Internet Addiction Test (IAT) Manual

From netaddiction.com

INTRODUCTION

The Internet Addiction Test (IAT; Young, 1998) is a 20-item scale that measures the presence and severity of Internet dependency among adults. Dr. Kimberly Young, a professor at St. Bonaventure University and director of the Center for Internet Addiction Recovery, developed the IAT to assess symptoms of Internet addiction and compulsivity in a variety of test settings.

Appropriate Uses

The IAT measures the severity of self-reported compulsive use of the Internet for adults and adolescents. Results from the IAT should be interpreted with caution among clinical populations that suffer from psychiatric conditions concurrent with compulsive syndromes. The scale was created by adapting DSM-IV criteria for pathological gambling and is a modification of the earlier 8 item scale, Young's Internet Addiction Diagnostic Questionnaire (IADQ). The IAT views Internet addiction as an impulse-control disorder and the term Internet refers to all types of online activity. The IAT is the most widely used Internet addiction scale and the test has been translated in several languages including English, Chinese, French, Italian, Turkish, and Korean.

Background

In 1995, Dr. Kimberly S. Young first identified addictive use of the Internet as a distinct psychological disorder utilizing comprehensive case studies of Internet users. Since this initial study, research from Young and others has classified various ways that Internet addiction has negatively impacted users' lives. Early studies showed mild to compulsive use of the Internet lead to social isolation and depression (Krant et al., 1998), relationship difficulties and marital discord (Cooper et al., 2000; Schneider, 2000; Young et al, 2000), academic failure among students (Anderson, 1999; Morahan-Martin, 1997), and work-related problems such as reduced productivity and job loss (Case & Young, 2001). In the 90s, studies attempting to define the prevalence of the disorder vary in their estimates from 6% (Greenfield, 1999) among the general population of Internet users to 14% among college-based populations (Scherer, 1998).

Diagnosis of Internet addiction is often complex. Unlike chemical dependency and substance abuse, the Internet offers several direct benefits as a technological advancement in our society and not a device to be criticized as addictive. Individuals can conduct research, perform business transactions, access libraries, communicate, and make vacation plans. Books have been written outlining the psychological as well as functional benefits of the Internet in our lives. By comparison, alcohol or drugs are not an integral or necessary part of our personal and professional lives nor do these substances offer any health benefit. With so many practical uses of the Internet signs of addiction can easily be masked or justified. Further, clinical assessments often cover relevant disorders for psychiatric conditions and addictive disorders. However, given its newness, symptoms of Internet addiction may not be revealed in an initial clinical interview. While self-referrals for Internet addiction are becoming more common, often the client does not present with complaints of computer addiction. People may initially present with signs of

depression, bi-polar disorder, anxiety, or obsessive-compulsive tendencies, only for the treating professional to later discover signs of Internet abuse upon further examination. Thus, diagnosing Internet addiction upon clinical interview can be challenging. It is important for treating professionals to routinely screen compulsive use of the Internet as part of the assessment process.

The IAT was constructed to measure symptoms of Internet addiction which are mutually shared with other established compulsions, such as to gambling, food, and sex; and to also evaluate specific symptoms unique to this client population. The IAT provides an assessment tool for clinicians to measure the severity of Internet addiction among their clients. Furthermore, given corporate reliance upon this technology to support multiple business applications, the IAT serves as a useful pre-employment screening device for managers to detect the presence for Internet addiction among job candidates to improve productivity and reduce corporate liability.

Studies have found that the IAT is a reliable measure that covers the key characteristics of problematic Internet use. The test measures the extent of client's involvement with the computer and classifies the addictive behavior in terms of mild, moderate, and severe impairment. The IAT is a worldwide accepted and validated testing instrument and it can be utilized among outpatient and inpatient settings and adapted accordingly to fit the needs of the clinical setting.

