Cyberspace Psychopathology

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Abstract. The authors, after an initial description of the “Internet phenomenon” and more specifically concerning the psychological and psychopathological risks related to its use, propose a series of unpublished papers on this theme, developed during the last year.

Keywords. IRP, Internet Related Psychopathology, addiction, assessment.

Introduction

It was around 10 years ago when we studied the so-called Internet Addiction for the first time [1]. Since then, the “Queen of the Nets” spread at global level by becoming the best mean of communication among all the others. From one side, its spreading increased scientific knowledge related to the Net psychopathologic aspects and from the other this phenomenon made it possible to obtain any kind of information from it.

As conventionally agreed, we will use the expression “Internet Related Psychopathology” (IRP) in order to indicate a series of online disorders and behaviors (cybersex addiction, cyber relationship addiction, muds addiction and so on) [2].

1. Twenty-eight definitions for a disorder

The very first computer addiction cases appeared already in the 70’s and 80’s [3]. It is obvious that those kinds of problems were related to the PC use-abuse and not to Internet, since it did not exist at that time.

It was the American psychiatrist [4], the first scholar who assumed this “illness,” who defined this phenomenon as Internet Addiction Disorder. He used the web to edit all relative diagnostic criteria with a provocative purpose. Since then, in order to describe this syndrome, several definitions were created in the scientific field. These definitions are as follows: Internet Addiction [5], Internet Dependency, [6], Compulsive Internet Use [7], Compulsive Computer Use [8] etc.

Similarly to the Chinese boxes, IRP can be intended as a smaller subset of a bigger problem that, on the basis of the specific addiction object (see the terminological table), can be split up into Cybersexual Addiction, Cyber Relationship Addiction, Muds Addiction, Compulsive Online Gambling, Compulsive Online Shopping, Information Overload Addiction, EBay Addiction, and Trading Online Addiction [5].

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Lavenia and Marcucci [9] perform a further distinction between Cybersex Addiction and Cyberporn Addiction, by assigning to the first type of addiction a sexual interactivity (man-machine-man system) that is completely absent in the second type of addiction (man-machine system).

In his cognitive-behavioral pattern, Davis [10] suggests to use the term Specific Pathological Internet Use (opposing to Generalized Pathological Internet Use) in order to identify any specific form of online addiction. As previously stated, the authors of this article proposed the acronym IRP, which stands for Internet Related Psychopathology.

We suggested a further definition in order to underline the “exhilarating” aspect of the Net. Indeed, with the word Retomania, we want to specify a kind of “almost-maniacal” exaltation, culminating into dissociative remarkable phenomena [11,12].

Carretti offers a good remark by explaining the Video Display Dissociative Trance, as provided by the DSM. He confirms that it is a disorder induced by technology and shows a clinical picture that can be related to an intense Internet intoxication [13,14].

2. Diagnostic criteria

Historically, IRP has been diagnosed by using differing assessment criteria. In 1996, Young was the first researcher who studied the disorder by proposing diagnostic criteria for Internet Addiction Disorder [5]. According to Young, it was possible to identify formal aspects of the addiction, such as tolerance, abstinence, and craving in all those people affected.

Afterwards, she thought to apply the same criteria to the pathologic gambling. This disorder is considered very close to IRP phenomenology, since it does not imply the assumption of chemical substances [15,16]. Some criteria for the pathologic gambling (“run-up” to the losses, committing illegal acts to finance the game, and finding money to relieve a financial situation caused by the gambling) were not considered applicable to IRP. Thus, a new specific criteria was created by scratch (spending more time online than predicted) by Johansson, Gotestam and Leung [17,18].

Shapira and his colleagues [19] proposed some interesting guidelines that highlight the emotional aspects connected to the loss of control. They also focus their attention on the intense anxieties and worries relevant to immoderate Net use.

Recently, the authors of this article proposed a set of criteria organized in overt (evident) and covert (hidden) symptoms. In order to diagnose the disorder, it is necessary to identify at least two overt symptoms and at least two covert symptoms, for a period of time no less than 6 months [20].

Up till now, IRP does not belong to any diagnostic system yet. People affected by the syndrome can be included in the category of the Disorder of impulses control not differently specified. Nonetheless, proposals to include this type of addiction into the next edition of the DSM (Diagnostic and Statistical Manual of Mental Disorder) become even more persistent. Last proposal came from the pages of the authoritative American Journal of Psychiatry. J. Block published an article, where he identifies IRP as a peculiar type of disorder referable to the compulsive-impulsive specter [21].
3. The effect of the disorder

The figures of IRP effects on the population vary in a substantial way. It depends on the methodology of the survey (surveys conducted in or out of the Net) and the type of instruments used (questionnaires based on several diagnostic criteria). Generally, online surveys indicate a rate of diffusion included between 3% and 11% [22, 23].

For instance, Greenfield’s survey conducted on a sample of 17251 subjects with an age between 8 and 85 years shows a disorder effect rate equal to 5.7% [7].

More recently, a survey completed by some Korean researchers underlined a lower effect rate [24]: only 3.47% of participants in the survey became addicted to the Internet. Most likely these surveys prove that multiple factors influence the diffusion level differences. For instance, while Greenfield [7] focused his attention only on American users, Whang and his staff members studied exclusively Korean subjects. Moreover, Whang and his collaborators used the Internet Addiction Test proposed by Young, which is an instrument represented by a scale with 20 items called the Likert scale. The structure of this test is very different from the yes/no answers test used for Greenfield’s survey.

Generally, studies completed on the net can better gather a big quantity of data in a relatively short period of time [25, 26]. Nonetheless, online supply can select subjects that frequently use the Internet or possibly have a problem with the Internet usage modality.

