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RHETORICAL REINVENTIONS

Rethinking Research Processes and Information Practices to Deepen our Pedagogy

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LOEX 2016, May 5-7, 2016, Pittsburgh, PA

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Information Literacy through the Lens of Rhetoric and Composition

Together we will…

Make connections between rhetoric and composition theories and information literacy in order to consider new instructional approaches to traditional information literacy learning outcomes.

- *question formulation (Joel)*
- *information search (Donna)*
- *source evaluation (Mary)*

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Rhetoricizing Information Literacy

"**. . .** information literacy is less a formal skill linked to textual features than **an intellectual process driven by engaged inquiry**. It is less an outcome or product than it is **a recursive process, something to be drafted and revised–by students and by ourselves**" (Norgaard, 2003, p. 128).

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QUESTION FORMULATION

Joel M. Burkholder
@FromtheShelves

Generic Questions

- Focus on viability
  - *Is it interesting to YOU?*
  - *Is the question too broad?*
  - *Is the question too narrow?*
  - *What background information is available?*
  - *Is it researchable given available resources?*

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Situated Questions

- Focus on rhetorical justification
  - *Community-based: "We write not as isolated individuals but as members of communities whose beliefs, concerns, and practices both instigate and constrain, at least in part, the sorts of things we can say" (Harris, 1989).*
  - *Activity-based: "Invention…is related to observation and experience" (Reich, 1986).*
  - *Rhetorically persuasive: "To 'define' a problem is to interact with the material world according to the conventions of a particular discourse community" (Bizzell, 1982).*

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Moving from Generic to Situated Questions

1. *Name your topic:* I am studying _____,
2. *Imply your question:* because I want to find out who/how/why _____,
3. *State the rationale for the question*: in order to understand how/why/what _____.

From *The Craft of Research* (Booth, Colomb, & Williams, 2008)

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Do you have a cell phone?

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Do you have a cell phone?

APPLIED COGNITIVE PSYCHOLOGY

Research Article

Did you see the unicycling clown? Inattentional blindness while walking and talking on a cell phone

Ira E. Hyman Jr*, S. Matthew Boss, Breanne M. Wise, Kira E. McKenzie and Jenna M. Caggiano

Article first published online: 19 OCT 2009

DOI: 10.1002/acp.1638

Issue

Applied Cognitive Psychology
Volume 24, Issue 5, pages 597–607, July 2010

Abstract

We investigated the effects of divided attention during walking. Individuals were classified based on whether they were walking while talking on a cell phone, listening to an MP3 player, walking without any electronics or walking in a pair. In the first study, we found that cell phone users walked more slowly, changed directions more frequently, and were less likely to acknowledge other people than individuals in the other conditions. In the second study, we found that cell phone users were less likely to notice an unusual activity along their walking route (a unicycling clown). Cell phone usage may cause inattentional blindness even during a simple activity that should require few cognitive resources. Copyright © 2009 John Wiley & Sons, Ltd.

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Are you someone's best friend?

