

Study of Loneliness and Identity Styles among Internet Addicted Students in Faculty of Engineering, Islamic Azad University, Central Tehran Branch

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Abstract

Application of new technologies is an obvious effects of today world. Internet as a newborn tool of contemporary technology world, plays an important role in change of people's life. Internet now is a necessary tool of modern era which makes it an inevitable component of everyday life. The present study aims to investigate level of sense of loneliness, identity styles and Internet Problematic Use among students. This is a descriptive survey study whose statistical population is all of the students of Technical - Engineering Faculties of Islamic Azad University in 1394-95 (2015-2016) in Tehran, using Multistage Cluster sampling method. 3 questionnaires , sense of loneliness, identity styles and internet addiction, have been selected for gathering data. Data analysis have been carried out by SPSS software. The results indicate that sense of loneliness is higher than two other variances which in turn end in internet addiction and identity disorders.

Keywords:

Sense of Loneliness;
Identity Styles;
Internet Addiction;
Normative Identity;
Informational Identity;
Avoidant Identity.

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1- Introduction

Along with wide access to internet, we are witnesses of a newcomer addiction, specific to the Information Age: Internet Addiction. Like other kinds of addiction, internet addiction comes with symptoms including anxiety, depression, tantrum, irritation, compulsive thoughts, or web related fantasy. Addicted ones, especially adolescents and young adults, at the same time with expanding virtual relations, experience shrinking of relationship scope in real world [1].

Loneliness is not merely being alone; rather it can be defined as an unpleasant cognitive state causing by perception of difference between desirable relationships and available ones [2]. It is proposed that sense of loneliness plays an important role in development of internet addiction, which makes it necessary to investigate about relation of this variance to internet addiction. Some researchers suggested that sense of loneliness is one of the best antecedents of internet addiction, but few experimental studies have been dedicated to this issue. Most of literature indicates that internet addiction leads to sense of loneliness, whilst others know internet addiction as the main cause of sense of loneliness. So there is not clear study results about the issue [3].

On the other hand, identity styles are of great importance in developing and expanding internet addiction [4]. Still there are scant researches examining the relation between identity styles and internet addiction. Some findings of this scarce body of literature has yielded the result that there is a relation between identity styles (informational, normative and commitment) and internet addiction. Furthermore there is a significant differences between identity style of normal and addicted ones. So one can consider identity styles as risk factors of internet addiction [5].

Identity is an intricate aspect of human nature. Adolescents and youth through internet and media know some of their important aspects including identity. Internet setting provides youth with opportunity to satisfy their need of expressing,

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discovering and examining their identity. A positive aspect of online activities is that they encourage adolescents to argue about everything related to them and their identity. Another outcome is to provide individual with an opportunity to express oneself in different ways. It makes it possible to change biography, age, personality, physical appearance, and even gender. In fact, here, there is a possibility to have two identity at the same time: real identity and virtual identity. [6].

So, one can say that information technology and Internet are able both to shape individual's identity and destroy it. Some studies have shown positive influences as well. For example [7] it has been reported that more compatible 13-14 year old adolescents, are more likely to use social media and websites at the age of 20-22. On the other hand, some studies have shown negative consequences. Whilst social media like Facebook can be a tool for self - discovery and developing identity, it may be a cause of shaping false identity and unreal identity, too.

Seemingly, students due to their age requirements and occupation, are subject to internet addiction such as chat room addiction, pornography, and online gambling which may put healthy relationship, wholesome feelings and consequently one's mental health in danger [8].

According to the above, it is clear that there is a relation between identity styles, sense of loneliness and internet addiction, but there are few experimental studies exploring their relations. So the present study aims to investigate identity style and level of sense of loneliness in internet addicted students of technical and engineering faculties of Islamic Azad University to gather more data regarding these variances and to know them better.

2- Theoretical Basics

2-1- Internet Addiction

Internet is a technical tool aimed to facilitate our everyday life; it is now an inevitable part of our life and number of its users is growing increasingly. Internet presents services like game and recreation, shopping and social media. Internet makes it faster and more convenient to access knowledge and information. But in return, it brings with itself, physical and social damages like fatigue, hostility, depression and sense of loneliness. Also it may end to educational problems, like lacking sense of time, educational failure, and problem in peer communication [9].

