messages and use social networking sites, and more than one-third of all Internet users engage in these activities (Jones, 2009).

With millions of users worldwide, it raises the question of what types of people rely on these online social media tools in their interactions with others. Previous research has established three personality traits that are central to social media use: extraversion, neuroticism, and openness to experience (Ross *et al.*, 2009; Zywicki & Danowski, 2008). People who are more open to experiences tend to be drawn to SNS (social

Research Article

networking sites), as are those with high levels of neuroticism. Individuals high in neuroticism, as well as people, who are extraverted, also seem to have greater use of instant messages (Ehrenberg *et al.*, 2008).

As the pool of research on Internet use grew, several scholars examined the influence of personality traits on Internet uses by utilizing the Five-Factor Model (McCrae & Costa, 1997). The Big- Five framework is a model of personality that contains five factors representing personality traits at a broad level: extraversion, neuroticism, openness to experiences, agreeableness, and conscientiousness (Ehrenberg *et al.*, 2008; John & Srivastava, 1999). Each factor is bipolar (e.g., extraversion vs. introversion) and summarizes various specific aspects (e.g., sociability), which in turn contain more specific traits (e.g., talkative, outgoing). This model suggests that the majority of individual differences in personality can be classified into these five broad domains (Gosling *et al.*, 2003).

Amichai–Hamburger (2002) suggests that the internet is an interactive medium that does not fulfill its potential. This, he believes, is a result of the lack of communication, exchange, or sharing of knowledge between network designers and psychologists. Networks designers perceive surfers as a homogeneous group and take no account of personality differences, while psychologists tend to see the network as a single entity, ignoring its richness and variety of services. As a result, studies of the social network tend to deal in stereotypes and the network develops in ways that ignore the individual needs of the user. This is particularly regrettable since the networks unique interactive abilities mean that services may be tailored to fit the personality type of the individual surfer. Amichai–Hamburger argued that research should focus on the interaction between the different personalities of the net users and the diverse components of Internet technology. An important result of this line of research would be a bank of knowledge that would facilitate the design of more user-friendly social networks.

There are several personality theories relevant to the Internet, among them are need for closure (Amichai–Hamburger *et al.*, 2004a), need for cognition (Amichai–Hamburger *et al.*, 2004b), and risk taking, sensation seeking, attachment, and locus of control (Amichai–Hamburger, 2002). The personality theory considered by many to have the most relevance to the social aspects of the Internet is the extroversion and neuroticism personality theory (Eysenck & Eysenck, 1975). The main reason for this is its focus on social aspects and its connection to loneliness (Hamburger & Ben–Artzi, 2000).

The personality type comparisons, which would seem most relevant to the study of Internet use, are those of the extrovert vs. introvert and neurotic vs. non-neurotic. The extrovert is a friendly person who seeks company, desires excitement, takes risks, and acts on impulse, whereas the introvert is a quiet, reflective person who prefers his or her own company, does not enjoy large social events, does not crave excitement, and may be seen by some as distant and remote. The neurotic person is an anxious individual who is overly emotional and reacts too strongly to all types of stimuli (Eysenck & Eysenck, 1975).

In his personality typology, Jung framed two life orientations: extroversion and introversion (Campbell, 1971; Jung, 1939).

Most scholars have considered these personality components to be two extremes of the same continuum (see for example, Eysenck & Eysenck, 1975). Jung himself, however, believed that they coexist simultaneously within the same personality; while one may dominate, the other is also present, although it may be unconscious and undeveloped.

Eysenck and Eysenck's (1975) extroversion and neuroticism personality theory is one of the developments of Jung's extroversion-introversion personality typology. Two models have been suggested to explain the relationship between extroversion and neuroticism and loneliness (Levin & Stokes, 1986; Stokes, 1985; Watson & Clark, 1984). The internet model states that the relationship between personality variables and loneliness is mediated by internet variables (Stokes, 1985). Specifically, the model suggests that individual characteristics may reduce one's motivation to initiate social interactions or may affect one's behavior during social contacts, resulting in unsuccessful interactions. The cognitive bias model emphasizes interpersonal cognitive processes as being responsible for feelings of loneliness. According to this model, some people tend to hold a negative view of themselves and the world and, as a result, perceive themselves as depressed, worthless, and lonely, regardless of their actual internet (Watson & Clark, 1984).

