



HS LESSON 3: Reading Research Studies

LESSON DESCRIPTION: In this lesson, students will begin analyzing studies relating to the effects of excessive screen use on physical, social, and emotional well-being. Students will read one or two journal articles on the effects of entertainment media. They will learn about the different sections of a journal article. The teacher will provide guidance on taking notes.

FOCUS QUESTIONS: How do you read research studies published in journals? What are the effects of entertainment media on student behavior? This question will depend on the focus of the unit.

OBJECTIVES: Students will:

- read a research article and determine central ideas or conclusions of the studies.
- generate questions, analyze information and develop possible solutions to social problems through reasoning.
- identify specific effects of excessive screen use and/or media violence.

Core State Standards

CCSS.ELA-Literacy.RST.9-10.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.

CCSS.ELA-Literacy.SL.9-12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

LENGTH OF LESSON: This lesson will take two periods.

MATERIALS NEEDED:

- Research article regarding excessive screen use (see Appendix)
- Example of Note Taking
- Notecards or HANDOUT 1: Taking Notes
- Research Folders

Journal of the
American
Academy of
Pediatrics

VOLENCE AND CHILDREN 45
MEDIA and Children 48
Once upon a Time 46

Teacher's Note: There are a number of websites that provide access to full journal articles or abstracts. They are listed at the end of this lesson. The article: ***Children's Screen Viewing is Related to Psychological Difficulties Irrespective of Physical Activity, 2010***, is available online, along with updated information, through the American Academy of Pediatrics at <http://pediatrics.aappublications.org/content/126/5/e1011.full.html>. There are also science articles available at the website: www.TakeTheChallengeNow.net.

PROCEDURE:

Activity 3.1: Students will read a recent journal article on the effects of entertainment media. They will learn about the different sections of a journal article. The teacher will provide guidance on taking notes. They will be provided with a suggested format for note taking.

1. Use the article: ***Children's Screen Viewing is Related to Psychological Difficulties Irrespective of Physical Activity, 2010***, available online, through the American Academy of Pediatrics at: <http://pediatrics.aappublications.org/content/126/5/e1011.full.html>. You may also use a different research article on excessive media or media violence.
2. Display the article on a projection screen. Point out the different sections.
3. **TELL STUDENTS:** At first a scientific research article from a journal can be intimidating. But as long as you have a road map it can be fun and there are treasures to be found.
 - **Title:** Usually the title will explain what the article is about, eg. "*Children's Screen Viewing is Related to Psychological Difficulties.*" Sometimes the title may also be catchy; after all, researchers want to entice people to read their article, eg., "*Brains on Video Games*" or "*Frenemies, Fraitors, and Mean-em-aitors: Priming Effects of Viewing Physical and Relational Aggression in the Media on Women.*"
 - **Abstract:** This is a brief overview of the article. The abstract helps us decide if we want to read more of the article. Most journals let you read the abstracts for free. The abstract usually gives the background or the hypothesis, methods, results, and conclusion. Even if you don't have the entire article you can learn a lot from the abstract.
 - **Introduction:** This provides background information and the research hypothesis, eg. "We hypothesized that greater screen use would be associated with greater psychological difficulties and children with high level of screen use and low levels of physical activity would have the most negative psychological profiles."
 - **Methods:** This explains how a study was conducted, who was in the study, what instruments, e.g., surveys, what variables were measured and other important details.
 - **Results:** This explains the results and includes the data, tables and graphs as well as statistical analysis of the data. This section can get pretty heavy mainly because of the statistical analysis used to determine if the results were "significant." This refers to whether observations reflect a pattern rather than just chance. However, the researcher will explain the results in simpler language, in the next section.
 - **Discussion:** This section may be the most important because the researcher will explain the results and whether the research question (hypothesis) was answered. The discussion may compare the study to other studies and discuss the implications of the research including how important the results are. This section may also include limitations of the study and suggestions for future studies.
 - **References:** These are citations of sources used in the article. This study included 41 references. These can be useful if you want to read more about a subject.

Activity 3.2: The teacher will provide guidance on taking notes. Students will be provided with a suggested format for note taking.

1. Read the **Title and Abstract** of the article to the students and model taking notes about the abstract on a projection screen using a notecard or page.

TELL STUDENTS: I've been conducting an online search for my topic and when I find an article I think I might use then I want to write down some information so I can find it again. This article has some good information so I'm going to write the Title, journal, and date at the top. Then I'm going to write a short summary of the abstract in my own words. I'm going to keep this information short so it fits on a notecard or a page that can be kept in your folder. This can also be kept in a digital format.

(Have the class help summarize the abstract in one or two sentences.)

2. **TELL STUDENTS:** I've decided this is an important study and want to read the entire article and take more extensive notes. I'm going to show how I would do that. First I'm going to read more of the article and underline or highlight the areas I believe are most important. I'm going to read the introduction next. This provides background about the study as well as the researcher's hypothesis.

(Read the introduction to the students and model highlighting important information. Note – In some articles the Introduction does not have a title or is called Background but it's the section that follows the Abstract and provides important background information.)

I'm going to skim the methods and the results sections underlining key information. Remember this section can get pretty heavy mainly because of the statistical analysis used to determine if the results were "significant." However, the researcher will explain the results in simpler language, in the next section, the discussion.

The Discussion section is the most important section. I'm also going to read the conclusion again, which was in the abstract.

(Continue to read or skim the different sections of the article to the students and model highlighting important information.)

3. Display **HANDOUT 1: Taking Notes** on a projection screen.
4. **TELL STUDENTS:** I'm going to go back over the article, reading over the information I've highlighted and write down notes. This handout may provide a useful format.