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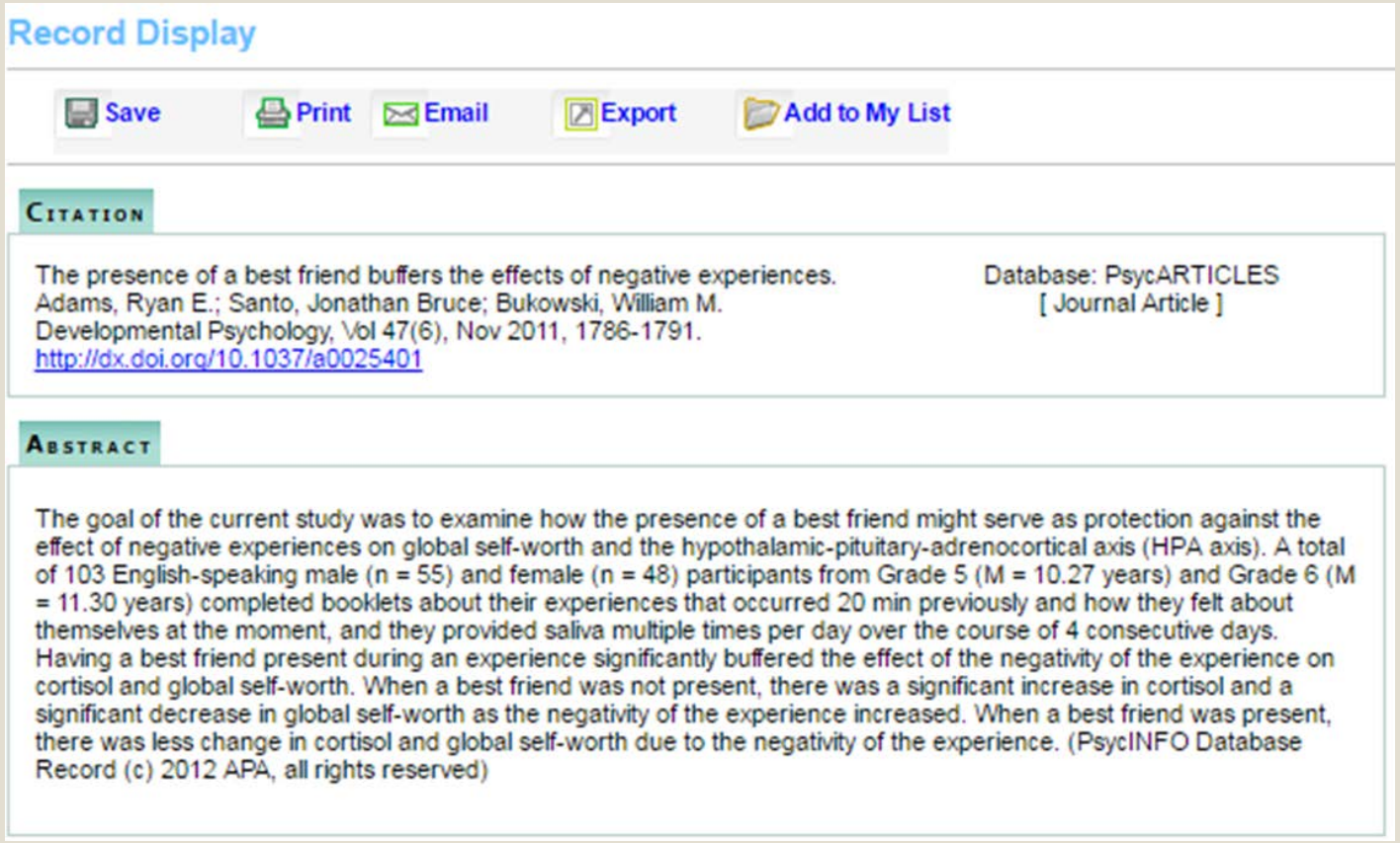
Are you someone's best friend?



Record Display

Save Print Email Export Add to My List

CITATION

The presence of a best friend buffers the effects of negative experiences.
Adams, Ryan E.; Santo, Jonathan Bruce; Bukowski, William M.
Developmental Psychology, Vol 47(6), Nov 2011, 1786-1791.
http://dx.doi.org/10.1037/a0025401

Database: PsycARTICLES
[Journal Article]

ABSTRACT

The goal of the current study was to examine how the presence of a best friend might serve as protection against the effect of negative experiences on global self-worth and the hypothalamic-pituitary-adrenocortical axis (HPA axis). A total of 103 English-speaking male (n = 55) and female (n = 48) participants from Grade 5 (M = 10.27 years) and Grade 6 (M = 11.30 years) completed booklets about their experiences that occurred 20 min previously and how they felt about themselves at the moment, and they provided saliva multiple times per day over the course of 4 consecutive days. Having a best friend present during an experience significantly buffered the effect of the negativity of the experience on cortisol and global self-worth. When a best friend was not present, there was a significant increase in cortisol and a significant decrease in global self-worth as the negativity of the experience increased. When a best friend was present, there was less change in cortisol and global self-worth due to the negativity of the experience. (PsycINFO Database Record (c) 2012 APA, all rights reserved)

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Do you love chocolate?

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Do you love chocolate?