Research Article

In a series of studies, Levin and Stokes (1986) provide evidence that the internet model explains the loneliness experienced by introverts, whereas the cognitive bias model explains the loneliness of neurotics. Stokes (1985) found that only the correlation between extroversion and loneliness, and not that between neuroticism and loneliness, is mediated by the size of the individual's internet. People high in neuroticism seem to be lonely not because of their difficulty in forming and maintaining social relationships, but rather as a manifestation of their negative affectivity, that is, their general negative bias. These continua of extroversion—introversion, neurotic—non-neurotic are particularly relevant to Internet use. This is because the user is anonymous, has no physical proximity or contact with the person with whom he/she interacts, and has complete control over the interaction, so that he/she feels him/herself to be in a protected environment (Hamburger & Ben–Artzi, 2000). These factors may assist introverted and neurotic individuals to express themselves more freely on the net than they feel able to in an offline relationship. For women, introversion and neuroticism were found to be positively related to the use of Internet social sites (Hamburger & Ben–Artzi, 2000). These results are particularly interesting because they confirm earlier studies showing that women have higher self-awareness and are more likely to use the internet for support (Leana & Feldman, 1991; Ptacek *et al.*, 1994). It is, however, suggested that, in time, introverted and neurotic males also come to realize that the Internet social services may answer their social needs, since the protected net environment allows them to express themselves freely. This preference for using Internet social services is not likely to be found among male and female extroverts and non-neurotic net users, since they do not suffer from inhibitions in their social interactions.

Maldonado *et al.*, (2001) evaluated computer-mediated messages and found that introverted subjects send messages with an extroverted tone. Their messages contained more information than those sent by extroverted subjects. It seems that on the net introverts do not behave in accordance with their usual behavior pattern, but due to the secure environment conduct themselves in ways associated with extroverts in offline relationships (see also Amichai–Hamburger *et al.*, 2002). It is interesting to note that this uncharacteristic online behavior by introverts actually accords with the teachings of Jung. Jung believed that human beings are made up of opposing sets of characteristics; thus, an extroverted person will also be an unexpressed introvert, the introversion lying mainly in the unconscious. The opposite is true for the introvert. Well-being is the result of a successful creation of a balance between these opposing forces. The Internet may be able to assist in the construction of such an equilibrium, by allowing individuals to express the undeveloped part of their personalities. Thus, introverts may express their extroversion in online relationships.

A different opinion was given by Kraut *et al.*, (2002) who pointed out that Internet users who are extroverts, with many friends in their offline relationships, showed a higher involvement in their real communities as compared with introverts who are also net users. In addition, it was found that, although both extroverts and introverts benefit from their increased Internet use by enlarging their social circles, introverts report a higher loneliness level. They explained their results by 'The rich get richer' phenomenon. Namely, people who have many friends anyway make more friends on the net, whereas people who suffer from social problems are those who are likely to gain less from Internet interaction. However, most scholars hold that the Internet creates opportunities for the 'poor to get rich'. That is, the protected environment created by the Internet produces a situation in which people who cannot express themselves through the more traditional channels of communication find themselves able to do so on the net (Hamburger & Ben–Artzi, 2000; Maldonado *et al.*, 2001; McKenna *et al.*, 2002).

Research Objectives

Main Purpose

-compare the Personality characteristics the youth who use internet and do not use.

Research Hypotheses

- 1- Emotional instability people who use the internet more those who do not use.
- 2- Extraversion people who use the internet than those who do not use.
- 3- Openness people who use the internet than those who do not use.
- 4- Agree or adaptation people who use the internet than those who do not use.

Research Article

5- Conscientiousness people who use the Internet than those who do not use.

Research Spatial Domain

The spatial domain of the research was Tehran, and the population includes all students of the Science and Research University.

Research Period

Period of this research was during 2014

Research Methodology

This research is of descriptive type, and its study design is an ex-post facto (causal- comparative). The population includes all students of the Science and Research University. The size of the sample, which was selected using a relative stratified sampling method proportional to the population size, is 300 people according to Cochran formula.

To collect data, one questionnaire was used: standard questionnaire of personality traits also to analyze the data in two scopes of data, descriptive and inferential analyses with emphasis on the assumptions of statistical model T, two independent groups have attempted to analyze the data.

Table of Descriptive Variables

Table 1: The distribution of variables related to academic disciplines Degree

PHD			MA					Fields of study		
sampl	percent	Total	W	M	sampl	Percent	Total	W	M	
12	4	46	12	34	17	6	71	40	31	history
12	4	53	19	34	32	11	137	100	37	Physical education
18	6	75	49	26	85	29	355	303	52	Psychology
6	2	27	14	13	23	8	101	58	43	Communications
29	10	125	33	92	59	20	243	130	113	Geography
77	26	326	127	199	216	74	907	631	276	Total

Table 2: Distribution associated with age, marital status and place of residence

place of residence		marital status			age		
Unanswered	S-tehran	C-tehran	N-tehran	Married	single	M	W
1	69	81	149	93	200	114	186

Table of Variables

This tables shows the relationship between variables, components and indicators in this research which have been used in questionnaires.