Development

The items for the IAT were drawn from earlier research and clinical studies that explored various aspects of online behavior and profiled characteristics that differentiate 'normal' online users from compulsive online users (e.g., Greenfield, 1999; Griffiths, 1996; Morahan-Martin, 1997; Young, 1997a, 1997b, 1998, 1999). Characteristics of compulsive online users include: a preoccupation with the Internet, lying about the behavior, a loss of interest in other interests and/or people only to prefer more time online, using the Internet as a form of escape, an inability to control the behavior, and impairment in functioning. Compulsives also reported frequent time distortion, sleep deprivation, increased social isolation, being secretive about online activities or a sudden demand for privacy when online, and persona development when online. Studies typically evaluated non-essential Internet usage (i.e., non-business or academically related use) over a six-month period, when not better accounted for by a manic episode.

Description and Content of Scale

The IAT is designed for the experienced Internet user who utilizes this technology on a frequent basis. The 20-item questionnaire measures characteristics and behaviors associated with compulsive use of the Internet that include compulsivity, escapism, and dependency. Questions also assess problems related to addictive use in personal, occupational, and social functioning. Questions are randomized and each statement is weighted along a Likert-scale continuum that ranges from 0 = less extreme behavior to 5 = most extreme behavior for each item.

User Qualifications

The IAT may be administered and scored by paraprofessionals, but it should be used and interpreted best by professionals with appropriate clinical training and experience according to

the guidelines established by the American Psychological Association's *Standards for Educational and Psychological Tests* (1985). Clients with Internet addiction frequently have co-morbid mood disorders, and some clients with mood disorders, in turn, may report suicidal ideation. Therefore, the clinician reviewing the IAT data must be able to respond to a client's addictive disorder as well as the client's depression or suicidal ideation.

ADMINSTRATION

Administration

The IAT presents few difficulties in administration. The testing environment in which the IAT is given must provide the client with sufficient illumination for reading and be quiet enough to afford concentration. Obviously, the test administrator must determine beforehand whether or not a client can comprehend the IAT's item content.

Administration Time

The IAT requires between 5 to 10 minutes to complete when it is self-administered. Oral administration generally takes 10 minutes.

Direction for Administration

Self-Administration: In addition to spaces for the person's name, age, gender, the testing date, year's online, and work use, the IAT record form includes the following instructions:

"The questionnaire consists of 20 statements. After reading each statement carefully, based upon the 5-point Likert scale, please select the response 0, 1, 2, 3, 4 or 5 which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified."

Oral Administration: If the test administrator deems that a respondent needs assistance in completing the IAT, the following instructions should be used:

"The following questionnaire consists of 20 statements. After listening to the statement carefully, based upon the 5-point Likert scale, please select the response (0, 1, 2, 3, 4 or 5) which best describes you. On the low side, 0 indicates the statement is Not Applicable to your life, 1 indicates that the statement is something that you rarely engage in, 2 indicates that the statement is something that you occasionally engage in, 3 indicates that the statement is something you frequently engage in, 4 indicates that the statement is something you often engage in, and 5 indicates that the statement is something that you always engage in. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified."

After these instructions are given, a copy of the IAT is given to the respondent who is told, "Here is a copy for you so that you can follow along as I read." Sometimes a respondent will take the initiative, read the statements ahead of the test administrator, and describe how much he or she was bothered by each symptom. If necessary, the administrator may tactfully encourage the respondent to reflect sufficiently before making a choice. At the end of testing, a careful inspection of all the ratings will insure that no responses have been omitted. The administrator should ask the respondent to rate any omitted responses. If the client explains that he or she is unsure, the administrator should tell client to make a rating based upon his or her first impression.

Response Sets: If an examinee gives the same rating to each set of item statements, then he or she should be told that a person seldom experiences all of the symptoms in exactly the same way and that perhaps he or she might wish to reconsider some of the ratings.

SCORING

Guidelines

The IAT total score is the sum of the ratings given by the examinee for the 20 item responses. Each item is rated on a 5-point scale ranging from 0 to 5. The maximum score is 100 points.

The IAT total score ranges, with the higher the score representing the higher level of severity of Internet compulsivity and addiction. Total scores that range from 0 to 30 points are considered to reflect a normal level of Internet usage; scores of 31 to 49 indicate the presence of a mild level of Internet addiction; 50 to 79 reflect the presence of a moderate level; and scores of 80 to 100 indicate a severe dependence upon the Internet. Research addressing the sensitivity and validity of these score ranges is published in several journals. The IAT is validated in several languages so the examiner should review the correct study based on the language used for administration.