Many psychologists are doubtful whether it is appreciate to use addiction term to describe people spending a good deal of time using internet. Addiction is a phenomenon which from past to now, different societies have been familiar with its concept. Nowadays, along with gradual change of life style in parallel with scientific and technology developments, there is an undeniable enhancement of people's level of awareness regarding addiction issues and countless new addictions have been developed. Today internet addiction is considered as a common problem defined by inappropriate usage of computer and internet. Accessibility of internet is a growing phenomenon that day after day, attracts more users. Internet is present everywhere from home to school, workplace and even shopping centers. Among internet users, adolescents and youth are of greater number [10].

Internet addiction is defined with terms like "internet problematic usage", "internet addiction disorder" and "quasi - disease misuse of internet ". Internet addiction includes chat room addiction, pornography and online gambling which put healthy relations, feelings and ultimately psych and mind at risk of destruction. Though Internet by itself is a safe tool, abuse and misuse may end to internet addiction; a phenomenon followed by hazards for social mental health [11].

Internet makes it convenient to gain information and communication with others. However, without proper controlling of its usage, it may influence on daily activities, emotional states, and family member communications. Lack of control on level of internet usage is called "internet problematic usage", "internet addiction disorder", "quasi - disease misuse of internet "and "internet addiction" as well. Internet addiction is distinguished with mental engagement by internet usage, repetitive thoughts about limiting and managing its usage, disability to restrain tendency towards internet usage, extreme usage in spite of damages to different functional levels, dedicating more time to internet gradually, internet seeking when not available, incontrollable disposition to access internet [2].

2-2- Sense of Loneliness

Though sense of loneliness is of vast meaning, there is little body of literature about it [12]. Recently it became more in focus. Sense of loneliness is identified as a risk factor for general health [13]. Sense of loneliness is a destructive and undesirable feeling. If an individual choose to be alone, it does not lead to sense of loneliness which is a prevalent and stressful feeling [14].

Sense of loneliness is a complicated psychological construct which is the target of many debates since ancient philosophy. In past, loneliness was perceived as a positive concept which was defined as volunteer withdrawal from routine life activities for sake of a sublime purpose (e.g. reflection, mediation, connection to God). Nowadays, psychological literature does not have a positive attitude about sense of loneliness. It is considered as experienced or

perceived state of lack of relationship with others and it consists of main elements like undesirable feeling of loss, missing companion, negative and unpleasant aspects of breaking relations or loss of quality level of relationship [15].

A good deal of studies have pointed to Weiss as a researcher who conceptualized sense of loneliness. In 1973 he divided sense of loneliness to 2 parts: social isolation and emotional isolation. Other people mentioned as theorizing sense of loneliness and its treatment, are Peplau and Perlman (1982). In other words, in 1970s, researches paid little attention to sense of loneliness; it was only after 1970s that sense of loneliness came to attention [13].

2-3- Identity Styles

Most recent theory in field of identity is Berzonsky's identity styles theory which is a cognitive - social model. The cognitive- social processing model studies strategies and processes which people use or avoid to develop their identity. According to this model, identity is a cognitive structure and personal referential framework used to interpret experiences and information related to themselves and others along with responding to questions about concepts of meaningfulness and purpose of life. This model is based on building; meaning that people play a proactive role in building and improving their perception of who they are. Adoptive behaviors when not successful, foster needs of revising and improving some dimensions of identity. Accordingly, identity development is a dialectical interaction among processes manipulated by identity structure and coping processes led by physical and social contexts of individual's living environment. Identity styles are pointing to strategies and processes of encountering with identity conflicts. In other words, identity style is a relatively preferred mode of identity problem solving and processing self - relevant information [16].

Berzonsky (1989) introduced social - cognitive view or self -made theories (self- reflective) as identity styles which are ways of information processing and coping with identity crisis [17]. Berzonsky identity theory emphasizes on a more cognitive view of identity development. Berzonsky recognize identity development as an outcome of continuous interaction between physical and social world (Swenez et al, 2005). Identity style offers a tool for measuring people approaches toward identity development and is the first step toward knowing how identity styles are applied as a medium for treatment interventions [18].

Berzonsky and Cook (2005) believe that identity style indicates strategies which a person uses for decision making, problem solving and examining one's own information [19]. Identity style is a way for identifying and examining identity- relevant information [18].

