Social Media and the Era of Internet Addiction

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ABSTRACT
Internet and mobile communication technologies had sink into the modern life and changed many of the habits. People do not memorize phone numbers or have phonebooks, use paper maps or check transportation schedules on paper anymore. Everything is online and available. Information search is easy and accessible not only on computer but also with smart phones, almost always and everywhere. Using internet for search or information gathering is just one aspect of using these communication technologies. Another dimension that internet evolved is entertainment and socializing purposes. People can chat, share, create content in different media types from music to video, play games and cluster around some common interest and even form communities. The social networks consume most of people’s time online. Checking e-mail, status updates, facebook or twitter becomes a crucial habit, which also transported to smart phones. Especially young population is so used to spend time online, not just work/study purposes but also for leisure, this becomes another part of their life. People tend to react absence of internet or mobile connection as a withdraw; and feels missing or empty when they can share their lives online through social media. This is no different than alcohol, drug, gambling or shopping addiction. People realize that it takes over the control of their time and life, try to control or cut back but somehow feel the urge to spend more time online. They lie about the behavior, or even feel the need to hide or use the social media as a tool to escape from the problems [1].

This study focuses on Turkey with its young generation dominated demographic structure, and aim to capture the picture of the internet and social media usage habits of younger generation. The internet usage, social media usage patterns and the main reasons and preferences are examined. The addiction level of a younger sample is tried to be captured and tried to be defined the mainstream addiction behavior patterns.

Keywords: Internet, Social Media, Social media addiction, Turkey, Turkish Internet Market

1. INTRODUCTION
Technology became an inseparable part of the modern life. Especially the communication technology advances shape the new form of life and even become the lifestyle for some people. Today, people are depended on computer and communication technologies for work and writing; depended on internet for searching, gaming, even some are depended on social media for socializing and self-expressing. With the latest innovations on software and hardware delivers the internet technologies to our smartphones and makes it available everywhere. Even though the innovation acceptance is not homogeneous in societies and differs in various social-economic and demographic groups, communication, internet and related technologies change and shape and finally mesh into our lives.

Although the internet technologies seems to make the modern life easier at first, personal and social problems also emerged by the changing lifestyle. Some of these behavioral changes have defined as “problematic internet use” (PIU) [2], while some sources preferred to define the change as “internet dependency” [3]. Defining internet over use as a disease like addiction [4] [5] [6] or as pathological internet use [7][8] is taking the internet’s role in modern life to a bit more concerning level.

This study is focuses on people’s internet and social media usage patterns and tries to understand the need of internet and social media use in terms of addictive behavior.
2. LITERATURE REVIEW

With new technologies like internet, people tend to have different attitudes to accept and adapt the technology in to their lives. Accepting and adapting a new technology could differ from different demographical and socio-economical groups to the others [9]. Internet usage changes the structure of personal behavior and also reflected on the consumer behavior itself. The subject is not evaluated as just using a new technology and acceptances or adaptation any more. The change of social behavior or consumer perspective is also a main topic. The literature usually focuses on the increasing and mostly the negative affect on the behavior on personal level [10] [11] [12].

The literature of internet changes the dimension from acceptance to addiction a while ago. Addiction is the state of person towards some outside stimuli with withdrawal, tolerance and extreme focus in activities with high level of time spend and losing interest on other activities and having social and physical problems dependent on the stimuli [12]. The physiology literature adapted internet and social media usage behavioral change as an impulse control disorder, which leads people to periodically check and spend increasing time online [5]. Even though the behavior is defined as a mental disorder, some resource define the behavior as “over use” of internet rather than an “addiction” [2] [5].

The addiction of internet is also needs to be defined. Literature could refer to the need of acceptance, anonymity, information search need, or the computer usage behavior as the source of addiction [13][5]. Liu and Kuo links internet addiction to parent and peer problems [14], while Kardefelt-Winther [15] refers to avoiding problems and focusing on feeling better. Internet addiction also has the addictive behavior has classical symptoms like avoiding problems, feeling better with the behavior and even lying about the behavior, repeating the behavior and cannot stop the behavior and increase time/energy usage for the behavior [1].

Young also agrees the definition of addiction should be examined in the different dimensions of addiction. Addiction to the computer games are examined under the need of gaming as a class of addiction. Addictive behavior of web surfing is linked with information need and also named as information overload. The compulsive behaviors over internet is also examined like online shopping addiction or online gambling and named as net compulsion. Another addictive behavior of online pornography is accepted as a part of sex/cybersex addiction. Some group of people develops an addictive behavior of online relations which could be named as cyber-relationship addiction [1].

Social network or social media gets more importance of internet usage time. One of the most important three activity online in Turkey is social media usage [16] with web surfing and communication. Uses and gratifications theory explains that the new way of communication is not just between one people to another but also between groups and peers unlike before [17]. Social media allows people to have the freedom to be anonymous, create their own profile to communicate and even create new societies [18] [19]. With internet and mobile technologies, social media usage is also becoming a new wave of internet addiction because of so many reasons from feeling better with peers to avoiding problems depending on the social media offerings, and specifically differ for different social media types like facebook or twitter [20] [21].

