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PROBLEMATIC INTERNET USE IN ADOLESCENCE: A STUDY ON DISSOCIATIVE EXPERIENCES

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Abstract

Problematic Internet Use in situations with strong emotional involvement could encourage abstraction from the real world and represent a refuge for adolescents. This could contribute to increase dissociative experiences. Dissociation represents a potential risk factor in case of Problematic Internet Use, especially for adolescents and their identity. The present study aimed to assess the associations between dissociative experiences and problematic internet use in adolescents, considering their emotional-behavioral functioning. Through the collaboration of high schools of center-south of Italy, N=133 adolescents aged between 14 and 18 were assessed. Self-report questionnaires on dissociative experiences, internet use and emotional behavioral functioning were administered. The results showed that Problematic Internet Use was associated with increased dissociative experiences. Furthermore, in females Problematic Internet Use was associated with the presence of internalizing and externalizing symptoms. On the other hand, in males Problematic Internet Use was associated with passive influence. The result of this study indicates that Internet is not only understood as a withdrawal for adolescents. The virtual world allows the expression of forms of acts, representing diversified responses to adolescent distress.

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1. Introduction

“Problematic Internet Use” (PIU) refers to a condition that contains within itself a wide range of activities carried out on the Internet (such as, for example, online shopping, the use of pornography, gaming online, the use of social networks), that are implemented dysfunctionally by the subject. Karderfelt-Winther (2014) suggested that activities related to the use of the Internet should be considered not only as conducts that contribute to possible patterns of addiction, but also as compensatory strategies to meet the needs of the individual and to cope with psychosocial problems. In line with this theoretical perspective, PIU can be conceptualized as a scaffold of coping strategies used to escape the problems and difficulties of real life through a temporary withdrawal in the activities carried out on internet (Deleuze et al., 2019; Di Blasi et al., 2019; Kardefelt-Winther, 2014; Maganuco et al., 2019; Maroney et al., 2018; Reinecke, 2009; Schimmenti et al., 2019; Snodgrass et al., 2018).

Problematic Internet Use in situations with strong emotional involvement could encourage abstraction from the real world and represent a refuge for adolescents (Ghezzani, 2018). This could contribute to increase dissociative experiences.

2. Problem Statement

While adequate and functional Internet use allows a greater experiential enrichment by promoting fantasy, imagination and creativity, an abuse could contribute to increase dissociative experiences, generating pathological phenomena, in extreme forms of depersonalization/derealisation (Cantelmi et al., 2000). The loss of time that passes, when teenagers are emotionally involved during the connection, strengthens the dissociative phenomena related to addiction (Tonioni & Corvino, 2011). Therefore, the dissociation represents a potential risk in case of abuse of navigation, especially for adolescents and their identity in construction.

Dissociation represents a potential risk factor in case of Problematic Internet Use, especially for adolescents and their identity.

The dissociation, in the continuum from mild phenomena to pathological situations, could act as an adaptive defense mechanism in the management of phase-specific conflicts (Calamari & Pini, 2003) or act as an organizer, according to the definition of Ferro and Riefolo (2006).

In this case the obsessive-compulsive tendencies may pervade the adolescent's mental space, causing a dissociation from everything that is perceived as intolerable, leading to memory loss, sense of unreality and feeling of detachment from oneself or one's environment. It is a syndrome characterized by the alteration of cognitive processes that affect reality and personal identity (Ghezzani, 2018). Research aimed at investigating the psychopathological condition of withdrawn adolescents has shown a significant correlation between internet addiction and particular emotional experiences, low self-esteem and dysfunctional interpersonal relationships. Distorted thoughts about oneself and a devalued perception of the representation of the world have emerged (Del Miglio et al., 2001). Generally these are adolescents who belong to families of a good social level and do not seem to have severe pathologies. They tend to be rather apathetic, lacking interest in everything that happens in the real world (Ranieri et al., 2015; Young, 2007).

