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Use of Internet in an Italian Clinical Sample

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Abstract. This study is aimed at evaluating Internet use in a psychiatric population. We used the UADI questionnaire to investigate the degree of addictive Internet use in our sample of patients affected by various psychiatric disorders. Several psychological and psychopathological variables related to internet use, have been assessed through the five dimensions of the UADI: dissociation (DIS), Impact on real life (IMP), Experimentation (EXP), Dependence (DEP), Escape (ESC).

Keywords. Internet Use, Psychiatric disorders, level of education, UADI questionnaire

Introduction

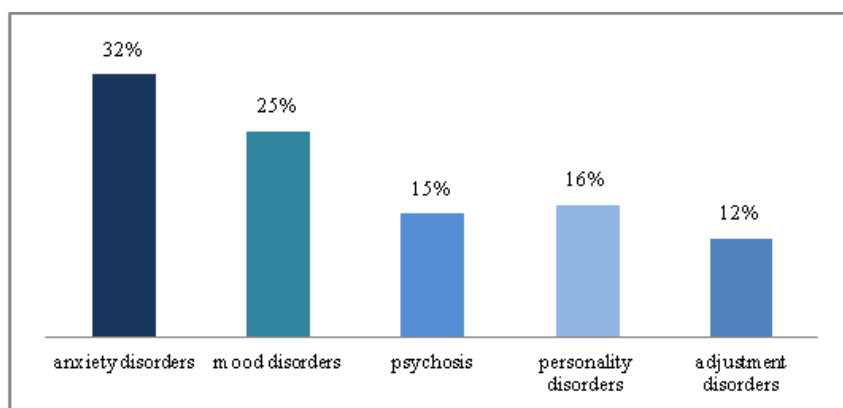
It's well known that Internet use has an impact on real life. According to several studies, some people show a condition called Problematic Internet Use (PIU) [1] or Internet Addiction Disorder [2]. Even if there isn't a specific diagnostic category about this diagnosis, it's important to recognize the presence of a problematic Internet use in patients affected by psychiatric disorders to understand whether it can impact on their symptoms and on their daily life. The aim of this study is to explore the degree of a problematic internet abuse among outpatients affected by various psychiatric disorders and to analyze the main socio-demographic, psychological and psycho-pathological factors influencing normal/abnormal use of Internet, by the Italian self-report "U.A.D.I." questionnaire (Internet Use, Abuse and Dependence) [3].

1. Methods

One hundred sixty five patients affected by various psychiatric disorders were recruited at the outpatients Unit of Psychiatry of Palermo University Hospital. Ninety-four patients (58%; 46 M, 48 F; aged to 61 years, mean age = 37, SD= ± 12) regularly use internet; 71% of them has a middle/high level of education.

Patients were affected by: Anxiety disorders (32%), Mood disorders (25%), Psychosis (15%), Personality Disorders (16%), Adjustment Disorders (12%) (Figure 1).

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Figure 1. Clinical groups

We used the “U.A.D.I.” questionnaire to study psychological and psychopathological factors related to Internet use. It’s a self-report questionnaire, with 5-point likert scale (totally true vs totally false); it’s composed of 80 items. The cut off is 70; scores in between 31 to 69 indicate the presence of dimension but without a psychopathological meaning. It explores 5 dimensions: *Escape* (ESC), *Dissociation* (DIS), *Impact on real life* (IMP), *Experimentation* (EXP), *Dependence* (DEP).

Escape: it consists of items aimed at evaluating if Internet is a way to escape from real life difficulties and routine. Medium scores indicate that Internet is used as a way to escape, even if real life is not denied.

Dissociation: it consists of items aimed at evaluating dissociative experiences (such as depersonalization). Medium scores indicate the absence of dissociative experience or the mild presence of this kind of experience.

Impact on real life: it consists of items aimed at evaluating the impact of abnormal Internet use on real life. Medium scores indicate that Internet activities are integrated with real life.