Appetite
Volume 58, Issue 1, February 2012, Pages 387–392

Research report

Brisk walking reduces ad libitum snacking in regular chocolate eaters during a workplace simulation ☆

Hwajung Oh, Adrian H. Taylor

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doi:10.1016/j.appet.2011.11.006

Get rights and content

Abstract

Workplace snacking can contribute to obesity. Exercise reduces chocolate cravings but effects on chocolate consumption are unknown. This study investigated the effect of brief exercise on ad libitum consumption during breaks in a computerised task. Seventy-eight regular chocolate eaters, age: 24.90 ± 8.15 years, BMI: 23.56 ± 3.78 kg/m^2 abstained for 2 days. They were randomly assigned to one of four conditions, in a 2 × 2 factorial design, involving either a 15 min brisk walk or quiet rest, and then computerised Stroop tasks with low or high demanding conditions, in three 180 s blocks with a 90 s interval. Throughout, a pre-weighed bowl of chocolates was available for ad libitum eating. A two-way ANOVA revealed no interaction effect of exercise and stress on total chocolate consumption, or main effect of stress, but a main effect of exercise [$F(1, 74) = 7.12$, $p < .01$]. Mean (SD) chocolate consumption was less ($t(73.5) = 2.69$, 95% CI for difference 3.4–22.9, ES = 0.61) for the exercise (15.6 g) than control (28.8 g) group. Exercise also increased affective activation, but there was no mediating effect of change in affect on chocolate consumption. A brief walk may help to reduce ad libitum snacking in regular chocolate eaters.

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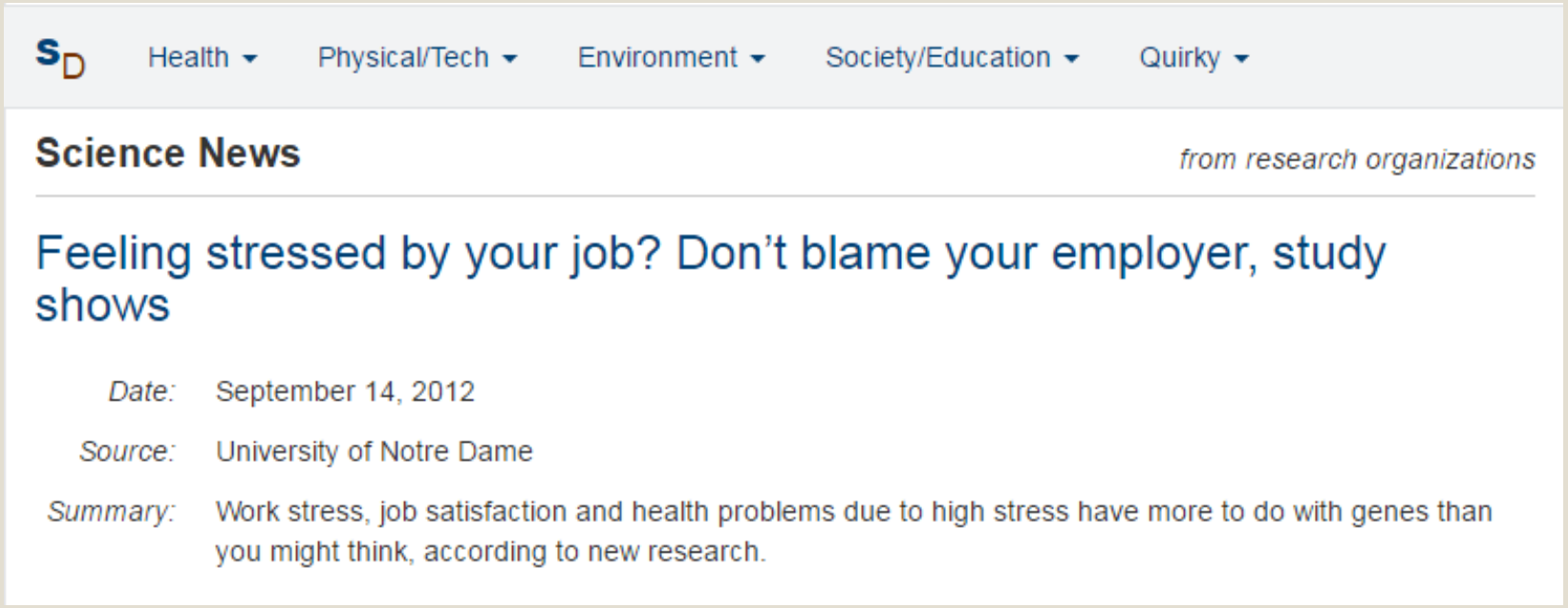
Are you feeling stressed at work?