Informational identity style: this style indicates being open minded and seeking data from different resources [18]. People with this identity style in case of decision making, examine different dimensions of an issue. They are hardworking, self - regulating, of high self- esteem, self - introspective, with internal locus of control, self - aware, capable of problem solving and possessing complicated cognitive skills [19]. Adolescents with informational identity style, are critical towards their own concepts, open to new information and in case of facing with incompatible self - relevant information, revise some aspects of their identity; they own a distinguished and integrated sense of identity. High level of cognitive complication, problem focused coping strategies, independence and cognitive consistency are among their characteristics. They are interested in learning new things about themselves and trying to improve themselves according to feedbacks. Research findings have shown that informational identity style is companion with self - insight, open - mindedness, empathy, adoptive self - regulation, high commitment level and successful identity. They tend to describe themselves by individual traits like personal values, targets and standards [20].

Normative identity style: these are people who without undergoing heuristic period and identity crisis, merely by imitating significant others and authorities, become committed; they guard their commitments rigorously and fanatically [19]. Normative style means deciding about one's identity according to significant others' expectations [18]. They are closed to any information threatening their beliefs and values. They vigorously protect their identity commitments with a lot of efforts. They are relatively committed, possessing definite educational goals and strong conscience. However, they show high scores of conservatism and low scores of openness toward values and actions [20]. They prefer to define themselves by community traits like religion, family, and nationality. They are not flexible, with low independence, weak individuality, and less emphasizing on their social and cognitive traits [19].

Avoidant or Diffuse identity style: they usually lack decision making ability, they make decisions carelessly with a great deal of delay. Their locus of control is external and their behavior is emotional and inconsistent. They are in a state of uncertainty and indeterminacy avoiding doing anything in their life. Low self-esteem, negative self-image and lack of self - regulation are among their characteristics. The diffuse identity style means avoiding identity decision making [18]. They avoid involving in personal conflicts and identity related issues. They continuously adjusting themselves with common social demands, without revising their identity. They often apply maladaptive coping mechanism, feeling ashamed and showing adjustment disorders. They show high scores of psychoneurosis and low scores of compatibility and conscience. People with diffuse identity style define themselves by social traits like reputation and popularity [20].

Many studies have been conducted to investigate relation of identity styles with adult outcomes (e.g. general adoptability, educational success, quality of interpersonal relationship, and decision making). Results show that

typically, better outcomes belong to informational style; lower outcomes belong to diffuse style; and outcomes of normative style are contradictory [18].

Berzonsky (2003) consider commitment as a targeted referential framework which is applied to examination of behaviors and feedbacks. This framework engages to control, evaluate, and organize. Commitment makes clear criteria, values, goals and beliefs which people are willing to keep them. As a result people feel purposeful and oriented.

3- Methodology

Given the subject matter, this is a descriptive survey study. Its statistical population includes all undergraduate students of technical - engineering faculties of Islamic Azad University from 2015 to 2016. Sampling was carried on by multistage cluster method in a way that first, a sample of 5 were selected from all technical - engineering faculties of Islamic Azad university in Tehran. Then a sample of 30 classes were selected. Students of selected classes were presented by questionnaires to answer. Young's Internet Addiction 20 -item Test questionnaire using a 5-point Likert scoring scale was applied. (1= rarely, 2= occasionally, 3= frequently, 4= often, 5= always). For measuring sense of loneliness, Russell, Peplau and Cutrona's questionnaire was used consisting of 28 items by 4 -answer options. Each item was rated from 1 to 5, respectively from completely disagree to completely agree. Furthermore, Berzonsky identity styles scale was used consisting of 40 questions scored based on a 5-point scale (1= completely disagree, 2= disagree, 3= somewhat agree, 4= agree, 5= completely agree). For data analysis, drawing diagrams and tables of findings, SPSS software was applied.

4- Results

Statistical indicators related to identity styles (informational, normative, diffuse), sense of loneliness and internet addiction of sample population were evaluated. Table 1 shows statistical indicators and descriptive data.