According to some research, the common trait of adolescents, who live isolated from reality, concerns emotional fragility (Suwa & Suzuki, 2013).

3. Research Questions

The dependence on the Internet leads adolescents to use dissociation in a rigid way, in order to escape from their perceived disastrous experience (Perrella & Caviglia, 2014). If the link between dysfunctional use of the internet and isolation becomes very strong, the dissociative risks increase (Ranieri et al., 2015).

There is a lack of in-depth studies on factors predisposing to the abuse of the distorted Internet of the Internet (Marcucci & Lavenia, 2004).

4. Purpose of the Study

The present study aimed to assess the associations between dissociative experiences and problematic internet use in adolescents, considering their emotional-behavioral functioning.

In particular, we aimed to investigate:

- the possible correlation between dissociative experiences and internet abuse;
- whether the presence of internalizing / externalizing symptoms in adolescents was associated with massive use of the Internet and with dissociative experiences (in males and females separately).

5. Research Methods

5.1. Participants and procedure

Through the collaboration of high schools of center-south of Italy, N=133 adolescents aged between 14 and 18 were assessed. Sample was composed by 70.7% girls with an average age of 16.71 (sd = 1.21). 94.7% of sample were Caucasian.

Adolescents and their parents signed an informant consent, in which the study was described in detail. Self-report questionnaires (described below) on dissociative experiences, internet use and emotional behavioral functioning were administrated.

5.2. Measures

- *Internet Addiction Test* (IAT; Young, 1998), is a 20 items self-report questionnaire, that specifically assess the degree of psychopathological risk related to the use of the Internet. The use/abuse of internet was assessed on a Likert scale from 1 (never) to 5 (always). The IAT showed a good internal consistency (Cronbach's alpha = .84). Furthermore, it was analyzed the internal consistency in eleven studies, detecting a total Cronbach alpha of .889 (Frangos et al., 2012).
- *Adolescent Dissociative Experiences Scale* (A-DES), (Armstrong et al., 1997), is a 30 items self-report questionnaire, which measures dissociation through its phenomenological outcomes

(dissociative experiences). The dissociative experiences was assessed on a Likert scale between 0 (never) to 10 (always). The items describe dissociative experiences such as feelings of derealization and depersonalization, memory disorders and attention. The scoring provides a total score of dissociation and 4 dimensions: dissociative amnesia (e.g. “I get back tests or homework that I don't remember doing”), absorption and imaginative involvement (e.g. “I get so wrapped up in watching T.V., reading, or playing video games that I don't have any idea what's going on around me”), passive influence (e.g. “I can do something really well one time and then I can't do it at all another time”) e depersonalization and derealization (e.g. “I have strong feelings that don't seem like they are mine.”). A-DES has demonstrated good validity, good reliability and internal consistency (Bernstein & Putnam, 1986). The Italian validation showed a high internal consistency (Cronbach's Alpha = .912) (Caretto et al., 2005).

- *Youth Self Report/11-18* (YSR/11-18; Achenbach, 1991) is a 112 items self-report questionnaire, assessed on a Likert scale from 0 (not true) to 2 (always true). It assessed emotional-behavioral functioning in adolescents aged between 11 and 18 years. The YSR provides scores on 2 scales: Internalizing and Externalizing problems. The Italian validation showed a high internal consistency.

5.3. Data Analysis

All statistical analysis were carried out with IBM SPSS Statistics version 25.0. In order to investigated possible associations between abuse of internet and dissociative experiences, Pearson correlation analysis were carried out. Furthermore, in order to verify whether the presence of internalizing / externalizing symptoms in adolescents was associated with massive use of the Internet and with dissociative experiences, Pearson correlation analysis were carried out, separately for girls and boys.

6. Findings

6.1. Associations between abuse of internet and dissociative experiences

In order to investigated possible associations between abuse of internet and dissociative experiences, Pearson correlation analysis were carried out. Table 01 show the results of correlation analysis.