The examiner should evaluate the score ranges for the purposes for which the IAT is being used. If the examiner's purpose is to measure detection of persons with Internet addiction, then the upper level of each range should be lowered to minimize false negatives. This method would be useful in screening for possible cases of Internet addiction. To reduce the number of false positives, the examiner should raise the upper level of each range. This method is used in research for which one wishes to obtain as pure a sample as possible of persons with Internet addiction.

Interpretation

Because a IAT total score yields only an estimate of the overall severity of Internet addiction being described by a person, the examiner must consider other aspects of psychological functioning exhibited by the person, particularly any co-morbid symptoms of chronic impulsively, clinical depression, or relational difficulties that may elevate scores. A review of the more recent validation studies will help in looking at closer analyses of the test. The examiner should also inspect the IAT score for a pattern of symptom complaints as follows:

Salience – questions 10, 12, 13, 15, and 19.

High ratings for Salience-related exam items indicate that the respondent most likely feels preoccupied with the Internet, hides the behavior from others, and may display a loss of interest in other activities and/or relationships only to prefer more solitary time online. High ratings also suggest that the respondent uses the Internet as a form of mental escape from distributing thoughts and may feel that life without the Internet would be boring, empty, or joyless.

Excessive Use – questions 1, 2, 14, 18, and 20

High ratings for Excessive Use-related items indicate that the respondent engages in excessive online behavior and compulsive usage, and is intermittently unable to control time online that he or she hides from others. High ratings also suggest that the respondent is most likely to become depressed, panicked, or angry if forced to go without the Internet for an extended length of time.

Neglect Work – questions 6, 8, and 9

High ratings for Neglect Work-related exam items indicate the respondent may view the Internet as a necessary appliance akin to the television, microwave, or telephone. Job or school performance and productivity are most likely compromised due to the amount of time spent online and the respondent may become defensive or secretive about the time spent online.

Anticipation – questions 7, 11

High ratings for Anticipation-related items indicate that the respondent most likely thinks about being online when not at the computer and feels compelled to use the Internet when offline.

Lack of Control – questions 5, 16, and 17

High ratings for Lack of Control-related items indicate that the respondent has trouble managing his or her online time, frequently stays online longer than intended, and others may complain about the amount of time he or she spends online.

Neglect Social Life – questions 3 and 4.

High ratings for Neglect of Social Life-items indicate the respondent most likely utilizes online relationships to cope with situational problems and/or to reduce mental tension and stress. High ratings also suggest that the respondent frequently forms new relationships with fellow online users and uses the Internet to establish social connections that may be missing in his or her life.

Upon further interview, the examiner should inspect how the response set compares with the types of online applications utilized by the respondent to assist in identification of problematic Internet use patterns. For instance, if a respondent compulsively uses chat rooms than his or her total score may be high among those categories related to online relationships, such as Neglect of Social Life. If a respondent compulsively uses role-playing games than his or

her total score may be high among those categories related to Salience. To assist in the assessment, an Internet Application Checklist is provided in Appendix 2 that that requires the respondent to rank order the online applications he or she most utilized within the past month.

REFERENCES

Early Studies

American Psychiatric Association (1985). *Standards for educational and psychological testing.* Washington, DC: Author.

Anderson, K. (1998). Internet Use among college students: An exploratory study. Paper presented at the annual meeting of the Eastern Psychological Association. April 12, 1998. Boston, MA.

Beck A.T., Ward, C.M., Mendeleson, M., Mock, J.F., & Erbaugh, J.K. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4,* 5~-571.

Case, C & Young, K.S. (2001). *Internet Risk Management: Building a Framework for Research.* American Society of Business and Behavioral Sciences. Las Vegas. February 21, 2000

Cooper, A., Delmonico, D., & Burg, R. (2000). Cybersex users, abusers, and compulsives: New findings and implications. *Sexual Addiction & Compulsivity*, vol. 7, 5-29.