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Are you feeling stressed at work?

ELSEVIER

Organizational Behavior and Human Decision Processes

Volume 117, Issue 1, January 2012, Pages 208–220

Genetic influences on core self-evaluations, job satisfaction, and work stress: A behavioral genetics mediated model

Timothy A. Judge[a], Remus Ilies[b], Zhen Zhang[c]

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doi:10.1016/j.obhdp.2011.08.005

Abstract

In this study we investigated the mediated influence of core self-evaluations (CSE) on employee health problems via job satisfaction and work stress, and the degree to which genetic factors explain these mediated relationships. Based on data obtained from a sample of 594 Swedish twins (114 monozygotic twin pairs and 183 dizygotic twin pairs), conventional path analysis results supported the mediated effects of CSE on employee health via job satisfaction and work stress, after controlling for conscientiousness and extraversion. Behavioral genetic analyses showed significant heritability of all four variables. Moreover, we found that the mediated relationships via job satisfaction and work stress are explained by genetic factors, such that the genetic source of job satisfaction and work stress mediates the genetic influence of CSE on health problems. These results highlight the role played by genetic factors in better understanding the relationships between CSE, work attitudes, and health outcomes.

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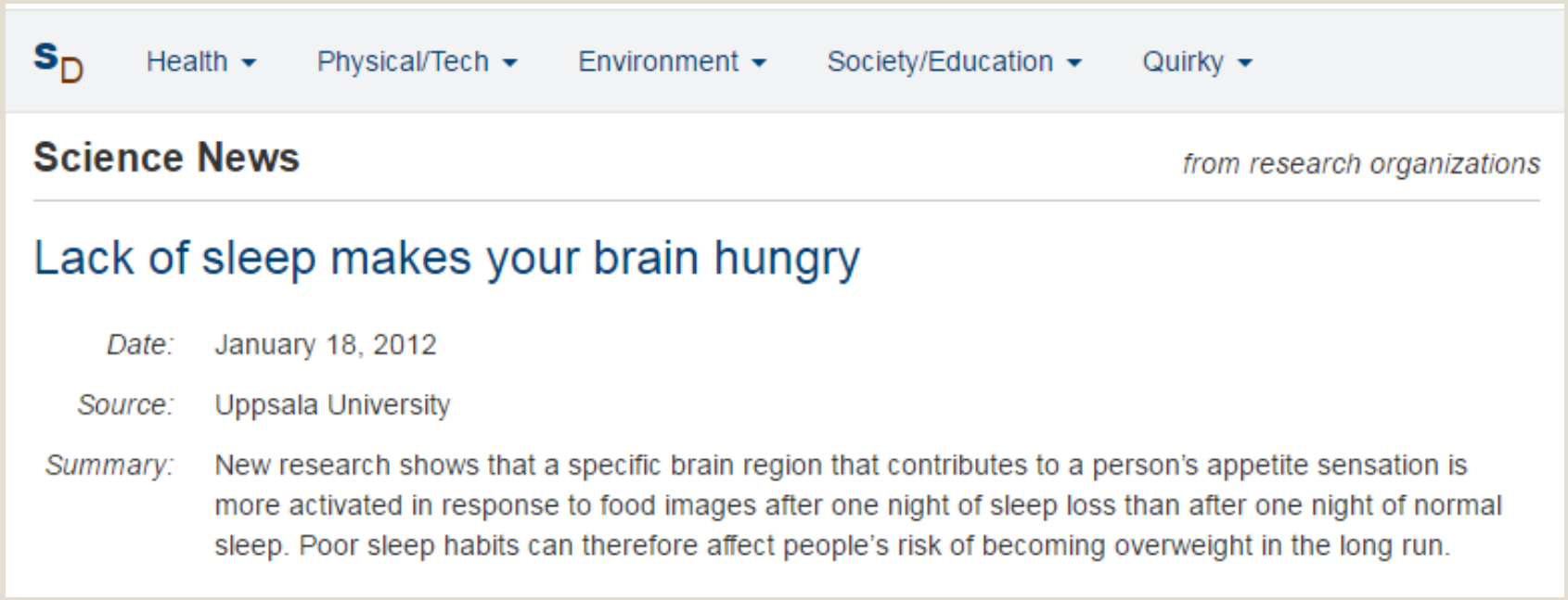
Do you get enough sleep?