Table 1. Correlation between abuse of internet and dissociative experiences

	Diss. Amn.	Absorption	Passive Influence	Deper/Derea
IAT	.54*	.56*	.58*	.54*

* p < .01

6.2. Associations between adolescents' emotional/behavioural functioning and the abuse of internet and dissociative experiences

In order to verify whether the presence of internalizing / externalizing symptoms in adolescents was associated with massive use of the Internet and with dissociative experiences, Pearson correlation analysis were carried out, separately for girls and boys. Table 02 and 03 show results of correlation analysis respectively for girls and boys.

Table 2. Correlation between girls' emotional/behavioural functioning and the abuse of internet and dissociative experiences

	Internalizing symptoms	Externalizing symptoms
IAT	.24*	.44**
Diss. Amn	.36**	.39**
Absorption	.32**	.31**
Passive influence	.29**	.42**
Deper/derea	.37**	.42**

* p < .05 ** p < .01

Table 3. Correlation between boys' emotional/behavioural functioning and the abuse of internet and dissociative experiences

	Internalizing symptoms	Externalizing symptoms
IAT	.01	-.04
Diss. Amn	.28	.09
Absorption	.28	-.02
Passive influence	.32*	.29
Deper/derea	.31	.21

* p < .05

7. Conclusion

In the last decade, several studies and theories have focused on internet addiction in adolescence. The increasing number of young people around the world engaged in the growing number of online activities, has oriented research with the aim of identifying the potential negative consequences but also the predictive factors of misuse of the web. In the literature review, Musetti et al. (2017), highlighted several psychopathological traits in comorbidity with dysfunctional use of the internet, such as depression, anxiety, substance abuse, dissociation.

The research has shown that the PIU is positively correlated with dissociative disorders in adolescents, confirming the empirical studies. The results are very significant on the presence of psychological problems, with a marked gender trend. The scores reported in the sample of females were high in both the internalizing/externalizing scales, especially in the externalizing one. The males, instead, showed an internalizing tendency related to passive influence when they had an abuse of Internet.

Concluding, the result of this study indicates that Internet is not only understood as a withdrawal for adolescents. The virtual world allows the expression of forms of acts, representing diversified responses to adolescent distress.

References

- Achenbach, T. M. (1991). *Manual for the youth self-report and 1991 profile*. Burlington: Department of Psychiatry, University of Vermont.
- Armstrong, J. G., Putnam, F. W., Carlson, E. B., Libero, D. Z., & Smith, S. R. (1997). Development and validation of a measure of adolescent dissociation: The Adolescent Dissociative Experiences Scale. *The Journal of nervous and mental disease*, 185(8), 491-497.
- Bernstein, E. M., & Putnam, F. W. (1986). Development, reliability, and validity of a dissociation scale.