Experimentation: it consists of items aimed at evaluating if Internet is used to seek new and exciting emotions. Medium scores indicate that the subject needs to experience a new identity or a different role.

Dependence: it consists of items aimed at evaluating presence of craving, impulsivity or withdrawal symptoms. Medium scores indicate absence of these variables.

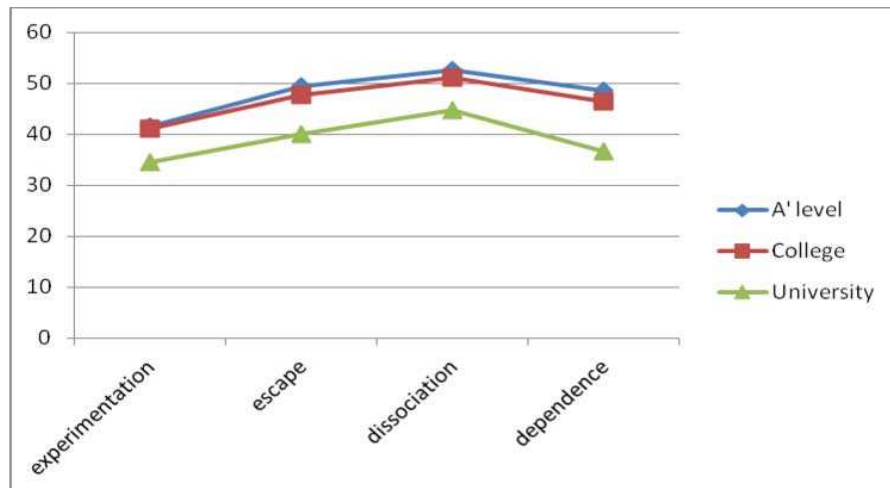
2. Results

In our sample nobody reach the cut off for Internet Addiction in our clinical sample. Anyway, we obtained interesting data. Dissociation (51 ± 4) and Impact on real life (52 ± 4) scores are higher than other dimensions, even if they are under the cut off ($T > 70$) in the entire clinical sample and Experimentation is generally lower than any other factor (40 ± 4). IMP dimension is more represented ($T > 70$) in Personality Disorders (33%), Mood disorders (24%), Psychosis (22%), Anxiety disorders (10%).

Men have higher scores in the Experimentation dimension than females (43 ± 10 vs. 38 ± 8 ; $t = 2,73$; $p = 0,007$).

Descriptive statistics indicating that subjects with university level of education have mean scores that are lower than college level and A-level of education in four dimensions are shown in the figure 2.

Figure 2. Descriptive statistics of mean values for UADI dimensions of patients divided for level of education