I'm going to write the title, author(s), journal, and date at the top like I did on the notecard. However, I've added the author(s) names. If there are several authors you may list the first author's name followed by **et al.** which means and others, (Children's Screen Viewing is Related to Psychological Difficulties Irrespective of Physical Activity, A. S. Page, et al., *Pediatrics*, 2011).

Now I'm looking for key points from the article. I will write short notes and even sentence fragments. If there's a sentence or two I really like I may write that down using the actual words from the article and put quotation marks around it. If I'm not summarizing or writing

short notes it's important to always use quotation marks so later I don't plagiarize or take the words of someone else and pass them off as my own. Quoting from an article and giving credit to the author will make your work more authoritative and impress your teachers.

I'm also looking for information that I find interesting or compelling in some way. I'll write that information down. If there's data it's important to include information with data.

Then I'm going to write a short summary of the article in my own words. I can go back to the notecard summary and add to that based on what I've learned.

You may use the **EXAMPLE TAKING NOTES** when doing this activity with the class to fill out **HANDOUT 1: Taking Notes.** You may also use the **EXAMPLE OF TAKING NOTES** as a hand for students to help them as they write their summaries. We've also provided a half size pages for HANDOUT 1.

Activity 3.3: Students will read another journal article on the effects of entertainment media and take notes on their own.

1. Distribute another research article and **HANDOUT 1: Taking Notes.**

(There are a number of free access articles in the websites at the back of the lesson. You may shorten this lesson by having students complete the handout using just the abstract

2. Have students work in groups or pairs to complete the handout using a research article.

Activity 3.4: Class Discussion & Identify Main Problems

1. Have a class discussion regarding main conclusions of the research articles. Students should also record problems they identified on note cards and save in their research folder.
2. Ask students what they noticed from the articles that they can relate to their own experiences with screens (i.e. video games and movies).
3. Remind students the purpose of these lessons is to have them read the research and make their own decisions. They will identify social problems with supporting data and then develop their own recommendations.

Teacher's Note: Depending on the amount of time you want to use for this unit, students can begin the class period by reading and taking notes on an article related to screen use. They can include the notes in their research folders. There is a list of websites with research studies.

HANDOUT 1: Taking Notes (Full Page)

TITLE & REFERENCE	
INFORMATION If a direct quote use Quotation Marks	
INFORMATION If a direct quote use Quotation Marks	
INFORMATION Interesting or compelling	
DATA	
SUMMARY (In your own words)	

Example of Taking Notes

TITLE & REFERENCE	Children's Screen Viewing is Related to Psychological Difficulties Irrespective of Physical Activity, Angie S. Page, PhD, Ashley R. Cooper, PhD, Pippa Griew, MSc, Russell Jago, PhD, <i>Pediatrics</i> , 2010
INFORMATION - If a direct quote use Quotation Marks	- Study of over 1,000 children age 10 – 11 - measured the amount of TV they watched and computer use, activity level, and psychological difficulties.
INFORMATION - If a direct quote use Quotation Marks	“Limiting computer use and television viewing may be important for optimal well-being for young people.”
INFORMATION – Interesting or compelling	Children who watched more than 2 hours of TV were more likely to indicate: - I am often unhappy, downhearted or tearful. - I generally play alone or keep to myself. - I am usually on my own.
DATA	“Children who reported 2 hours of daily computer or television use but engaged in less than 60 minutes of Moderate or Vigorous Physical Activity per day were at increased risk for psychological difficulties.”
SUMMARY	Students who watch more than 2 hours of TV a day and computer use are more at risk for psychological problems. Even if you’re exercising a lot but still watching more than 2 hours of TV/computers you are more likely to have psychological problems. However, if you watch more than 2 hours of TV/Computers and don’t exercise, your risk increases even more.

TITLE & REFERENCE	
INFORMATION If a direct quote use Quotation Marks	
INFORMATION If a direct quote use Quotation Marks	
INFORMATION Interesting or compelling	
DATA	
SUMMARY (In your own words)	

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Internet Resources

www.cmch.tv Center on Media and Child Health at Boston Children's Hospital, Harvard Medical School and Harvard School of Public Health. They have over 6,000 research articles on media in a user friendly format.

www.media-awareness.ca/english/index.cfm The Media Awareness Network (MNet), is one of the world's most comprehensive collections of media education and Internet literacy resources. MNet is a Canadian non-profit organization that has been pioneering the development of media literacy programs since 1996.

www.lionlamb.org This organization was developed by parents for parents, teachers and students. Although the organization no longer exists there are great references on the site.

ccfc@commercialfreechildhood.org The Campaign for a Commercial Free Childhood (ccfc), is an international nonprofit organization, that now supports the National Screen Free Week and provides great resources for schools, communities, and families.



www.med.umich.edu/1libr/yourchild/tv.htm This Website is part of the University of Michigan Health System and has resources including links to research organized by questions, e.g. Does TV affect a child's brain development?

www.TakeTheChallengeNow.net includes a variety of resources including curriculum, science articles, activities for families, student products, power point and video resources.

<http://drdouglas.org/index.html> Psychologist Douglas Gentile is an award-winning research scientist, educator, author, and one of the world's leading experts on the effects of mass media on children, adolescents, and adults. His website has including research articles including abstracts and full text, audio podcasts, books, videos, frequently asked questions, etc.

<http://www.psychology.iastate.edu/~caa/> Dr. Craig Anderson, Distinguished Professor and Director, Center for the Study of Violence, has research studies including full text, video game recommendations, and links to scales used in their research.

<http://www.rcgd.isr.umich.edu/aggr/> The University of Michigan Aggression Research Program and <http://www.rcgd.isr.umich.edu/aggr/personnelprofiles/huesmann.html> includes the work of Dr. Huesman, one of the world experts on the effects of media.

www.scholar.google.com Google Scholar provides search for scholarly information including research journals and academic publishers.