Table 1. Statistical indicators of identity styles and internet addiction scores

Scales	Central orientation index			Dispersion index			Distribution index	
	Mode	Median	Mean	Scope of change	Variance	Standard deviation	Slope coefficient	Elongation coefficient
Internet addiction	39	40.50	41.85	11.57	133.99	61	0.606	0.197
Sense of loneliness	48	48	49.40	31	30.47	5.52	0.078	-0.111
Informational identity style	37	37	36.85	33	32/19	5.67	-0.068	0.174
Normative identity style	28	30	29.74	26	21.15	4.59	-0.276	0.151
Diffuse identity style	28	27	26.62	29	20.57	4.53	0.099	0.469

According to Table 1, mean of internet addiction is (41.85), sense of loneliness is 49.40, informational identity style is 36.85, normative identity style is 29.74, and diffuse identity style is 26.62. Given that, it is obvious that there is no significant difference among mode, mean and median of each variance. Also, to display data deviation of each variance, a diagram has been drawn, which is as below:

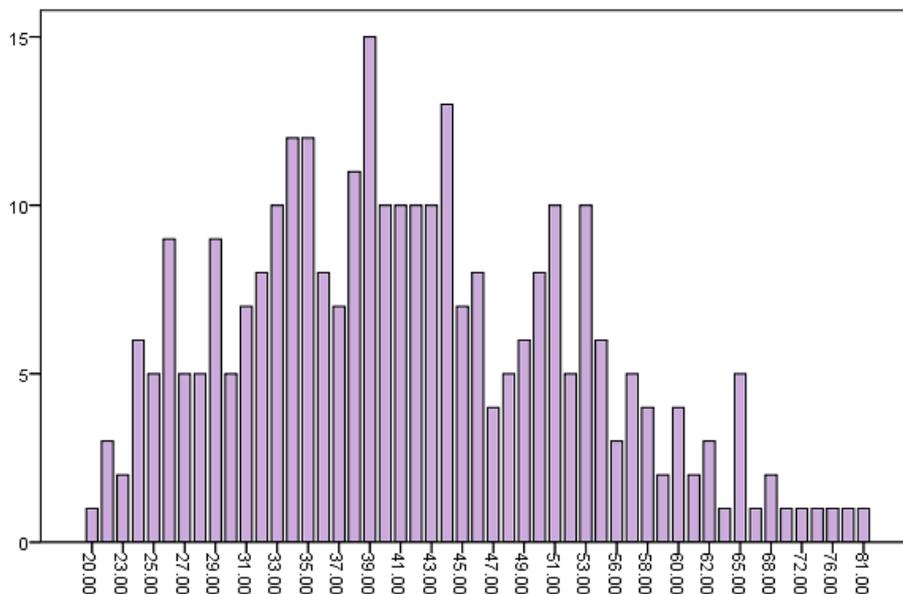