SD Health Physical/Tech Environment Society/Education Quirky

Science News *from research organizations*

Lack of sleep makes your brain hungry

Date: January 18, 2012

Source: Uppsala University

Summary: New research shows that a specific brain region that contributes to a person's appetite sensation is more activated in response to food images after one night of sleep loss than after one night of normal sleep. Poor sleep habits can therefore affect people's risk of becoming overweight in the long run.

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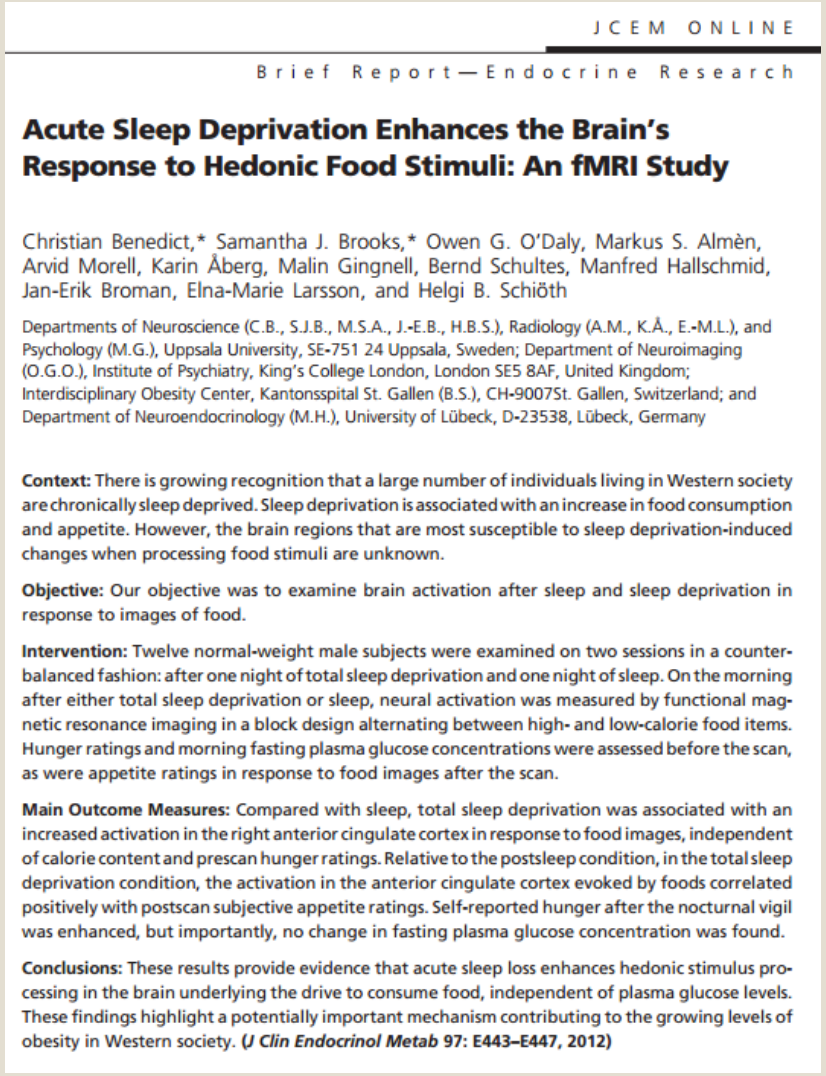
Do you get enough sleep?



