Internet Addiction Disorder in a sample of students

F. Taranto, A. Goracci, S. Bolognesi, E. Borghini, A. Fagiolini.
University of Siena - Department of Mental Health - Division of Psychiatry

Introduction:
There is a clear albeit dimensional distinction between the majority of web users and a subgroup of individuals who gradually lose their ability to manage the frequency and duration of access to the Web. Although the last fifteen years have shown an increase of research on the so-called Internet Addiction Disorder (IAD), there is still a considerable controversy about this newly emerging mental health problem. Evidences arising from world-wide research show that IAD is widespread, but the lack of shared and uniform definitions as well as the use of different assessment tools have hindered a reliable appraisal of its prevalence so far [1][2].

Purpose of the study:
The aims of this study are: 1) to evaluate the prevalence of IAD in an Italian sample of high-school students aged 14-16; 2) to explore the relationship between Social Phobia and IAD diagnosis, focusing on sub-threshold symptomatology by means of the Structured Clinical Interview for Social Phobia Spectrum (SCI-SHY) and 3) to investigate the relationship between IAD and substance misuse.

Methods:
IAD was defined as the inability of individuals to control their internet use, resulting in marked distress and/or functional impairment in daily life. A total of 402 study subjects were recruited and administered the Internet Addiction questionnaire proposed by Ko and colleagues [3]. Study subjects were also administered a general and personal data questionnaire with a section about history of drug misuse and the Social Anxiety Spectrum Self-Report (SHY-SR) Lifetime Questionnaire. The research was conducted in accordance with the Helsinki Declaration.

Summary of Results:
19 of 402 subjects (i.e. 4.7% of the sample) endorsed the diagnostic criteria for IAD. 10.9% of 402 subjects met diagnostic criteria for a Social Phobia Spectrum disorder. Six IAD subjects (31.8%) were also diagnosed with a social phobia spectrum condition. Within the group of subjects diagnosed with IAD, 4 (21.05%) subjects reported current or past use of drugs. No significant association were found between a diagnosis of IAD and sex, presence and number of brothers/sisters, scholastic achievement, household composition, type of residence and smoking habit.

<table>
<thead>
<tr>
<th>INTERNET ADDICTION DIAGNOSES * SHY-SPECTRUM</th>
<th>Shy - Spectrum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crosstabulation</td>
<td>Below threshold</td>
</tr>
<tr>
<td>IAD Diagnoses</td>
<td>Endorsed</td>
</tr>
<tr>
<td></td>
<td>Endorsed</td>
</tr>
<tr>
<td></td>
<td>Not endorsed</td>
</tr>
<tr>
<td>Total</td>
<td>358</td>
</tr>
</tbody>
</table>

Conclusion:
Considering that Internet misuse is likely distributed on a continuum of severity, our results suggest that there is a sizeable population of youth already showing an internet addiction disorder and an even greater population of youth at risk of developing some kind of problematic relationship with the web. Social Anxiety Disorder seems to be both a risk factor and a frequent co-morbid disorder of internet misuse. Internet could be both a sheltered place to establish interpersonal relationships from a safer standpoint and an alienating place where individuals progressively lose their interpersonal skills up to becoming social phobic. Further prospective, long-term, epidemiological and clinical data along with shared diagnostic criteria and tools are warranted.

References
EXECUTIVE SUMMARY

I graduated in Liceo Scientifico E. Majorana in Mola di Bari (100/100) and then in Medicine and Surgery at the University of Siena (110/110). I have attended an international internship in Poznan (Poland) and another one in Utrecht (The Netherlands) where I focused my research on brain MRI evidences of schizophrenic patients and I am actually attending the last year as a young resident in Psychiatry at the University of Siena with Professor Andrea Fagiolini. I have participated to several national and international neuroscience and psychiatric meetings. The topics of my research include new addictions and their treatment, the treatment of depression, bipolar disorder and schizophrenia and strategies to improve the outcome of psychiatric disorders by improving lifestyle.
**Internet addiction disorder in a sample of students**

F. Taranto, A. Goracci, S. Bolognesi, E. Borghini, A. Fagiolini

1University of Siena - School of Medicine, Psychiatry, Siena, Italy

**Introduction:** There is a clear albeit dimensional distinction between the majority of web users and a subgroup of individuals who gradually lose their ability to manage the frequency and duration of access to the Web. Although the last fifteen years have shown an increase of research on the so-called Internet Addiction Disorder (IAD), there is still a considerable controversy about this newly emerging mental health problem. Evidences arising from world-wide research show that IAD is widespread, but the lack of shared and uniform definitions as well as the use of different assessment tools have hindered a reliable appraisal of its prevalence so far [1,2].

**Purpose of the study:** The aims of this study are: (1) to evaluate the prevalence of IAD in an Italian sample of high-school students aged 14–16; (2) to explore the relationship between Social Phobia and IAD diagnosis, focusing on sub-threshold symptomatology by means of the *Structured Clinical Interview for Social Phobia Spectrum (SCI-SHY)* and (3) to investigate the relationship between IAD and substance misuse.

**Methods:** IAD was defined as the inability of individuals to control their internet use, resulting in marked distress and/or functional impairment in daily life. A total of 402 study subjects were recruited and administered the Internet Addiction questionnaire proposed by Ko and colleagues [3]. Study subjects were also administered a general and personal data questionnaire with a section about history of drug misuse and the Social Anxiety Spectrum Self-Report (SHY-SR) Lifetime Questionnaire. The research was conducted in accordance with the Helsinki Declaration.

**Summary of Results:** 19 of 402 subjects (i.e. 4.7% of the sample) endorsed the diagnostic criteria for IAD. 10.9% of 402 subjects met diagnostic criteria for a Social Phobia Spectrum disorder. Six IAD subjects (31.8%) were also diagnosed with a social phobia spectrum condition. Within the group of students diagnosed with IAD, 4 (21.05%) subjects reported current or past use of drugs. No significant association were found between a diagnosis of IAD and sex, presence and number of brothers/sisters, scholastic achievement, household composition, type of residence and smoking habit.

**Conclusion:** Considering that Internet misuse is likely distributed on a continuum of severity, our results suggest that there is a sizeable population of youth already showing an internet addiction disorder and an even greater population of youth at risk of developing some kind of problematic relationship with the web. Social Anxiety Disorder seems to be both a risk factor and a frequent co-morbid disorder of internet misuse: Internet could be both a sheltered place to establish interpersonal relationships from a safer standpoint and an alienating place where individuals progressively lose their interpersonal skills up to becoming social phobic. Further prospective, long-term, epidemiological and clinical data along with shared diagnostic criteria and tools are warranted.


**Citation:** Eur Neuropsychopharmacol. 2014;24(Suppl 2):S701

**Keywords**

Diagnoses & classification

New research

Drug dependence & abuse: clinical