Table 1: T two direct groups comparing analysis of emotional instability among users and un users of internet

Meaningful level	Freedomrank	T amount	deviation	average	levels	variable
0/01	300	7/24	9/72 4/90	35/13 28/69	user unuser	emotional instability

With emphasis on achieved amount of T quantities it bring up meaningful difference among all indices related to revenue from emotional instability among individuals who use internet and the persons who don't use (Hypothesis confirmation)

Research Article

Table 2: T two direct groups comparing analysis of openness among users and un users of internet

Meaningful level	Freedomrank	T amount	deviation	average	levels	variable
---	300	0/37	4/97 4/16	35/65 35/46	user unuser	openness

With emphasis on achieved amount of T quantities there is not up meaningful difference among all indices related to revenue from openness among individuals who use internet and the persons who don't use (Reject the hypothesis)

Table 3: T two direct groups comparing analysis of extraversion among users and un users of internet

Meaningful level	Freedomrank	T amount	deviation	average	levels	variable
0/01	300	-9/12	7/40 4/12	39/34 45/66	user unuser	extraversion

With emphasis on achieved amount of T quantities it brings up meaningful difference among all indices related to revenue from extraversion among individuals who use internet and the persons who don't use (Hypothesis confirmation)

Table 4: T two direct groups comparing analysis of agreeableness among users and un users of internet

Meaningful level	Freedomrank	T amount	deviation	average	levels	variable
0/01	300	-10/40	6/59 5/75	40/44 47/89	user unuser	agreeableness

With emphasis on achieved amount of T quantities it brings up meaningful difference among all indices related to revenue from agreeableness among individuals who use internet and the persons who don't use (Hypothesis confirmation)

Table 5: T two direct groups comparing analysis of conscientiousness among users and un users of internet

Meaningful level	Freedomrank	T amount	deviation	average	levels	variable
0/01	300	-5/64	7/94 5/92	42/87 47/45	user unuser	conscientiousness

With emphasis on achieved amount of T quantities it brings up meaningful difference among all indices related to revenue from conscientiousness among individuals who use internet and the persons who don't use (Hypothesis confirmation)

CONCLUSION

The research which studies the effect of internet on the personality traits of the youth is seeking to find answer to the question that: what is the function of internet in forming our behavior? And do they make changes in personality traits of youth?

The findings of the study indicated that introversion, emotional instability, lack of agreement and compatibility, and reduction of conscientiousness are accompanied with using internet. These findings are consistent to the results attained by some researches such as Moody, 2001; Auorenberg *et al.*, 2002; Shapiro, 2003; Bolenherio, 2005; and Davis, 2008; and are contrary to some other researches such as

Research Article

Haward and colleagues; Poininternet *et al.*; Hamborger and Artsy, 2001; Anitakombor and Lilianavas, 2008. To interpret such findings it can be said that internet as a social media having different capabilities may provide a pleasant and secure life for some people who were ignored in real world. This figurative space may be an escape for the individuals who suffer from some psychological problems and are afflicted with loneliness. Also it may satisfy their emotional and psychological needs. People are led to internet because of its high potential companionship, on line changed interactions models and also as a way to meet with the cases related to loneliness. Self-consciousness and social stress are reduced because of Anonymity and no face to face communication in the internet which in turn facilitates socialized behavior and forms friendly relationship for lonely individuals. People who were not succeeded in real interrelationship, now without disclosing faces, can develop vast relationships and reveal their feelings.

Entering people routine life vastly, internet should be understood in respect of its effect on the individuals. Since the short term and long term effects of internet have not been recognized yet, we should be cautious in how to collect these data and careful on the risks arising from these behaviors.

Technology designing and policy making to avoid negative consequences depend on complete understanding of the mechanisms by which using internet affects the psychological safety. Most of the public policy on internet has focused on its potential advantages as an information and media source in trading business. We can improve this unbalancing through technology and policy making to support the use of internet in interrelationships.

The main point here is that positive behaviors may be improved through understanding the processes which cause internet behavior and designing instruments and situations appropriately. Similarly, bad designing may lead to some negative consequences. Also it is clear that many psychological processes arising from negative consequences caused by using internet are necessary to attain positive results. According to this, it is useless to divide internet into positive and negative consequences; although it may help to show the connections between them. What is important to distinguish here is that some steps in reducing negative aspects of using internet may cause to harm its positive aspects.