This study focuses on an Emerging market of Turkey with increasing young population with high technology adaptation (89.7% of cellular phone coverage per population and average of 74.3% of internet penetration rate by 2013 [16]). Studies show young population is more eager to try and adapt internet and mobile technologies and most of the studies focuses on younger population rather than older in this area [22] [23] [24] [25] [26] [27] [28] [29].

3. RESEARCH METHODOLOGY

Aim of this research is to understand and evaluate the internet and social media usage patterns of Turkish users (especially the younger generation). Addition to the demographic and internet usage pattern questions, the internet addiction and social media addiction scale is adapted and used.

The internet and social media addiction scale is developed from Young’s [5] addiction measurement open ended questions. The questions are transformed into internet and social media usage behavior in 5 point, 37 item Likert scale (1 totally disagree-5 totally agree), in order to allow the participants to evaluate their own situation more easily then open ended questions. The dimensions of avoiding problems, lying, need of anonymity and happiness of sharing are included by the previous studies. The adapted version of the scale tested with 60 volunteer and some phrases are reformulated in order to
achieve a better level of understanding by the participants. In order to capture a realistic view of the sample, the survey is conducted via internet through a 2-week period in March 2014. The online survey structure is uploaded online and the links are shared through social media like twitter, facebook etc. and through mailing groups. Surveys are completed average 8-10 min. each.

4. RESULTS

For this study, 259 participants are reached, after deducting of inconsistent surveys the total number of 255 is used for final evaluations. Participants are asked to answer questions about their own internet usage behaviors even though the addiction level behaviors are known to be misrepresented by the addict, these questions are asked as the average evaluation and before the addiction measurement scale.

Participants report to use internet at the average of 6.47 hours a day (std. dev. 3.31). The average usage period of internet was 11.39 years (std. dev. 7.47). The participants state laptop computers are the most frequently used device for internet connection (49.8%) followed by desktop computers (22.7%). “Following social media” is the most important reason for internet usage (21.6%), followed by “data search” (19.6%) and “content creation over social media” (17.6%). The fourth important reason seems to be “business purposes” with 15.3%.

The demographic profile of the sample is also examined. 52.2% of the participants are male. The average age is 19.18 (std. dev. 6.02). The majority of the participants have undergraduate degree (52.2%) and the average household is 4 people. The two highest income groups are; 2001 TL- 3000 TL (with 26.7%) and 1001 TL-2000 TL (with 18.9%).

All of the participants declare at least one social media website (such as facebook or twitter) to be their first three website whenever they got online. To be able to see a better picture of the addictive profiles of the participants; a cluster analysis is used after a factor analysis for the internet and social media addiction scale. Cronbach alpha is found 0.933 for 37 item scale.

The factor analysis (principal components and VARIMAX rotation is used) results show 9 factors with 71.56% total variance explained. (One item removed from the analysis, since gives less than 0.04 loading to any of the factors, Cronbach alpha remains 0.933 for the 36 itemed scale). KMO value 0.856 which indicates the scale is adequate for the factor analysis.

The dimensions defining internet and social media addiction are grouped under; need for continuous connection, online time usage, avoiding personal problems by using internet, happiness of online sharing, real life relationships, social media usage behavior, internet usage behavior, lying behavior and need of anonymity. (See appendix 1)

K-mean cluster analyses are conducted with 3, 4, 5 and 6 cluster groups. The best fit for group differences and group sample size is captured with 3 cluster. Demographical differences for the clusters are also examined to establish a full profile of the clusters.

Cluster1: Basic Internet Users (n=94, 36.9%)
This cluster is using social media at the lowest rate. The main reason for using internet is work and data search. This cluster feels even less concern about their online time or continuous connection compared to other clusters. This group seems to use internet because the conditions rather than preference. Naturally does not show, addiction, time spending, lying or happiness of sharing kind of behavior. Average age of this group is more than 20.

Cluster2: Internet & Social Media Users (n=124, 48.6%)
This cluster consists of people who are using internet continuously and keen on their continuous connection and their internet time. This cluster also reached to a level that they could use internet and social media for happiness of sharing where they are, what they are experiencing and avoid some of their problems. However this group would like to feel that online interaction should not take over their life and their real social life. Social media connection is not absent but not the first priority. Lying behavior or anonymity is not that important for their internet usage. Average age of this group is almost 19 and comparatively younger than cluster 1.

Cluster3: Social Media Addicts (n= 37, 14.5%)
Social media addicts, are online not because other reasons only, they are attached to internet and social media. The continuous connection and internet usage potential are higher followed by online time spending and happiness of sharing, avoiding problems. Lying behavior is reported to be low, yet again greater than the other clusters. This group is significantly higher from the others by level of education and income level (sig. = 0.048, sig. =0.035). Social median usage, anonymity, sharing and negative influence of internet and social media
over real social life is significantly higher than other cluster. This cluster’s average age is the lowest and about 18. This group also prefers smartphones or tablets more than the first two clusters.