Greenfield, D. (1999). *Internet Addiction: Disinhibition, accelerated intimacy and other theoretical considerations.* Paper presented at the 107th annual meeting of the American Psychological Association, August 22, 1999. Boston, MA.

Griffiths, M. (1996). Technological addictions. *Clinical Psychology Forum.* 76, 14-19.

Krant, R., Patterson, M., Lundmark, V., Kiesler, S. , Mukopadhyay, T., & Scherlis, W. (1998) Internet Paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, *53*, 1017-1031.

Morahan-Martin, J. (1997). *Incidence and correlates of pathological Internet use.* Paper presented at the 105th annual meeting of the American Psychological Association, August 18, 1997. Chicago, IL.

Scherer, K. (1997). College life online: Healthy and unhealthy Internet use. *Journal of College Development*, 38, 655-665.

Schneider, J. P. (2000). Effects of Cybersexual Addiction on the Family: Results of a Survey. *Sexual Addiction and Compulsivity*, vol. 7, 31-58.

Young, K. S. (1996). *Internet addiction: The emergence of a new clinical disorder.* Paper presented at the 104th annual meeting of the American Psychological Association, August 18, 1996. Toronto, Canada.

Young, K. S. (1997a). *What makes on-line usage stimulating? Potential explanations for pathological Internet use.* Paper presented at the 105th annual meeting of the American Psychological Association, August 15, 1997. Chicago, IL.

Young, K. S. (1997b). The relationship between depression and Internet addiction. *Cyberpsychology and Behavior*, 1(1), 24-28.

Young, K. S. (1998) Internet addiction: The emergence of a new clinical disorder. *CyberPsychology and Behavior*, 1(3), 237-244.

Young, K. S. (1999) The Evaluation and treatment of Internet addiction. In L. VandeCreek & T. Jackson (Eds.). *Innovations in Clinical Practice: A Source Book* 17, 19-31. Sarasota, FL: Professional Resource Press.

Young, K, Cooper, A., Griffin-Shelley, E., Buchanan, J, & O'Mara, J. (2000) Cybersex and Infidelity Online: Implications for evaluation and treatment. *Sexual Addiction and Compulsivity*. 7(1), 59-74.

A Sample of Validation Studies and Uses of IAT

Barke, A., Nyenhuis, N., & Kröner-Herwig, B. (2012). The German version of the internet addiction test: a validation study. *Cyberpsychology, Behavior, and Social Networking*, 15(10), 534-542.

Canan, F., Ataoglu, A., Nichols, L. A., Yildirim, T., & Ozturk, O. (2010). Evaluation of psychometric properties of the internet addiction scale in a sample of Turkish high school students. *Cyberpsychology, Behavior, and Social Networking*, 13(3), 317-320.

Cao, F., & Su, L. (2007). Internet addiction among Chinese adolescents: prevalence and psychological features. *Child: care, health and development,* 33(3), 275-281.

Chang, M. K., & Law, S. P. M. (2008). Factor structure for Young's Internet Addiction Test: A confirmatory study. *Computers in Human Behavior*, 24(6), 2597-2619.

Ferraro, G., Caci, B., D'amico, A., & Blasi, M. D. (2006). Internet addiction disorder: an Italian study. *CyberPsychology & Behavior*, 10(2), 170-175.

Frangos, C. C., Frangos, C. C., & Sotiropoulos, I. (2012). A meta-analysis of the reliability of Young's Internet addiction test. In *World Congress on Engineering* (Vol. 1, pp. 368-371).

Ghassemzadeh, L., Shahraray, M., & Moradi, A. (2008). Prevalence of Internet addiction and comparison of Internet addicts and non-addicts in Iranian high schools. *CyberPsychology & Behavior*, 11(6), 731-733.

Guan, N. C., Isa, S. M., Hashim, A. H., Pillai, S. K., & Singh, M. K. H. (2015). Validity of the Malay Version of the Internet Addiction Test A Study on a Group of Medical Students in Malaysia. *Asia-Pacific Journal of Public Health*, 27(2), NP2210-NP2219.