JCEM ONLINE

Brief Report—Endocrine Research

Acute Sleep Deprivation Enhances the Brain's Response to Hedonic Food Stimuli: An fMRI Study

Christian Benedict,* Samantha J. Brooks,* Owen G. O'Daly, Markus S. Almèn, Arvid Morell, Karin Åberg, Malin Gingnell, Bernd Schultes, Manfred Hallschmid, Jan-Erik Broman, Elna-Marie Larsson, and Helgi B. Schiöth

Departments of Neuroscience (C.B., S.J.B., M.S.A., J.-E.B., H.B.S.), Radiology (A.M., K.Å., E.-M.L.), and Psychology (M.G.), Uppsala University, SE-751 24 Uppsala, Sweden; Department of Neuroimaging (O.G.O.), Institute of Psychiatry, King's College London, London SE5 8AF, United Kingdom; Interdisciplinary Obesity Center, Kantonsspital St. Gallen (B.S.), CH-9007St. Gallen, Switzerland; and Department of Neuroendocrinology (M.H.), University of Lübeck, D-23538, Lübeck, Germany

Context: There is growing recognition that a large number of individuals living in Western society are chronically sleep deprived. Sleep deprivation is associated with an increase in food consumption and appetite. However, the brain regions that are most susceptible to sleep deprivation-induced changes when processing food stimuli are unknown.

Objective: Our objective was to examine brain activation after sleep and sleep deprivation in response to images of food.

Intervention: Twelve normal-weight male subjects were examined on two sessions in a counter-balanced fashion: after one night of total sleep deprivation and one night of sleep. On the morning after either total sleep deprivation or sleep, neural activation was measured by functional magnetic resonance imaging in a block design alternating between high- and low-calorie food items. Hunger ratings and morning fasting plasma glucose concentrations were assessed before the scan, as were appetite ratings in response to food images after the scan.

Main Outcome Measures: Compared with sleep, total sleep deprivation was associated with an increased activation in the right anterior cingulate cortex in response to food images, independent of calorie content and prescan hunger ratings. Relative to the postsleep condition, in the total sleep deprivation condition, the activation in the anterior cingulate cortex evoked by foods correlated positively with postscan subjective appetite ratings. Self-reported hunger after the nocturnal vigil was enhanced, but importantly, no change in fasting plasma glucose concentration was found.

Conclusions: These results provide evidence that acute sleep loss enhances hedonic stimulus processing in the brain underlying the drive to consume food, independent of plasma glucose levels. These findings highlight a potentially important mechanism contributing to the growing levels of obesity in Western society. (***J Clin Endocrinol Metab*** **97: E443–E447, 2012)**

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INFORMATION SEARCH

Donna Witek
@donnarosemary

A 23+ Year-Old Conversation

"Rather than describe the search process as a matter of finding information—which sounds like panning for solid nuggets of truth—librarians should describe it as a way of tapping into a scholarly communication network . . . [student researchers] are **not locating information**, but **voices with something important to say**"(Fister, 1993, pp. 214-5).

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ACRL Framework for Information Literacy for Higher Education (2015)

- *Scholarship as Conversation*
- *Research as Inquiry*
- ***Searching as Strategic Exploration***

"Experts realize that information searching is a **contextualized, complex experience** that affects, and is affected by, the **cognitive, affective, and social dimensions of the searcher.**"

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Framework for Success in Postsecondary Writing (2011)

Framework for Success in Postsecondary Writing *Habits of Mind on left, Experiences with Writing, Reading and Critical Analysis on right*		ACRL Framework for Information Literacy *Frames*
Persistence, Creativity, Flexibility, Metacognition	--Developing Critical Thinking Through Writing, Reading, and Research --Developing Flexible Writing Processes	Searching as Strategic Exploration
Curiosity, Openness, Creativity, Persistence	--Developing Critical Thinking Through Writing, Reading, and Research	Research as Inquiry
Creativity, Curiosity, Openness, Flexibility	--Developing Rhetorical Knowledge --Developing Critical Thinking Through Writing, Reading, and Research	Scholarship as Conversation

Search as Mystery

"Above all, we want our students to view **mystery as a source of inquiry, research, and writing . . .** where **the unknown is approached from many directions**, using a variety of ways of thinking, writing, and making" (Davis & Shadle, 2000, p. 441).