- Calamari, E., & Pini, M. (2003). Dissociative experiences and anger proneness in late adolescent females with different attachment styles. *Adolescence*, 38(150).
- Cantelmi, T., Del Miglio, C., Talli, M., & D'andrea, A. (2000). Internet Related Psychopathology: primi dati sperimentali, aspetti clinici e note critiche. *Giornale Italiano di Psicopatologia*, 6(1), 40-51.
- Caretti, V., Craparo, G., Ragonese, N., & Schimmenti, A. (2005). Disregolazione affettiva, trauma e dissociazione in un gruppo non clinico di adolescenti. Una prospettiva evolutiva. *Infanzia e adolescenza*, 4(3), 170-178.
- Del Miglio, C., Gamba, A., & Cantelmi, T. (2001). Costruzione e validazione preliminare di uno strumento UADI per la rilevazione delle variabili psicologiche e psicopatologiche correlate all'uso di Internet. *Giornale Italiano di psicopatologia*, 7, 293-306.
- Deleuze, J., Maurage, P., Schimmenti, A., Nuyens, F., Melzer, A., & Billieux, J. (2019). Escaping reality through videogames is linked to an implicit preference for virtual over real-life stimuli. *Journal of Affective Disorders*, 245, 1024-1031.
- Di Blasi, M., Giardina, A., Giordano, C., Coco, G. L., Tosto, C., Billieux, J., & Schimmenti, A. (2019). Problematic video game use as an emotional coping strategy: Evidence from a sample of MMORPG gamers. *Journal of Behavioral Addictions*, 8(1), 25-34.
- Ferro, F. M., & Riefolo, G. (2006). *Isteria e campo della dissociazione*, Roma: Borla.
- Frangos, C. C., Frangos, C. C., & Sotiropoulos, I. (2012, July). A meta-analysis of the reliability of Young's Internet Addiction Test. In *Proceedings of the World Congress on Engineering* (Vol. 1, pp. 368-371).
- Ghezzani, N. (2018). *La vita è un sogno, deralizzazione, depersonalizzazione e attacchi di panico*. Franco Angeli.
- Kardefelt-Winther, D. (2014). A conceptual and methodological critique of Internet addiction research: Towards a model of compensatory Internet use. *Computers in Human Behavior*, 31, 351-354.
- Maganuco, N. R., Costanzo, A., Midolo, L. R., Santoro, G., & Schimmenti, A. (2019). Impulsivity and alexithymia in virtual worlds: A study on players of world of warcraft. *Clinical Neuropsychiatry*, 16(3), 127-134
- Marcucci, M., & Lavenia, G. (2004). *Realtà virtuali e identità soggettiva. Nuovi mondi e psicopatologia del Sé*. www.tecnoteca.it/articoli/realta
- Maroney, N., Williams, B. J., Thomas, A., Skues, J., & Moulding, R. (2018). A stress-coping model of problem online video game use. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-018-9887-7>
- Musetti, A., Cattivelli, R., Zuglian, P., Terrone, G., Pozzoli, S., Capelli, F., & Castelnuovo, G. (2017). Internet Addiction Disorder o Internet Related Psychopathology? *Rivista Giornale italiano di psicologia*, 2, 359-382. <https://doi.org/10.1421/87345>
- Perrella, R., & Caviglia, G. (2014). *Dipendenze da internet. Adolescenti e adulti*. Santarcangelo di Romagna: Maggioli Editore.
- Ranieri, F., Andreoli, M., Bellagamba, E., Franchi, E., Mancini, F., Pitti, L., Sfameni, S., & Stoppielli, M. (2015). Early adolescents in social withdrawal: elements for the assessment of hikikomori syndrome. *Proceedings of the 23rd EPA Congress of Psychiatry - European Congress of Psychiatry*, marzo 28-31.
- Reinecke, L. (2009). Games and recovery: The use of video and computer games to recuperate from stress and strain. *Journal of Media Psychology*, 21(3), 126-142.
- Schimmenti, A., Musetti, A., Costanzo, A., Terrone, G., Maganuco, N. R., Rinella, C. A., & Gervasi, A.M. (2019). The unfabulous four: Maladaptive personality functioning, insecure attachment dissociative experiences, and problematic Internet use among young adults. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-019-00079-0>
- Snodgrass, J. G., Bagwell, A., Patry, J. M., Dengah II, H. F., Smarr-Foster, C., Van Oostenburg, M., & Lacy, M. G. (2018). The partial truths of compensatory and poor-get-poorer Internet use theories: More highly involved videogame players experience greater psychosocial benefits. *Computers in Human Behavior*, 78, 10-25.
- Suwa, M., & Suzuki, K. (2013). The phenomenon of "hikikomori" (social withdrawal) and the socio-cultural situation in Japan today. *Journal of Psychopathology*, 19, 191-198.
- Tonioni, F., & Corvino, S. (2011). Dipendenza da Internet e psicopatologia web-mediata. *Recenti progressi in medicina*, 102(11), 417-420.
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology & behavior*, 1(3), 237-244.
- Young, K. S. (2007). Internet addiction: a new clinical phenomenon and its consequences. *American Behavioral Scientist*, 48, 402-415.