Hawi, N. S. (2013). Arabic validation of the Internet addiction test. *Cyberpsychology, Behavior, and Social Networking*, 16(3), 200-204.

Jelenchick, L. A., Becker, T., & Moreno, M. A. (2012). Assessing the psychometric properties of the Internet Addiction Test (IAT) in US college students. *Psychiatry Research*, 196(2), 296-301.

Khazaal, Y., Billieux, J., Thorens, G., Khan, R., Louati, Y., Scarlatti, E & Zullino, D. (2008). French validation of the internet addiction test. CyberPsychology & Behavior, 11(6), 703-706.

Lai, C. M., Mak, K. K., Watanabe, H., Ang, R. P., Pang, J. S., & Ho, R. C. (2013). Psychometric properties of the internet addiction test in Chinese adolescents. Journal of pediatric psychology, jst022.

Lam, L. T., Peng, Z. W., Mai, J. C., & Jing, J. (2009). Factors associated with Internet addiction among adolescents. *CyberPsychology & Behavior*, 12(5), 551-555.

Ngai, S. S. Y. (2007). Exploring the validity of the Internet Addiction Test for students in grades 5–9 in Hong Kong. *International Journal of Adolescence and Youth*, 13(3), 221-237.

Panayides, P., & Walker, M. J. (2012). Evaluation of the psychometric properties of the Internet Addiction Test (IAT) in a sample of Cypriot high school students: the Rasch Measurement Perspective. *European Journal of Psychiatry*, 8(3), 327-351.

Pawlikowski, M., Altstötter-Gleich, C., & Brand, M. (2013). Validation and psychometric properties of a short version of Young's Internet Addiction Test. *Computers in Human Behavior*, 29(3), 1212-1223.

Tsai, C. C., & Lin*, S. S. (2003). Internet addiction of adolescents in Taiwan: An interview study.*

CyberPsychology & Behavior, 6(6), 649-652.

Widyanto, L., & McMurran, M. (2004). The psychometric properties of the internet addiction test. *CyberPsychology & Behavior*, 7(4), 443-450.

Appendix 1:

INTERNET ADDICTION TEST

Name_____
Male _____ Female _____
Age _____ Years Online _____ Do you use the Internet for work? _____Yes _____ No

This questionnaire consists of 20 statements. After reading each statement carefully, based upon the 5-point Likert scale, please select the response (0, 1, 2, 3, 4 or 5) which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified.

0 = Not Applicable
1 = Rarely
2 = Occasionally
3 = Frequently
4 = Often
5 = Always

1. ___How often do you find that you stay online longer than you intended?
2. ___How often do you neglect household chores to spend more time online?
3. ___How often do you prefer the excitement of the Internet to intimacy with your partner?
4. ___How often do you form new relationships with fellow online users?
5. ___How often do others in your life complain to you about the amount of time you spend online?
6. ___How often do your grades or school work suffer because of the amount of time you spend online?
7. ___How often do you check your email before something else that you need to do?
8. ___How often does your job performance or productivity suffer because of the Internet?
9. ___How often do you become defensive or secretive when anyone asks you what you do online?
10. ___How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?
11. ___How often do you find yourself anticipating when you will go online again?
12. ___How often do you fear that life without the Internet would be boring, empty, and joyless?
13. ___How often do you snap, yell, or act annoyed if someone bothers you while you are online?
14. ___How often do you lose sleep due to being online?
15. ___How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?
16. ___How often do you find yourself saying "just a few more minutes" when online?
17. ___How often do you try to cut down the amount of time you spend online and fail?
18. ___How often do you try to hide how long you've been online?
19. ___How often do you choose to spend more time online over going out with others?
20. ___How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

Appendix 2:

INTERNET APPLICATION CHECKLIST

Please estimate the percentage of time you have utilized the following online activities over the past month:

_____Adult Entertainment Sites
_____Business Email
_____Business Surfing
_____Chat rooms
_____Discussion Lists
_____Instant Messaging
_____News Sites
_____Online Auctions
_____Online Gambling
_____Online Gaming
_____Online Shopping
_____Other_____
_____Personal Email
_____Recreational Surfing
_____Stock Trading