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Reading the Database (Hayles, 2007, pp. 1603-6)

Database…

- constructs relational juxtapositions but is helpless to interpret or explain them
- relies on enumeration, requiring explicit articulation of attributes and data values
- allows large amounts of information to be sorted, cataloged, and queried

Narrative…

- needed by database to make its results meaningful
- gestures toward the inexplicable, the unspeakable, the ineffable
- models how minds think and how the world works, projects in which temporality and inference play rich and complex roles

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Search as Invention

"Information literacy goes well beyond helping students to access texts, for it can become an **inventional resource** for the writing student, not merely a resource for supporting what has already been invented" (Norgaard, 2003, p. 129).

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Teaching Search Rhetorically

Context

***Eloquentia Perfecta* Foundation**

- First-Year Oral Communication
- First-Year Digital Technology

3-6 sections per semester

Librarian embedded in each section

- "double-shot"
- one-on-one meetings

Capstone Project: deliver a persuasive speech drawing on evidence to convince listeners of your position

Pedagogy

"The purpose of this activity is to **demonstrate that you have strategically explored your topic through the search process.**"

- low stakes searching exercise early in research process
- evaluated & assessed on level of detail in reflective responses
- shift from emphasis on sources found to what students learned through the process of finding them

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Teaching Search Rhetorically

Searching as Strategic Exploration

Exploring your research topic through the search process

Starting Point
Determine & Match

What do you already know?
What questions do you have?
Who would write about this?
Where might this information be found?

What words **(search terms)** did you use?
What words did you **discover**?
What types (formats) of information do you need?
Were there **features** in the database that lead to new search terms? What were they?
Were there different levels of scholarship? What were they?

Using the tool
Search & Explore

Assessing Results
Evaluate & Gather

Evaluation criteria
--Why is this source useful to you for your research about this topic?
--Is the article a research study? What level of scholarship is it? What level of scholarship do you need?
--article title, abstract, subject terms all help you determine how relevant to your topic the article is
--Who is the author? (not just their name, but their educational background and expertise)

Record complete citation information
--academic integrity: document, give credit, strengthen your position, and enable others to find it

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Teaching Search Rhetorically

SEARCH & EXPLORE

6. Select one of the search tools from Question 5 and use it to conduct a search for information about your Capstone topic. **Name the search tool below. Why did you choose that search tool? Then, list below the search terms you used. Provide a detailed explanation for your choices.** If your first attempted search brings back no results, try broadening your search terms and try again.

---

7. Browse through the results of your search, and **describe in detail what types of information you encounter**. Does the information seem useful for learning more about your topic? If so, what about the information makes it useful? Or, does the information seem less than useful for learning about your topic? What about the information makes it seem less than useful? What parts of the search results did you notice and choose to click on? What happened when you did so?

Please use these questions to **reflect in detail on the information you found through your initial search**. You will need to **click through** and **examine critically** some of the results in order to do this.

---

8. After critically examining and evaluating the quality and usefulness of the information you found through your first search, **what new things did you learn about your Capstone topic? What terms and concepts do you see repeatedly associated with your topic within this search tool? How can you use this new knowledge to revise your search?**

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Teaching Search Rhetorically: Questions to Consider

Recall the most recent information literacy instruction session in which you taught students SEARCH.

- *Why* did you demonstrate the search tool you did?
- *What* scholarly and professional communities does the search tool provide access to?
- *How* might you invite students to approach the search tool and process with mystery, curiosity, and invention?
- ***How* can you make these parts of their learning explicit to them?**

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SOURCE EVALUATION

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Information Evaluation as Generally Taught

- Based on external, superficial features
  - *Format (scholarly articles)*
  - *Where it is indexed*
  - *Author's educational background*
- Doesn't address how to *use* the information

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Information Evaluation in Rhetoric Studies

- Reading comprehension cannot be separated from information evaluation
  - *Must actually read the source*
- Reasoning *about* documents vs. reasoning *with* documents
- What a reader brings to a reading event
  - *Background knowledge (schema)*
  - *Rhetorical goal*

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Using Background Knowledge to Evaluate Sources

- Introduction to schema theory
- Using schema as filters in order to:
  - *Assimilate*
  - *Accommodate*
  - *Reject*
- Happens unconsciously, but learners need to bring it to consciousness

Schema Example 1

The baby kicked the ball.