Figure 1. Distribution of students' internet addiction scores

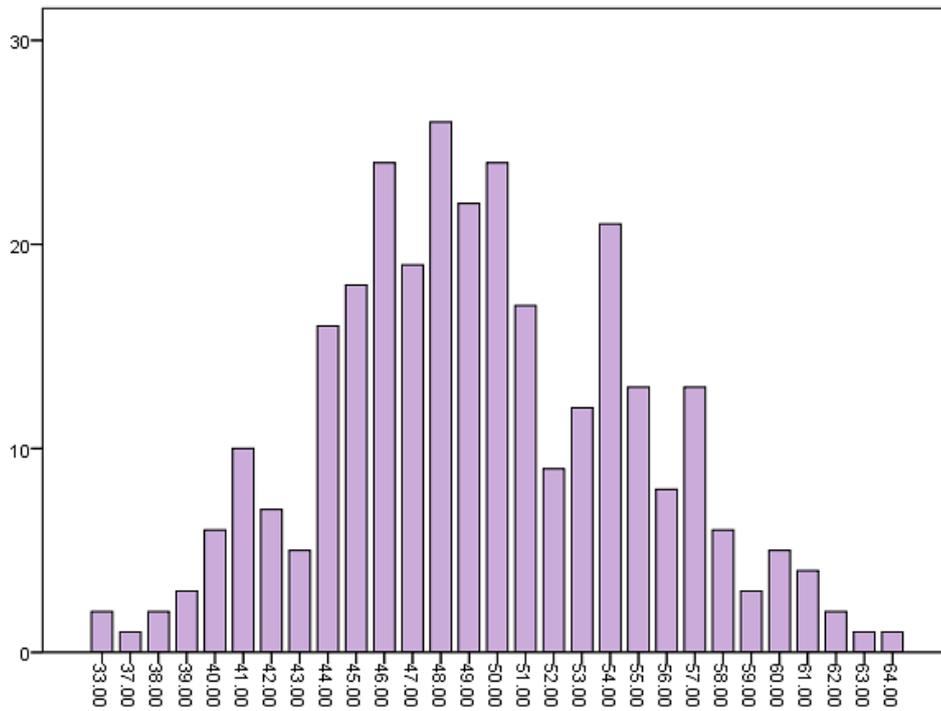


Figure 2. Distribution of students' sense of loneliness scores

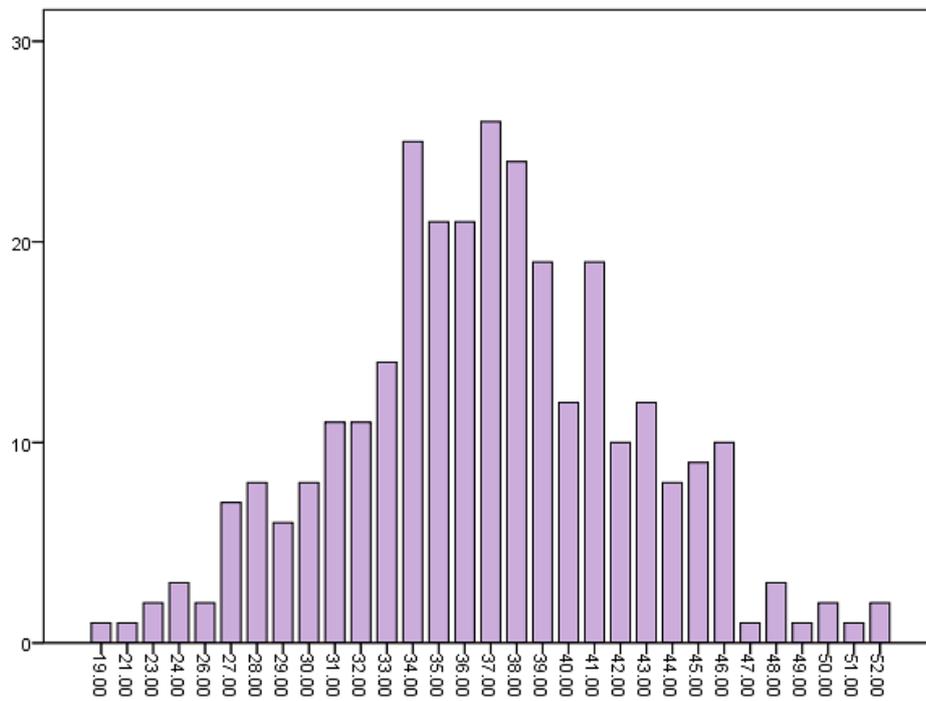


Figure 3. Distribution of students' informational identity scores

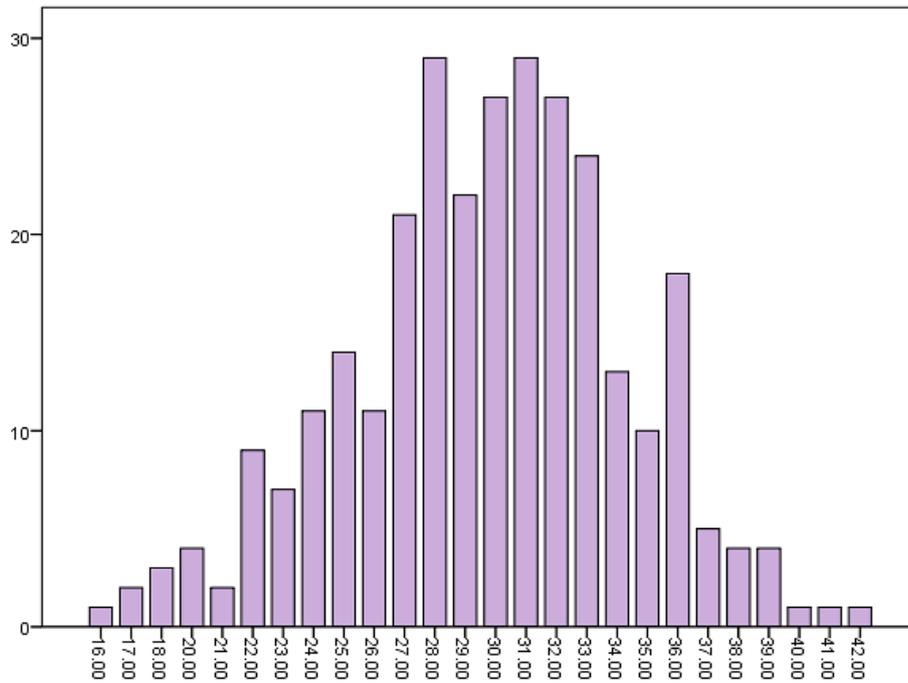


Figure 4. Distribution of student's normative identity scores

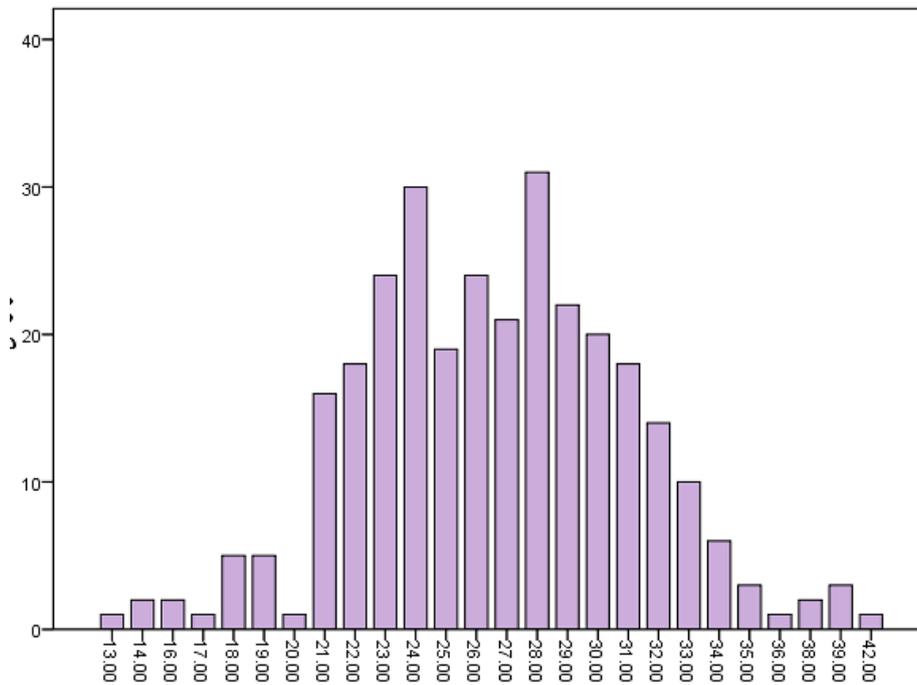


Figure 5. Distribution of student's diffuse identity scores

5- Conclusion

Computer addiction as a health problem only recently came to view. It is categorized as psychological disorders and gradually we are witness of growth of number of clients referring to psychiatric clinics for seeking help. Internet is not an enemy but people become dependent to it because of numerous reasons such as it disconnects them from real life. Given necessity of the subject, this study, was conducted to investigate level of sense of loneliness and identity style of internet addicted students. Results of data analysis show high percent of sense of loneliness; so one can say that they rely on virtual world to be able to express themselves by various identities. Those who feel lonely are of low self-confidence about their beliefs, and they avoid real and face to face communication. In addition findings indicate that identity styles are in a better status in compare to sense of loneliness and mean of identity styles are lower than mean of sense of loneliness. Normative and diffuse identity percents are low. Studies show that normative people are adoptive and responsible ones but they are intolerant in face of ambiguity, needy of strong structures and closed to information

challenging their values and belief system. Berzonsky et al. noted that informational students in comparison with normative and diffuse ones show high scores in scales of educational autonomy, self - reliance, effective life management skills, respecting to and tolerating others, develop close relationships, emotional independence, and self - confidence.