These surveys not conducted on the net on the basis of a random selection of subjects represent an important way to carry out researches on IRP. Up till now, only one survey has been published regarding this phenomenon among the general population that used a strategy of offline random sampling. This survey shows a very low diffusion rate varying from 0.3% to 0.7% [27].

4. Theoretical patterns

In this review, we will analyze only some of the patterns proposed by aiming to explain IRP phenomenon.

Young’s ACE pattern [15] summarizes the main factors that make easy and/or induce the beginning of the disorders related to Internet:

- Accessibility: the easy and immediate accessibility to any online service allows an immediate gratification for the smallest need.
- Control: the very high control that can be performed on the online activity goes with an unreal perception of omnipotence.
- Excitement: the huge quantity of stimulus present on the Net allows reaching a high condition of psychological excitement.

In his pattern, Davis [10] uses a cognitive-behavioral approach, which bases itself on the Pathological Internet Use (PIU) of problematic cognitions linked to some behaviors that intensify or detain a non-adaptive response. This theory highlights cognitions and thoughts for the individual intended as the main source of the abnormal behavior. According to the author, the non-adaptive cognitions related to persons automatically starting with the Internet who could refer to himself/herself (by doubting about his/her personal esteem) or to the world (generalizations or thoughts about everything and nothing). The product of these cognitions is a PIU that can be specific or generalized. This specific PIU defines persons depending on an Internet specific
function (example: erotic material, gambling, auctions, etc.). These types of dependences are specific-content addictions and will exist, regardless of the presence of Internet. The generalized PIU, instead, includes a generalized and multidimensional overuse of Internet that can be comparable to the use of the Net.

Cantelmi and his colleagues suggested a pattern that shows a virtual path pushing the subjects to become real net addicted users in a progressive way. Initially, users experienced a toxiphilic phase, characterized by a constant and growing interest in checking email and a certain persistence in surfing the web. Afterwards, they experience the toximaniac phase, characterized by a hyper focalization on interactive applications as chat and mud, by building a multiple identity [2].

Grohol [28] believes that subjects suffering from this disorder are, more frequently, new users of the Net, who are not yet accustomed to the new technological environments and become “enchanted.” However, even those who have been using the net for a longer period of time could develop the disorder, but only after discovering a novel, particularly attractive application. However, both new and old users will eventually reach stadium III, the stadium of balance.

According to Carretti, the Video Display Dissociative Trance (Trance Dissociativa da Videoterminal) [13] represents one of the possible consequences to the pathological computer addiction and its applications. This disorder implies an involuntary condition of trance with alteration of the awareness condition, depersonalization, and loss of the usual sense of personal identity that can cause a possible personal replacement of the original identity with an alternative one. From the psychodynamic point of view, we can distinguish three evolutionary levels: addiction, regression, and dissociation.

Addiction implies:
• A ritual hyper-involvement with the computer and its applications;
• An obsessive-compulsive relation with the virtual experiences and realities;
• A tendency to dream with open eyes prevailing over the action in the real relationships;
• An aware or unaware shame as peculiar detail of the weakness of the Ego;
• Phobic tendencies towards social life.

Regression implies:
• A tendency to imaginary relationships that compensate lacking real relationships;
• Autistic retreat;
• Autistic fantasy as defensive modality of the Ego.

Dissociation implies:
• Liability of the borders of the Ego;
• Dispersion of the Oneself;
• Depersonalization that is separation and alienation from themselves until the loss of the vital contact with the reality.

5. Predisposition

Nowadays, it is not easy to draw a profile of the psychological characteristics of Internet users. Moreover, it is not possible to state with certainty whether there are inducing factors explaining the abuse of such an instrument. It is obvious that the
psychological (family and relational problems) or psychiatric difficulties (personality disorders, social phobia, etc.) represent a strong risk factor [12].

Many studies could verify how varying the typology of Internet users can be and how different the reasons that push subjects to have recourse are to this new reality by becoming completely absorbed by it. Some subjects admit to using the web just because they look for a new and exiting identity. Others are just pushed by the stimulating perspective to remain anonymous. Even so, some use it simply to reduce the strain and the everyday stress. Finally, some use the Internet just because they want to meet new people in a comfortable and safe environment.

According to a survey conducted by Marcucci and Lavenia [9], IRP personalities would have a commonality to the schizoid side. Individuals with this characteristic tend to isolate and have difficulties in building durable social relationships. Their interests and hobbies usually increase their condition of isolation from people since they are more interested in things (objects, machines, etc.) than in people.

It has been suggested that male subjects could have a major tendency to develop Internet Addiction because of their excessive use of the Net. Male subjects would be more dedicated to activities with a very high “tossicologic gradient”, such as videogames, virtual sex, and gambling [28]. This is what comes from many Internet surveys conducted with university students [6, 29, 30]. For example, a survey completed on a sample of students in Taiwan showed that a very high percentage of male subjects had already used online games in comparison to female subjects (81.8% against 36.4%) [31]. Moreover, this survey showed that male subjects had a higher score on a scale evaluating Internet Addiction (Chen Internet Addiction Scale) and that a higher amount of male subjects- compared to female subjects- spent more than 10 hours playing online [32].

According to Wallace [33], people with a higher “locus of internal control” would be more attracted to the Net because of the sensations of control it offers (the choice of websites, what to read, and what to download, etc.). On one hand, an important difference has been ascertained between subjects who use the Net and subjects who do not use the Net. On the other hand, concerning the rate of internality, it was not possible to verify the same difference among groups of users with a diverse level of involvement (use, abuse, addiction).

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