The punter kicked the ball.

The golfer kicked the ball.

From Anderson, Reynolds, Schallert, & Goetz, 1977, p. 368

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Schema Example 2

Image source: http://threedogsnorth.com/wp-content/uploads/2014/05/junior-baby.jpg

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One's Rhetorical Goal and Evaluating Sources

- Reading to understand an author's message and purpose
- Reading to understand how a text can help one reach their own rhetorical goals
  - *Forwarding*
  - *Countering*
  - *BEAM*
- Becomes even more important when synthesizing information from multiple texts

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What this means for educators

- Educators need to increase support for reading comprehension
- Why librarians are well-suited for the task
  - *We are "novice expert" readers*
  - *Reading comprehension is critical for students to use the information the library provides*
  - *We can be a good resource for helping students troubleshoot when we meet with them individually*
  - *We can advocate with faculty*

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Q&A / DISCUSSION

Thank you!

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References & Further Reading

Anderson, R. C., Reynolds, R. E., Schallert, D. L., & Goetz, E.T. (1977). Frameworks for comprehending discourse. *American Educational Research Journal*, 14(4), 367-381.

Bizup, J. (2008). BEAM: A Rhetorical Vocabulary for Teaching Research-Based Writing. *Rhetoric Review*, 27(1), 72-86.

Bizzell, P. (1982). Cognition, convention, and certainty: What we need to know about writing. *PRE/TEXT: A Journal of Rhetorical Theory*, 3(3), 213-243.

Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). *The craft of research*. Chicago: University of Chicago Press.

Brent, D. (1992). *Reading as rhetorical invention: Knowledge, persuasion, and the teaching of research-based writing*. Urbana, IL: National Council of Teachers of English.

Davis, R., & Shadle, M. (2000). "Building a Mystery": Alternative research writing and the academic act of seeking. *College Composition and Communication*, 51(3), 417-446

Fister, B. (1993). Teaching the rhetorical dimensions of research. *Research Strategies*, 11(4), 211-219.

Framework for information literacy for higher education. (2015). Association of College and Research Libraries. Retrieved from http://www.ala.org/acrl/standards/ilframework

Framework for success in postsecondary writing. (2011). Council of Writing Program Administrators, National Council of Teachers of English, & National Writing Project. Retrieved from http://wpacouncil.org/files/framework-for-success-postsecondary-writing.pdf

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References & Further Reading

Harris, J. (1989). The idea of community in the study of writing. *College Composition and Communication*, 40(1), 11-22.

Harris, J. (2006). *Rewriting: How to do things with texts*. Logan, UT: Utah State University Press.

Hayles, N. K. (2007). Narrative and database: Natural symbionts. *PMLA*, 122(5), 1603-1608.

Holliday, W., Dance, B., Davis, E., Fagerheim, B., Hedrich, A., Lundstrom, K., & Martin, P.. (2015). An information literacy snapshot: Authentic assessment across the curriculum. *College & Research Libraries*, 76(2), 170-187.

Howard, R. M., Serviss, T., & Rodrigue, T. K. (2010). Writing from sources, writing from sentences. *Writing and Pedagogy*, 2(2), 177-192.

MacMillan, M., & Rosenblatt, S. (2015). They've found it. Can they read it? Adding academic reading strategies to your IL toolkit. Presented paper at the Association of College and Research Libraries Conference, Indianapolis, IN. Retrieved from http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/confsandpreconfs/2015/MacMillan_Rosenblatt.pdf

Norgaard, R. (2003). Writing information literacy: Contributions to a concept. *Reference & User Services Quarterly*, 43(2), 124-130.

Norgaard, R. (2004). Writing information literacy in the classroom: Pedagogical enactments and implications. *Reference & User Services Quarterly*, 43(3), 220-226.

Reich, P. (1986). Choosing a topic in a research methods-oriented library instructional program. *Research Strategies*, 4(4), 185-189.