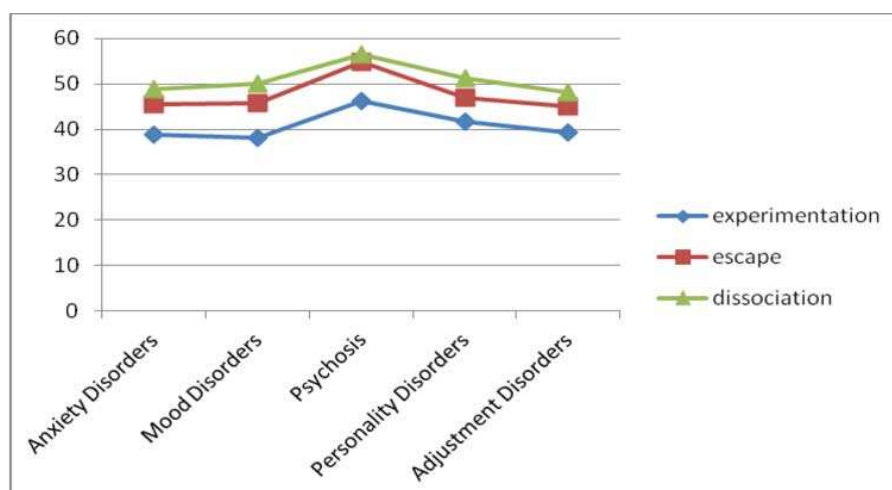


Particularly, there are differences between university and college level, and between university and level A-level concerning experimentation (Welch=37,8; $p=0,004$), Escape (Welch= 35,7; $p=0,004$), Dissociation (Welch=38,7; $p=0,006$) and Dependence (ANOVA $F=4,3$; $p=0,015$) dimensions. Post Hoc analysis (Dunnnett and Bonferroni) shows that the group with highest level of education has significantly lower scores than any other group in the following dimensions of UADI (Table 1).

Table 1. Post Hoc analysis for level of education and UADI dimensions

<i>Dimension</i>	<i>Level of education</i>	<i>p</i>
Experimentation	University vs College level	.006
	University vs A' level	.035
Escape	University vs College level	.008
	University vs A' level	.012
Dissociation	University vs College level	.018
	University vs A' level	.013
Dependence	University vs College level	.033
	University vs A' level	.015

In clinical groups, T-test shows that psychotic patients have significantly higher scores in the following dimensions of UADI (Figure 3) (Table 2).

Figure 3. Descriptive statistics of mean values for UADI dimensions of patients divided for diagnosis**Table 2.** T-test for clinical group and UADI dimensions

Dimension	Clinical group	<i>t</i>	<i>p</i>
Experimentation	Psychosis vs Anxiety disorders	2,29	.027
	Psychosis vs Mood disorders	2,41	.021
Escape	Psychosis vs Anxiety disorders	2,76	.008
	Psychosis vs Mood disorders	2,53	.016
	Psychosis vs Personality disorders	2,13	.042
	Psychosis vs Adjustment disorders	2,56	.017
Dissociation	Psychosis vs Anxiety disorders	2,46	.018
	Psychosis vs Adjustment disorders	2,34	.029

3. Discussion and Conclusions

Internet use is common among psychiatric population [4]. Sometimes it becomes a PIU or an addiction in comorbidity with other psychiatric disorder [5]. Even when Internet use is not problematic or pathological, investigating internet-related psychological variables in a clinical sample can be very useful to understand the reasons and the needs underlying patients' Internet use.

Just like in general population, where men seem to be more interested than females in Internet activities (such as messaging, browsing) aimed at communicating and experiencing new feeling [6], in our clinical sample men seem to use Internet as an explorative and exciting activity more than women [7]. Lower educated patients with a lower level of education tend to report an abnormal use of Internet.

This is a controversial data. According to some studies, people with a high level of education tend to use Internet more than other people, and the Internet penetration rate in the group with the highest level of education is much higher than that in the groups with middle and low education [8].

On the other hand, according to other studies, high level of education or good academic performance may protect subject from the risk of an abnormal use of Internet [7].

In our sample, subjects with higher level of education show low scores in Experimentation, Escape, and Dissociation and Dependence dimensions. We hypothesize that they don't use Internet to escape from real life. Moreover, they don't live dissociative experiences and don't develop dependence symptoms.

So, high education seems to mediate the role of Internet in patient's life and it plays a protective role, just like in the general population.

Psychotic patients show different values at UADI than all other clinical groups. The presence of higher scores in Experimentation, Escape and Dissociation dimensions might indicate that they are more exposed to a dysfunctional use of Internet than other patients. It could be closely related to the clinical characteristics of psychotic syndrome.

Internet is a complex phenomenon with several potentialities and risks. It may provide an environment for individuals to escape from stress in the real world both for patients and non-clinical population [7].

These preliminary data should be supported by other studies about PIU and IA in a larger clinical population, aimed at exploring their diffusion in psychiatric patients and the psychological and psychopathological variables which are associated to a problematic internet use.

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