

TEACHER NOTES AND KEY

Behavioral Addiction Student Recording Sheet

Name _____

Student: Define 'addiction'. What does it mean that someone is classified as "addicted"?

Student: What are things that people can become addicted to, apart from drugs and alcohol?

Discussion: The clinical definition of 'addiction' is **Addiction** is characterized by²:

- a. **Inability to consistently Abstain;**
- b. **Impairment in Behavioral control;**
- c. **Craving;** or increased "hunger" for drugs or rewarding experiences;
- d. **Diminished recognition of significant problems** with one's behaviors and interpersonal relationships; and
- e. **A dysfunctional Emotional response.**

Discussion: The Brown Criteria

The Brown Criteria is one of the diagnostic tools doctors use to determine addiction. What are the six points of the Brown Criteria?

1. **Salience:** Domination of a person's life by the activity. Social media/gaming/texting becomes very important thing in your life.
2. **Euphoria:** A 'buzz' or a 'high' is derived from the activity. Your mood changes based on access to social media/games/texting.
3. **Tolerance:** The activity has to be undertaken to a progressively greater extent to achieve the same 'buzz'. You are using social media/gaming/texting more and more often for longer periods of time. Collecting more farm animals, getting to the next level on a game, getting more 'likes', posting more often.
4. **Withdrawal Symptoms:** Cessation of the activity leads to the occurrence of unpleasant emotions or physical effects. You become moody, impatient, irritable when you aren't on social media/game/texting. You think about the next time you can check in, and until you do, you're grouchy.
5. **Conflict:** The activity leads to conflict with others or self-conflict. Those around you express frustration with your obsession and extensive use of social media/gaming/texting.
6. **Relapse and Reinstatement:** Resumption of the activity with the same vigor subsequent to attempts to abstain, negative life consequences, and negligence of job, educational or career opportunities. You try

to limit your use, but you find yourself depressed, angry, missing school, losing a job, friends, and family, and you still continue to do it anyway.

Student: Why do you think some people become addicts and others don't?

Discussion: Precursors to Addiction

Precursors are characteristics that may increase one's chances of becoming addicted.

1. Sociodemographics - gender, economic status, age
2. Personality - ADHD, depression, anxiety, antisocial personality disorder
3. Comorbidity - already using alcohol, drugs, nicotine, poor health, excessive daytime sleepiness, obesity
4. Cognitive Features - novelty seeking, low reward dependence, low self-esteem, low frustration tolerance, stress, low academic achievement, leisure boredom, parent bonding, perceived parental monitoring
5. Neurological Processes - neurotransmitter systems (dopamine/serotonin), diminished activity of certain areas of the brain
6. Family History/Genetics - genetic predisposition, childhood maltreatment

Student: Take Social Media/Texting/Gaming Quiz. Score yourself based on directions.

Student: Reflect on your score.

Student: See the following chart up on the board. Place a tally in the column for your score. When all tallies are in, copy results into the table below. Calculate total percentages for each column.

	Low Risk	At Risk	Addicted
Hour 1			
2			
3			
4			
TOTALS			

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Student: What are things that people can become addicted to, apart from drugs and alcohol?

Discussion: What is the clinical definition of 'addiction'?

Discussion: The Brown Criteria

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Salience:

Euphoria:

Tolerance:

Withdrawal Symptoms:

Conflict:

Relapse and Reinstatement:

Student: Why do you think some people become addicts and others don't?

Discussion: Precursors to Addiction

Precursors are characteristics that may increase one's chances of becoming addicted.

Sociodemographics -

Personality -

Comorbidity -

Cognitive Features -

Neurological Processes -

Family History/Genetics -

Student: Take Social Media/Texting/Gaming Quiz. Score yourself based on directions.

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Student: See the following chart up on the board. Place a tally in the column for your score. When all tallies are in, copy results into the table below. Calculate total percentages for each column.

	Low Risk	At Risk	Addicted
Hour 1			
2			
3			
4			
TOTALS			

This test, which is adapted from the Internet Addiction Test, was developed by Dr. Kimberly Young. It is the first reliable measure of addictive internet-related use. To assess your level of addiction, answer the following questions using this scale:

1 = rarely	2 = occasionally	3 = frequently	4 = very often	5 = always
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1. How often do you find that you stay on social media/texting/gaming longer than you wanted?	1 2 3 4 5
2. How often do you ignore household tasks to spend more time on social media/texting/gaming?	1 2 3 4 5
3. How often do you prefer the excitement of social media/texting/gaming to spending time with others?	1 2 3 4 5
4. How often do you form new relationships with other social media/texting/gaming users?	1 2 3 4 5
5. How often do others complain to you about the amount of time you spend on social media/texting/gaming?	1 2 3 4 5
6. How often do your grades or schoolwork or work suffer because of the amount of time you spend on social media/texting/gaming?	1 2 3 4 5
7. How often do you check social media/texting/gaming before something else that you need to do?	1 2 3 4 5
8. How often does your job performance or productivity suffer because social media/texting/gaming?	1 2 3 4 5
9. How often do you become defensive or secretive when someone asks you what you do on social media/texting/gaming?	1 2 3 4 5
10. How often do you block out disturbing thoughts about your life with calming thoughts of social media/texting/gaming?	1 2 3 4 5
11. How often do you find yourself anticipating when you will go onto social media/texting/gaming again?	1 2 3 4 5
12. How often do you fear that life without social media/texting/gaming would be boring, empty, and joyless?	1 2 3 4 5
13. How often do you get angry, yell, or act annoyed if someone bothers you while you are on social media/texting/gaming?	1 2 3 4 5

14. How often do you lose sleep due to late-night social media/texting/gaming use?	1 2 3 4 5
15. How often do you feel preoccupied with social media/texting/gaming when off-line, or fantasize about being on them?	1 2 3 4 5
16. How often do you find yourself saying "just a few more minutes" when on social media/texting/gaming?	1 2 3 4 5
17. How often do you try to cut down the amount of time you spend social media/texting/gaming, and fail?	1 2 3 4 5
18. How often do you try to hide how long you've been on social media/texting/gaming?	1 2 3 4 5
19. How often do you choose to spend more time on social media/texting/gaming over going out with others?	1 2 3 4 5
20. How often do you feel depressed, moody, or nervous when you are off social media/texting/gaming, which goes away once you are back on?	1 2 3 4 5

After you've answered all the questions, add the numbers you selected for each response to obtain a final score. The higher your score, the greater your level of addiction and the problems your social media/gaming/texting usage causes. Here's a general scale to help measure your score:

20 - 49 points: Low Risk

You are an average user. You may surf Facebook and Tumblr and text a bit too much at times, but you have control over your usage.

50 -79 points: At Risk

You are experiencing occasional or frequent problems because of social media, texting or gaming. You should consider their full influence on your life.

80 - 100 points: Addicted

Your social media/gaming/texting usage is causing significant problems in your life. You should estimate the influence of these on your life and address the problems directly caused by your usage.

TEACHER NOTES AND KEY

Data Analysis Article Questions Student Sheet

Name _____

A. Read each article. For each, answer the following questions in your science notebook.

1. Who did the research (university, research institute, government, etc)?
2. Who published the article (independent, journal, university, government, etc)?
3. Who funded the study?
4. What is the number of participants in the study? What is the breakdown of participants, (gender, age, demographics, etc)?
5. Who many participants were considered “addicted”?
6. How was the participant information gathered (survey, questionnaire, interview, etc)?
7. Is addiction defined in the article?
8. Is the title supported by the data stated in the article?
9. Do you feel the data is reliable? EXPLAIN your answer.

Articles

Many teens tell survey they’re addicted to social media, texting

http://www.washingtonpost.com/blogs/post-tech/post/many-teens-tell-survey-theyre-addicted-to-social-media-texting/2012/06/25/gJQAvZc72V_blog.html

*No addiction data given

Teens And Social Media: Even Digital Natives Want A Break From The Web

http://www.huffingtonpost.com/2012/06/26/teens-and-social-media_n_1628442.html

*41 percent

28 Social Networking Addiction Statistics

<http://brandongaille.com/28-social-networking-addiction-statistics/>

*350 million

Facebook is still in. Teens still addicted to social network: Survey

<http://www.techtimes.com/articles/9157/20140626/facebook-is-still-in-teens-still-addicted-to-social-network-survey.htm>

*No addiction data given

Research Links Addictive Social Media Behavior With Substance Abuse

http://www.huffingtonpost.com/2014/12/13/social-media-addiction_n_6302814.html

*10 percent

B. Read the three abstracts found on the *Article Abstracts for Data Analysis* handout. For each, answer the questions above in your science notebook.

C. Class discussion

1. Compare and contrast the types of articles in parts A and B.

A: Ambiguous titles, little or no data presented, unknown sources/procedures for data collection, no explanation of sampling procedures, no validity of data or bias, no citations

B: Titles represent testable question, data is represented and reported including procedure, data collection methods, bias is addressed (if applicable), statistical data is defended, limitations are discussed (if applicable), citation list to support question and research methods.

2. Do any of the data represented in any of the articles/abstracts correlate with the data collected in class? The data found in the abstracts most closely represent what you would most likely find in a sample size of approximately 100 students. If not, discuss the importance of sample size, random sampling, demographics, definitions of terms, honesty and bias on part of participants, etc.

3. When someone states a statistic to you, for example, "Tons of students are addicted to the Internet.", what two questions do you feel are most important to ask regarding the validity of the data (your answers do not have to be from the questions you answered in this exercise)?

