Rapid Communication

Alexithymia and Its Relationships with Dissociative Experiences and Internet Addiction in a Nonclinical Sample

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Abstract

The aim of the present study was to evaluate alexithymia, dissociative experiences, and Internet addiction (IA) in a nonclinical sample of 312 undergraduate students, identifying predictive factors associated with the possible risk of developing IA. We found that alexithymics had more consistent dissociative experiences, lower self-esteem, and higher obsessive-compulsive symptoms than nonalexithymics. In addition, alexithymics reported a higher potential risk for IA when compared to nonalexithymics. Difficulty in identifying feelings, higher dissociative experiences, lower self-esteem, and higher impulse dysregulation were associated with higher IA. Thus, a combination of alexithymia, dissociative experiences, low self-esteem, and impulse dysregulation may be a risk factor for IA, at least in a nonclinical sample.

Introduction

INTERNET ADDICTION DISORDER (IAD) is a modern-day addiction.1 Young2 suggested Internet addiction (IA) as a broad term that covers a wide variety of behaviors and impulse control problems such as cybersexual addiction, cyberrelationship addiction, Internet compulsions, information overload, and computer addiction. Also, the alexithymia construct, formulated from clinical investigations, is multifaceted and includes four distinct characteristics: (a) difficulty identifying and describing feelings, (b) difficulty distinguishing feelings from bodily sensations, (c) diminution of fantasy, and (d) concrete and poorly introspective thinking.3 An increasing body of evidences suggests that alexithymia may be present in several addictive disorders4 and is often associated with dissociative experiences.5

However, to date, no studies have investigated the relationships among alexithymia, dissociative experiences, and IA; therefore, the aims of our study were (a) to verify whether alexithymic and nonalexithymic participants showed different demographic and clinical features, and (b) to investigate variables associated with IA severity.

Methods

A convenience sample was selected, and the participants in this study were 312 undergraduate students from the University of Chieti, 140 (44.9%) males and 172 (55.1%) females, with a mean age of 22.9 (SD = 3.4). For inclusion in the study, participants were required to be at least 18 years old and to have used the Internet over the previous week. Approval for the study was granted by the university’s Ethics Board. Participants were required to read and sign an informed consent letter before filling out the questionnaires. They did not receive course credits for their participation.

We used the Young’s Internet Addiction Test (IAT) to evaluate problematic Internet use.2 Following Yoo et al.,6 we defined the Internet addiction group as IAT ≥ 50; Cronbach’s alpha was 0.91. The Toronto Alexithymia Scale (TAS-20)
measured alexithymia. It has a three-factor structure: factor 1, Difficulty in Identifying Feelings (DIF); factor 2, Difficulty in Describing Feelings (DDF); and factor 3, Externally Oriented Thinking (EOT). A score of 61 or higher on the TAS-20 is considered to be within the alexithymic range. In our study, Cronbach’s alpha was 0.83. We used Dissociative Experiences Scale (DES) to evaluate dissociation; Cronbach’s alpha was 0.94. A 41-item Italian version of the Padua Inventory Revised (PI-R) was used to assess obsessive-compulsive symptoms. It consists of five subscales: Impulses, Washing, Checking, Rumination, and Precision; Cronbach’s alpha for the full scale was 0.89. Moreover, following Adebayo et al., we assessed the level of Internet use with three items: participants were required to state the actual number of hours spent per week (on average) for e-mail, chatting, and browsing. The total number of hours spent on average were summed and used as a composite score of Internet use.

Comparison of groups were made by students’ t test. Group distributions were evaluated by χ² analysis. A blockwise linear regression analysis was performed on the whole sample in order to find variables associated with IA (IAT score as dependent variable). In the first block, demographic variables, BDI, STAI, PI-R, and RSES were entered. In the second block, DES was added to the model. DIF, DDF, and EOT subscales of TAS-20 were entered in the last block. P values less than or equal to 0.05 were considered statistically significant.

### Results

TAS-20 score was 45.3 (SD = 10.9). Of the 312 participants, 10.6% (n = 33) scored 61 or more on TAS-20 total score and therefore were categorized as alexithymics. Seventeen participants (5.4%) scored 50 or higher on the IAT. Mean BDI score was 8.7 (SD = 8.3). The overall results and the comparisons between alexithymics and nonalexithymics are reported in Table 1. Alexithymics reported more intense Internet usage and had higher scores on IAT total score and subscales Salience, Excessive use, Neglect work, Lack of control, and Neglect social life. Alexithymics also reported higher scores on DES, PI-R total score, and subscales Impulses, Checking, and Rumination, and lower RSES scores. The percentage of participants who scored higher than 50 on IAT was higher and statistically significant (χ² = 21.39, p < 0.001) in the alexithymic group (n = 8, 24.2%) than in the nonalexithymic group (n = 9, 3.2%). Blockwise linear regression analysis with IAT score as dependent variable showed that the DIF subscale of TAS-20 was significantly associated with higher risk of IA (β = 0.29, p < 0.001) as well as lower self-esteem (lower scores on RSES; β = −0.16, p = 0.01), higher DES scores (β = 0.21, p = 0.003), and impulse dyscontrol (higher scores on Impulsuses subscale of PI-R; β = 0.15, p = 0.02).