REFERENCE

- Amichai-Hamburger Y (2002).** Internet and personality. *Computers in Human Behavior* **18**(1) 1–10.
- Amichai-Hamburger Y, Fine A and Goldstein A (2004a).** The impact of Internetinteractivity and need for closure on consumer preference. *Computers in Human Behavior* **20** 103–17.
- Campbell J (1971).** *The Portable Jung* (New York: Viking).
- Ehrenberg A, Juckes S, White KM and Walsh SP (2008).** Personality and selfesteem as predictors of young people’s technology use. *Cyberpsychology & Behavior* **11**(6) 739–741.
- Ellison NB, Steinfield C and Lampe C (2007).** The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, **12**(4) 1143–1168.
- Eysenck HJ and Eysenck SEG (1975).** Manual: Eysenck Personality Inventory. *San Diego: Educational and Industrial Testing Service.*
- Gil de Zúñiga H and Valenzuela S (in press).** Disentangling facebookers: A snapshot of social network site users in the United States. In: *Facebook and Philosophy*, edited by Wittkower D (Open Court Publishing).
- Gil de Zúñiga H, Puig E and Rojas H (2009).** Weblogs traditional sources online & political participation: An assessment of how the Internet is changing the political environment. *New Media & Society* **11**(4) 553–574.
- Gil de Zúñiga H, Veenstra A, Vraga E and Shah D (in press).** Digital democracy: Reimagining pathways to political participation. *Journal of Information Technology & Politics* **7**(1).
- Gosling SD, Rentfrow PJ and Swann WBJ (2003).** A very brief measure of the big five personality domains. *Journal of Research in Personality* **37** 504–528.
- Hamburger YA and Ben-Artzi E (2000).** The relationship between extraversion and neuroticism and the different uses of the Internet. *Computers in Human Behavior* **16** 441–9.

Research Article

- John OP and Srivastava S (1999).** The big five trait taxonomy: History, measurement, and theoretical perspectives. In: *Handbook of Personality: Theory and Research*, 2nd edition, edited by Pervin LA and John OP (New York: Guilford) 102–138.
- Jones S and Fox S (2009).** Generations online in 2009. Pew Internet and American Life Project. Available: <<http://www.pewinternet.org/Reports/2009/Generations-Online-in-2009.aspx/>> [Accessed on 19.03.09].
- Jung CG (1939).** *The Integration of the Personality* (New York: Farrar & Rinehart).
- Kraut R, Kiesler S, Boneva B, Cummings JN, Helgeson V and Crawford AM (2002).** Internet paradox revisited. *Journal of Social Issues* **58** 49–74.
- Leana CR and Feldman DC (1991).** Gender differences in responses to unemployment. *Journal of Vocational Behavior* **38** 65–77.
- Lenhart A (2009).** Adults and social network Web sites. Pew Internet and American Life Project. Available: <<http://www.pewinternet.org/Reports/2009/Adults-and-Social-Network-Websites.aspx/>> [Accessed on 19.03.09].
- Levin I and Stokes JP (1986).** An examination of the relation of individual difference variables to loneliness. *Journal of Personality* **54** 717–33.
- Maldonado GJ, Mora M, Garcia S and Edipo P (2001).** Personality, sex and computer communication mediated through the Internet. *Anuario de Psicologia* **32** 51–62.
- McCrae RR and Costa PT (1997).** Personality trait structure as a human universal. *American Psychologist* **52** 509–516.
- McKenna KYA and Bargh JA (2000).** Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality & Social Psychology Review* **4**(1) 57–75.
- McKenna KYA, Green AS and Gleason MJ (2002).** Relationship formation on the Internet: what's the big attraction? *Journal of Social Issues* **58** 9–32.
- Ptacek JT, Smith RE and Dodge KL (1994).** Gender differences in coping with stress: when stressor and appraisals do not differ. *Personality and Social Psychology Bulletin* **20** 421–30.
- Raacke J and Bonds-Raacke J (2008).** MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior* **11**(2) 169–174.
- Ross C, Orr ES, Sisc M, Arseneault JM, Simmering MG and Orr RR (2009).** Personality and motivations associated with Facebook use. *Computers in Human Behavior* **25**(2) 578–586.
- Stokes JP (1985).** The relation of social network and individual difference variables to loneliness. *Journal of Personality and Social Psychology* **48** 981–90.
- Valenzuela S, Park N and Kee KF (2009).** Is there social capital in a social network site? Facebook use, and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication* **14**(4) 875–901.
- Watson D and Clark LA (1984).** Negative affectivity: the predisposition to experience aversive emotional states. *Psychological Bulletin* **96** 465–90.
- Zywica J and Danowski J (2008).** The faces of Facebookers: Investigating social enhancement and social compensation hypotheses. *Journal of Computer-Mediated Communication* **14**(1) 1–34.