Problematic Internet use and the diagnostic journey

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Elias Aboujaoude's thoughtful overview of problematic Internet use allows us to reflect on the various strategies currently available to buttress claims for a distinct diagnostic category along the impulsive, compulsive, and/or addiction disorders spectrum.

The presence of physiological tolerance and withdrawal, which initially underpinned the diagnosis of substance dependence, has become increasingly optional in recent nomenclatures, while behaviors such as impaired control, preoccupation/compulsive use, continued use despite harmful consequences, and craving have been added. These behavioral constructs have ushered the consideration of an ever-growing list of activities liable to excess, without the physiological requirements.

These adapted criteria borrow terminology from related disorders but, so far, have received only limited empirical testing. The DSM nomenclature also utilizes "exclusion criteria" such as "the behavior is not better accounted for by a manic episode", disclaiming the real possibility of two primary disorders. Further, the categorical dichotomy abuse/dependence is increasingly recognized as lacking empirical support, many arguing for a continuum perspective for excessive behaviors.

Among the attempts to identify core components of behavioral addiction, in-

cluding Internet addiction, Griffiths (1) has suggested salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse. Other researchers have created a typology of Internet addiction such as online gaming, online sexual preoccupations, and emailing/texting (2). Could the Internet just be the medium used to enact or fuel excessive behaviors? (1). Those displaying problematic Internet use through activities such as online gambling, shopping, sexual activity or viewing pornography, may be selecting to conduct their chosen behavior on the Internet. If the Internet were not available, these same persons would spend their time at casinos, shopping malls, utilizing the sex trade industry, or viewing print pornography.

Finally, an additional measure to consider is the Problematic Internet Use Questionnaire (PIUQ), created by Thatcher and Goolam (3). Based on the South Oaks Gambling Screen (SOGS) and Young's Internet Addiction Scale (IAS), this measure is self-completed and contains 20 items on a 5 point Likert scale, from 1 (rarely/not applicable) to 5 (always). The measure taps into three factors: online preoccupations (10 items), adverse effects (7 items), and social interactions (3 items). The results of a pilot and larger validation studies provided good evidence for the reliability and construct validity of the PIUQ; however, participants were recruited via an online IT magazine, which may reflect a sampling bias.

Prevalence estimates among interest groups, such as Internet users or treatment samples, are fraught with sampling bias. Studies examining behavioral addictions may overestimate the prevalence of these phenomena, as they often sample from populations already engaged in these excessive behaviors. Of note, in contrast with the common occurrence of the behaviors investigated, i.e., exercise, sex, or Internet use, the point prevalence of these problematic behaviors in the general population is typically low, i.e., less than 1% for the severe end of the spectrum, as in the case of Internet addiction or pathological gambling, with an average 2-3% added for less severe problematic use.

Weakening the epidemiological perspective is the lack of estimates of incidence, due to a dearth of longitudinal prospective studies. In candidate disorders derived from a rapidly developing technology such as the Internet, longitudinal studies exploring rates of incidence should be a priority to shed further light on groups at particular risk.

Associated "birds of a feather" provide insights about potential etiological links. High comorbidity rates with substance abuse, for example, have buttressed the consideration of behavioral disorders under the "addiction" umbrella, such as is the case in pathological gambling. In our experience, features of impulsivity, compulsivity, and addiction are encountered in most of our clinical samples and, to various degrees, in individual patients. The relative frequency of these features remains an open question.

It is sometimes assumed that, if a treatment strategy applied to a specific disorder is equally successful with an-

other disorder, this may argue in favor of classifying both disorders together. A string of pharmacological trials applied to severe problematic behaviors based on a putative affiliation with impulsive, compulsive, or addiction disorders have, so far, resulted in limited benefit. The quest continues.

By comparison, psychotherapeutic approaches, particularly cognitive behavioral therapy, are currently supported by the broadest empirical evidence over longer follow-up periods. Should we further explore a nomenclature of cognitive distortions rather than investigating new disease entities?

Lastly, the popularity of 12-steps mutual help groups have been seen by some as further evidence of the benefit of an addiction model applied to problematic behaviors.

Renewed impetus in the expanded consideration of a range of excessive behaviors as disorders has arisen from tremendous advances in the study of the brain. Brain imaging yields images of a common pathway through the “reward system” without the confound of the use of a substance. “Reward circuit” disorders may be a gateway to the exploration of human nature itself, rather than just “impulses”, “compulsions”, or “addictions”.

Aboujaoude’s review also raises, for us, the unaddressed question of socio-cultural relevance. Certain cultural communities are emerging as being more at risk than others. In South Korea, children diagnosed with Internet addiction may even require hospitalization. Are the children more at risk for Internet addiction in South Korea, or is the behavior simply less socially acceptable in that culture? The behaviors explored, i.e., work exercise, sex, gambling, and Internet use, are culturally value laden. Their liability to become excessive could also be shaped by culture. The investigative journey continues toward constructs with improved predictive validity and effective management strategies.

References

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