### Discussion

To our knowledge, this was the first study that evaluated interrelationships among alexithymia, dissociative experiences, and IA in a sample of undergraduate students. Alexithymics reported higher risk of IA (as resulted from higher scores on IAT) and higher dissociative experiences than nonalexithymics, as well as higher obsessive-compulsive symptoms and lower self-esteem. Results of linear regres-

### Table 1. Overall Results and Comparison between Alexithymics and Nonalexithymics

<table>
<thead>
<tr>
<th></th>
<th>Overall (n = 312)</th>
<th>Alexithymics (n = 33, 10.6%)</th>
<th>Nonalexithymics (n = 279, 89.4%)</th>
<th>Student t test (df = 280)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Internet use</td>
<td>34.3</td>
<td>10.2</td>
<td>39.4</td>
<td>11.7</td>
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<tr>
<td>IAT total score</td>
<td>29.5</td>
<td>7.3</td>
<td>33.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Salience</td>
<td>6.2</td>
<td>1.7</td>
<td>7.1</td>
<td>1.8</td>
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<tr>
<td>Excessive use</td>
<td>7.8</td>
<td>2.0</td>
<td>8.8</td>
<td>2.3</td>
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<td>Neglect work</td>
<td>3.8</td>
<td>1.7</td>
<td>4.5</td>
<td>1.0</td>
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<tr>
<td>Anticipation</td>
<td>3.8</td>
<td>1.7</td>
<td>4.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Lack of control</td>
<td>4.6</td>
<td>1.7</td>
<td>5.4</td>
<td>2.1</td>
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<tr>
<td>Neglect social life</td>
<td>3.1</td>
<td>1.3</td>
<td>3.9</td>
<td>1.8</td>
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<tr>
<td>DES</td>
<td>29.0</td>
<td>25.7</td>
<td>40.9</td>
<td>25.9</td>
</tr>
<tr>
<td>PI-R total score</td>
<td>28.8</td>
<td>16.3</td>
<td>40.6</td>
<td>20.5</td>
</tr>
<tr>
<td>Impulses</td>
<td>2.2</td>
<td>2.4</td>
<td>4.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Washing</td>
<td>6.8</td>
<td>5.3</td>
<td>8.4</td>
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<tr>
<td>Checking</td>
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<td>5.7</td>
<td>11.0</td>
<td>7.0</td>
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<tr>
<td>Rumination</td>
<td>9.3</td>
<td>6.5</td>
<td>14.0</td>
<td>6.1</td>
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<tr>
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<td>2.2</td>
<td>2.5</td>
<td>2.4</td>
<td>1.9</td>
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<tr>
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<td>11.1</td>
<td>40.3</td>
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<td>9.1</td>
<td>43.1</td>
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<td>8.7</td>
<td>6.3</td>
<td>9.1</td>
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</table>
tion showed that difficulty in identifying feelings was significantly associated with a higher risk for IA as well as the presence of higher dissociative experiences, lower self-esteem, and impulse dyscontrol. The relationships between alexithymia and low self-esteem and between low self-esteem and IA have been widely investigated, and it is clearly recognized that alexithymic individuals often present low self-esteem. Armstrong et al. found that self-esteem was a significant predictor of IA compared to impulsivity. Moreover, Griffiths suggested that excessive Internet users may use it as a way to cope with and counteract self-inadequacies such as low self-esteem, physical disability, and lack of social support in real life.

As specified in the introduction, alexithymia and dissociative experiences may be strongly associated. These findings were confirmed by our study, which found an association between DIF and DES without significant associations with DDF and EOT dimensions of the TAS-20. Recently, de Wildt et al. found that the Internet-dependent participants showed significantly more pathological scores on the DES scale than did non-Internet-dependent participants. In fact, Internet usage can elicit feelings of dissociation and immersion that can include losing track of time, feeling like someone else, blacking out, and being in a trancelike state; these dissociative symptoms may become clinically relevant in Internet-dependent individuals even if they are present in non-Internet-dependent participants. Although in our study we found that alexithymics showed more severe obsessive-compulsive symptoms, only the Impulses subscale of the PI-R was significantly associated with IA in the linear regression analysis: this was one of the most interesting findings in the present study that may support the notion of IA as an impulse disorder, similar to pathological gambling. Taken together, we suggest, on the basis of our results, that alexithymia may play a role in pathogenesis and maintenance of IA, facilitating the presence of dissociative experiences as well as lower self-esteem and impulse dysregulation. Lower self-esteem may directly exacerbate abnormal Internet attitudes or have repercussions on alexithymia itself and dissociative experiences with a worsening of abnormal Internet use. On its own, IA may worsen self-esteem and dissociative tendencies.

This study has several limitations. The first was the use of a convenience sample. Another limitation is that the data gathered were all self-reports. Furthermore, this study employed a cross-sectional design, and the sample was relatively small. Therefore, further studies on larger nonclinical and clinical samples are needed.

Disclosure Statement

The authors do not have a conflict of interest.

References


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