Who did the research (is it peer reviewed)?

How was the data collected (is there a set procedure, is the process valid, a large sample size, variety in participants, variables)?

A. Read each article. For each, answer the following questions in your science notebook.

10. Who did the research (university, research institute, government, etc)?
11. Who published the article (independent, journal, university, government, etc)?
12. Who funded the study?
13. What is the number of participants in the study? What is the breakdown of participants, (gender, age, demographics, etc)?
14. Who many participants were considered “addicted”?
15. How was the participant information gathered (survey, questionnaire, interview, etc)?
16. Is addiction defined in the article?
17. Is the title supported by the data stated in the article?
18. Do you feel the data is reliable? EXPLAIN your answer.

Articles

Many teens tell survey they’re addicted to social media, texting

http://www.washingtonpost.com/blogs/post-tech/post/many-teens-tell-survey-theyre-addicted-to-social-media-texting/2012/06/25/gJQAvZc72V_blog.html

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B. Read the three abstracts found on the *Article Abstracts for Data Analysis* handout. For each, answer the questions above in your science notebook.

C. Class discussion

1. Compare and contrast the types of articles in parts A and B.
2. Do any of the data represented in any of the articles/abstracts correlate with the data collected in class?
3. When someone states a statistic to you, for example, “Tons of students are addicted to the Internet.”, what two questions do you feel are most important to ask regarding the validity of the data (your answers do not have to be from the questions you answered in this exercise)?

Article Abstracts for Data Analysis

1. Problematic Internet use and health in adolescents: data from a high school survey in Connecticut.

[J Clin Psychiatry](#). 2011 Jun;72(6):836-45. doi: 10.4088/JCP.10m06057. Epub 2011 Apr 19.

[Liu TC](#)¹, [Desai RA](#), [Krishnan-Sarin S](#), [Cavallo DA](#), [Potenza MN](#).

Abstract

OBJECTIVE:

This study aims to explore the prevalence and health correlates of problematic Internet use among high school students in the United States.

METHOD:

A cross-sectional survey with a sample size of 3,560 students was conducted among high schools in Connecticut. Demographic data, characteristics of Internet use, health measures, and risk behaviors were assessed. Chi-square and logistic regression analyses were used to study the relationship between problematic Internet use and risk behaviors as well as related gender differences.

RESULTS:

When problematic Internet use was diagnosed with criteria modeled after the Minnesota Impulsive Disorder Inventory that address core features of impulse-control disorder (strong urge, growing tension, and attempts to cut back), the overall prevalence was about 4%, with no significant difference between genders. Problematic Internet use was more common among Asian (7.86%) and Hispanic (6.07%) students. Even though boys spent significantly more time on the Internet (16.52% of boys spent over 20 hours per week vs 12.62% of girls; $P = .0001$) and more frequently missed important school or social activities as a result (8.97% of boys vs 5.85% of girls; $P = .0004$), girls more frequently self-reported measures of excessive use of the Internet (11.81% of girls thought that they had a problem vs 8.90% of boys; $P = .0048$). After adjustment of sociodemographic factors, problematic Internet use was found to associate significantly with substance use ($P = .0014$), depression ($P < .0001$), and aggression ($P < .0001$), with largely similar patterns of associations between genders.

CONCLUSIONS:

Problematic Internet use may be present in about 4% of high school students in the United States. It may be associated with depression, substance use, and aggressive behaviors. High school boys, though, may have heavier Internet use and may be less self-aware of the related problems.

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Footnotes

Disclosure: All authors reported no conflict of interest in the content of this paper. Dr. Potenza has received financial support or compensation for the following: Dr. Potenza consults for and is an advisor to Boehringer Ingelheim; has financial interests in Somaxon; has received research support from the National Institutes of Health, Veteran's Administration, Mohegan Sun Casino, the National Center for Responsible Gaming and its affiliated Institute for Research on Gambling Disorders, and Forest Laboratories pharmaceuticals; has participated in surveys, mailings or telephone consultations related to drug addiction, impulse control disorders or other health topics; has consulted for law offices on issues related to addictions or impulse control disorders; has provided clinical care in the Connecticut Department of Mental Health and Addiction Services Problem Gambling Services Program; has performed grant reviews for the National Institutes of Health and other agencies; has guest-edited journal sections; has given academic lectures in grand rounds, CME events and other clinical or scientific venues; and has generated books or book chapters for publishers of mental health texts.

2. Prevalence of Pathological Internet Use among University Students and Correlations with Self-Esteem, the General Health Questionnaire (GHQ), and Disinhibition

CYBERPSYCHOLOGY & BEHAVIOR

Volume 8, Number 6, 2005

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KATIE NIEMZ, M.Sc., MARK GRIFFITHS, Ph.D., and PHIL BANYARD, B.Sc.