<table>
<thead>
<tr>
<th>Final Cluster Centers</th>
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<tbody>
<tr>
<td>Cluster</td>
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<tr>
<td>Continuous connection</td>
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<td>Online time usage</td>
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<td>Avoiding Problems</td>
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<td>Happiness of Sharing</td>
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<td>Real Relations</td>
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<td>Social media usage</td>
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<td>Internet Usage</td>
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<tr>
<td>Lying</td>
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<td>Anonymity</td>
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5. CONCLUSION
The concept of addiction could be evaluated as an extreme word for intensive internet and social media usage for some people. But the younger generation seems to have a complete different level of attachment to mobile and internet technologies. This study therefore focused on the behavior in an addiction point of view and tried to understand the internet and social media user’s characteristics.

The three cluster defined by their addictive behavior patterns, the most larger group is internet and social media users while the following group resists to pass to the social media era. Even the smallest group in highly active and developing addictive behavior towards technology, the study results show that the younger, educated and high income group has the highest tendency to accept, adapt and get addicted to the internet and social media.

Need of continuous connection and internet usage time increasing behavior is the highest characteristics for all the groups. Even though over 38 hours per week considers as addictive behavior, none of the clusters have reached to that level yet [14]. Addictive parameters like happiness of sharing, avoiding problems or lying are relatively lower for the internet and social media users but none addictive groups.

This study results support the existing literature which indicate problem avoiding or trying to feel better is an important indicator of addictive profile [14] [15]. Even through the addictive profile is not the main stream, it has a potential to be adapted by larger groups as the diffusion of technology increases by time.

For future studies, it might be helpful to see the social media types and addictive difference between different social media addictive groups. Also a larger and demographically different group may show the addictive or increased adapted behavioral changes in the society.

Social media addicts could create a potential for mobile and social media applicant, and real customer data would give better understanding about their behavior when measure in real time by big data and data mining applications.

6. REFERENCES
### 7. APPENDIXES

#### Appendix 1: Rotated Component Matrix (VARIMAX Rotation)

<table>
<thead>
<tr>
<th>Component</th>
<th>Continuous connection</th>
<th>Online time usage</th>
<th>Avoiding Problems</th>
<th>Happiness of Sharing</th>
<th>Real Relations</th>
<th>Social media usage</th>
<th>Internet Usage</th>
<th>Lying</th>
<th>Anonymity</th>
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</thead>
<tbody>
<tr>
<td>I feel lost without internet connection</td>
<td>.872</td>
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<td>I feel anxious without internet connection</td>
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<td>I don’t know what to do when I don’t have internet connection</td>
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<td>I feel like I miss something unless I connect to Social media frequently</td>
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<td>I feel anxious unless I control my social media accounts frequently</td>
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<td>I got my smartphone because I want to be able to check my social media accounts everywhere</td>
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<td>I think I should spend less time online</td>
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<td>I am trying to control myself about being online</td>
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<td>.839</td>
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<td>I am trying to limit my time online</td>
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<td>.806</td>
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<td>I usually spend more time online then I anticipated</td>
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<td>.621</td>
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<td>I usually don’t realize how much time I spend online</td>
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<td>I want to be online when I feel unhappy</td>
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<td>I want to be online when I am troubled</td>
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<td>I use social media to avoid my problems</td>
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<td>.734</td>
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<td>I use internet to avoid my problems</td>
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<td>I use internet to avoid my responsibilities (school, work etc.)</td>
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<td>I feel happy when people “like” my location check ins</td>
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<td>I want to share every interesting thing I do or place I been to</td>
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<td>I feel more like sharing when people “like” my shares</td>
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<td>I like to increase the number of friends/followers over social media</td>
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<td>I am aware that I am sharing so many personal details about my life online</td>
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<td>My relationship with my friends had weakened because of internet</td>
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<td>I feel like I can spend enough time with people I care about because of internet</td>
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<td>My relationship with my family had weakened because of internet</td>
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<td>My work/school performance decreases because of social media</td>
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<td>I am aware that I am spending more time on social media</td>
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<td>Even I am online, just not to show people around me that I am almost always online, I seem like offline on social media</td>
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<td>I think I should spend less time on social media</td>
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<td>I am using internet more than it is necessary</td>
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<td>I feel like I am spending too much time online</td>
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<td>I don’t feel satisfied when I use internet less now</td>
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<td>People around me complains that I spend so much time online</td>
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<td>I lied to people around me (friends/family/therapist etc.) about my frequency of using internet</td>
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<td>I lied to people around me (friends/family/therapist etc.) about my time frame been online</td>
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<td>I need to speak up my thoughts online by using a nick name which I can't say in my real life</td>
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<td>I like to be included to strangers life as a follower over social media</td>
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