6- References

- [1] Berzonsky, Michael D., and Linda S. Kuk. "Identity style, psychosocial maturity, and academic performance." *Personality and individual differences* 39, no. 1 (2005): 235-247.
- [2] Koyuncu, Tugce, Alaettin Unsal, and Didem Arslantas. "Assessment of internet addiction and loneliness in secondary and high school students." *J Pak Med Assoc* 64, no. 9 (2014): 998-1002.
- [3] Pontes, Halley M., Mark D. Griffiths, and Ivone M. Patrão. "Internet addiction and loneliness among children and adolescents in the education setting: an empirical pilot study." *Aloma: revista de psicologia, ciències de l'educació i de l'esport Blanquerna* 32, no. 1 (2014): 91-99.
- [4] Demirer, Veysel, Bahadır Bozoglan, and Ismail Sahin. "Preservice teachers' Internet addiction in terms of gender, Internet access, loneliness and life satisfaction." *International Journal of Education in Mathematics, Science and Technology* 1, no. 1 (2013): 56-63.
- [5] Dhir, Amandeep, Sufen Chen, and Marko Nieminen. "Predicting adolescent Internet addiction: The roles of demographics, technology accessibility, unwillingness to communicate and sought Internet gratifications." *Computers in Human Behavior* 51 (2015): 24-33.
- [6] Stefanescu, C. R. I. S. T. I. N. E. L., Vasile Chirita, Roxana Chirita, and G. A. B. R. I. E. L. A. Chele. "Network identity, the internet addiction and Romanian teenagers." In *Proceedings of the 4th WSEAS/IASME International Conference on Engineering Education*, pp. 24-26. 2007.
- [7] Cyr, Betty-Ann., "The Role of Communication of Technology in Adolescent Relationship and Identity Development", University of Central Florida. Master's Thesis. University of Central Florida, (2012).
- [8] Cecilia, Maria Rosita, Monica Mazza, Silvia Cenciarelli, Marta Grassi, and Vincenza Cofini. "The relationship between compulsive behaviour and internet addiction." *Styles of Communication* 5, no. 1 (2013): 24-31.
- [9] Cardak, Mehmet. "Psychological well-being and Internet addiction among university students." *TOJET: The Turkish Online Journal of Educational Technology* 12, no. 3 (2013).
- [10] Guan, Shu-Sha Angie, and Kaveri Subrahmanyam. "Youth Internet use: risks and opportunities." *Current opinion in Psychiatry* 22, no. 4 (2009): 351-356.
- [11] Koo, Hoon Jung, and Jung-Hye Kwon. "Risk and protective factors of Internet addiction: a meta-analysis of empirical studies in Korea." *Yonsei medical journal* 55, no. 6 (2014): 1691-1711.
- [12] Spira, L., and A. K. Richards. "On Being Lonely, Socially Isolated, and Single: Multiple Perspectives." *PSYCHOANALYSIS AND PSYCHOTHERAPY* 20, no. 1 (2003): 3-22.
- [13] Savikko, Niina. "Loneliness of older people and elements of an intervention for its alleviation." (2008).
- [14] Cosan, Deniz., "An Evaluation of Loneliness", *The European Proceedings of Social & Behavioural Sciences*, Vol 1, No 12, (2014): 103-110.
- [15] Morsünbül, Ümit. "Internet addiction in adolescence period: its relations with identity style and ruminative exploration." *Anatolian Journal of Psychiatry* 15, no. 1 (2014): 77-83.
- [16] Oguz, Ebru, and Ozlem Cakir. "Relationship between the Levels of Loneliness and Internet Addiction." *Anthropologist* 18, no. 1 (2014): 183-189.
- [17] Omoyemiju, Adeniyi Michael, and Folakemi Titilayo Fatoki. "Do parenting styles influence internet addictive behavior of undergraduate students in Nigeria." In *The African Symposium: An Online Journal of the African Educational Research Network*, 15 (1), pp. 3-11. 2015.
- [18] Kerpelman, Jennifer L., Joe F. Pittman, and Francesca Adler-Baeder. "Identity as a moderator of intervention-related change: Identity style and adolescents' responses to relationships education." *Identity: An International Journal of Theory and Research* 8, no. 2 (2008): 151-171.
- [19] Weinstein, Aviv, Laura Curtiss Feder, Kenneth Paul Rosenberg, and Pinhas Dannon. "Internet addiction disorder: Overview and controversies." *Behavioral addictions* (2014): 99-117.
- [20] Berzonsky, Michael D., Jan Cieciuch, Bart Duriez, and Bart Soenens. "The how and what of identity formation: Associations between identity styles and value orientations." *Personality and Individual Differences* 50, no. 2 (2011): 295-299.