ABSTRACT

Over the last few years, there has been increased interest in the addictive potential of the Internet. The current study was an attempt to replicate common findings in the literature and provide more evidence for the existence of Internet addiction among students—a population considered to be especially vulnerable. A total of 371 British students responded to the questionnaire, which included the Pathological Internet Use (PIU) scale, the General Health Questionnaire (GHQ-12), a self-esteem scale, and two measures of disinhibition. Results showed that 18.3% of the sample were considered to be pathological Internet users, whose excessive use of the Internet was causing academic, social, and interpersonal problems. Other results showed that pathological Internet users had lower self-esteem and were more socially disinhibited. However, there was no significant difference in GHQ scores. These results are discussed in relation to the methodological shortcomings of research in the area as a whole.

3. Internet addiction disorder: prevalence in an Italian student population.

[Nord J Psychiatry](#). 2012 Feb;66(1):55-9. doi: 10.3109/08039488.2011.605169. Epub 2011 Aug 23.

[Poli R](#)1, [Agrimi E](#).

Abstract

BACKGROUND:

Internet addiction is one of the latest forms of addiction that has attracted the attention of popular media and researchers in these last few years. Several authors think Internet addiction is a separate disorder that merits inclusion in DSM-V. There is considerable controversy about this opinion.

AIMS:

The aim of this study was to assess the prevalence of Internet addiction in a representative sample of high school students attending secondary institutions in the district of Cremona and to assess any difference concerning variables such as gender, age, place of residence and kind of school attended.

METHODS:

The Italian version of the Internet Addiction Test (IAT) has been administered to a sample of 2533 students from different kinds of school. The survey also required social and demographic data.

RESULTS:

The majority of respondents were classified as normal users of the Internet (n = 2386, 94.19%), with 127 (5.01%) moderately addicted and 20 (0.79%) seriously addicted. Significant differences in gender and in kinds of school were found. No statistical differences were revealed in age and urban or rural conditions.

CONCLUSIONS:

Our study has confirmed the general use of the Internet among youngest people, the emergence of Internet addiction and the male preponderance of this phenomenon.

TEACHER NOTES AND KEY**Survey Evaluation Student Recording Sheet**

Name _____

Using Brown's Criteria, assign each question from your survey to one of the six criteria.

Brown's Criteria	Survey Question # (s)
Salience: Domination of a person's life by the activity	
Euphoria: A 'buzz' or a 'high' is derived from the activity	
Tolerance: The activity has to be undertaken to a progressively greater extent to achieve the same 'buzz'	
Withdrawal Symptoms: Cessation of the activity leads to the occurrence of unpleasant emotions or physical effects	
Conflict: The activity leads to conflict with others or self-conflict	
Relapse and Reinstatement: Resumption of the activity with the same vigor subsequent to attempts to abstain, negative life consequences, and negligence of job, educational or career opportunities.	

Is this survey a good measure of addiction according to Brown's Criteria? Justify your claim.

Survey Evaluation Student Recording Sheet

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Using Brown's Criteria, assign each question from your survey to one of the six criteria.

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TEACHER NOTES AND KEY

EXTENSION

Claim - Evidence - Reasoning (CER)

Social Media/Texting/Gaming Addiction

Depending on experience using CER, students could use claims/evidence/reasoning on a variety of points from this lesson.

Some examples include:

There is/is not a significant social media addiction...

among students in our school.

teenagers in America.

teenagers in the world.

I am low risk/at risk/addicted to social media.

The information and data represented in this lesson does/does not validate a significant social media addiction problem...

among students in our school.

teenagers in America.

teenagers in the world.

CER Template Examples and Rubric

http://www.am.dodea.edu/lejeune/bms/lion_docs/documents/cerwriting.pdf

<http://www.colorincolorado.org/pdfs/cer-template.pdf>

<http://www.nsta.org/elementaryschool/connections/201104ClaimsEvidenceRubric.pdf>

http://www.bcps.org/offices/lis/writing/secondary/docs/Just_Because%5B1%5D.pdf

EXTENSION

Technology Vacation

For the next 48 hours, you will refrain from the use of technology!

1. Form a group of four.
2. In your group, discuss and create a list of rules for your “technology vacation”.
3. After 48 hours, review the list of characteristics associated with addiction and reflect on
4. Write one statement that summarizes your experience.
5. Share your experience with your group members.
6. Compare and Contrast your experience with others in your group.

1. _____

2. _____

3. _____

4. _____

Characteristics: (-) did not experience, (+) did experience

1. Think you hear your phone ringing/vibrating and it is not there. - / +
2. Feeling lonely, anxious or worried. _ / +
3. Nausea or feeling sick. _ / +
4. Strong feeling to pick up your phone, play a game or surf the internet. _ / +

Summary Statement:

Compare and Contrast: