Ecrans et Développement

De la réalité scientifique aux discours médiatiques

Michel Desmurget

Inserm
Institut national
de la santé et de la recherche médicale

cnrs
dépasser les frontières

UCB
Université Claude Bernard
Lyon 1

ISC
Marc Jeannerod

Les écrans c’est formidable !

LE FIGARO.fr

Les jeux de tirs sont bons pour le cerveau

Différentes études ont démontré que la pratique de ces jeux vidéo améliorait rapidement et durablement la concentration et l'acuité visuelle des joueurs.

Le Point.fr

ACTUALITÉ · Tech & Net

Non, les écrans ne sont pas néfastes pour les petits

"Il existe beaucoup d'aspects positifs", souligne l'Académie des sciences à l'occasion de la sortie de son rapport, "L'enfant et les écrans".

LE FIGARO.fr madame

Rencontre / Magazine / Le mag / Société / Accueil

23 septembre 2012

"Le cerveau de nos enfants n'aura plus la même architecture"

Discussion entre Pierre Kosciusko-Morizet et Aurélien Bellanger sur l'impact des nouvelles technologies dans nos vies

Par Julien Bisson

Direct Matin.fr

LES JEUX VIDÉO ONT AUSSI DES EFFETS BÉNÉFIQUES

LE FIGARO.fr santé

Médecine | Santé Publique | Bien-être | Famille | Sexualité | Psychologie | Nutrition

Actualité Santé > Santé publique

Les jeux vidéo d'action au secours de la dyslexie

Par Stéphany Gardier | Publié le 18/02/2014 à 09:58

3 commentaires

En améliorant la capacité d'attention des enfants, ces jeux pourraient s'avérer utiles dans la panoplie d'outils pour leur rééducation.

L'OBS ENQUÊTE

Actualité Migrants Santé Education Justice

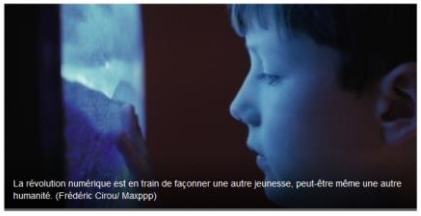
Actualités > L'enquête de l'Obs > Nos enfants, ces mut@nts

Nos enfants, ces mut@nts

Par Sophie Des Deserts
Voir tous ses articles

Publié le 27-10-2012 à 11h11

Dès le berceau, ils passent une partie de leur vie devant les tablettes, ordinateurs, et autres smartphones... quel impact sur leur développement ? Enquête.



La révolution numérique est en train de façonner une autre jeunesse, peut-être même une autre humanité. (Frédéric Cirou/ Maxppp)

Libération CULTURE

POLITIQUE SOCIÉTÉ MONDE ÉCONOMIE CULTURE NEXT IDÉES BLOGS VIDÉO PHOTO

CINÉMA MUSIQUE ARTS LIVRES BANDE DESSINÉE THÉÂTRE DANSE OPÉRA CIRQUE ARTS NUMÉRIQUES

Accueil > Culture

Petite Poucette, la génération mutante

PASCALE NIVELLE 3 SEPTEMBRE 2011 À 00:00

Michel Serres, mars 2010. (AFP)

ENTRETIEN Philosophe et historien des sciences, Michel Serres réclame l'indulgence pour les jeunes, obligés de tout réinventer dans une société bouleversée par les nouvelles technologies.

High-tech

LES JEUX VIDÉO RETARDERAIENT LE VIEILLISSEMENT MENTAL

LES SENIORS SONT AUX MANETTES

LE CARTON DES JEUX SÉRIEUX

FORMIDABLE…
VRAIMENT ?

Les écrans récréatifs

Télévision
Smartphones
Consoles
Ordinateurs
Tablettes

2 à 5 heures / Jour

GENERATION M²

Media in the Lives of 8- to 18-Year-Olds

A Kaiser Family Foundation Study

JANUARY 2010

7 h 38

Preschoolers' Total Daily Screen Time at Home and by Type of Child Care

Pooja S. Tandon, MD, MPH, Chuan Zhou, PhD, Paula Lozano, MD, MPH, and Dimitri A. Christakis, MD, MPH
(J Pediatr 2011;158:297-300).

5 h

6 heures / Jour

…..

~2200 h / an

(2,5 fois le temps passé à l’école -864 h-)

…..

~ 25 ans de vie éveillée

Les Ecrans Agissent à Trois Niveaux

1. Cognition
2. Santé
3. Sociabilité / Violence

Réussite Scolaire

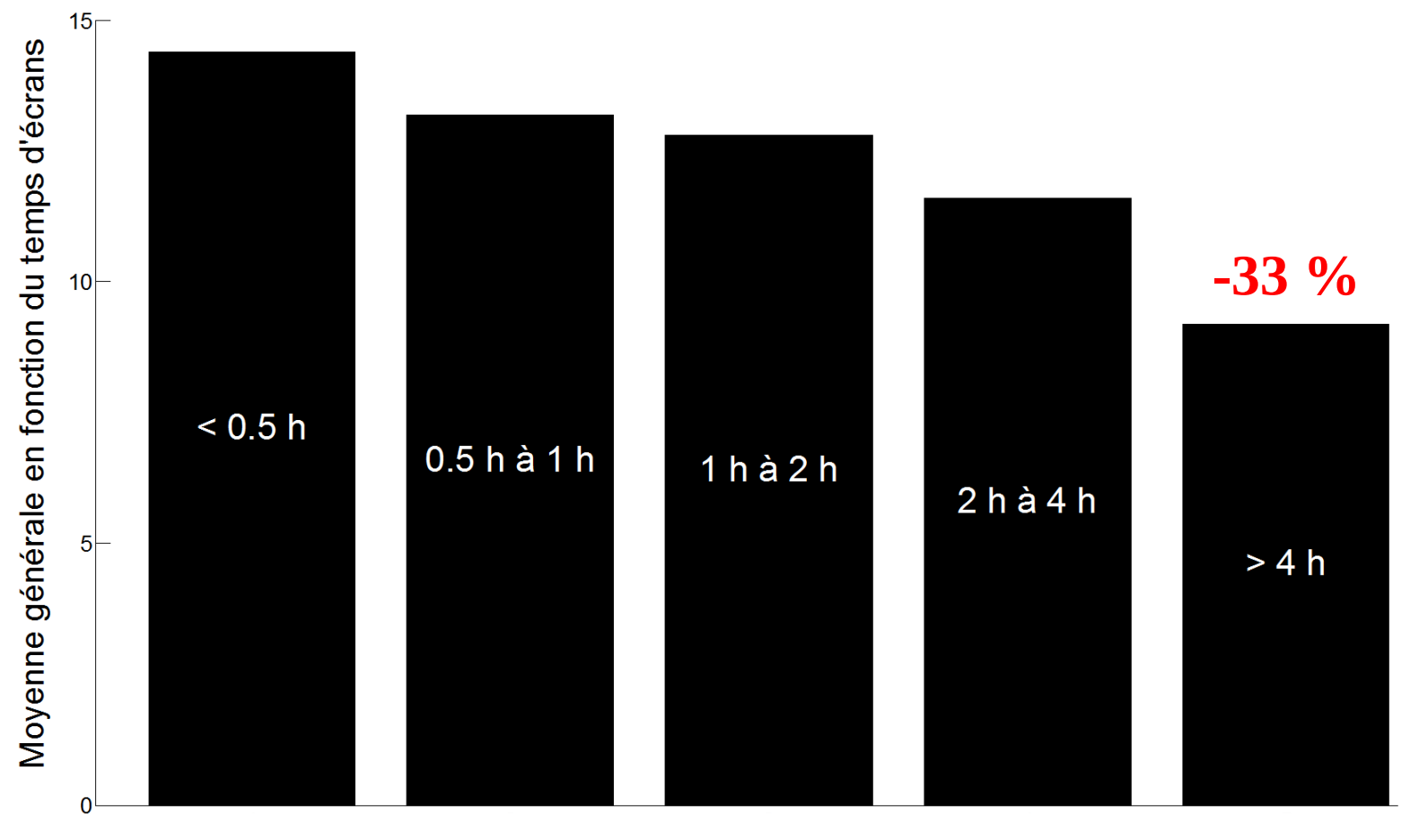
The American Journal of Family Therapy, 42:347–365, 2014

ISSN: 0192-6187 print / 1521-0383 online
DOI: 10.1080/01926187.2014.935684

Routledge
Taylor & Francis Group

Examining the Interface of Family and Personal Traits, Media, and Academic Imperatives Using the Learning Habit Study

ROBERT M. PRESSMAN
New England Center for Pediatric Psychology, Providence, Rhode Island, USA
JUDITH A. OWENS
Children's National Medical Center, Washington, District of Columbia, USA
ALLISON SCHETTINI EVANS
Brown University Alpert School of Medicine, Providence, Rhode Island, USA
MELISSA L. NEMON
Brandeis University Heller School of Social Policy and Management, Waltham, Massachusetts, USA



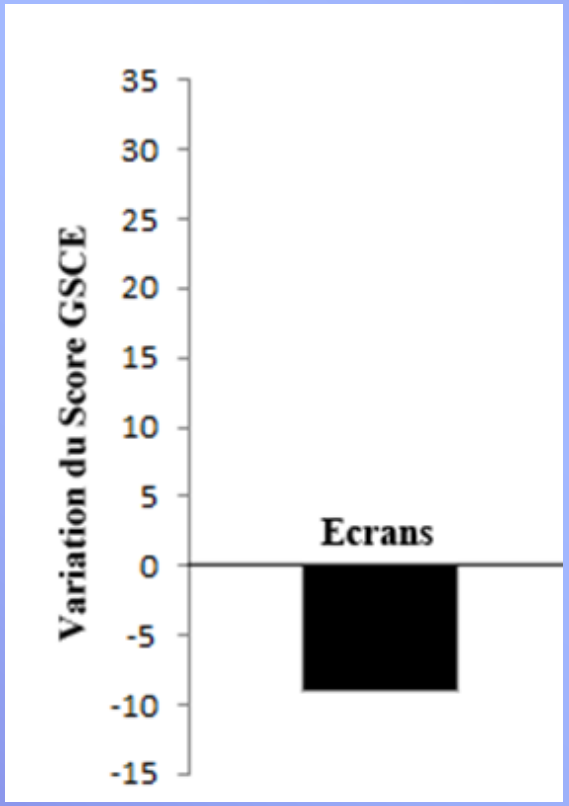
Corder et al. International Journal of Behavioral Nutrition and Physical Activity (2015) 12:106
DOI 10.1186/s12966-015-0269-2

International Journal of Behavioral Nutrition and Physical Activity

RESEARCH Open Access

Revising on the run or studying on the sofa: prospective associations between physical activity, sedentary behaviour, and exam results in British adolescents

Kirsten Corder[1,2*], Andrew J. Atkin[2], Diane J. Bamber[3,4], Soren Brage[1], Valerie J. Dunn[3,4], Ulf Ekelund[1,5], Matthew Owens[3,4,6], Esther M. F. van Sluijs[1,2] and Ian M. Goodyer[3,4]



GSCE: General Certificate of Secondary Education

Computers in Human Behavior 26 (2010) 1237–1245

Contents lists available at ScienceDirect

Computers in Human Behavior

journal homepage: www.elsevier.com/locate/comphumbeh

Facebook® and academic performance

Paul A. Kirschner [a,*], Aryn C. Karpinski [b]

[a] Centre for Learning Sciences and Technologies (CELSTEC), Open University of the Netherlands, Valkenburgerweg 177, 6419AT Heerlen, The Netherlands
[b] The Ohio State University, The College of Education and Human Ecology, The School of Educational Policy and Leadership, 29 West Woodruff Avenue, 210 Ramseyer Hall, Columbus, OH 43210

ARTICLE INFO

Keywords:
Facebook
Social networking software
Grade point average
Academic performance

ABSTRACT

There is much talk of a change in modern youth – often referred to as digital natives or Homo Zappiens – with respect to their ability to simultaneously process multiple channels of information. In other words, kids today can multitask. Unfortunately for proponents of this position, there is much empirical documentation concerning the negative effects of attempting to simultaneously process different streams of information showing that such behavior leads to both increased study time to achieve learning parity and an increase in mistakes while processing information than those who are sequentially or serially processing that same information. This article presents the preliminary results of a descriptive and exploratory survey study involving Facebook use, often carried out simultaneously with other study activities, and its relation to academic performance as measured by self-reported Grade Point Average (GPA) and hours spent studying per week. Results show that Facebook® users reported having lower GPAs and spend fewer hours per week studying than nonusers.

1. Introduction

We read it every day in the newspapers, hear it constantly on the news, and thanks to our Really Simple Syndication (RSS) feeds, we also get it 24/7 online. The "it" is the news about today's children who are spoiled, love luxury, have bad manners, have contempt for authority, are disrespectful to their elders, contradict their parents, and tyrannize their teachers. We also are constantly being reminded of the fact that the world is passing through troubling times, and that young people today think of nothing but themselves, are impatient, talk as if they know everything, and what passes for wisdom for us is foolishness for them. The only problem with the aforementioned is that the first statement was uttered by Socrates, sometime around 300 BCE and the second statement was uttered by Peter the Hermit, a priest of Amiens and a key figure during the First Crusade, who died July 8, 1115 in Neufmoutier by Huy in Belgium.

A glance in the myriad of scientific journals, academic book sellers, and web sites cannot help but make us think that today's generation of children is radically different from its predecessors. It appears that the Baby Boomers have spawned Generation X, the MTV generation, Net Geners, Millenials, Generation Y/iGeneration, and even Generation Z (Howe & Strauss, 2000; Oblinger & Oblinger, 2005; Prenksy, 2001; Rosen, 2007; Tapscott, 1997). At a recent conference of the Western Psychological Association (i.e., April 23–26, 2009 in Portland Oregon), Rosen defined these children as follows:

> Welcome to the Net Generation. Born in the 1980s and 1990s, they spend their days immersed in a "media diet" accumulating a fulltime job plus overtime devouring entertainment, communication, and every form of electronic media. They are master multitaskers, social networkers, electronic communicators and the first to rush to any new technology. They were born surrounded by technology and with every passing year they add more tools to their electronic repertoire. They live in social networks such as Facebook, MySpace, and Second Life gathering friends; they text more than they talk on the phone; and they Twitter the night away often sleeping with their cell phones vibrating by their sides.

The assumption is that these children now have acquired specific new multitasking skills that they are able to apply in a learning setting, and that education as we know it is frustrating them in the application of these multitasking skills. Unfortunately, most empirical research shows that this is not the case finding either that (1) children do not possess these skills, or (2) that acting in this way negatively affects the processing of information. This article first tackles these two widely-held, modern-day "truths," and then presents the results of a preliminary study on the potential relationship between Facebook® (FB) and academic performance.

2. We hold these truths to be self-evident

We see children today doing their homework, watching YouTube®, instant messaging (IM), Twittering, using FB, surfing

* Corresponding author. Tel.: +31 45 5762361; fax: +31 45 5762907.
E-mail address: paul.kirschner@ou.nl (P.A. Kirschner).

0747-5632/$ - see front matter © 2010 Elsevier Ltd. All rights reserved.
doi:10.1016/j.chb.2010.03.024

Le portable à l'école

COLLEGE TEACHING, 63: 119–124, 2015

ISSN: 8756-7555 print / 1930-8299 online
DOI: 10.1080/87567555.2015.1019826

Routledge
Taylor & Francis Group

The Costs of Texting in the Classroom

Dakota Lawson and Bruce B. Henderson
Western Carolina University

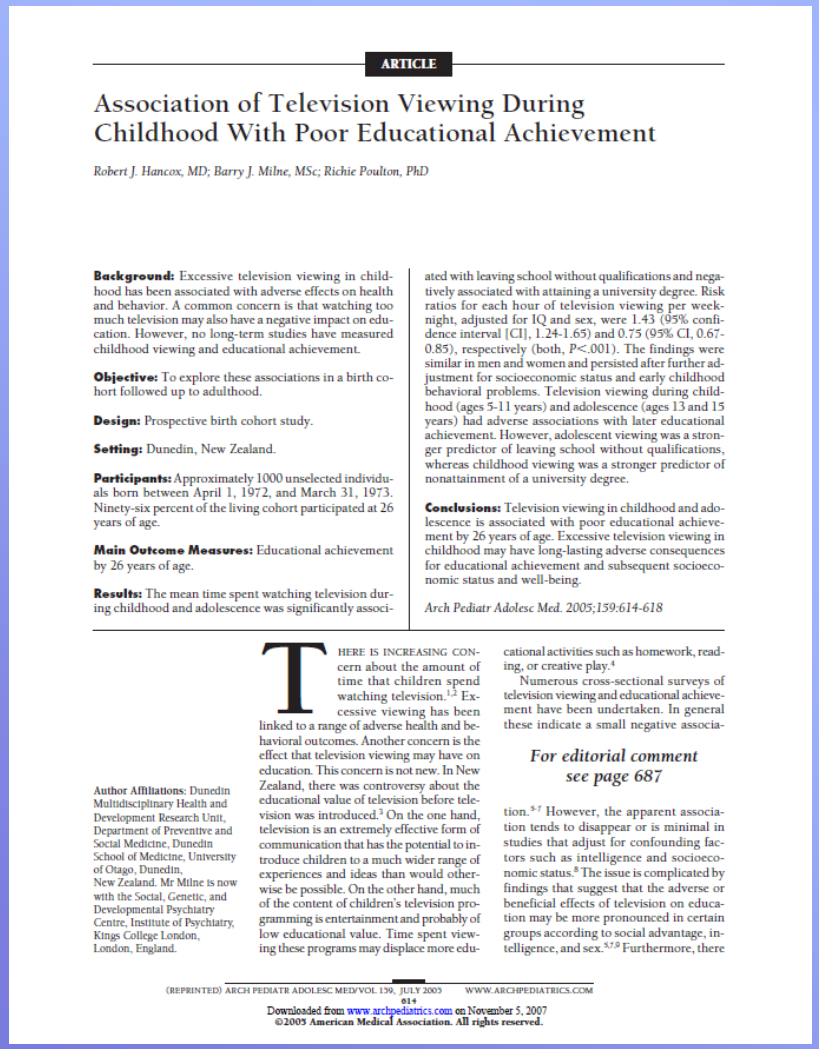
Many college students seem to find it impossible to resist the temptation to text on electronic devices during class lectures and discussions. One common response of college professors is to yield to the inevitable and try to ignore student texting. However, research indicates that because of limited cognitive capacities, even simple texting can reduce comprehension of class material at a rate of 10–20%. We review that research and present our study of the effects of texting on comprehension. Proposed alternatives to ignoring texting or outright bans include using smartphones for classroom exercises, educating students about the dangers of multitasking, and the use of "technology breaks."

Keywords: student learning, teaching, technology

SMS < NoSMS

10 à 20 %

Des Influences de long terme



ARTICLE

Association of Television Viewing During Childhood With Poor Educational Achievement

Robert J. Hancox, MD; Barry J. Milne, MSc; Richie Poulton, PhD

Background: Excessive television viewing in childhood has been associated with adverse effects on health and behavior. A common concern is that watching too much television may also have a negative impact on education. However, no long-term studies have measured childhood viewing and educational achievement.

Objective: To explore these associations in a birth cohort followed up to adulthood.

Design: Prospective birth cohort study.

Setting: Dunedin, New Zealand.

Participants: Approximately 1000 unselected individuals born between April 1, 1972, and March 31, 1973. Ninety-six percent of the living cohort participated at 26 years of age.

Main Outcome Measures: Educational achievement by 26 years of age.

Results: The mean time spent watching television during childhood and adolescence was significantly associated with leaving school without qualifications and negatively associated with attaining a university degree. Risk ratios for each hour of television viewing per weeknight, adjusted for IQ and sex, were 1.43 (95% confidence interval [CI], 1.24-1.65) and 0.75 (95% CI, 0.67-0.85), respectively (both, $P<.001$). The findings were similar in men and women and persisted after further adjustment for socioeconomic status and early childhood behavioral problems. Television viewing during childhood (ages 5-11 years) and adolescence (ages 13 and 15 years) had adverse associations with later educational achievement. However, adolescent viewing was a stronger predictor of leaving school without qualifications, whereas childhood viewing was a stronger predictor of nonattainment of a university degree.

Conclusions: Television viewing in childhood and adolescence is associated with poor educational achievement by 26 years of age. Excessive television viewing in childhood may have long-lasting adverse consequences for educational achievement and subsequent socioeconomic status and well-being.

Arch Pediatr Adolesc Med. 2005;159:614-618

THERE IS INCREASING CONcern about the amount of time that children spend watching television.[1,2] Excessive viewing has been linked to a range of adverse health and behavioral outcomes. Another concern is the effect that television viewing may have on education. This concern is not new. In New Zealand, there was controversy about the educational value of television before television was introduced.[3] On the one hand, television is an extremely effective form of communication that has the potential to introduce children to a much wider range of experiences and ideas than would otherwise be possible. On the other hand, much of the content of children's television programming is entertainment and probably of low educational value. Time spent viewing these programs may displace more educational activities such as homework, reading, or creative play.[4]

Numerous cross-sectional surveys of television viewing and educational achievement have been undertaken. In general these indicate a small negative association.[5-7] However, the apparent association tends to disappear or is minimal in studies that adjust for confounding factors such as intelligence and socioeconomic status.[8] The issue is complicated by findings that suggest that the adverse or beneficial effects of television on education may be more pronounced in certain groups according to social advantage, intelligence, and sex.[5,7,8] Furthermore, there

For editorial comment see page 687

Author Affiliations: Dunedin Multidisciplinary Health and Development Research Unit, Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand. Mr Milne is now with the Social, Genetic, and Developmental Psychiatry Centre, Institute of Psychiatry, Kings College London, London, England.

2 heures / jour de TV
à l'école primaire
=

<u>+ 86 % de chances de sortir de l'école sans diplôme</u>

Des influences clairement causales

ARTICLE

Extensive Television Viewing and the Development of Attention and Learning Difficulties During Adolescence

Jeffrey G. Johnson, PhD; Patricia Cohen, PhD; Stephanie Kasen, PhD; Judith S. Brook, EdD

Objective: To investigate the association of television viewing with educational and intellectual outcomes during adolescence and early adulthood.

Design: Prospective epidemiological study.

Setting: Families participating in the Children in the Community Study, a prospective longitudinal investigation, were interviewed at mean offspring ages 14, 16, and 22 years.

Participants: A community-based sample of 678 families from upstate New York.

Main Exposures: Television viewing, attention difficulties, learning difficulties, and educational achievement during adolescence and early adulthood.

Main Outcome Measures: The Disorganizing Poverty Interview and age-appropriate versions of the Diagnostic Interview Schedule for Children.

Results: Frequent television viewing during adolescence was associated with elevated risk for subsequent attention and learning difficulties after family characteristics and prior cognitive difficulties were controlled. Youths who watched 1 or more hours of television per day at mean age 14 years were at elevated risk for poor homework completion, negative attitudes toward school, poor grades, and long-term academic failure. Youths who watched 3 or more hours of television per day were the most likely to experience these outcomes. In addition, youths who watched 3 or more hours of television per day were at elevated risk for subsequent attention problems and were the least likely to receive postsecondary education. There was little evidence of bidirectionality in the association of television viewing with attention and learning difficulties.

Conclusion: Frequent television viewing during adolescence may be associated with risk for development of attention problems, learning difficulties, and adverse long-term educational outcomes.

Arch Pediatr Adolesc Med. 2007;161:480-486

CHILDREN AND ADOLESCENTS in most industrialized societies spend an average of 2 or more hours per day watching television.[1-4] Many youths who watch 3 or more hours of television per day spend as much time watching television in an average year as they do receiving classroom instruction.[1-4] Most children and adolescents spend more time watching television than reading, and television viewing time is inversely associated with reading time and reading comprehension.[1,5-7] These findings are a cause of concern because research has suggested that extensive viewing of entertainment and general audience programming during childhood may be associated with poor academic achievement and deficits in attention and cognitive functioning.[3,8-14] Although viewing educational television may be associated with positive outcomes,[4] most children spend more than 90% of their television viewing time watching entertainment and general audience programming.[1-4,15]

Frequent viewing of entertainment and general audience television programming during childhood and adolescence has been hypothesized to contribute to persistent reductions in educational and intellectual functioning[14] because it displaces reading and homework, requires relatively little intellectual effort, and promotes attention problems and disinterest in school.[2,8,9,11,16,17] Research findings supporting this hypothesis have indicated that overall television viewing time during childhood and adolescence may be associated with elevated risk for the development of attention problems, educational difficulties, poor reading comprehen-

Author Affiliations:
Department of Psychiatry, Columbia University College of Physicians and Surgeons and the New York State Psychiatric Institute (Drs Johnson, Cohen, and Kasen) and Department of Psychiatry, New York University School of Medicine (Dr Brook), New York.

14 ans < 2 h/jour

À 16 ans

- **moins 1h**
  - **Risque échec scolaire moins 50%**
- **plus 1h**
  - **Risque échec scolaire doublé**

La télé dans la chambre

ARTICLE

The Remote, the Mouse, and the No. 2 Pencil

The Household Media Environment and Academic Achievement Among Third Grade Students

Dina L. G. Borzykowski, EdD; Thomas N. Robinson, MD, MPH

Arch Pediatr Adolesc Med. 2005;159:607-613

	Pas de télé dans la chambre	Une télé dans la chambre	
Math	15	9.5	-35 %
Français	15	11	-25 %
Lecture	15	12	-20 %

"Des études ont montré que **c’est dans les milieux socioculturels les plus défavorisés que les enfants ont le plus souvent la télévision dans leur chambre. Il est donc difficile de rapporter seulement à la télévision des résultats scolaires moins bons. Il serait plus judicieux de mettre un rapport le "plus de télé" et le "de moins bons résultats scolaires" avec un niveau socioculturel moindre des parents**.

Tisseron, Premiere.fr, 2011

ARTICLE

The Remote, the Mouse, and the No. 2 Pencil

The Household Media Environment and Academic Achievement Among Third Grade Students

Dina L. G. Borzekowski, EdD; Thomas N. Robinson, MD, MPH

Background: Media can influence aspects of a child's physical, social, and cognitive development; however, the associations between a child's household media environment, media use, and academic achievement have yet to be determined.

Objective: To examine relationships among a child's household media environment, media use, and academic achievement.

Methods: During a single academic year, data were collected through classroom surveys and telephone interviews from an ethnically diverse sample of third grade students and their parents from 6 northern California public elementary schools. The majority of our analyses derive from spring 2000 data, including academic achievement assessed through the mathematics, reading, and language arts sections of the Stanford Achievement Test. We fit linear regression models to determine the associations between variations in household media and performance on the standardized tests, adjusting for demographic and media use variables.

Results: The household media environment is significantly associated with students' performance on the standardized tests. It was found that having a bedroom television set was significantly and negatively associated with students' test scores, while home computer access and use were positively associated with the scores. Regression models significantly predicted up to 24% of the variation in the scores. Absence of a bedroom television combined with access to a home computer was consistently associated with the highest standardized test scores.

Conclusion: This study adds to the growing literature reporting that having a bedroom television set may be detrimental to young elementary school children. It also suggests that having and using a home computer may be associated with better academic achievement.

Arch Pediatr Adolesc Med. 2005;159:607-613

AMERICAN PARENTS ARE FREQUENTLY heard instructing their children to turn off the television set to do their homework. Some of these same parents regularly purchase and equip their households with the latest computer technology so that their children will not be "disconnected" or "disadvantaged." Such words and actions, while representing genuine concerns, are not based on an unequivocal or established body of literature. Many assume quite simplistically that television is bad and computers are good, at least when it comes to children's cognitive development and academic achievement. A common argument is that watching television is passive, promoting zombie-like behaviors, while computer use is active, encouraging problem solving and mental stimulation.[1,2]

To say that today's children live in a media-rich environment is a gross understatement. United States households with children have an average of 2.8 television sets, and 97% of these households have at least 1 VCR or DVD player.[3,4] More than two thirds of households with children have at least 1 computer and more than half (53%) have home Internet access.[3,5] The household media environment is less frequently examined, and its impact on children is not yet well understood.

Researchers have been studying media use for decades, and we are becoming more aware of how media affect children's development and behaviors. Youth concurrently use screen-based electronic media for up to 6 hours per day.[3,6] Substantial evidence exists to show that people who use media more heavily are at greater risk for obesity[7,8] and aggressive behavior.[9,10] Less clear is the relationship between media and academic achievement.

Historically, the introduction of mass media has been met with concerns over its possible negative impact on children's cognitive development and school performance. Targeting media ranging from

For editorial comment see page 687

Author Affiliations: Department of Population and Family Health Sciences, Johns Hopkins Bloomberg School of Public Health, Baltimore, Md (Dr Borzekowski); and Division of General Pediatrics, Department of Pediatrics and Stanford Prevention Research Center, Department of Medicine, Stanford University, Stanford, Calif (Dr Robinson).
Financial Disclosure: Neither author has advisory board affiliations or financial interests in organizations sponsoring the research.

Contrôlé pour

âge

sexe

groupe ethnique

langue parlée à la maison

niveau d'éducation des parents

niveau social des parents

usage informatique -incluant internet-

nombre de télés à la maison,

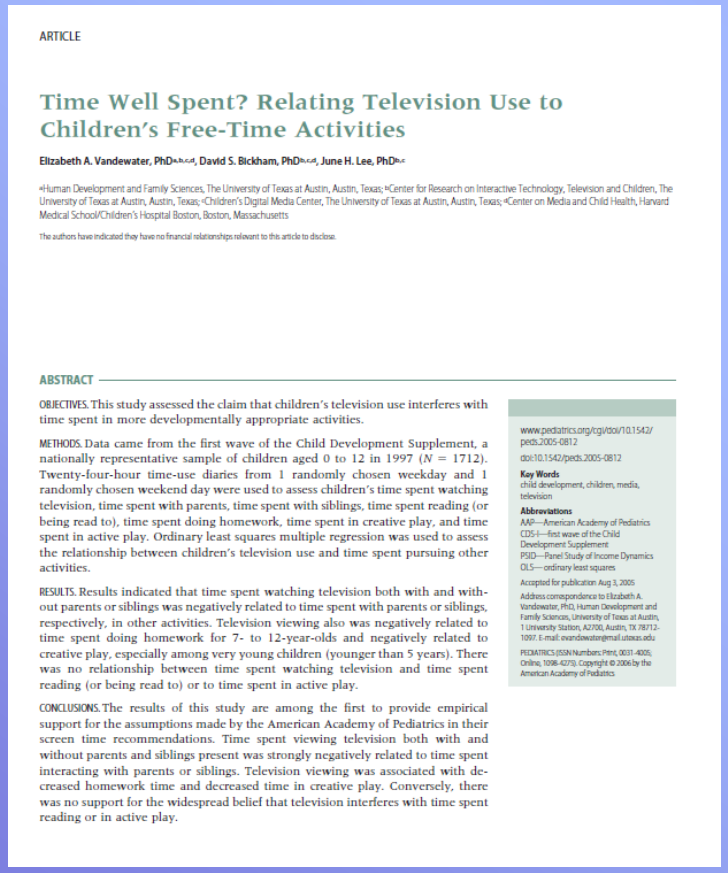
lecteur DVD,

Etc.,

Comment ça marche ?

Des effets largement INDEPENDANTS du contenu et du média

Un effondrement des interactions intra-familiales



ARTICLE

Time Well Spent? Relating Television Use to Children's Free-Time Activities

Elizabeth A. Vandewater, PhD[a,b,c,d], David S. Bickham, PhD[b,c,d], June H. Lee, PhD[b,c]

[a]Human Development and Family Sciences, The University of Texas at Austin, Austin, Texas; [b]Center for Research on Interactive Technology, Television and Children, The University of Texas at Austin, Austin, Texas; [c]Children's Digital Media Center, The University of Texas at Austin, Austin, Texas; [d]Center on Media and Child Health, Harvard Medical School/Children's Hospital Boston, Boston, Massachusetts

The authors have indicated they have no financial relationships relevant to this article to disclose.

ABSTRACT

OBJECTIVES. This study assessed the claim that children's television use interferes with time spent in more developmentally appropriate activities.

METHODS. Data came from the first wave of the Child Development Supplement, a nationally representative sample of children aged 0 to 12 in 1997 (N = 1712). Twenty-four-hour time-use diaries from 1 randomly chosen weekday and 1 randomly chosen weekend day were used to assess children's time spent watching television, time spent with parents, time spent with siblings, time spent reading (or being read to), time spent doing homework, time spent in creative play, and time spent in active play. Ordinary least squares multiple regression was used to assess the relationship between children's television use and time spent pursuing other activities.

RESULTS. Results indicated that time spent watching television both with and without parents or siblings was negatively related to time spent with parents or siblings, respectively, in other activities. Television viewing also was negatively related to time spent doing homework for 7- to 12-year-olds and negatively related to creative play, especially among very young children (younger than 5 years). There was no relationship between time spent watching television and time spent reading (or being read to) or to time spent in active play.

CONCLUSIONS. The results of this study are among the first to provide empirical support for the assumptions made by the American Academy of Pediatrics in their screen time recommendations. Time spent viewing television both with and without parents and siblings present was strongly negatively related to time spent interacting with parents or siblings. Television viewing was associated with decreased homework time and decreased time in creative play. Conversely, there was no support for the widespread belief that television interferes with time spent reading or in active play.

www.pediatrics.org/cgi/doi/10.1542/peds.2005-0812

doi:10.1542/peds.2005-0812

Key Words
child development, children, media, television

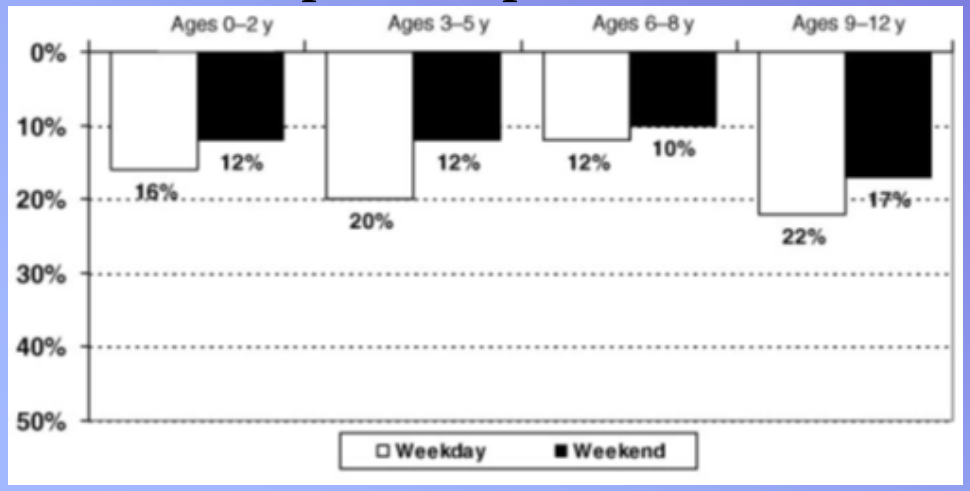
Abbreviations
AAP—American Academy of Pediatrics
CDS-I—first wave of the Child Development Supplement
PSID—Panel Study of Income Dynamics
OLS—ordinary least squares

Accepted for publication Aug 3, 2005

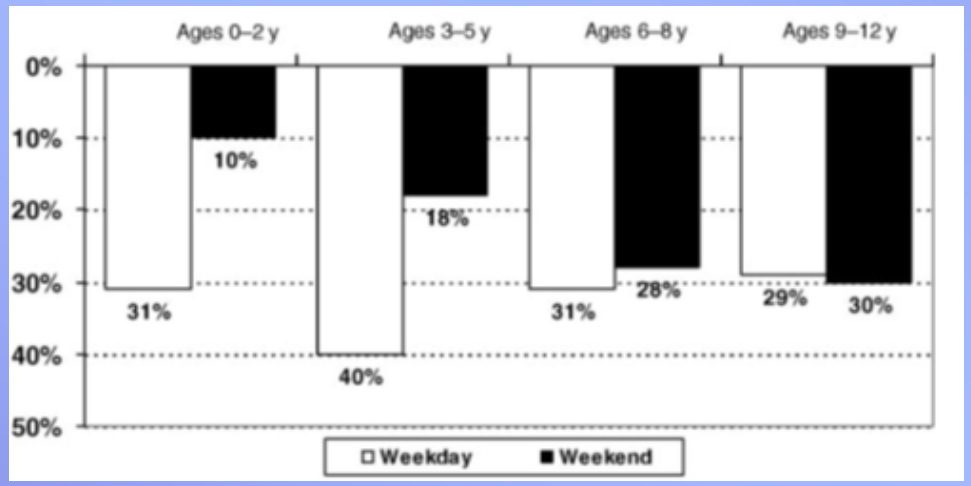
Address correspondence to Elizabeth A. Vandewater, PhD, Human Development and Family Sciences, University of Texas at Austin, 1 University Station, A2700, Austin, TX 78712-1097. E-mail: evandewater@mail.utexas.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275). Copyright © 2006 by the American Academy of Pediatrics

Diminution du temps passé à interagir avec les parents pour 1 h de TV



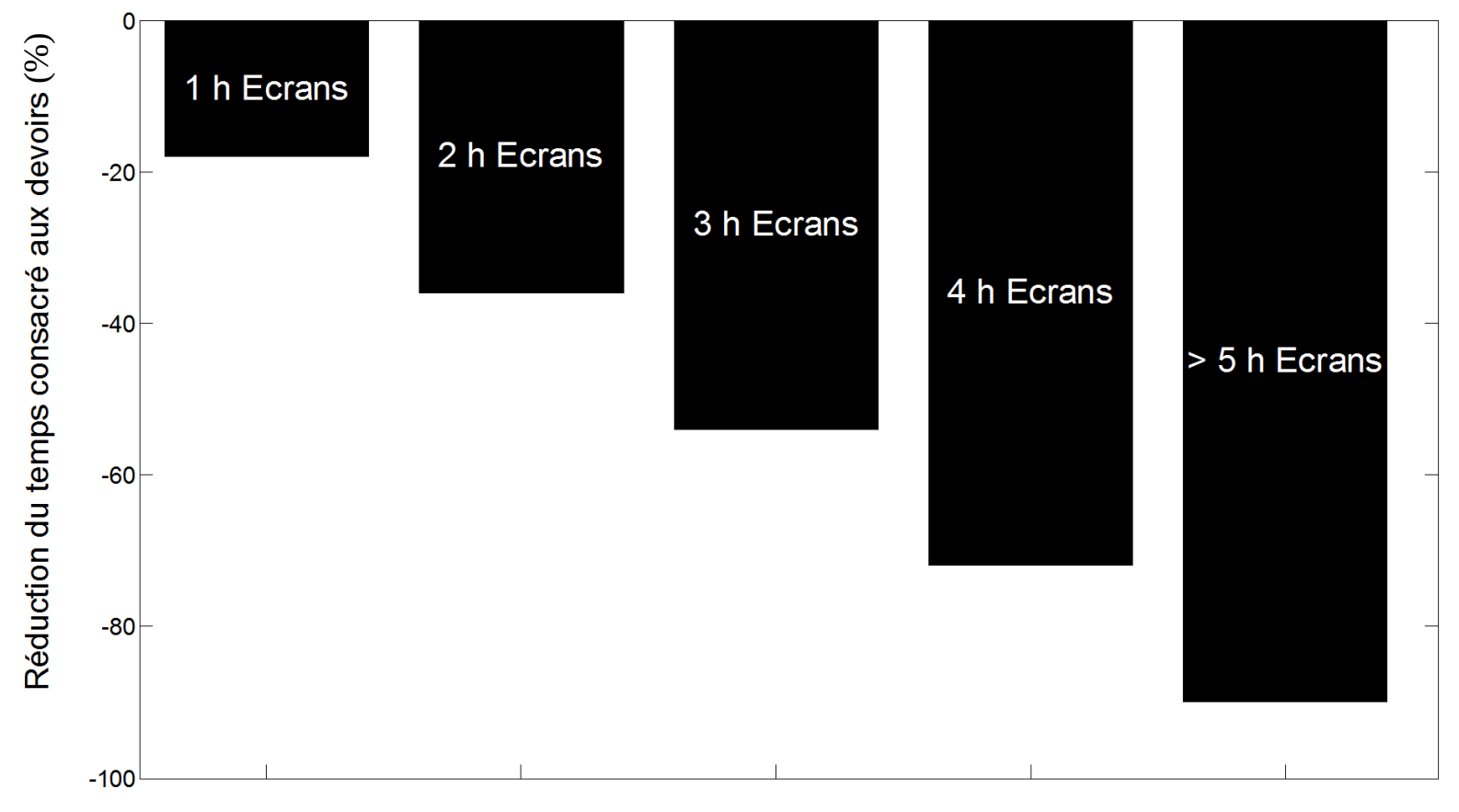
Diminution du temps passé à interagir avec les frères et sœurs pour 1 h de Tv



Un effondrement du temps consacré aux devoirs


Time Well Spent? Relating Television Use to Children's Free-Time Activities

Elizabeth A. Vandewater, PhD, David S. Bickham, PhD, June H. Lee, PhD



Un affaissement du QI

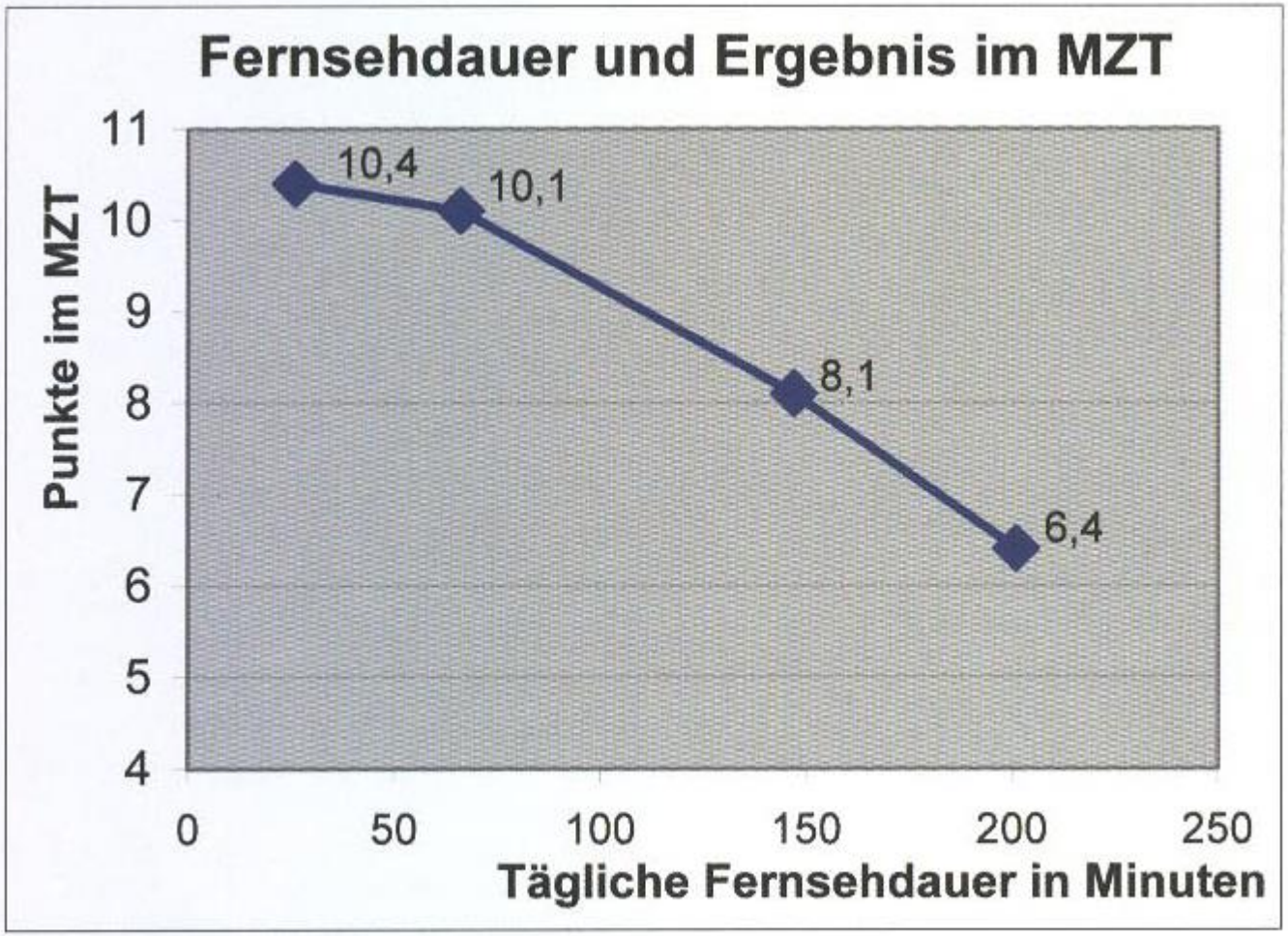
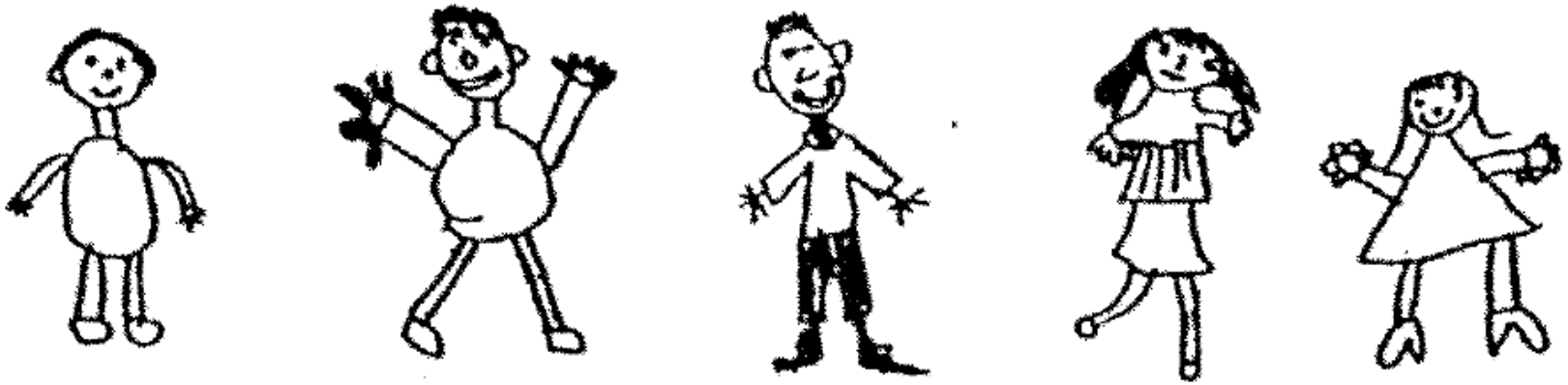


Abb. 3: Durchschnittliche Ergebnisse im MZT gruppiert nach der Dauer des täglichen Fernsehkonsums in Nichtraucher-Familien (n=1161)

Winterstein et Jungwirth, Kinder und Jugendarzt, 2006

Une vue d'ensemble: le test du bonhomme

Moins de 60 minutes de télé par jour



Plus de 180 minutes de télé par jour

Cerebral Cortex
doi:10.1093/cercor/bht315

The Impact of Television Viewing on Brain Structures: Cross-Sectional and Longitudinal Analyses

Hikaru Takeuchi[1], Yasuyuki Taki[1,2,3], Hiroshi Hashizume[1], Kohei Asano[1], Michiko Asano[1], Yuko Sassa[1], Susumu Yokota[4], Yuka Kotozaki[5], Rui Nouchi[6] and Ryuta Kawashima[2,4,7]

[1]Division of Developmental Cognitive Neuroscience, Institute of Development, Aging and Cancer, [2]Division of Medical Neuroimaging Analysis, Department of Community Medical Supports, Tohoku Medical Megabank Organization, [3]Department of Nuclear Medicine & Radiology, Institute of Development, Aging and Cancer, [4]Graduate School of Education, [5]Smart Ageing International Research Centre, Institute of Development, Aging and Cancer, [6]Human and Social Response Research Division, International Research Institute of Disaster Science, and [7]Department of Functional Brain Imaging, Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan

Address correspondence to Hikaru Takeuchi, Division of Developmental Cognitive Neuroscience, IDAC, Tohoku University, 4-1 Seiryo-cho, Aoba-ku, Sendai 980-8575, Japan. Email: takehi@idac.tohoku.ac.jp

Television (TV) viewing is known to affect children's verbal abilities and other physical, cognitive, and emotional development in psychological studies. However, the brain structural development associated with TV viewing has never been investigated. Here we examined cross-sectional correlations between the duration of TV viewing and regional gray/white matter volume (rGMV/rWMV) among 133 boys and 143 girls as well as correlations between the duration of TV viewing and longitudinal changes that occurred a few years later among 111 boys and 105 girls. After correcting for confounding factors, we found positive effects of TV viewing on rGMV of the frontopolar and medial prefrontal areas in cross-sectional and longitudinal analyses, positive effects of TV viewing on rGMV/rWMV of areas of the visual cortex in cross-sectional analyses, and positive effects of TV viewing on rGMV of the hypothalamus/septum and sensorimotor areas in longitudinal analyses. We also confirmed negative effects of TV viewing on verbal intelligence quotient (IQ) in cross-sectional and longitudinal analyses. These anatomical correlates may be linked to previously known effects of TV viewing on verbal competence, aggression, and physical activity. In particular, the present results showed effects of TV viewing on the frontopolar area of the brain, which has been associated with intellectual abilities.

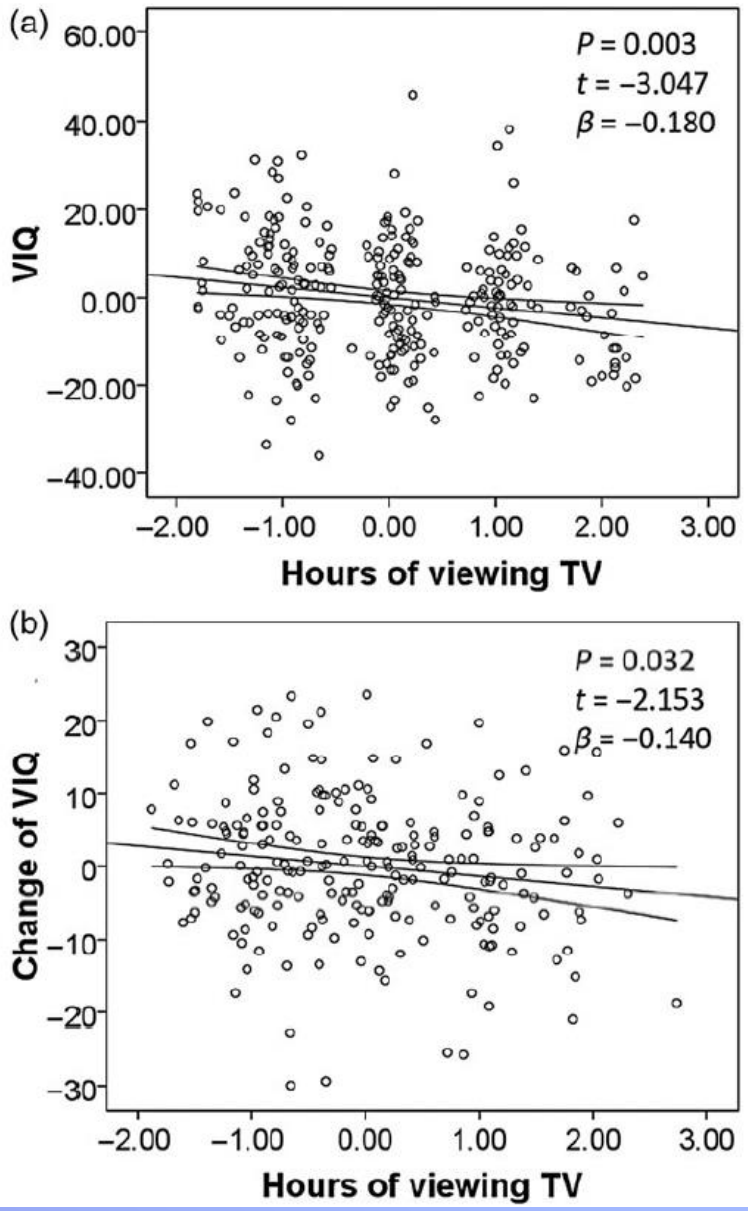
Keywords: children, gray matter volume, television, verbal, white matter volume

Introduction

Many cross-sectional and longitudinal studies have reported deleterious effects of television (TV) viewing on the cognitive abilities, attention, behaviors, and academic performance of children (Johnson et al. 2002, 2007; Christakis et al. 2004). Longer TV viewing was associated with lower intelligence quotient (IQ) and reading grades in a cross-sectional study (Ridley-Johnson et al. 1983). However, the longitudinal effects of TV viewing on Full Scale IQ (FSIQ) are less clear (Gortmaker et al. 1990). In an intervention study, restricting children's TV viewing for a short period improved their cognitive abilities (Gadberry 1981) and another longitudinal study showed that TV viewing affected attention (Landhuis et al. 2007), which in turn is correlated with a wide range of cognitive performances (Sergeant et al. 2002). Finally, longitudinal studies have shown that TV viewing has detrimental effects on verbal abilities including verbal working memory (Zimmerman and Christakis 2005).

As described above, TV viewing during infancy and childhood is considered to be detrimental to the development of intellectual abilities, particularly verbal ones. Thus, revealing the effects of TV viewing on neural systems and revealing the mechanisms by which TV viewing affects children's intellectual abilities is socially and scientifically important. However, despite numerous related psychological and functional magnetic resonance imaging (fMRI) studies of brain activities in children watching certain content, the effects of TV viewing on brain structures in children are unknown.

The medial prefrontal cortex (mPFC), frontopolar areas, posterior parietal areas, and the left inferior frontal gyrus (IFG) are considered to be important for the development of intelligence and verbal intelligence in children. The frontopolar area, which is the most anterior part of the brain, is considered to be involved in the evaluation of internally generated information as well as with higher functioning associated with hierarchical organization of the prefrontal functions (for review, see Christoff and Gabrieli 2000). Regional gray matter structures in medial and lateral areas around the frontal pole have also been rather consistently correlated with intelligence in adults (Haier et al. 2004; Gong et al. 2005; Colom et al. 2006; Narr et al. 2007) and children (Wilke et al. 2003; Frangou et al. 2004; Karama et al. 2011; Menary et al. 2013). These areas show developmental cortical thinning during development, and children with superior IQs show the most vigorous cortical thinning in this area (Shaw et al. 2006). In addition, the posterior parietal areas have rather consistently been shown to be correlated with intelligence together with other less consistent findings across the brain (Jung and Haier 2007), which may suggest the importance of the fronto-parietal areas and the associated functional network in intelligence (Jung and Haier 2007). On the other hand, the left IFG has been shown to be critical in a wide range of verbal cognitions (phonological, semantic, and syntax-related) (Vigneau et al. 2006). Regional gray matter structures have also been correlated with the verbal intelligence quotient (VIQ) (Konrad et al. 2012). Furthermore, children whose verbal IQ improved in a longitudinal developmental study showed a greater increase in regional gray matter volume (rGMV) in the left IFG (Ramsden et al. 2011). Considering the association between the duration of TV viewing and IQ/VIQ that TV viewing is less associated with cognitions such as monitoring and the evaluation of internally generated information, which is covered by the frontopolar



Le sommeil mis à mal

Des effets avérés… et massifs

- On dort moins (coucher plus tardif)
- On met plus de temps à s'endormir (excitation, mélatonine)
- Le sommeil est plus agité (cauchemars, réveils multiples)

⬇

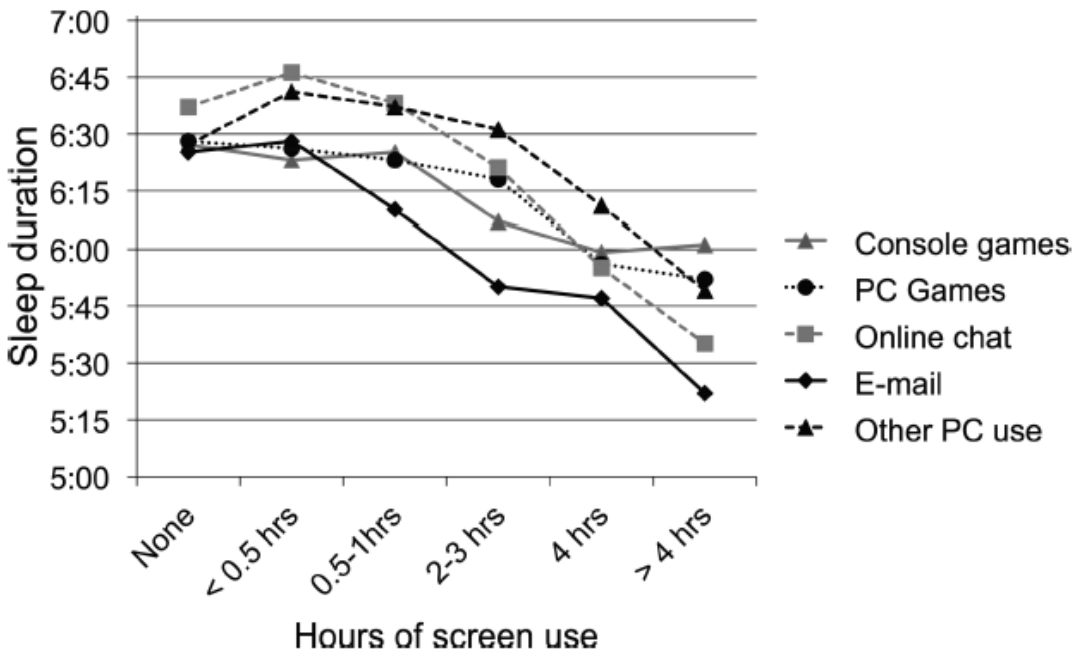
Fonction cognitives ; Sociabilité ; Croissance ; Santé ; Risque d'Accident ; etc.

Open Access Research

BMJ Open

Sleep and use of electronic devices in adolescence: results from a large population-based study

Mari Hysing,[1] Ståle Pallesen,[2,3] Kjell Morten Stormark,[1] Reidar Jakobsen,[1] Astri J Lundervold,[1,4] Børge Sivertsen[5,6,7]



L'effet particulièrement délétère des contenus violents

PNAS

Media's role in broadcasting acute stress following the Boston Marathon bombings

E. Alison Holman[a], Dana Rose Garfin[b], and Roxane Cohen Silver[b,c,d,1]

[a]Program in Nursing Science, Departments of [b]Psychology and Social Behavior and [c]Medicine, and [d]Program in Public Health, University of California, Irvine, CA 92697

Edited* by Shelley E. Taylor, University of California, Los Angeles, CA, and approved November 14, 2013 (received for review August 28, 2013)

A NATIONAL SURVEY OF STRESS REACTIONS AFTER THE SEPTEMBER 11, 2001, TERRORIST ATTACKS

MARK A. SCHUSTER, M.D., PH.D., BRADLEY D. STEIN, M.D., M.P.H., LISA H. JAYCOX, PH.D., REBECCA L. COLLINS, PH.D., GRANT N. MARSHALL, PH.D., MARC N. ELLIOTT, PH.D., ANNIE J. ZHOU, M.S., DAVID E. KANOUSE, PH.D., JANINA L. MORRISON, A.B., AND SANDRA H. BERRY, M.A.

N Engl J Med, Vol. 345, No. 20 · November 15, 2001

"There was no significant association between the extent of communication and the degree of stress symptoms on the part of parents or children"

Les liseuses aussi

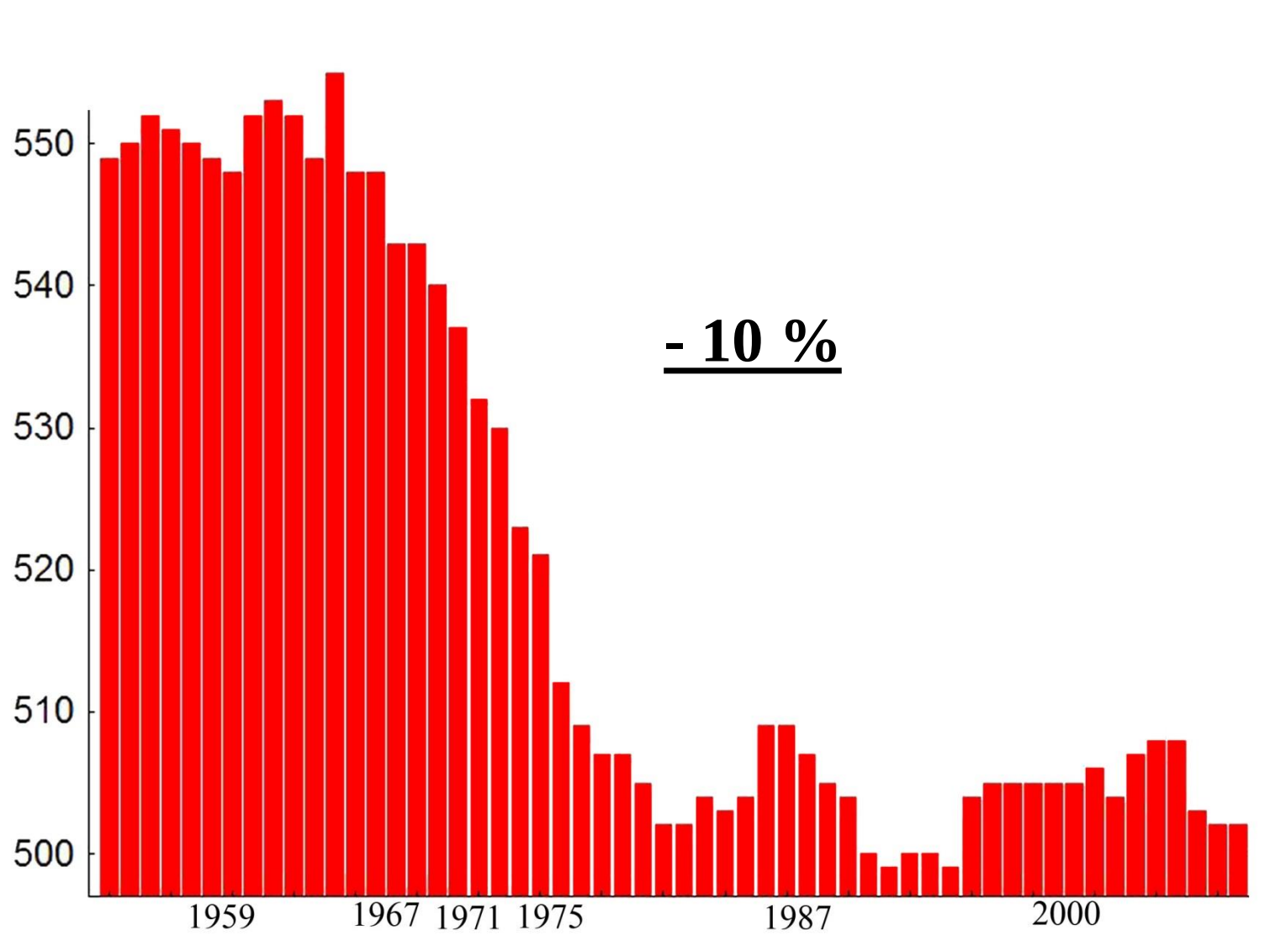
PNAS

Evening use of light-emitting eReaders negatively affects sleep, circadian timing, and next-morning alertness

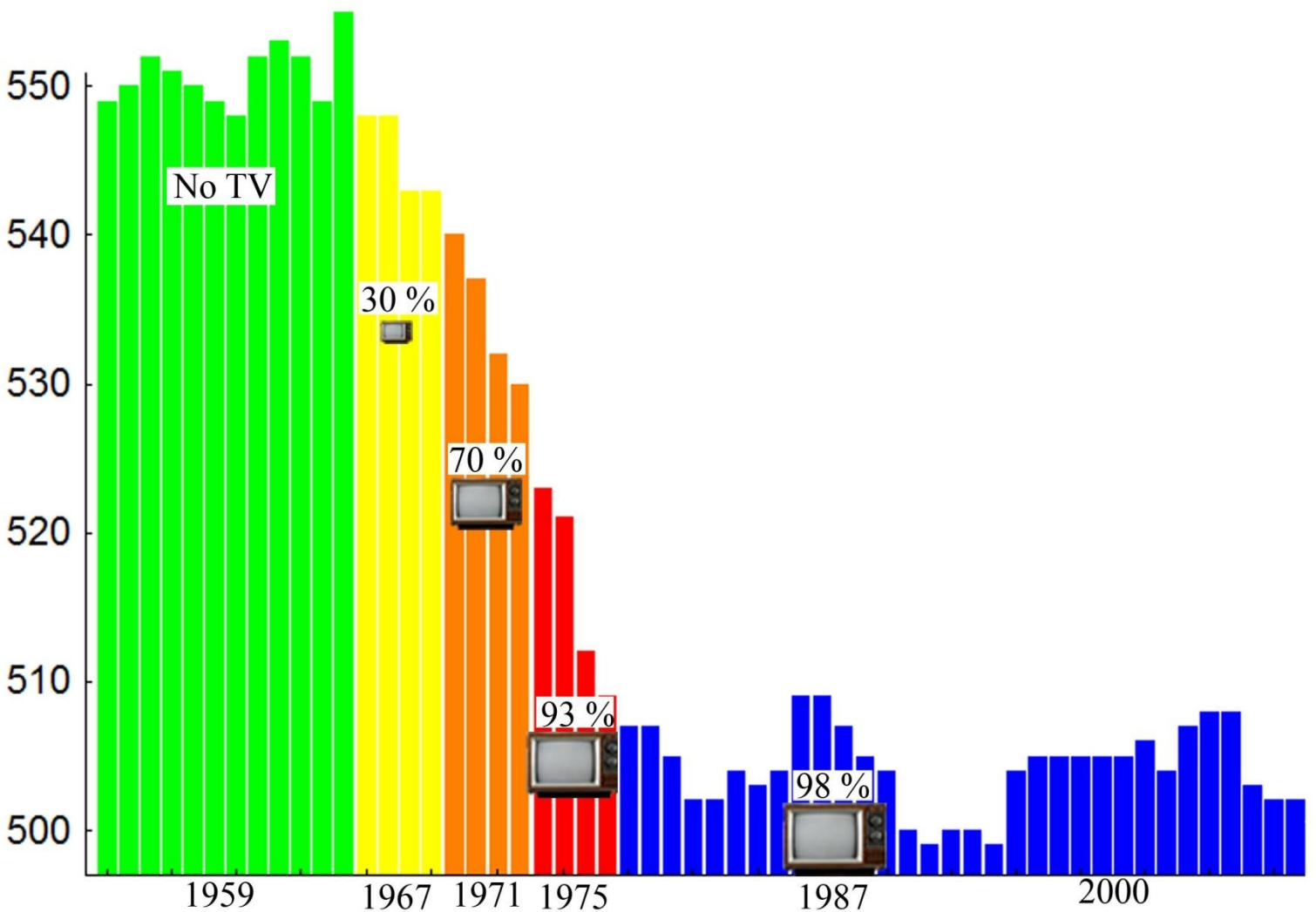
Anne-Marie Chang[a,b,1,2], Daniel Aeschbach[a,b,c], Jeanne F. Duffy[a,b], and Charles A. Czeisler[a,b]

Des compétences langagières effondrées

Test d'Entrée à l'Université (SAT score, USA)



Test d'Entrée à l'Université (SAT score, USA)

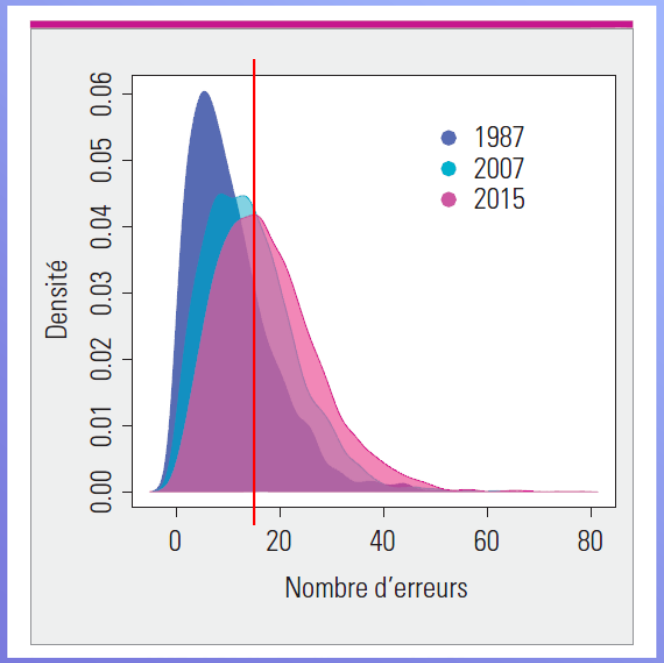



DEPP
DIRECTION DE L'ÉVALUATION, DE LA PROSPECTIVE ET DE LA PERFORMANCE

NOTE D'INFORMATION
n° 28 – Novembre 2016

Les performances en orthographe des élèves en fin d'école primaire (1987-2007-2015)

« Le soir tombait. Papa et maman, inquiets, se demandaient pourquoi leurs quatre garçons n'étaient pas rentrés. – Les gamins se sont certainement perdus, dit maman. S'ils n'ont pas encore retrouvé leur chemin, nous les verrons arriver très fatigués à la maison. – Pourquoi ne pas téléphoner à Martine ? Elle les a peut-être vus ! Aussitôt dit, aussitôt fait ! À ce moment, le chien se mit à aboyer. »



	1987	2007	2015
Pourcentage global d'items réussis en lecture	**71,3**	**66,4**	**65,1**
Pourcentage d'élèves ayant ≤ 2 erreurs à la dictée	13,2	6,5	2,0
Pourcentage d'items réussis en lecture	*83,6*	*83,5*	*84,2*
Pourcentage d'élèves ayant ≤ 5 erreurs à la dictée	31,0	16,4	7,8
Pourcentage d'items réussis en lecture	*79,7*	*81,1*	*80,7*
Pourcentage d'élèves ayant ≤ 10 erreurs à la dictée	58,5	37,7	24,7
Pourcentage d'items réussis en lecture	*76,5*	*77,3*	*76,8*
Pourcentage d'élèves ayant ≥ 15 erreurs à la dictée	25,6	44,5	59,1
Pourcentage d'items réussis en lecture	*61,5*	*57,0*	*59,1*
Pourcentage d'élèves ayant ≥ 25 erreurs à la dictée	5,4	11,3	19,8
Pourcentage d'items réussis en lecture	*55,8*	*47,9*	*50,8*

Lecture : en 2015, les 2 % d'élèves ayant fait 2 erreurs ou moins à la dictée ont réussi 84,2 % des items de lecture.
Champ : France métropolitaine, secteur public. *Source : MENESR-DEPP.*

÷7

x2

Nous n'irons pas à Kernach cet été =>
On n'ira pas à Kernach cet été

Quand ils furent en vue => Quand ils s'approchent

Ils passèrent une heure à discuter, puis le soleil disparut dans un flamboiement d'incendie, et le lac refléta de merveilleux tons de pourpre et d'or.
=>
Ils passent encore une heure à discuter, puis le soleil disparaît derrière les sommets alpins, et le lac prend des reflets dorés

Des causes précoces
On n’apprend pas à parler avec la télé (ou des vidéos)

Applied Psycholinguistics
Applied Psycholinguistics / Volume 2 / Issue 01 / February 1981, pp 33-54

DOI: http://dx.doi.org/10.1017/S0142716400000643 (About DOI), Published online: 28 November 2008

Language learning with restricted input: Case studies of two hearing children of deaf parents

Jacqueline Sachs[a1] [c1], Barbara Bard[a2] and Marie L. Johnson[a3]

Une heure de contenus « éducatifs » entre 8 et 16 mois se traduit par un **appauvrissement du lexique de l'ordre de 10 %**

Associations between Media Viewing and Language Development in Children Under Age 2 Years

Frederick J. Zimmerman, PhD, Dimitri A. Christakis, MD, MPH, and Andrew N. Meltzoff, PhD

Objective To test the association of media exposure with language development in children under age 2 years.

Study design A total of 1008 parents of children age 2 to 24 months, identified by birth certificates, were surveyed by telephone in February 2006. Questions were asked about child and parent demographics, child-parent interactions, and child's viewing of several content types of television and DVDs/videos. Parents were also asked to complete the short form of the MacArthur-Bates Communicative Development Inventory (CDI). The associations between normed CDI scores and media exposure were evaluated using multivariate regression, controlling for parent and child demographics and parent–child interactions.

Results Among infants (age 8 to 16 months), each hour per day of viewing baby DVDs/videos was associated with a 16.99-point decrement in CDI score in a fully adjusted model (95% confidence interval = −26.20 to −7.77). Among toddlers (age 17 to 24 months), there were no significant associations between any type of media exposure and CDI scores. Amount of parental viewing with the child was not significantly associated with CDI scores in either infants or toddlers.

Conclusions Further research is required to determine the reasons for an association between early viewing of baby DVDs/videos and poor language development. *(J Pediatr 2007;151:364-8)*

Several high-quality educational television shows, including *Blue's Clues*, *Sesame Street*, *Barney*, and others, have proven educational value when viewed appropriately by children age 2-1/2 to 5 years.[1] In contrast, no commercial television programs or videos have demonstrated a benefit for children under age 2 years,[2] and heavy television viewing between age 0 and 3 years has been associated with subsequent development of problems with attention[3] and impaired reading and mathematical proficiency.[4] The American Academy of Pediatrics has recommended no screen time for children under age 2.[5,6]

Notwithstanding the paucity of evidence for cognitive development benefits of early viewing of DVDs or videos, claims have been made for such benefits.[2] Approximately 3/4 of the 100 top-selling infant videos on Amazon.com in 2005 made educational claims, both explicit and specific.[2] For example, one product targeted at 0- to 2-year-olds claimed that the video will "teach your child about language and logic, patterns and sequencing, analyzing details and more."[2]

This study reports the association of early viewing with language development in a cross-sectional sample of children age 8 to 24 months old, adjusting for likely confounders related to parental socioeconomic status and child–parent interactions.

METHODS

Data

The data were collected through a telephone survey conducted in February 2006. Households were identified by retrospective extraction from birth certificates in the states of Washington and Minnesota. These states were chosen because they are representative of their respective regions, and because birth certificates are public data in these states. Phone numbers are recorded on birth certificates in Washington and were obtained from a commercial phone number-matching firm for Minnesota.

See editorial, p 334 and related article, p 369

From the Child Health Institute (F.Z., D.C.), Department of Health Services (F.Z., D.C.), Department of Pediatrics (F.Z., D.C.), and Institute for Learning and Brain Sciences (A.M.), University of Washington, Seattle, WA and Children's Hospital and Regional Medical Center, Seattle, WA (F.Z., D.C.).

Supported by the Tamaki Foundation. Dr. Zimmerman's participation was also supported by the National Institutes of Mental Health (grant 1 K01 MH06446-01A1) and Dr. Meltzoff's by the National Science Foundation (grant SBE-0354453). Throughout this project, Dr. Zimmerman had full access to all of the data in the study, and he takes responsibility for the integrity of the data and the accuracy of the data analysis.

Submitted for publication Nov 13, 2006; last revision received Feb 16, 2007; accepted Apr 30, 2007.

Reprint requests: Dr. Frederick J. Zimmerman, Child Health Institute, University of Washington, 6200 NE 74th Street, Seattle, WA 98115. E-mail: fzimmer@u.washington.edu.

0022-3476/$ - see front matter

10.1016/j.jpeds.2007.04.071

CDI Communicative Development Inventory CI Confidence interval

Deux heures par jour d'exposition à la télé entre 15 et 48 mois **<u>multiplie par 3 le risque d'occurrence de retards du développement langagier (x 6 si initation avant 1 an)</u>**

Acta Paediatrica ISSN 0803–5253

REGULAR ARTICLE

Television viewing associates with delayed language development

Weerasak Chonchaiya, Chandhita Pruksananonda (pchandhi@hotmail.com)

Division of Growth and Development, Department of Pediatrics, King Chulalongkorn Memorial Hospital, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Keywords
Language development, Television viewing

Correspondence
Chandhita Pruksananonda, Associate Professor, MD, Division of Growth and Development, Department of Pediatrics, Sor Kor Building 11th floor, King Chulalongkorn Memorial Hospital, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand.
Tel: 662-256-4943 |
Fax: 662-256-4911 |
Email: pchandhi@hotmail.com

Received
27 January 2008; revised 31 March 2008; accepted 3 April 2008.

DOI:10.1111/j.1651-2227.2008.00831.x

Abstract

Aim: To identify impact of television viewing on language development.

Methods: The case-control study included 56 new patients with language delay and 110 normal children, aged 15–48 months. Language delay was diagnosed by reviewing language milestonies and Denver-II. Television viewing variables and child/parental characteristics between both groups were interviewed. The data were analyzed by ANOVA and chi-square test. Adjusted odds ratios and 95% confidence intervals were calculated from multivariate logistic regression model.

Results: Forty-six boys and 10 girls; mean [±SD] age, 2.11 ± 0.47 years of the case group and 59 boys and 51 girls; mean [±SD] age, 2.23 ± 0.80 years of the control group were enrolled. Children who had language delay usually started watching television earlier at age 7.22 ± 5.52 months vs. 11.92 ± 5.86 months, p-value < 0.001 and also spent more time watching television than normal children (3.05 ± 1.90 h/day vs. 1.85 ± 1.18 h/day; p-value < 0.001). Children who started watching television at <12 months of age and watched television >2 h/day were approximately six times more likely to have language delays.

Conclusion: There is a relationship between early onset and high frequency of TV viewing and language delay.

INTRODUCTION

The causes of delayed language development are complex, representing a close interaction between the biological development of the child and environment. Multiple factors such as hearing, cognitive abilities, speech organs and environmental factors can contribute to delayed development of language. Although some of these conditions can occur in isolation, there is usually a combination of interrelated areas of dysfunction (1).

Young children, not only in the United States but also in Thailand, watch an astonishing amount of television, spending more time in front of a screen than any other single activity except sleep (2,3). The American Academy of Pediatrics recommends that children ≥2 years of age should have <2 h of screen time per day and that children <2 years of age be discouraged from television watching. These recommendations are often ignored by caregivers (4). Anderson reported that background TV disrupts play and interactions with parents (5), but organizing the speech and language systems needs early exposure to a rich and varied verbal environment (6). From our observations, we usually found that children who have had language delay in our developmental clinics seem to watch television during early infancy.

Correlations between onset and frequency of television viewing and language milestones have been studied rarely (7,8). Linebarger and Walker found that content and program type of television viewing has a variable effect on language development in young children (7). We, therefore, need to identify television viewing and other risk factors that may have an impact on language development.

METHODS

Participants

A pilot study was done to find odds ratios of the correlation between television viewing and delayed language development. The pilot study showed that children who started watching television at <12 months of age and watched >2 h each day, tended to have language delay sixfold greater when compared to children who started watching television after that and/or watched television <2 h in a typical day. The final number of participants after calculation was 30 in each group.

From September 2005 to August 2006, 110 new patients with language delay who came to developmental clinics and 110 normal children, aged between 15 and 48 months old, at King Chulalongkorn Memorial Hospital, Bangkok, Thailand were evaluated. Fifty-four of 110 new patients were diagnosed with autistic spectrum disorder (ASD) by DSM IV criteria, they were excluded from this study. Therefore, 56 new patients with language delay were included in the study. We excluded participants who had language delay due to ASD, known genetics causes, hearing problems, cerebral palsy, neurological disorder and global developmental delay.

The normal children were selected by a simple randomized sampling from all children who came to the well child care clinic weekly. Caregivers from each group were interviewed by a developmental paediatrician during the visit and/or by telephone survey in order to complete the data. Parental consent was obtained from all participants.

Diagnosis of delayed language development

Children were diagnosed with language delay based on early signs of disorders in language and speech (9,10). A delay of

Plus d'écrans ; Moins de mots

Dans un foyer typique (télé allumée en moyenne ~6 heures / jour) l'enfant entend **<u>40 % de mots en moins chaque jour</u>**

ARTICLE

Audible Television and Decreased Adult Words, Infant Vocalizations, and Conversational Turns

A Population-Based Study

Dimitri A. Christakis, MD, MPH; Jill Gilkerson, PhD; Jeffrey A. Richards, MA; Frederick J. Zimmerman, PhD; Michelle M. Garrison, PhD; Dongxin Xu, PhD; Sharmistha Gray, PhD; Umit Yapanel, PhD

Objective: To test the hypothesis that audible television is associated with decreased parent and child interactions.

Design: Prospective, population-based observational study.

Setting: Community.

Participants: Three hundred twenty-nine 2- to 48-month-old children.

Main Exposures: Audible television. Children wore a digital recorder on random days for up to 24 months. A software program incorporating automatic speech-identification technology processed the recorded file to analyze the sounds the children were exposed to and the sounds they made. Conditional linear regression was used to determine the association between audible television and the outcomes of interest.

Outcome Measures: Adult word counts, child vocalizations, and child conversational turns.

Results: Each hour of audible television was associated with significant reductions in age-adjusted z scores for child vocalizations (linear regression coefficient, −0.26; 95% confidence interval [CI], −0.29 to −0.22), vocalization duration (linear regression coefficient, −0.24; 95% CI, −0.27 to −0.20), and conversational turns (linear regression coefficient, −0.22; 95% CI, −0.25 to −0.19). There were also significant reductions in adult female (linear regression coefficient, −636; 95% CI, −812 to −460) and adult male (linear regression coefficient, −134; 95% CI, −263 to −5) word count.

Conclusions: Audible television is associated with decreased exposure to discernible human adult speech and decreased child vocalizations. These results may explain the association between infant television exposure and delayed language development.

Arch Pediatr Adolesc Med. 2009;163(6):554-558

TELEVISION VIEWING DURING very early childhood is a growing but understudied phenomenon.[1-6] The American Academy of Pediatrics discourages television or video viewing before the age of 2 years, suggesting instead that parents focus on interactive play to foster appropriate child development.[6]

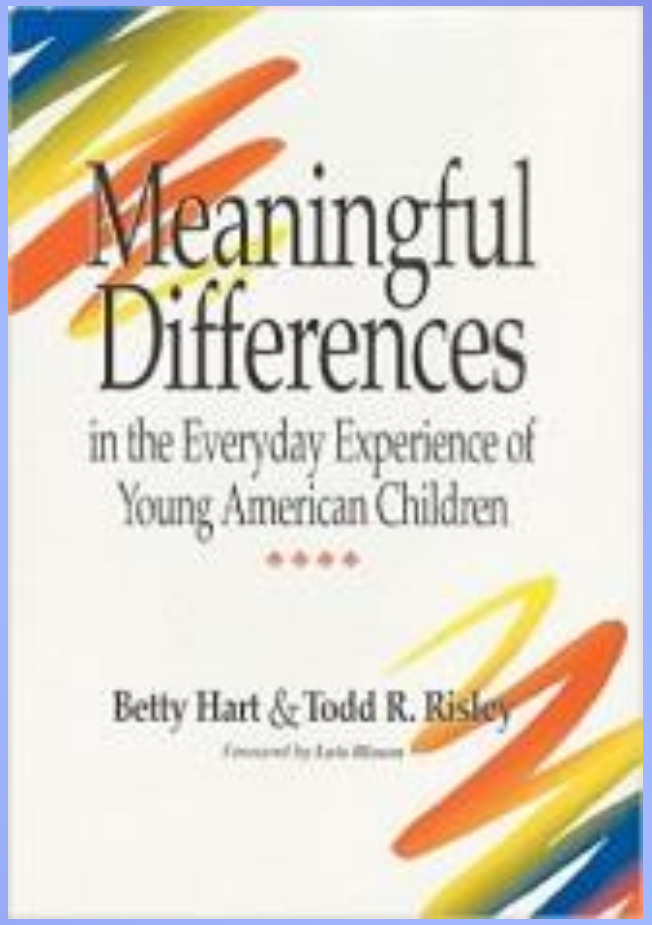
Language acquisition is a critical developmental task in early childhood that is promoted by certain activities, including interacting with adults.[7-9] In a prior study, we found an association between infant television or video viewing and delayed language development.[10] What factors might mediate this association is not entirely clear, however. One small laboratory-based study found that parents interact less with their children in the presence of a television set that is turned on.[11] In a separate retrospective study conducted in a low-income population, television exposure time was associated with self-reported decreased parent-child vocal interactions.[12] To date, no study has prospectively examined the effects of child television viewing on the frequency and nature of adult-child interactions in a population-based sample outside of a laboratory setting. We hypothesized that television exposure would be associated with decreased adult and child vocal activity.

METHODS

DATA SOURCE

Data for this study were obtained from the LENA Foundation Natural Language Study.[13] LENA is a language environment analysis system (LENA Foundation, Boulder, Colorado) designed to provide parents, clinicians, and researchers with information about the language environment of infants and toddlers. The LENA system contains a digital language pro-

Author Affiliations: Center for Child Health, Behavior and Development; and Department of Health Services, University of Washington (Dr Christakis); Seattle Children's Research Institute (Drs Christakis, Zimmerman, and Garrison), Seattle, Washington; and LENA Foundation, Boulder, Colorado (Drs Gilkerson, Xu, Gray, and Yapanel, and Mr Richards).



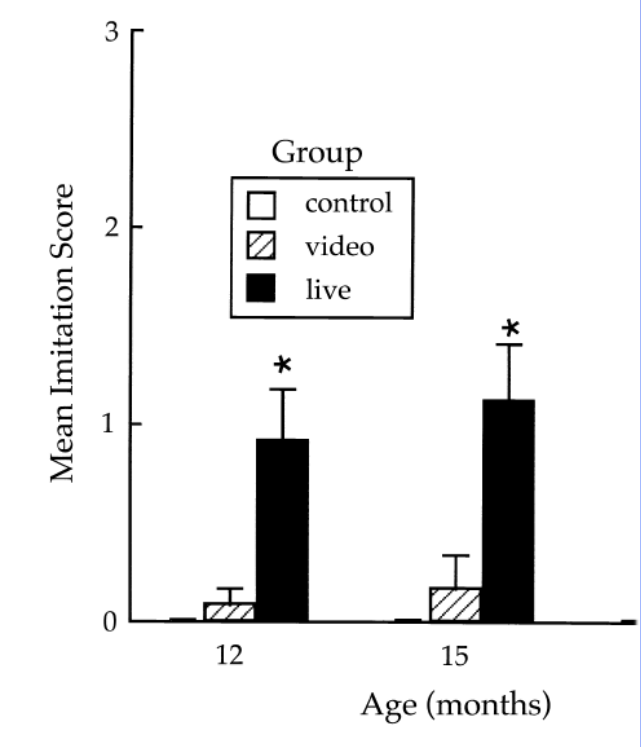
Un « déficit video » généralisé

Child Development, September/October 1999, Volume 70, Number 5, Pages 1067–1081

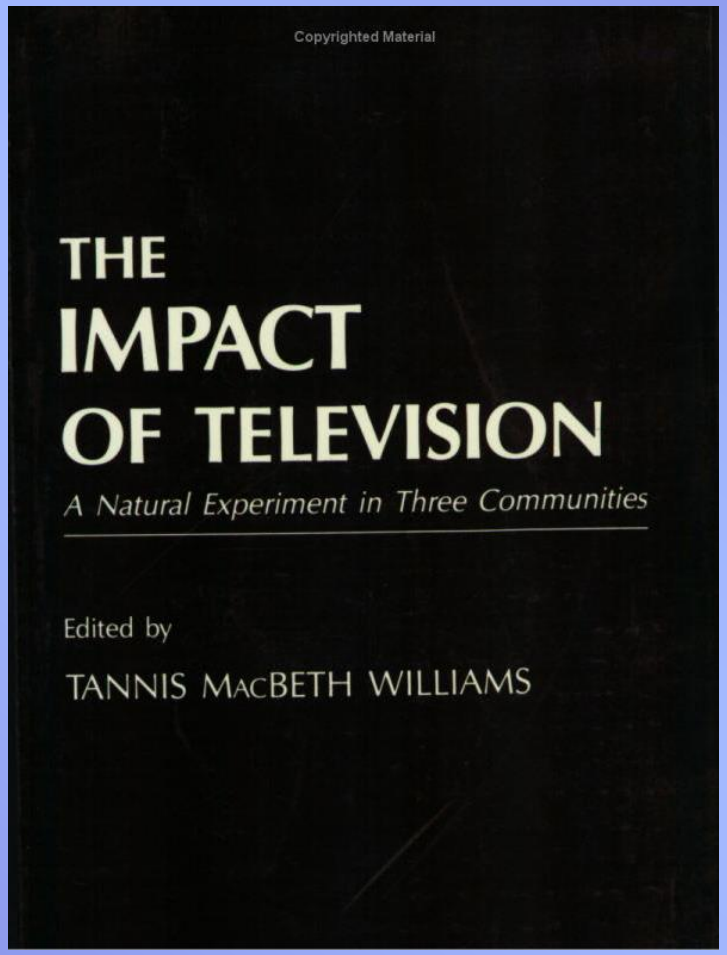
Developmental Changes in Imitation from Television during Infancy

Rachel Barr and Harlene Hayne

Infants' (N = 276) ability to learn from television under seminaturalistic conditions was examined in five experiments with 12-, 15-, and 18-month-olds. In all experiments, an adult performed a series of specific actions with novel stimuli. Some infants watched the demonstration live, and some infants watched the same demonstration on television from prerecorded videotape. Infants' ability to reproduce the target actions was then assessed either immediately or after a 24-hour delay. Infants of all ages exhibited imitation when the actions were modeled live. There were age-related and task-related differences, however, in infants' ability to imitate the same actions modeled on television. The role of perceptual, attentional, and cognitive development in the ability to learn from television is discussed.



Des causes tardives



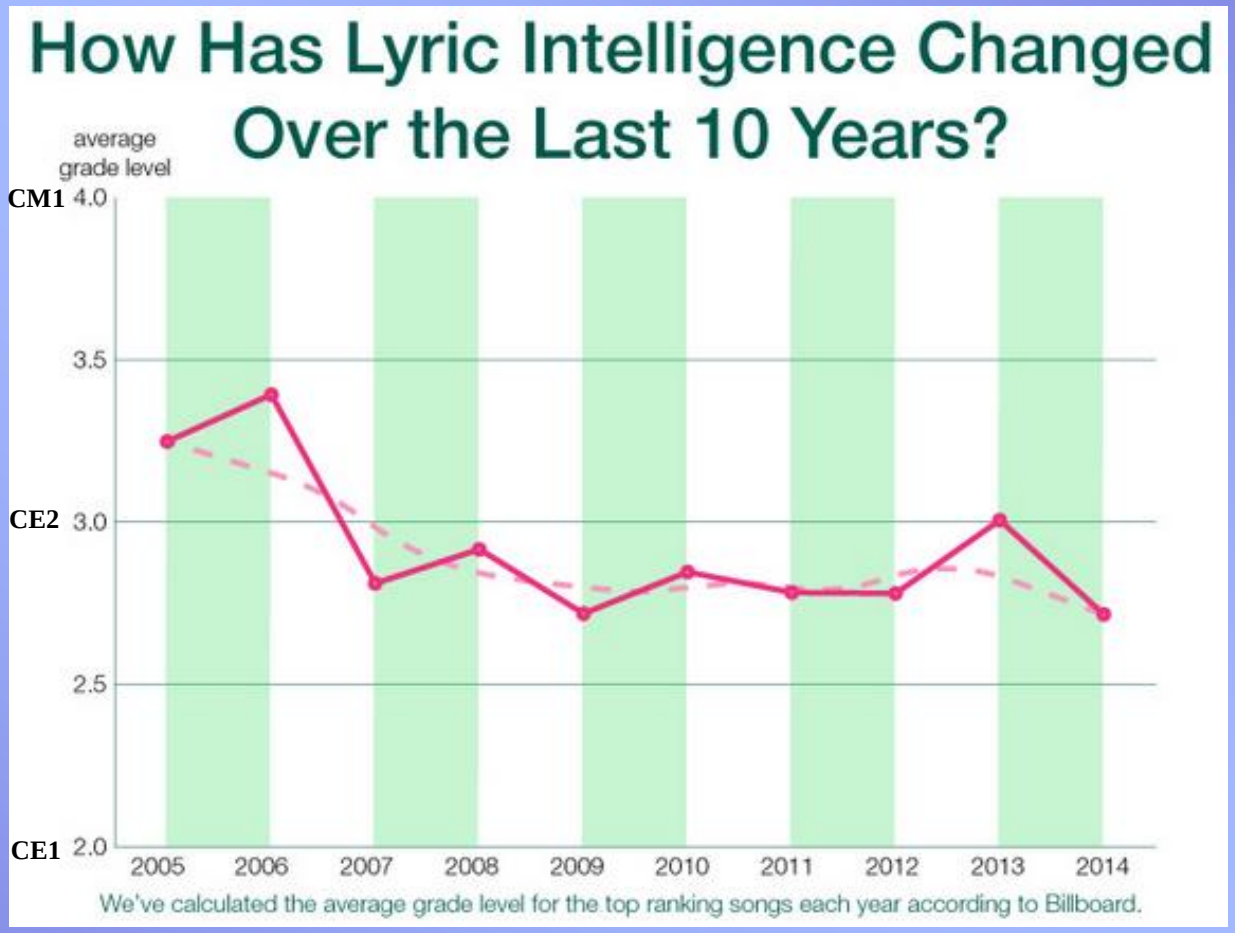
Retard en lecture induit par
l'arrivée de la télé
2 ANS

Data Visualizations

from SeatSmart

Lyric Intelligence In Popular Music: A Ten Year Analysis

May 18, 2015 By Andrew Powell-Morse 78 Comments



Une capacité d’attention fusillée

1 heure télévision / jour à 3 ans
Probabilités de troubles attentionnels à 8 ans : **x 2**

ARTICLE

Associations Between Content Types of Early Media Exposure and Subsequent Attentional Problems

Frederick J. Zimmerman, PhD, Dimitri A. Christakis, MD, MPH

Child Health Institute and Departments of Health Services and Pediatrics, University of Washington, Seattle, Washington; Seattle Children's Research Institute, Children's Hospital and Regional Medical Center, Seattle, Washington

The authors have indicated they have no financial relationships relevant to this article to disclose.

ABSTRACT

OBJECTIVE. Television and video/DVD viewing among very young children has become both pervasive and heavy. Previous studies have reported an association between early media exposure and problems with attention regulation but did not have data on the content type that children watched. We tested the hypothesis that early television viewing of 3 content types is associated with subsequent attentional problems. The 3 different content types are educational, nonviolent entertainment, and violent entertainment.

METHODS. Participants were children in a nationally representative sample collected in 1997 and reassessed in 2002. The analysis was a logistic regression of a high score on a validated parent-reported measure of attentional problems, regressed on early television exposure by content and several important sociodemographic control variables.

RESULTS. Viewing of educational television before age 3 was not associated with attentional problems 5 years later. However, viewing of either violent or nonviolent entertainment television before age 3 was significantly associated with subsequent attentional problems, and the magnitude of the association was large. Viewing of any content type at ages 4 to 5 was not associated with subsequent problems.

CONCLUSIONS. The association between early television viewing and subsequent attentional problems is specific to noneducational viewing and to viewing before age 3.

www.pediatrics.org/cgi/doi/10.1542/peds.2006-3322

doi:10.1542/peds.2006-3322

Key Words
television, media, attention problems, ADHD, executive function

Abbreviations
ADHD—attention-deficit/hyperactivity disorder
PSID—Panel Survey of Income Dynamics
CDS—Child Development Supplement
BPI—Behavior Problems Index
OR—odds ratio
CI—confidence interval

Accepted for publication May 21, 2007

Address correspondence to Frederick J. Zimmerman, PhD, Child Health Institute, University of Washington, 6200 NE 74th St, Seattle, WA 98115. E-mail: fzimmer@u.washington.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

1 heure télévision / jour à 14 ans

Probabilités de troubles attentionnels à 16 ans : **<u>+ 50%</u>**

ARTICLE

Extensive Television Viewing and the Development of Attention and Learning Difficulties During Adolescence

Jeffrey G. Johnson, PhD; Patricia Cohen, PhD; Stephanie Kasen, PhD; Judith S. Brook, EdD

Objective: To investigate the association of television viewing with educational and intellectual outcomes during adolescence and early adulthood.

Design: Prospective epidemiological study.

Setting: Families participating in the Children in the Community Study, a prospective longitudinal investigation, were interviewed at mean offspring ages 14, 16, and 22 years.

Participants: A community-based sample of 678 families from upstate New York.

Main Exposures: Television viewing, attention difficulties, learning difficulties, and educational achievement during adolescence and early adulthood.

Main Outcome Measures: The Disorganizing Poverty Interview and age-appropriate versions of the Diagnostic Interview Schedule for Children.

Results: Frequent television viewing during adolescence was associated with elevated risk for subsequent attention and learning difficulties after family characteristics and prior cognitive difficulties were controlled. Youths who watched 1 or more hours of television per day at mean age 14 years were at elevated risk for poor homework completion, negative attitudes toward school, poor grades, and long-term academic failure. Youths who watched 3 or more hours of television per day were the most likely to experience these outcomes. In addition, youths who watched 3 or more hours of television per day were at elevated risk for subsequent attention problems and were the least likely to receive postsecondary education. There was little evidence of bidirectionality in the association of television viewing with attention and learning difficulties.

Conclusion: Frequent television viewing during adolescence may be associated with risk for development of attention problems, learning difficulties, and adverse long-term educational outcomes.

Arch Pediatr Adolesc Med. 2007;161:480-486

CHILDREN AND ADOLESCENTS in most industrialized societies spend an average of 2 or more hours per day watching television.[1-4] Many youths who watch 3 or more hours of television per day spend as much time watching television in an average year as they do receiving classroom instruction.[1-4] Most children and adolescents spend more time watching television than reading, and television viewing time is inversely associated with reading time and reading comprehension.[1,5-7] These findings are a cause of concern because research has suggested that extensive viewing of entertainment and general audience programming during childhood may be associated with poor academic achievement and deficits in attention and cognitive functioning.[3,8-14] Although viewing educational television may be associated with positive outcomes,[2] most children spend more than 90% of their television viewing time watching entertainment and general audience programming.[1-4,15]

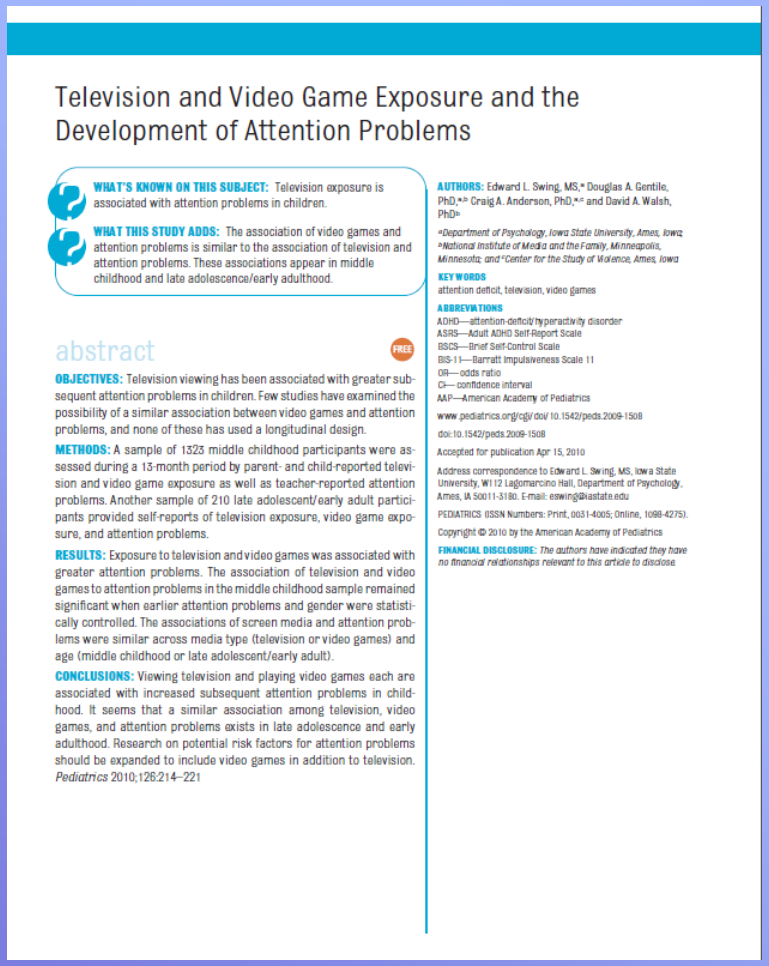
Frequent viewing of entertainment and general audience television programming during childhood and adolescence has been hypothesized to contribute to persistent reductions in educational and intellectual functioning[14] because it displaces reading and homework, requires relatively little intellectual effort, and promotes attention problems and disinterest in school.[2,6,7,11,16,17] Research findings supporting this hypothesis have indicated that overall television viewing time during childhood and adolescence may be associated with elevated risk for the development of attention problems, educational difficulties, poor reading comprehen-

Author Affiliations:
Department of Psychiatry, Columbia University College of Physicians and Surgeons and the New York State Psychiatric Institute (Drs Johnson, Cohen, and Kasen) and Department of Psychiatry, New York University School of Medicine (Dr Brook), New York.

Troubles attentionnels à 16 ans

Risque d'échec scolaire : **<u>x 4</u>**

Télé et jeux-vidéo, c'est pareil…



Television and Video Game Exposure and the Development of Attention Problems

WHAT'S KNOWN ON THIS SUBJECT: Television exposure is associated with attention problems in children.

WHAT THIS STUDY ADDS: The association of video games and attention problems is similar to the association of television and attention problems. These associations appear in middle childhood and late adolescence/early adulthood.

AUTHORS: Edward L. Swing, MS,[a] Douglas A. Gentile, PhD,[a,b] Craig A. Anderson, PhD,[a,c] and David A. Walsh, PhD[b]

[a]*Department of Psychology, Iowa State University, Ames, Iowa;* [b]*National Institute of Media and the Family, Minneapolis, Minnesota; and* [c]*Center for the Study of Violence, Ames, Iowa*

KEY WORDS
attention deficit, television, video games

ABBREVIATIONS
ADHD—attention-deficit/hyperactivity disorder
ASRS—Adult ADHD Self-Report Scale
BSCS—Brief Self-Control Scale
BIS-11—Barratt Impulsiveness Scale 11
OR—odds ratio
CI—confidence interval
AAP—American Academy of Pediatrics

www.pediatrics.org/cgi/doi/10.1542/peds.2009-1508

doi:10.1542/peds.2009-1508

Accepted for publication Apr 15, 2010

Address correspondence to Edward L. Swing, MS, Iowa State University, W112 Lagomarcino Hall, Department of Psychology, Ames, IA 50011-3180. E-mail: eswing@iastate.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

FINANCIAL DISCLOSURE: *The authors have indicated they have no financial relationships relevant to this article to disclose.*

abstract

FREE

OBJECTIVES: Television viewing has been associated with greater subsequent attention problems in children. Few studies have examined the possibility of a similar association between video games and attention problems, and none of these has used a longitudinal design.

METHODS: A sample of 1323 middle childhood participants were assessed during a 13-month period by parent- and child-reported television and video game exposure as well as teacher-reported attention problems. Another sample of 210 late adolescent/early adult participants provided self-reports of television exposure, video game exposure, and attention problems.

RESULTS: Exposure to television and video games was associated with greater attention problems. The association of television and video games to attention problems in the middle childhood sample remained significant when earlier attention problems and gender were statistically controlled. The associations of screen media and attention problems were similar across media type (television or video games) and age (middle childhood or late adolescent/early adult).

CONCLUSIONS: Viewing television and playing video games each are associated with increased subsequent attention problems in childhood. It seems that a similar association among television, video games, and attention problems exists in late adolescence and early adulthood. Research on potential risk factors for attention problems should be expanded to include video games in addition to television.

Pediatrics 2010;126:214–221

Fin primaire (6 - 12)
Fin Adolescence/Jeune Adulte (18 - 24)

> 2h par jour
Risque de déficits attentionnel X 2

Des données contradictoires ?

Dire n’importe quoi…

Il faut bien comprendre là où les chercheurs placent la barre (…) **avant une consommation de 2 heures par jour les recherches ne prennent pas en compte**…

S Tisseron, Les maternelles, France 5, 2011

Bis…

Le débat de la semaine

UN SONDAGE AMÉRICAIN **ACCUSE LA TÉLÉ** DE PERTURBER NOS NUITS

La télévision nuit-elle au sommeil?

Télé au lit, sommeil plombé…

NON

SERGE TISSERON

Psychiatre, psychanalyste

"Aucune étude ne le prouve vraiment"

TÉLÉ STAR: Que vous inspire ce sondage ?

SERGE TISSERON: Il n'est pas scientifiquement valable. Il faudrait comparer deux populations avec des habitudes différentes. Ici, 95 % regardent un écran avant de dormir. Très bien, mais ça ne veut rien dire.

Comment ça ?

S.T.: On ne peut pas en tirer de conclusion. C'est comme si on disait «On mange des pâtes tous les soirs, on dort mal, c'est la faute aux pâtes!» Ça fait des années que les gens s'endorment devant la télé, si c'était mauvais, ça se saurait.

Et avec l'ordinateur, les consoles ou les portables ?

S.T.: Il existe une étude qui a comparé deux groupes d'adolescents: avant de se coucher, l'un joue aux jeux vidéo, l'autre regarde un film. Résultat: le premier groupe mémorise moins bien ce qu'il a appris pendant la journée et présente un sommeil plus agité. Là, au moins, c'est une étude scientifique.

R.B.

Dire tout et son contraire

5.4. De la naissance à l'adolescence, l'usage des écrans selon l'âge[36]

Résumé
Les tablettes visuelles et tactiles suscitent au mieux, avec l'aide des parents, grands-parents, ou enfants plus âgés de la famille, l'éveil précoce des bébés (0-2 ans) au monde des écrans, car c'est le format le plus proche de leur intelligence. Lors de la construction de la pensée symbolique, entre 2 et 6 ans, les enfants doivent pour la première fois apprendre à privilégier alternativement le réel et le virtuel (le « semblant ») et à en jouer. C'est aussi l'âge où, de façon spontanée, l'enfant pourrait déjà se réfugier de façon excessive dans le monde virtuel des écrans. Au cas par cas, il faut très tôt éduquer à une pratique modérée et autorégulée. L'âge de l'école élémentaire (6-12 ans) est celui du plein essor du développement cognitif (lecture, calcul, raisonnement, etc.). Ici, l'usage pédagogique des écrans et outils numériques à l'école ou à la maison est un progrès technologique et éducatif important. Chez les adolescents (12-18 ans), en raison de la maturation cérébrale toujours en cours et de l'articulation non encore équilibrée entre les aspects cognitifs et émotionnels du cerveau en développement, l'éducation et le contrôle des parents concernant les écrans restent essentiels, autant qu'ils l'étaient chez les bébés et les enfants. Les technologies numériques sont des outils d'une puissance inédite pour mettre le cerveau des enfants et des adolescents en mode hypothético-déductif et explorer tous les mondes possibles. Certains jeux vidéo d'action améliorent même les capacités d'attention visuelle. Mais ces avantages cognitifs et perceptifs peuvent s'accompagner d'une pensée zapping trop rapide, superficielle et excessivement fluide où l'usage d'Internet appauvrirait la mémoire et les capacités de synthèse personnelle. De même, une pratique excessive des écrans peut provoquer un manque d'activités physiques et sociales, de sommeil, voire des risques accrus de troubles ultérieurs de la vision.

"Avant l'âge de 3 ans, les tablettes sont nuisibles"

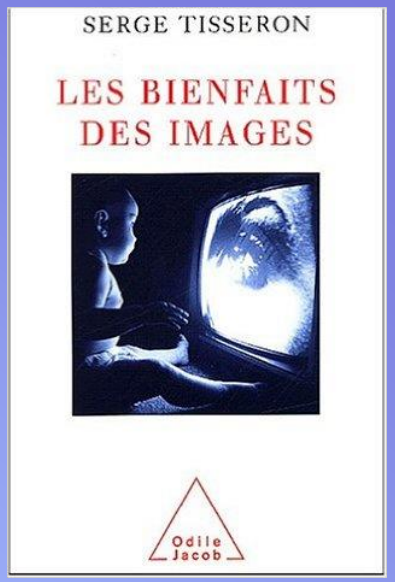
Pour le psychiatre Serge Tisseron, la multiplication des écrans serait dangereuse pour les enfants.

C'est une grand-mère soucieuse pour sa petite-fille de 3 ans. La gamine n'a pas sa pareille pour dompter la tablette numérique familiale. Du bout des doigts, elle fait glisser les pièces du puzzle virtuel et l'écran semble un prolongement naturel d'elle-même. Mais pourquoi reste-t-elle les bras ballants devant un vrai jeu en bois coloré? Une même inquiétude remonte des cabinets médicaux. Des parents vantent devant leur pédiatre, les acrobaties numériques de leurs bambins. Le praticien, lui, se désole de les voir démunis devant une boîte de cubes comme un Bochiman du Kalahari tombant sur une canette de Coca.

Mutation culturelle ou évolution préoccupante? Les deux, répondent les spécialistes. En attendant, en janvier 2013, le résultat d'un rapport de l'Académie des sciences consacré aux bons usages des écrans, la prudence s'impose. D'autant plus que, du Net au papier glacé des magazines, les joues rebondies des bébés s'affichent comme autant de cibles marketing. Ou comment les fabricants tentent d'imposer l'idée trompeuse que la tablette est un outil éducatif indispensable.

"Vive les bébés zappeurs!"

Certains parents veulent empêcher leur enfant d'exercer ses talents de bébé zappeur. Quelle erreur! Le bébé qui zappe ne se familiarise pas seulement avec les nouvelles technologies, il invente une variante high-tech de ses jeux traditionnels.
(2002)



M Idées

IDÉES | Tribunes | Enquêtes | Rencontres | Controverses | Livres | Analyses | Editoriaux | Chroniques

Un moratoire pour les bébés téléphages, par Pierre Delion, Bernard Golse et Serge Tisseron

LE MONDE | 26.10.2007 à 14h29

Abonnez vous à partir de 1 € | Réagir | Ajouter | Partager | Tweeter

Le lancement d'une nouvelle chaîne de télévision destinée aux enfants de 6 mois à 3 ans pose des problèmes graves.

Il est à craindre que de jeunes enfants confrontés sans cesse aux écrans ne développent une relation d'attachement à eux qui les "scotchent" indépendamment de tout contenu. (…)
prenons conscience que protéger nos enfants du risque de développer une forme d'attachement à un écran lumineux est une forme d'écologie de l'esprit.

Agrégez tout…

LOISIRS NUMÉRIQUES ET PERFORMANCES COGNITIVES ET SCOLAIRES : UNE ÉTUDE CHEZ 27 000 ÉLÈVES DE LA 3E DES COLLÈGES

Alain Lieury *et al.*

Groupe d'études de psychologie | *Bulletin de psychologie*

2014/2 - Numéro 530
pages 99 à 125

ISSN 0007-4403

Article disponible en ligne à l'adresse:

http://www.cairn.info/revue-bulletin-de-psychologie-2014-2-page-99.htm

Cercle de Recherche et d'Action Pédagogiques
CAHIERS PEDAGOGIQUES
Changer la société pour changer l'école, changer l'école pour changer la société

Recherche avancée
PUBLICATIONS
RESSOURCES
LES BLOGS DES CAHIERS
LE CRAP
Adhérer au CRAP
Nous contacter
Souscrire un abonnement
Commander un numéro
Télécharger un catalogue
Recevoir notre lettre d'information
Consulter les appels à contribution

Accueil - L'actualité vue par le CRAP - L'impact des loisirs des adolescents sur les performances scolaires

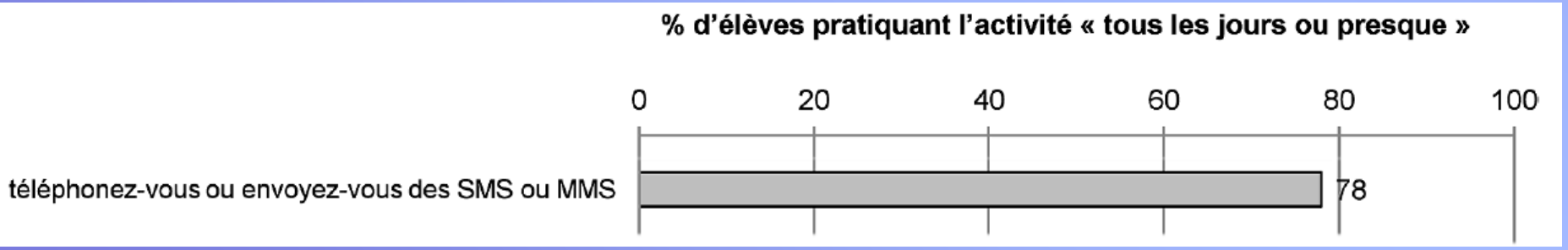
Recherche

L'impact des loisirs des adolescents sur les performances scolaires

Alain Lieury et Sonia Lorant

Les élèves ont changé, les livres sont remplacés par l'ordinateur et les jeux de la cour de récréation ont laissé la place au téléphone portable. Ce sont les « enfants du numérique ». Avec quelles conséquences négative ou positive sur les performances cognitives ou scolaires des élèves ? La pratique intensive de jeux vidéo améliore-t-elle certaines capacités cognitives comme on le dit parfois ? Le temps passé à téléphoner et échanger des SMS a-t-il des conséquences négatives sur les performances en lecture et en compréhension ? Bref, quelles sont les nouvelles habitudes de nos ados et les impacts éventuels sur leurs performances scolaires à l'ère du numérique ?

Dans l'ensemble, la majorité des loisirs, comme les jeux vidéo, n'a pas ou peu d'influences sur les performances scolaires et cognitives, ce sont des loisirs qui permettent la détente, ou l'expression des dimensions affectives et sociales des élèves (téléphone, sms). Mais la pratique trop fréquente de la télé (ou vidéo sur ordinateur) est associée à de moindres performances.



Oubliez les covariables…

Computers and Student Learning:
Bivariate and Multivariate Evidence on the Availability and Use of Computers at Home and at School*

Thomas Fuchs **Ludger Wößmann**

Ifo Institute for Economic Research at the University of Munich

Summary

We estimate the relationship between computers and students' educational achievement in the international student-level PISA database. Bivariate analyses show a positive correlation between achievement and computer availability both at home and at school. However, once we control extensively for family background and school characteristics, the relationship gets negative for home computers and insignificant for school computers. Thus, mere availability of computers at home seems to distract students from effective learning.

Comparaison Brute
(Scores math & lecture)

Ordinateurs > NoOrdinateur

~ 1 classe complète

Comparaison Ajustée
(Scores math & lecture)

NoOrdinateurs > Ordinateur

~ 1/2 classe

Arrangez un peu le tableau…

LE FIGARO.fr
tech & web

Actualités | Start-up | Tests | Les meilleurs smartphones 2016 | Pratique | Jeux vidéo

LE FLASH ACTU 15h22 Duterte invite Ban Ki-moon à venir enquêter

TECH & WEB > TECH & WEB

Selon une étude, les jeux vidéo permettraient d'avoir de meilleures notes

Par Audrey Fisné | Publié le 09/08/2016 à 22:09

theguardian

Positive link between video games and academic performance, study suggests

Students who played online games scored above average in maths, science and reading tests, although study does not prove games were the cause

The study looked at the correlation between academic scores and the children's personal interests and activities outside of school, including internet usage. Photograph: Image Source / Rex Features

Jeux vidéo et éducation, même combat

Les étudiants qui s'adonnent, quotidiennement, aux jeux vidéo en ligne, auraient «des notes supérieures de 15 points à la moyenne en mathématiques et supérieures de 17 points à la moyenne en sciences», d'après l'étude d'Alberto Posso.

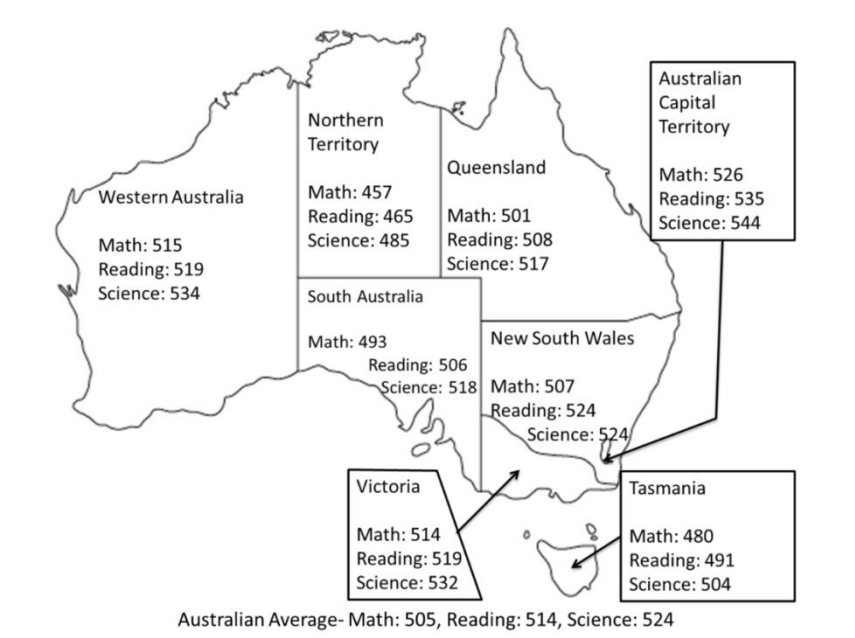
International Journal of Communication 10(2016), 3851–3876 1932–8036/20160005

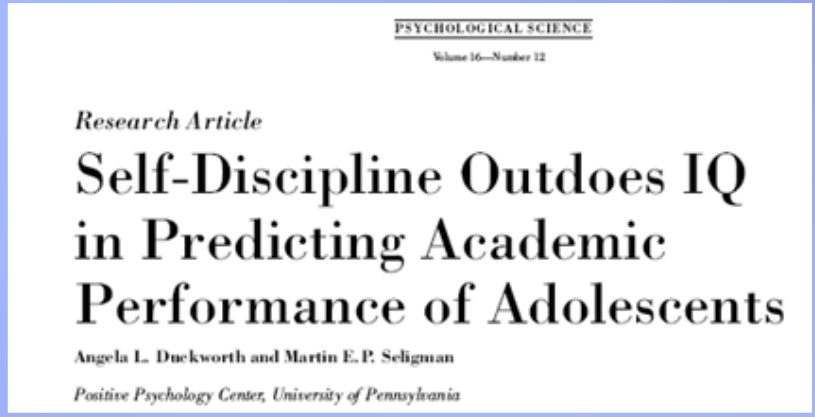
Internet Usage and Educational Outcomes Among 15-Year-Old Australian Students

ALBERTO POSSO[1]
Royal Melbourne Institute of Technology, Australia

These variables determined usage from *never*, to *once or twice a month*, to *once or twice a week*, to *almost every day*, to *every day*.[6]

playing almost every day has a larger positive effect on test scores than playing once a week or every day.




PSYCHOLOGICAL SCIENCE
Volume 16—Number 12

Research Article

Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents

Angela L. Duckworth and Martin E.P. Seligman

Positive Psychology Center, University of Pennsylvania

~ 2 à 3%

Utilisez des variables secondaires…

LE FIGARO·fr | NEWS | ENCYCLOPÉDIE SANTÉ | MIEUX-ÊTRE | SOCIAL | VOYAGES | COACHING

Accueil > Actualité

Article précédent | Article suivant

Les jeux vidéo d'action au secours de la dyslexie

Mots clés : Dyslexie, jeux vidéo

Par Stéphany Gardier - le 18/02/2014

En améliorant la capacité d'attention des enfants, ces jeux pourraient s'avérer utiles dans la panoplie d'outils pour leur rééducation.

Difficulté à lire, à écrire et à apprendre: **5 à 10% des enfants scolarisés seraient concernés par la dyslexie.** Elle s'accompagne parfois de troubles de l'attention rendant difficile l'intégration d'informations de différente nature telles que les sons et les images. Les résultats d'une étude anglaise publiés **dans la revue *Current Biology*** suggèrent que chez certains sujets dyslexiques l'association entre lettres et sons est perturbée par une asymétrie de traitement des stimuli par le cerveau, et que l'utilisation de jeux vidéo pourrait être utile à leur rééducation.

Pendant plus de vingt ans, il a été admis que les enfants dyslexiques souffraient d'un problème phonologique: une difficulté à isoler les «phonèmes», les différents sons qui composent un mot. «Parler de la dyslexie comme s'il n'en existait qu'une seule forme n'est pas juste», explique Sylviane Valdois, directrice de recherche CNRS au laboratoire de psychologie et neurocognition (Grenoble). «Nous sommes nombreux à penser qu'il existe en fait différents sous-groupes de patients, pour qui **les causes des symptômes dyslexiques** ne sont pas identiques.»

Dès 2007, la chercheuse proposait une explication alternative de la dyslexie. «Nous avons montré chez des enfants anglais et français que certains présentaient de manière isolée, ou en plus d'un trouble phonologique, des ressources attentionnelles visuelles limitées», explique-t-elle. Déchiffrer un mot nécessite de porter son attention sur chaque lettre, or un tel déficit empêche de considérer plus de quelques lettres à la fois, rendant la lecture plus que fastidieuse.

Les jeux vidéo d'action obligent le cerveau à traiter rapidement des informations auditives et visuelles aléatoires. Ils pourraient donc aider les enfants dyslexiques.

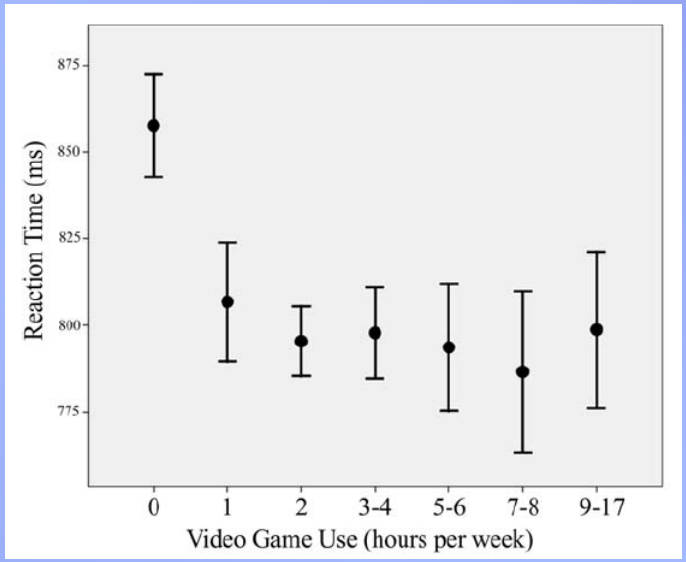
Current Biology 23, 1–5, March 18, 2013 ©2013 Elsevier Ltd All rights reserved http://dx.doi.org/10.1016/j.cub.2013.01.044

Action Video Games Make Dyslexic Children Read Better

Sandro Franceschini,[1,3] Simone Gori,[1,2,3] Milena Ruffino,[2] Simona Viola,[1] Massimo Molteni,[2] and Andrea Facoetti[1,2,3,*]

The reading improvements after the AVG training were characterized by the increased reading speed without a cost in accuracy.

Considering that children with dyslexia could present reading comprehension problems as consequence of the core reading decoding deficit, further studies could directly investigate the possible effect of AVG on this higher level reading parameter.



Pujol et al. Ann Neurol 2016

Utilisez des variables de substitution…

Jouer à Super Mario augmente le volume de matière grise

Par LEXPRESS.fr, publié le 23/12/2013 à 17:33

Des chercheurs allemands ont démontré pour la première fois le lien direct entre la pratique d'un jeu vidéo et l'augmentation du volume du cerveau.

Partager 1.7K | Tweeter 75 | g+1 11 | Voter (153) | 1 | A+ A-

Capture d'écran de Super Mario 64. Où l'on se dit que les graphismes ont bien vieilli.

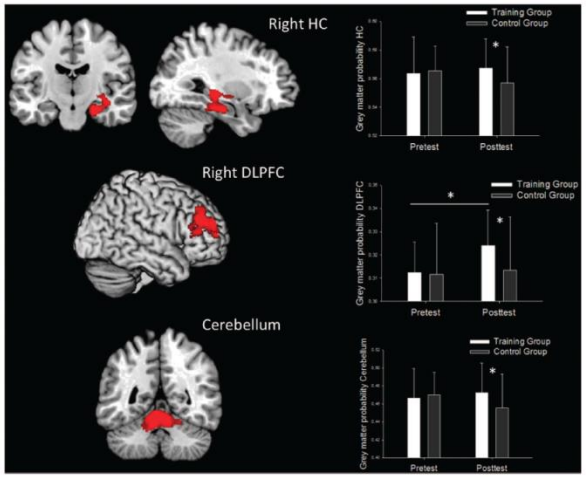


Figure 2. Brain regions showing a significant group (training vs control) × time (pre vs post-test) interaction in gray matter volume. Bar graphs depict the interaction effects for the clusters displayed, error bars illustrate s.d., *t-test, $P<0.05$. DLPFC, dorsolateral prefrontal cortex; HC, hippocampal formation.

SCIENCE&VIE
QUAND LA SCIENCE DÉCRYPTE LA SOCIÉTÉ

Rechercher sur le site | OK | Rec

N° EN COURS : EN SAVOIR + | SANTÉ | ENVIRONNEMENT | ESPACE | TECHNO | À ÉCOU | TV ET VOD

Accueil > Biologie > Neurosciences > Les adeptes des jeux vidéos ont plus de matière grise et une meilleure conn

[BIOLOGIE]

LES ADEPTES DES JEUX VIDÉOS ONT PLUS DE MATIÈRE GRISE ET UNE MEILLEURE CONNECTIVITÉ CÉRÉBRALE

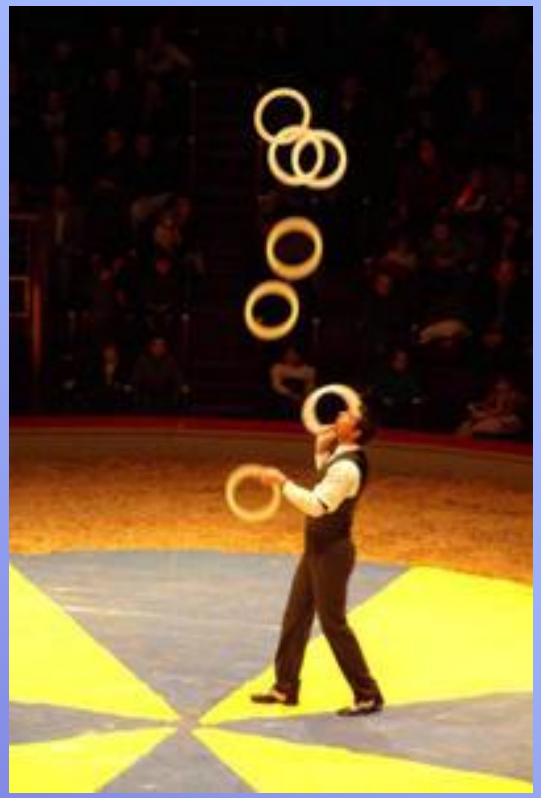
attention, cerveau, connexions cérébrales, cortex, cortex sensorimoteur, gamer, Imagerie, Insula, IRM, jeux vidéos, matière grise, mémoire, Neurosciences, plasticité neuronale, réseau de neurones

publié le 30/04/2015

G+1 12 Tweeter | Imprimer | Envoyer

La pratique assidue des jeux vidéos accroît la matière grise dans certaines structures du cerveau. – Ph. MartijnVanDalen via Flickr / CC BY SA 2.0

Jongler



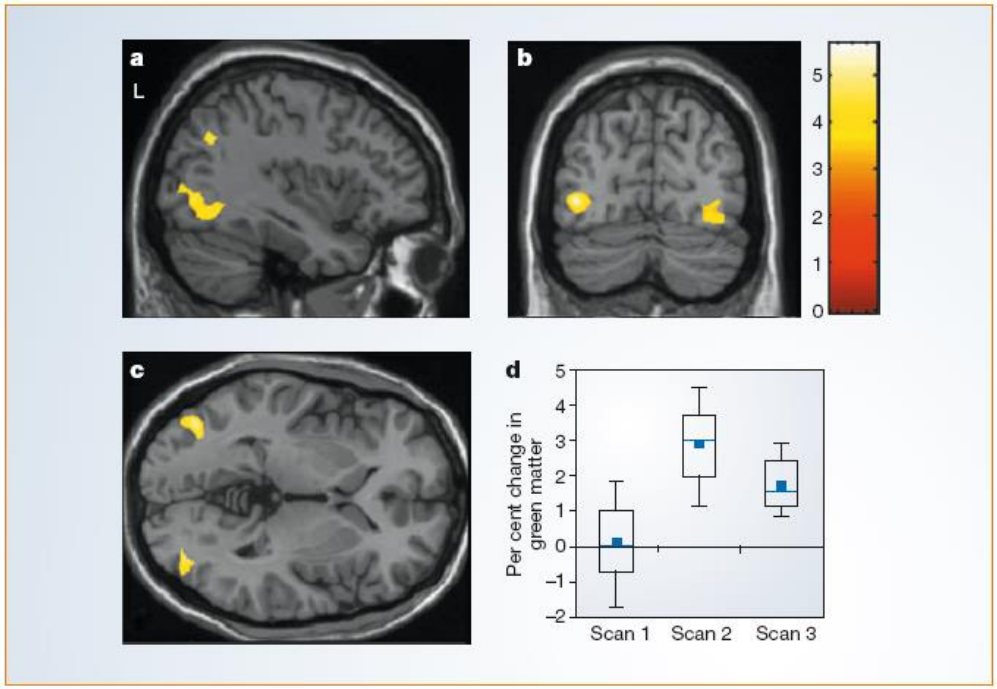
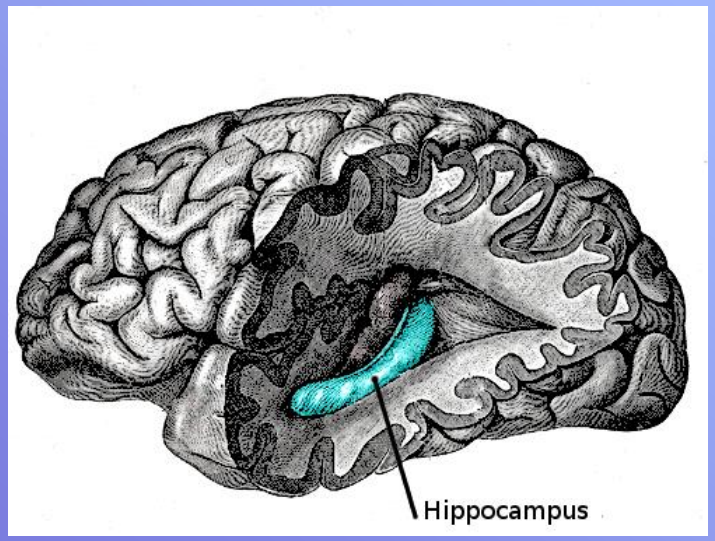
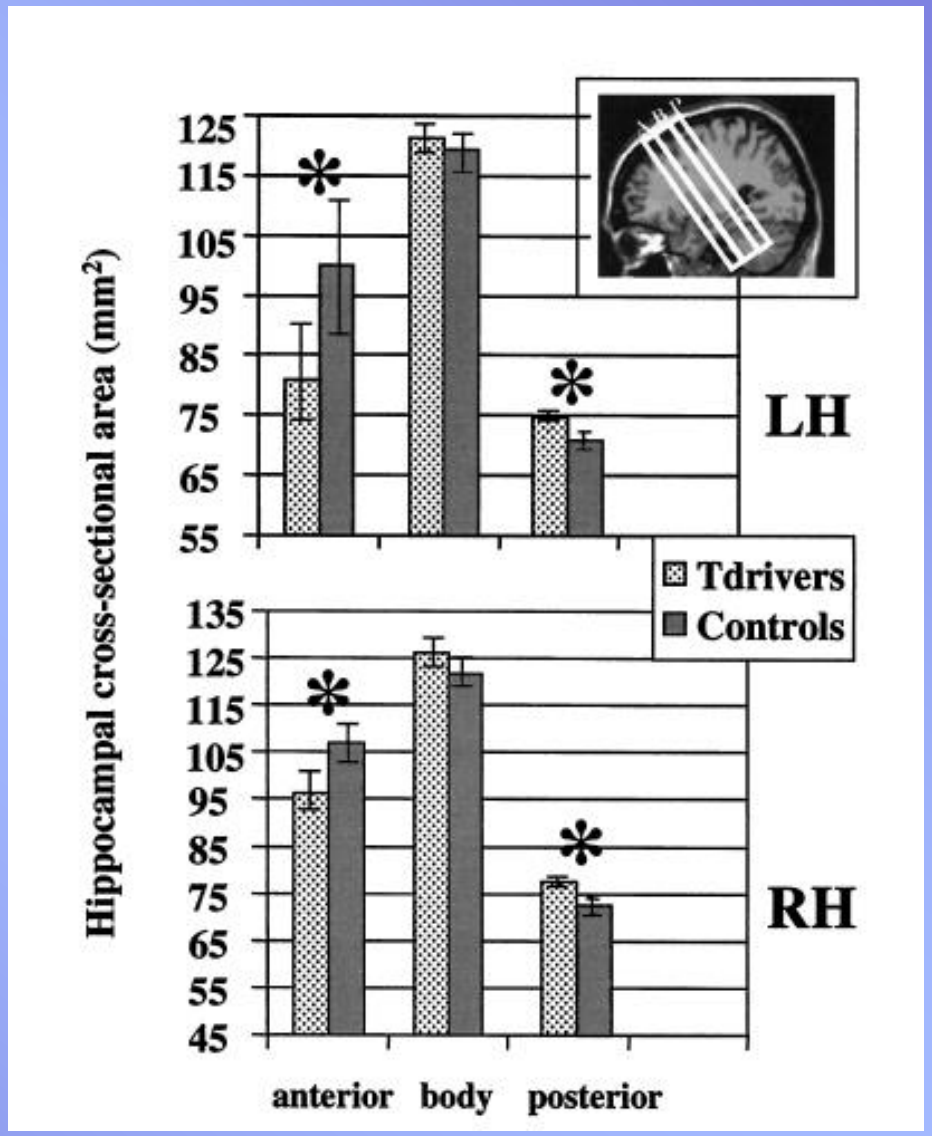


Figure 1 Transient changes in brain structure induced while learning to juggle. **a–c,** Statistical parametric maps showing the areas with transient structural changes in grey matter for the jugglers group compared with non-juggler controls. **a,** Sagittal view; **b,** coronal view; **c,** axial view. The increase in grey matter is shown superimposed on a normalized T1 image. The left side (L) of the brain is indicated. A significant expansion in grey matter was found between the first and second scans in the mid-temporal area (hMT/V5) bilaterally (left: x, −43; y, −75; z, −2, with $Z = 4.70$; right: x, 33; y, −82; z, −4, with $Z = 4.09$) and in the left posterior intraparietal sulcus (x, −40; y, −66; z, 43 with $Z = 4.57$), which had decreased by the time of the third scan. Colour scale indicates Z scores, which correlate with the significance of the change. **d,** Relative grey-matter change in the peak voxel in the left hMT for all jugglers over the three time points. The box plot shows the standard deviation, range and the mean for each time point.

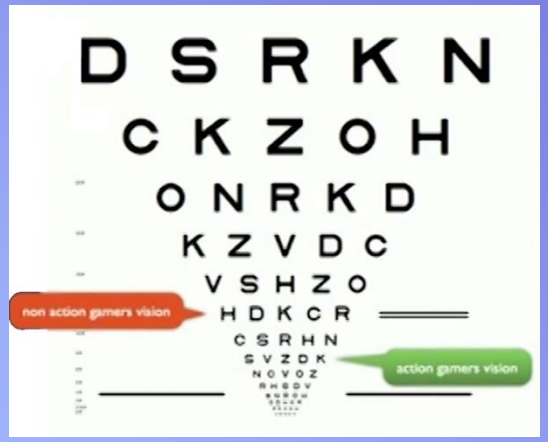
Conduire un taxi





Jouer d’un instrument

Oublier une partie des données…



Ophthalmology 2

Myopia

Ian G Morgan, Kyoko Ohno-Matsui, Seang-Mei Saw

Myopia has emerged as a major health issue in east Asia, because of its increasingly high prevalence in the past few decades (now 80–90% in school-leavers), and because of the sight-threatening pathologies associated with high myopia, which now affects 10–20% of those completing secondary schooling in this part of the world. Similar, but less marked, changes are occurring in other parts of the world. The higher prevalence of myopia in east Asian cities seems to be associated with increasing educational pressures, combined with life-style changes, which have reduced the time children spend outside. There are no reported major genes for school myopia, although there are several genes associated with high myopia. Any genetic contribution to ethnic differences may be small. However, to what extent many genes of small effect and gene-environment interactions contribute to variations in school myopia within populations remains to be established. There are promising optical and pharmacological interventions for preventing the development of myopia or slowing its progression, which require further validation, and promising vision-sparing treatments for pathological myopia.

Lancet 2012; 379: 1739–48

See Editorial page 1678

This is the second in a Series of three papers about ophthalmology

ARC Centre of Excellence in Vision Science, Research School of Biology, College of Medicine, Biology and Environment, Australian National University, Canberra, Australia (Prof I G Morgan PhD); Department of Preventive Ophthalmology, Zhongshan Ophthalmic Center, Sun Yat-sen University, Guangzhou, China (Prof I G Morgan); Department of Ophthalmology and Visual Science, Graduate School, Tokyo Medical and Dental University, Tokyo, Japan (Prof K Ohno-Matsui MD); Saw Swee Hock School of Public Health, National University Health Systems, Singapore (Prof S-M Saw PhD); and Singapore Eye Research Institute, Singapore (Prof S-M Saw)

Correspondence to: Prof Ian Morgan, Australian Research Council Centre of Excellence in Vision Science, Research School of Biology, College of Medicine, Biology and Environment, Australian National University, Canberra, ACT, Australia ian.morgan@anu.edu.au

Introduction

Myopia (short-sightedness or near-sightedness) is often regarded as a benign disorder, because vision can be corrected with glasses, contact lenses, and refractive surgery. Nevertheless, myopia has emerged as a major public health concern for three reasons: first, in developed countries in east and southeast Asia, such as Singapore, China, Taiwan, Hong Kong, Japan, and Korea, the prevalence of myopia has rapidly increased in the past 50–60 years.[1,2] In urban areas in these countries, 80–90% of children completing high school are now myopic, whereas 10–20% can have high myopia.[3] These changes are not restricted to urbanised east Asia, since the prevalence of myopia is also increasing in North America,[4] albeit more slowly, and probably in Europe as well. Second, the WHO recognises that myopia, if not fully corrected (uncorrected or under-corrected refractive error) is a major cause of visual impairment.[5] Finally, people with high myopia are at a substantially increased risk of potentially blinding myopic pathologies, which are not prevented by optical correction.[6]

These factors call for adequate diagnosis and correction of myopic refractive errors, effective treatment of myopic pathologies, and, above all, prevention of myopia. Fortunately, our understanding of the cause of myopia has substantially progressed, leading to promising approaches to prevention, and so has our understanding of pathological myopia and its treatment.

Search strategy and selection criteria

We searched the Medline and Online Mendelian Inheritance in Man (OMIM) databases using the search terms "myopia", "high myopia", and "pathological myopia", alone or in combination with "prevalence", "epidemiology", "genetics", and "prevention". We made a separate search for "stationary night blindness". Names of authors and reference lists from relevant article lists were used as the basis for further searches. Where possible, review articles or meta-analyses that contain comprehensive reference lists have been cited. In some cases, more recent, rather than older, papers have been cited since they provide an introduction to the earlier literature.

Biological basis and definition

Refractive status is a complex variable, determined by the balance of the optical power of the cornea and the lens, and the axial length of the eye (with its component parts anterior chamber depth, lens thickness, and vitreal chamber depth). Myopia usually results from an eye that has become too long, particularly through elongation of the vitreal chamber.

Most children are born hyperopic, with a normal distribution of refractive errors.[7] During the first year or two after birth, the distribution narrows,[8] with a mean in the hyperopic range of +1–2 dioptres (D). This change indicates that there is an active process shaping the distribution of refraction, known as emmetropisation. After that period, the cornea stabilises,[9] but refraction can become more myopic as axial length can continue to increase for another two decades. By contrast, lens power decreases substantially up to the age of about 12 years,[10] with slower decreases for most of adult life.[9] Myopia generally develops during the early to middle childhood years, but significant myopia can also develop in the late teenage years or early adulthood.[11] Axial length is the most variable factor during development, with the strongest correlation with refractive status, with longer eyes more likely to be myopic than shorter eyes.[12] Control of the axial elongation of the eye during development is thus crucial for achieving normal vision, and therefore is a primary site for prevention.

With normal vision, the parallel rays of distant objects are focused on or near the photoreceptors (figure 1). The image of closer objects then falls behind the photoreceptors, and accommodation (the variable power of

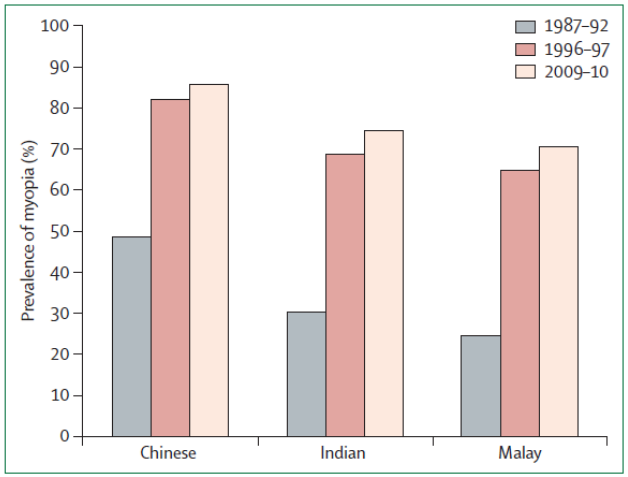


Figure 2: **Changes in the prevalence of myopia in the three major ethnic groups in Singapore**

Data are taken from several studies.[4,24-28] The data for 1987–92 are based on reduced visual acuity, whereas the later data are based on non-cycloplegic refractions.

Travestir par omission…

Certains jeux vidéo d’action destinés aux enfants et aux adolescents améliorent leurs capacités d’attention visuelle, de concentration et facilitent, grâce à cela, la prise de décision rapide

Mais que sont exactement ces jeux « d’action »

De quelle attention parle t-on ?

A Taxonomy of External and Internal Attention

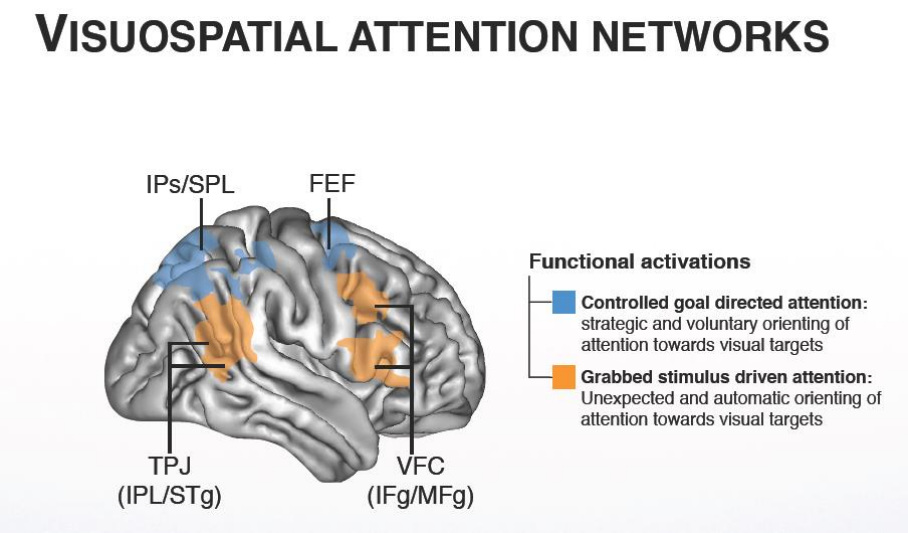
Marvin M. Chun,[1] Julie D. Golomb,[2] and Nicholas B. Turk-Browne[3]

[1]Departments of Psychology and Neurobiology, Yale University, New Haven, Connecticut 06520; email: marvin.chun@yale.edu

[2]McGovern Institute for Brain Research, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139

[3]Department of Psychology, Princeton University, Princeton, New Jersey 08540

Annu. Rev. Psychol. 2011. 62:73–101



Corbetta et al. Nat Rev Neuro , 2002

Faire attention au monde extérieur
Plusieurs objets d’attention (= une attention distribuée)
Ce sont les relances du monde extérieur qui soutiennent l’intérêt

Faire abstraction du monde extérieur
Un objet d’attention (= une attention focalisée)
Rester concentré sur des stimuli « immobiles »

Deux systèmes fondamentalement différents… !

“[Saying attention], if one means the ability to sustain focus on a slowly evolving stream of information, such as paying attention in class, there is recent work that suggests that total screen time, and video game playing time in particular, may have negative effects.“

Bavelier et al., Nat Rev Neurosci, 2011

Passer les problèmes sous silence

Physiology & Behavior 107 (2012) 146–153

Contents lists available at SciVerse ScienceDirect

Physiology & Behavior

journal homepage: www.elsevier.com/locate/phb

Review

ObesiTV: How television is influencing the obesity epidemic

Rebecca Boulos [a,1], Emily Kuross Vikre [a,1], Sophie Oppenheimer [a,1], Hannah Chang [b,1], Robin B. Kanarek [c,*]

[a] Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA 02111, USA
[b] Department of Anthropology, Tufts University, Medford, MA, 02155, USA
[c] Department of Psychology, Tufts University, Medford, MA, 02155, USA

Ou nier l’évidence

« Prenons l'exemple du Québec, où les enfants sont isolés de la publicité depuis trente ans : l'obésité infantile a quasiment doublé pendant la même période. (…)
Si la suppression de la publicité alimentaire dans les programmes pour enfants est loin d’être un instrument efficace dans le combat contre l’obésité, ses conséquences économiques seraient en revanche certaines sur notre secteur audiovisuel structurellement sous-financé »

Christine Kelly, CSA, LeMonde.Fr, 2010

Un cynisme assumé

" (…) soyons réaliste : à la base, le métier de TF1, c’est d’aider Coca-Cola, par exemple, à vendre son produit (...).
Or pour qu’un message publicitaire soit perçu, il faut que le cerveau du téléspectateur soit disponible. Nos émissions ont pour vocation de le rendre disponible : c’est-à-dire de le divertir, de le détendre pour le préparer entre deux messages. Ce que nous vendons à Coca-Cola, c’est du temps de cerveau humain disponible (...)".

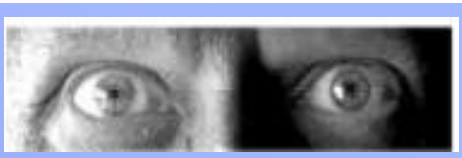
Patrick Le Lay, PDG de TF1, 2004

" Visez le petit. Préparez votre cible. Marquez-la au front le plus tôt possible. Seul l’enfant apprend bien […] Les cigarettiers et les limonadiers savent que plus tôt l’enfant goûtera plus il sera accro. Les neurosciences ont appris aux entreprises les âges idéaux auxquels un apprentissage donné se fait le plus facilement".

Patrick Georges, Michel Badoc, Le neuromarketing en action : Parler et vendre au cerveau, Eyrolles, 2010

Et oui… ça marche !

Got milk ?



Bateson et al. Biol Lett 2006

Are you Giacometti or Rothko ?


Appetite 58 (2012) 1109–1112

Contents lists available at SciVerse ScienceDirect

Appetite

journal homepage: www.elsevier.com/locate/appet

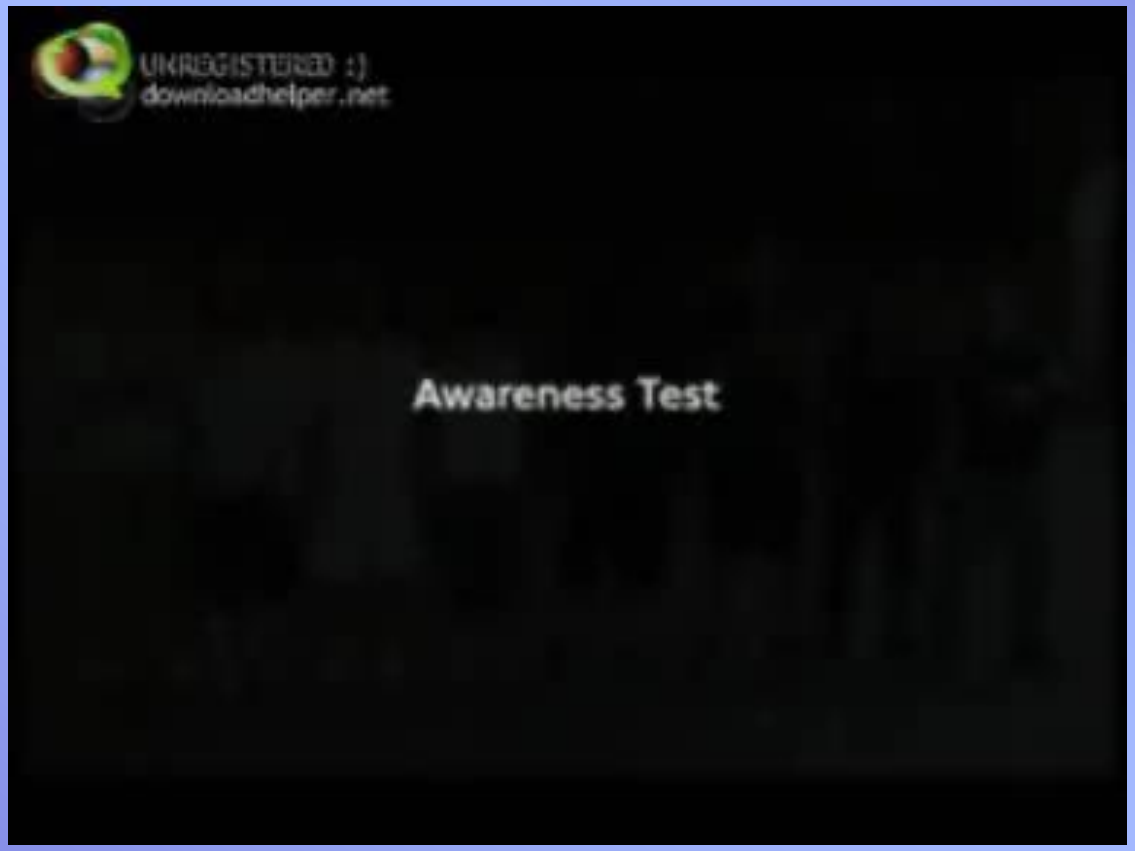
Short communication

Reduced food intake after exposure to subtle weight-related cues

Thomas A. Brunner*, Michael Siegrist

ETH Zurich, Institute for Environmental Decisions (IED), Consumer Behavior, Universitaetstrasse 22, CHN H 75.3, CH-8092 Zurich, Switzerland

Savez vous compter ?



L’exemple du tabagisme

« Les personnes qui qui ne commencent pas à fumer avant 21 ans ont peu de risques de jamais commencer (…)
Plus les enfants sont jeunes quand ils fument pour la première fois, plus ils risquent de fumer régulièrement par la suite et moins ils ont de chances d’arrêter"
(OMS, 2008)

1. 70 à 75 % des films sur la dernière décennie
2. Fumeur "positif", socialement accompli, stars
3. Pas d'allusion aux effets négatifs
4. Facteur de risque: **x 3-4**


Cameron Diaz, "She's The One" (1999)

Effect of viewing smoking in movies on adolescent smoking initiation: a cohort study

Madeline A Dalton, James D Sargent, Michael L Beach, Linda Titus-Ernstoff, Jennifer J Gibson, M Bridget Ahrens, Jennifer J Tickle, Todd F Heatherton

Summary

Background Exposure to smoking in movies has been linked with adolescent smoking initiation in cross-sectional studies. We undertook a prospective study to ascertain whether exposure to smoking in movies predicts smoking initiation.

Method We assessed exposure to smoking shown in movies in 3547 adolescents, aged 10–14 years, who reported in a baseline survey that they had never tried smoking. Exposure to smoking in movies was estimated for individual respondents on the basis of the number of smoking occurrences viewed in unique samples of 50 movies, which were randomly selected from a larger sample pool of popular contemporary movies. We successfully re-contacted 2603 (73%) students 13–26 months later for a follow-up interview to determine whether they had initiated smoking.

Findings Overall, 10% (n=259) of students initiated smoking during the follow-up period. In the highest quartile of exposure to movie smoking, 17% (107) of students had initiated smoking, compared with only 3% (22) in the lowest quartile. After controlling for baseline characteristics, adolescents in the highest quartile of exposure to movie smoking were 2·71 (95% CI 1·73–4·25) times more likely to initiate smoking compared with those in the lowest quartile. The effect of exposure to movie smoking was stronger in adolescents with non-smoking parents than in those whose parent smoked. In this cohort, 52·2% (30·0–67·3) of smoking initiation can be attributed to exposure to smoking in movies.

Interpretation Our results provide strong evidence that viewing smoking in movies promotes smoking initiation among adolescents.

Published online June 10, 2003
http://image.thelancet.com/extras/03art1353web.pdf

Departments of Paediatrics (M A Dalton PhD, Prof J D Sargent MD), **Anaesthesia** (M L Beach PhD), **and Community and Family Medicine** (M L Beach, L Titus-Ernstoff PhD, J J Gibson MS), **Norris Cotton Cancer Center, Dartmouth Medical School, One Medical Center Drive, Lebanon; Department of Health, Social, and Economic Research, RTI International, Research Triangle Park, NC, USA** (M B Ahrens MPH); **and Department of Psychological and Brain Sciences, Dartmouth College, Hanover, NH, USA** (J J Tickle PhD, Prof T F Heatherton PhD)

Correspondence to: Dr Madeline A Dalton, Department of Paediatrics, Dartmouth Medical School, One Medical Center Drive, Lebanon, NH 03756, USA
(e-mail: Madeline.Dalton@Dartmouth.edu)

Introduction

Many studies have linked tobacco marketing with an increased risk of smoking uptake in adolescents.[1-7] For example, owning tobacco promotional items and being able to recall cigarette advertisements can double the odds that an adolescent will become an established smoker.[3] Movie images, like commercial advertising, associate smoking with celebrities and depict it as an attractive behaviour.[8] In popular contemporary movies, smoking is frequently associated with characteristics many adolescents find appealing—such as toughness, sexiness, and rebelliousness.[9] Endorsement of cigarette brands in movies by actors has also increased substantially over the past decade.[10]

Several studies have described how smoking is portrayed in movies,[8,11-16] but only a few have specifically assessed whether viewing smoking in movies affects adolescent smoking behaviour. In an experimental study, Pechmann and Shih[17] showed that adolescents were more likely to report positive attitudes toward smoking after seeing smoking portrayed in movies. Results of two cross-sectional studies[18,19] indicated that adolescents were more likely to have tried smoking if their favourite movie stars smoked on screen. In our previous study of adolescents in New England, USA, exposure to smoking in movies was associated with smoking experimentation, even after controlling for the effects of other social influences, parenting, and personality characteristics of the child.[20]

Collectively, these results suggest that movie smoking influences adolescent smoking behaviour. However, the cross-sectional design of these studies precludes establishment of a temporal relation. To determine whether exposure to movie smoking predicts smoking initiation in adolescents, we did a longitudinal study of adolescents in New England, USA, who had never previously tried smoking.

Methods

Participants

In 1999, we distributed a self-administered written survey to adolescents (aged 10–14 years) enrolled in grades 5 through 8 at 14 schools in Vermont and New Hampshire, USA. The purpose of this baseline survey was to assess exposure to smoking in movies and investigate its association with lifetime smoking experience. Details of the methods for the survey have been published previously.[20]

Through the baseline survey, we identified 3547 adolescents who had never tried smoking cigarettes and were thus eligible for a follow-up 13–26 months later to assess risk factors for smoking initiation. The follow-up telephone interviews, accomplished for 2603 (73%) eligible baseline participants, were done by trained interviewers using a computer-assisted telephone interview system. To protect confidentiality, students indicated their answers by pressing numbers on the telephone. We used a PC Telecom digit grabber

Les images positives liées au tabagisme expliquent 52 % des initiations tabagiques chez l'adolescent

Idem pour les comportements sexuels à risque

Sexualité

70 % des programmes « tous publics » contiennent des références sexuelles, à hauteur moyenne de 5 incidents par heure

Les apports non protégés sont la norme

Les dangers ne sont jamais évoqués

Seuls les loosers ne couchent pas

Tout en finesse…

Bruno Harlé, NeuroscienceFictions.org

Psychological Science OnlineFirst, published on July 18, 2012 as doi:10.1177/0956797611435529

Research Article

Greater Exposure to Sexual Content in Popular Movies Predicts Earlier Sexual Debut and Increased Sexual Risk Taking

Psychological Science
XX(X) 1–10
© The Author(s) 2012
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0956797611435529
http://pss.sagepub.com
SAGE

Ross E. O'Hara[1], Frederick X. Gibbons[1], Meg Gerrard[2], Zhigang Li[3], and James D. Sargent[4]
[1]Department of Psychological and Brain Sciences, Dartmouth College; [2]Department of Psychiatry, Geisel School of Medicine, Dartmouth College; [3]Department of Community and Family Medicine, Geisel School of Medicine, Dartmouth College; and [4]Department of Pediatrics, Geisel School of Medicine, Dartmouth College

Abstract

Early sexual debut is associated with risky sexual behavior and an increased risk of unplanned pregnancy and sexually transmitted infections later in life. The relations among early movie sexual exposure (MSE), sexual debut, and risky sexual behavior in adulthood (i.e., multiple sexual partners and inconsistent condom use) were examined in a longitudinal study of U.S. adolescents. MSE was measured using the Beach method, a comprehensive procedure for media content coding. Controlling for characteristics of adolescents and their families, analyses showed that MSE predicted age of sexual debut, both directly and indirectly through changes in sensation seeking. MSE also predicted engagement in risky sexual behaviors both directly and indirectly via early sexual debut. These results suggest that MSE may promote sexual risk taking both by modifying sexual behavior and by accelerating the normal rise in sensation seeking during adolescence.

Keywords

mass media, sex

Received 8/24/11; Revision accepted 12/16/11

The effects of media on adolescents' risk behaviors, including tobacco use (National Cancer Institute, 2008), alcohol use (P. Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009), and aggression (C. A. Anderson et al., 2003), have been widely documented. Relatively less is known, however, about how media influence adolescents' sexual behavior, including their age of sexual debut and subsequent sexual risk taking. Early sexual debut is associated with an increased number of sexual partners and inconsistent condom use, as well as an increased risk of sexually transmitted infections (STIs; Kaestle, Halpern, Miller, & Ford, 2005). Delaying adolescents' sexual debut, therefore, could curb U.S. rates of STIs (more than 9 million new cases occur annually among adolescents; Weinstock, Berman, & Cates, 2000), and could potentially reduce instances of unplanned pregnancy (roughly 64 unplanned pregnancies occur for every 1,000 female adolescents age 19 or younger; Guttmacher Institute, 2010). Identifying risk factors for early sexual debut and sexual risk taking, therefore, is an important public-health concern. One significant influence on engagement in risky sexual behavior may be media (Wright, 2011)—specifically, movie sexual exposure (MSE). In the study reported here, we examined the association of MSE with sexual debut and engagement in risky sexual behaviors, both directly and indirectly through changes in sensation seeking.

Sex in the Movies

Popular movies provide adolescents with a wealth of sexual exposure, much of which may promote risk behaviors. A survey of movies released from 1950 to 2006 revealed that more than 84% contained sexual content (68% of G-rated movies, 82% of PG-rated movies, 85% of PG-13-rated movies, and 88% of R-rated movies; Nalkur, Jamieson, & Romer, 2010). Also, the sexual explicitness of PG-13-rated and R-rated movies has increased over the past decade (Nalkur et al., 2010). Potentially even more important for adolescents' sexual health, however, is that most of these movies do not portray safe sex. A content analysis revealed that 70% of the sexual acts depicted in movies released from 1983 to 2003 occurred between newly acquainted partners, 98% included no reference to contraception, and 89% resulted in no consequences (Gunasekera, Chapman, & Campbell, 2005). Additionally, Pardun, L'Engle, and Brown (2005) found that only 9% of sexual content in movies contained messages promoting sexual health. Adolescents who

Corresponding Author:
Ross E. O'Hara, University of Missouri, 147 Psychology Building, 200 South 7th St., Columbia, MO 65211
E-mail: oharar@missouri.edu

ARTICLE

Does Watching Sex on Television Predict Teen Pregnancy? Findings From a National Longitudinal Survey of Youth

Anita Chandra, DrPH[a], Steven C. Martino, PhD[b], Rebecca L. Collins, PhD[c], Marc N. Elliott, PhD[c], Sandra H. Berry, MA[c], David E. Kanouse, PhD[c], Angela Miu, MS[c]

[a]Rand Corp, Arlington, Virginia; [b]Rand Corp, Pittsburgh, Pennsylvania; [c]Rand Corp, Santa Monica, California

The authors have indicated they have no financial relationships relevant to this article to disclose.

What's Known on This Subject

Early findings suggest that exposure to greater amounts of sexual content on television may be linked to early initiation of sexual intercourse among adolescents. How this exposure is linked to sexual and reproductive behaviors has not been explored thoroughly.

What This Study Adds

We identified a link between exposure to sexual content on television and the experience of a teen pregnancy.

ABSTRACT

OBJECTIVE. There is increasing evidence that youth exposure to sexual content on television shapes sexual attitudes and behavior in a manner that may influence reproductive health outcomes. To our knowledge, no previous work has empirically examined associations between exposure to television sexual content and adolescent pregnancy.

METHODS. Data from a national longitudinal survey of teens (12–17 years of age, monitored to 15–20 years of age) were used to assess whether exposure to televised sexual content predicted subsequent pregnancy for girls or responsibility for pregnancy for boys. Multivariate logistic regression models controlled for other known correlates of exposure to sexual content and pregnancy. We measured experience of a teen pregnancy during a 3-year period.

RESULTS. Exposure to sexual content on television predicted teen pregnancy, with adjustment for all covariates. Teens who were exposed to high levels of television sexual content (90th percentile) were twice as likely to experience a pregnancy in the subsequent 3 years, compared with those with lower levels of exposure (10th percentile).

CONCLUSIONS. This is the first study to demonstrate a prospective link between exposure to sexual content on television and the experience of a pregnancy before the age of 20. Limiting adolescent exposure to the sexual content on television and balancing portrayals of sex in the media with information about possible negative consequences might reduce the risk of teen pregnancy. Parents may be able to mitigate the influence of this sexual content by viewing with their children and discussing these depictions of sex. *Pediatrics* 2008;122:1047–1054

www.pediatrics.org/cgi/doi/10.1542/peds.2007-3066
doi:10.1542/peds.2007-3066
Key Words
adolescent pregnancy, adolescent sexual behavior, media
Accepted for publication Feb 26, 2008
Address correspondence to Anita Chandra, DrPH, Rand Corp, 1200 South Hayes St, Arlington, VA 22202. E-mail: chandra@rand.org
PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

THE TEEN PREGNANCY rate in the United States has decreased remarkably since 1991; however, this rate remains the highest among industrialized nations (76.4 per 1000 pregnancies were among 15-19-year-old individuals in 2002).[1] Nearly 1 million young women 15 to 19 years of age, or 20% of all sexually active women in this age group, become pregnant each year; the majority of these pregnancies are unplanned.[2,3] The effects of a teen pregnancy (or pregnancy before age 20) on young mothers and fathers, their children, and society as a whole can be profound. Young mothers are more likely than others to drop out of school, to require public assistance, and to live in poverty. In fact, teen mothers have earnings that average less than one half of the poverty level.[4] Moreover, these mothers are less likely to have effective parenting skills or adequate social support as parents.[5,6] Teen fathers face similar challenges. For example, teen fathers complete an average of 1.3 years less education than do men who delay fatherhood until age 21.[4] Teen fathers often enter the labor market sooner than their counterparts because of fatherhood and ultimately earn less in their twenties than their peers.[7] Compared with children of older mothers, children born to adolescent mothers are at higher risk of low birth weight, limited fine motor skills, and low math and reading abilities; these children are also more likely to drop out of high school themselves.[6,8]

The factors that contribute to teen pregnancy are complex and interrelated. Research has established that individual (eg, lack of school attachment), social (eg, peer norms regarding sexual behavior), and environmental (eg, availability of contraception) influences converge in predicting teen pregnancy.[9–13] One factor that is likely to be

Idem pour les comportements « violents »

"Plus de 3500 travaux de recherche ont examiné l'association liant violence médiatique et comportements violents ; tous, à l'exception de 18, ont montré une relation positive"

AMERICAN ACADEMY OF PEDIATRICS

Committee on Public Education

Media Violence

ABSTRACT. The American Academy of Pediatrics recognizes exposure to violence in media, including television, movies, music, and video games, as a significant risk to the health of children and adolescents. Extensive research evidence indicates that media violence can contribute to aggressive behavior, desensitization to violence, nightmares, and fear of being harmed. Pediatricians should assess their patients' level of media exposure and intervene on media-related health risks. Pediatricians and other child health care providers can advocate for a safer media environment for children by encouraging media literacy, more thoughtful and proactive use of media by children and their parents, more responsible portrayal of violence by media producers, and more useful and effective media ratings.

ABBREVIATIONS. AAP, American Academy of Pediatrics; MTV, Music Television; FTC, Federal Trade Commission.

INTRODUCTION

At a Congressional Public Health Summit in July 2000, the American Academy of Pediatrics (AAP) was joined by the American Medical Association, the American Academy of Child and Adolescent Psychiatry, and the American Psychological Association in issuing an unprecedented "Joint Statement on the Impact of Entertainment Violence on Children" (http://www.aap.org/advocacy/releases/jstmtevc.htm). Although recent school shootings have prompted politicians and the general public to focus their attention on the influence of media violence, the medical community has been concerned with this issue since the 1950s.[1] On the basis of a growing and nearly unanimous body of evidence associating media violence with increased aggression in young people, the US Surgeon General issued a special report on the public health effects of media violence in 1972.[2] Ten years later, the National Institute of Mental Health issued a comprehensive review of the research on media violence and its effects, outlining concerns for children's psychological health,[3] as did a report generated by the American Psychological Association in 1993.[4]

EXPOSURE

American children between 2 and 18 years of age spend an average of 6 hours and 32 minutes each day using media (television, commercial or self-recorded video, movies, video games, print, radio, recorded music, computer, and the Internet).[5] This is more time than they spend on any other activity, with the exception of sleeping. When simultaneous use of multiple media is accounted for, that exposure increases to 8 hours a day.[6] A large proportion of this media exposure includes acts of violence that are witnessed or "virtually perpetrated" (in the form of video games) by young people. It has been estimated that by age 18, the average young person will have viewed 200 000 acts of violence on television alone.[7]

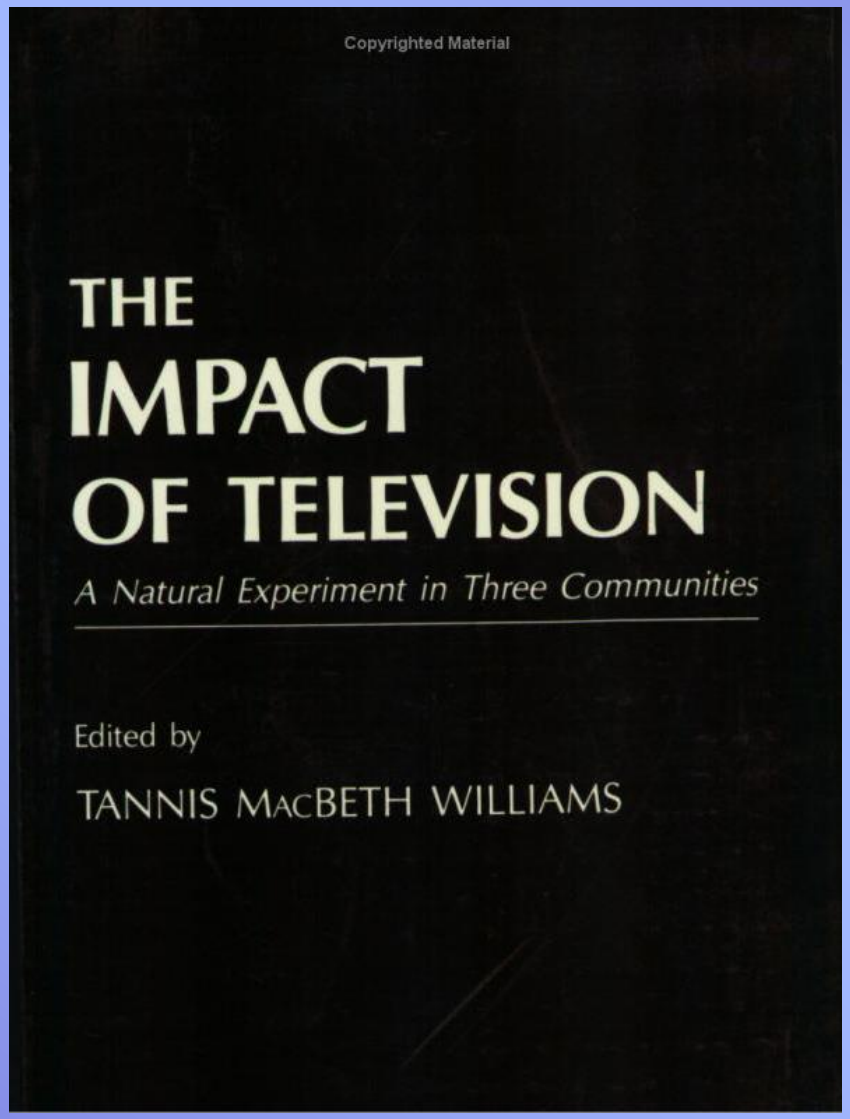
The National Television Violence study evaluated almost 10 000 hours of broadcast programming from 1995 through 1997 and found that 61% of the programming portrayed interpersonal violence, much of it in an entertaining or glamorized manner.[8–10] The highest proportion of violence was found in children's shows. Of all animated feature films produced in the United States between 1937 and 1999, 100% portrayed violence, and the amount of violence with intent to injure has increased through the years.[11] More than 80% of the violence portrayed in contemporary music videos is perpetrated by attractive protagonists against a disproportionate number of women and blacks.[12] American media, in particular, tend to portray heroes using violence as a justified means of resolving conflict and prevailing over others.[13]

Prolonged exposure to such media portrayals results in increased acceptance of violence as an appropriate means of solving problems and achieving one's goals.[14,15] Television, movies, and music videos normalize carrying and using weapons and glamorize them as a source of personal power.[16] Children in grades 4 through 8 preferentially choose video games that award points for violence against others.[17] Of the 33 most popular games, 21% feature violence against women.[18] The popular music CD that led the sales charts and swept the Music Television (MTV) Video Music Awards in the year 2000 featured songs about rape and murder with graphic lyrics and sound effects.[19] Because children have high levels of exposure, media have greater access and time to shape young people's attitudes and actions than do parents or teachers, replacing them as educators, role models, and the primary sources of information about the world and how one behaves in it.[20]

After the tragic shootings at Columbine High School in 1999, President Clinton asked the Federal Trade Commission (FTC) to investigate whether the motion picture, music, and video game industries advertised and marketed violent material to children and adolescents. Working with industry-provided

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

Quand la télé arrive en ville…



ARTICLE

Violent Television Viewing During Preschool Is Associated With Antisocial Behavior During School Age

Dimitri A. Christakis, MD, MPH, Frederick J. Zimmerman, PhD

Department of Pediatrics, Child Health Institute, University of Washington, Seattle, Washington; Department of Health Services, Seattle, Washington; Seattle Children's Research Institute, Children's Hospital and Regional Medical Center, Seattle, Washington

The authors have indicated they have no financial relationships relevant to this article to disclose.

1h/jour de programmes violents à la maternelle
(foot américain, Spiderman dessin animé, etc)

Probabilité de comportements asociaux au primaire (ex: propension à mentir, tricher, indiscipline, détérioration de biens, répondre aux enseignants, etc.) **X 4**

Vive le rap

A Prospective Study of Exposure to Rap Music Videos and African American Female Adolescents' Health

Gina M. Wingood, ScD, MPH, Ralph J. DiClemente, PhD, Jay M. Bernhardt, PhD, MPH, Kathy Harrington, MPH, MAEd, Susan L. Davies, PhD, MEd, Alyssa Robillard, PhD, and Edward W. Hook III, MD

Rap music videos are a media genre that is attracting considerable attention. Rap music has evolved from African American music forms, with influences from rhythm and blues, fusion, contemporary gospel, and bebop.[1–3] Although there is considerable concern regarding the themes and images expressed in rap music videos, limited empirical research has examined the effect of rap music videos on adolescents' behavior.[4] This investigation sought to determine whether exposure to rap music videos at baseline could predict the occurrence of health risk behaviors and sexually transmitted diseases among African American adolescent females over a 12-month follow-up period.

STUDY SAMPLE

From December 1996 through April 1999, recruiters screened female teenagers residing in nonurban, lower-socioeconomic-status neighborhoods from school health classes and county health department clinics to determine their eligibility for participating in an HIV prevention program. Adolescents were eligible to participate if they were African American females, were between ages 14 and 18, had been sexually active in the previous 6 months, and provided written informed consent.

MEASURES

Level of exposure to rap music videos, the predictor variable, was determined by asking adolescents to estimate the number of hours they viewed rap music videos during an average day. This was multiplied by the number of days in the week that rap music videos were viewed.

Music video viewing characteristics assessed included the primary type of rap music videos viewed (gangsta, bass, or hip-hop), with whom adolescents usually viewed rap music videos, and where the rap music videos were viewed.

Covariates assessed included age, employment status, involvement in extracurricular activities, participation in religious events, family composition, family's receipt of public assistance, parental monitoring of adolescents' whereabouts,[5] and group assignment to either the HIV intervention or the comparison condition.

Outcomes

Health risk behaviors assessed whether adolescents had hit a teacher, been involved in a fight, been arrested, used alcohol or drugs (either tranquilizers, marijuana, amphetamines, lysergic acid diethylamide [LSD], cocaine, or crack), had multiple sex partners, or used condoms. Adolescents were also tested for 3 sexually transmitted diseases (chlamydia, trichomoniasis, and gonorrhea).[6–8]

Data Analysis

Univariate analyses described music video viewing characteristics at baseline. Subsequent bivariate analyses examined the relations among adolescents' level of exposure to rap music videos at baseline, potential covariates, and the occurrence of health risk behaviors over the 12-month follow-up. Health risk behaviors and covariates significantly associated ($P<.05$) with exposure to rap music videos in bivariate analyses were included in logistic regression analyses. A separate logistic regression analysis was conducted to examine the relation between level of exposure to rap music videos at baseline and the occurrence of each health risk behavior over the 12-month follow-up. All logistic regression analyses controlled for covariates and the corresponding baseline health risk behavior.[9]

RESULTS

The study enrolled 522 single African American females. Of those enrolled, 92.2% completed 12-month follow-up assessments. Descriptive statistics on adolescents' exposure to rap music videos are illustrated in Table 1. The median hours of exposure to rap music videos per week at baseline and at 6- and 12-month follow-up were 14 hours, 14 hours, and 12 hours, respectively, suggesting relatively stable viewing habits. Greater exposure to rap music videos was associated with unemployment and less parental monitoring; therefore, these variables and group assignment were used as covariates in the logistic regression analyses.

Over the 12-month follow-up, 37.6% acquired a new sexually transmitted disease, 4.8% hit a teacher, 12.1% reported being arrested, 14.8% had sexual intercourse with someone other than their steady partner, 44.2% reported using drugs, and 44.4% consumed alcohol.

Logistic regression analyses illustrated that after controlling for covariates, greater expo-

Frapper un enseignant x3

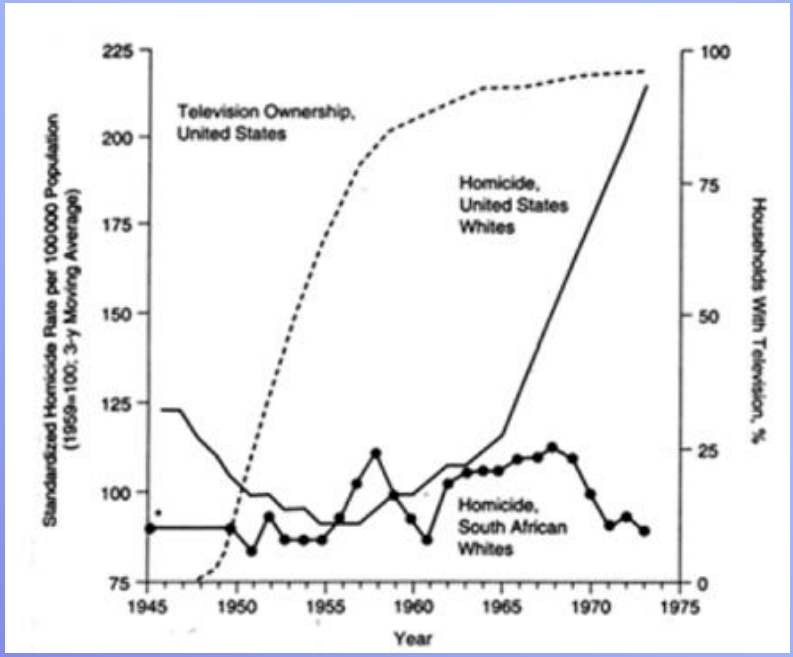
Partenaires sexuels multiples x 2

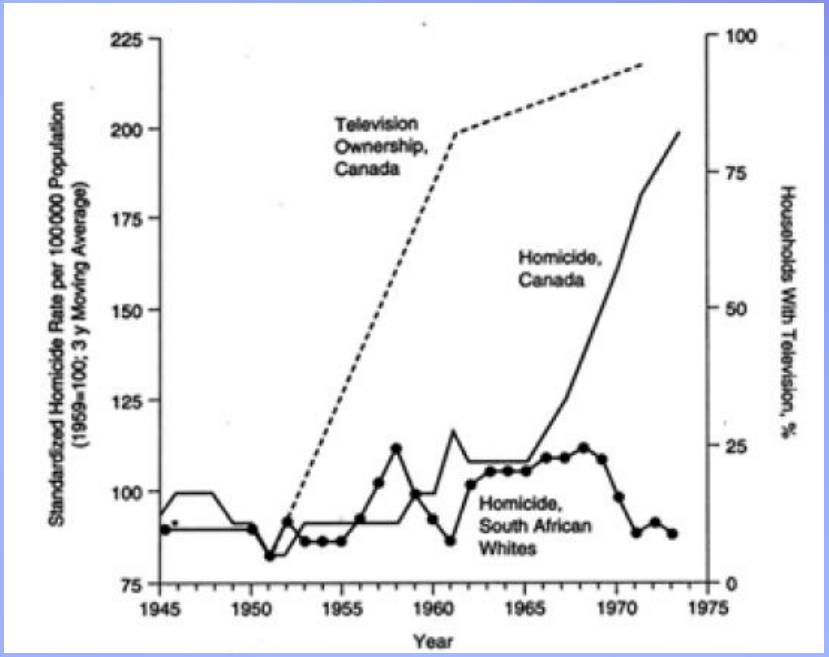
MST x 2

Journal of the American Medical Association, June 10, 1992 Vol 267. No. 22

Television and Violence
The Scale of the Problem and Where to Go From Here

Brandon S. Centerwall, MD, MPH





To say that childhood exposure to television and television violence is a predisposing factor behind half of violent acts is not to discount the importance of other factors. Manifestly, every violent act is the result of an array of forces coming together; poverty, crime, alcohol and drug abuse, stress of which childhood exposure to television is just one. Nevertheless, the epidemiologic evidence indicates that if, hypothetically, television technology had never been developed, there would today be 10,000 fewer homicides each year in the United States, 70,000 fewer rapes, and 700,000 fewer injurious assaults

Minimiser…

Ces résultats n’ont évidemment qu’une valeur statistique. Face à une personne violente qui regarde souvent des images de violence, il est impossible d’affirmer qu’elle serait violente pour cette raison. D’autant plus que l’observation des conduites d’autrui, que ce soit dans la réalité ou dans des mises en scène, n’est qu’un facteur parmi des centaines d’autres qui influencent les conduites agressives

Pondérer

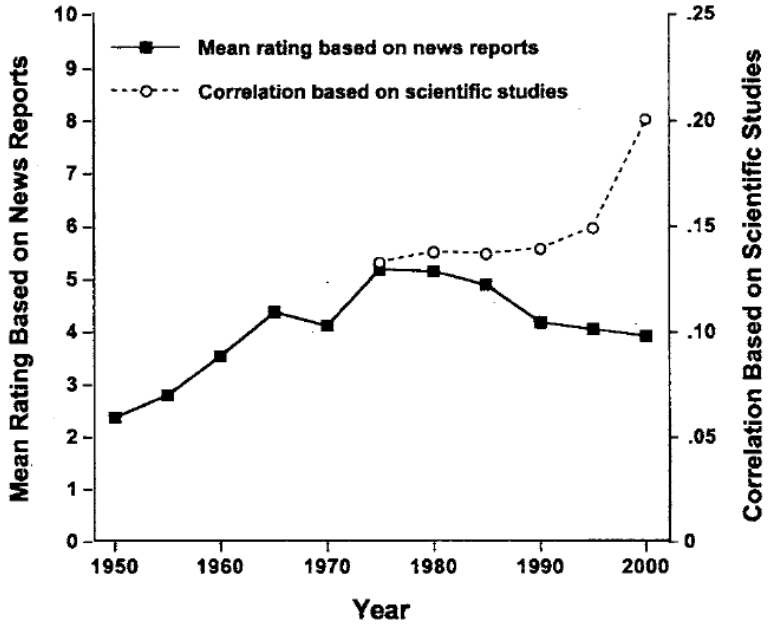
June/July 2001 • American Psychologist

Media Violence and the American Public

Scientific Facts Versus Media Misinformation

Brad J. Bushman and Craig A. Anderson
Iowa State University

Figure 7
Effect of Media Violence on Aggression: News Reports Versus Scientific Studies



En conclusion…

Un combat perdu d’avance ?

« dans les nouvelles générations nées « dans le numérique », ***<u>il ne sera possible que de réduire à la marge le temps d’exposition aux écrans »</u>***

Pas pour tout le monde…

Protective Effects of Parental Monitoring of Children's Media Use
A Prospective Study

Douglas A. Gentile, PhD; Rachel A. Reimer, PhD; Amy I. Nathanson, PhD; David A. Walsh, PhD; Joey C. Eisenmann, PhD

JAMA Pediatr. doi:10.1001/jamapediatrics.2014.146
Published online March 31, 2014.

(Am J Prev Med 2016;50(3):402–415)

Reducing Recreational Sedentary Screen Time
A Community Guide Systematic Review

Leigh Ramsey Buchanan, PhD,[1] Cherie R. Rooks-Peck, PhD, RD,[1] Ramona K.C. Finnie, DrPH,[1] Holly R. Wethington, PhD,[1] Verughese Jacob, PhD, MPH,[1] Janet E. Fulton, PhD,[2] Donna B. Johnson, PhD, RD,[4] Leila C. Kahwati, MD, MPH,[5] Charlotte A. Pratt, PhD, MS, RD,[3] Gilbert Ramirez, DrPH,[6] Shawna L. Mercer, MSc, PhD,[1] Karen Glanz, PhD, MPH,[7] and the Community Preventive Services Task Force

The New York Times
FASHION & STYLE | DISRUPTIONS
135 COMMENTS

Steve Jobs Was a Low-Tech Parent

By NICK BILTON SEPT. 10, 2014

Email
Share
Tweet
Pin
Save
More

WATCH TRAILER

When Steve Jobs was running Apple, he was known to call journalists to either pat them on the back for a recent article or, more often than not, explain how they got it wrong. I was on the receiving end of a few of those calls. But nothing shocked me more than something Mr. Jobs said to me in late 2010 after he had finished chewing me out for something I had written about an iPad shortcoming.

"So, your kids must love the iPad?" I asked Mr. Jobs, trying to change the subject. The company's first tablet was just hitting the shelves. "They haven't used it," he told me. "We limit how much technology our kids use at home."

I'm sure I responded with a gasp and dumbfounded silence. I had imagined the Jobs's household was like a nerd's paradise: that the walls were giant touch screens, the dining table was made from tiles of iPads and that iPods were handed out to guests like chocolates on a pillow.

Nope, Mr. Jobs told me, not even close.

Since then, I've met a number of technology chief executives and venture capitalists who say similar things: they strictly limit their children's screen time, often banning all gadgets on school nights, and allocating ascetic time limits on weekends.

While some tech parents assign limits based on time, others are much stricter about what their children are allowed to do with screens.
Jonathan Nackstrand/Agence France-Presse — Getty Images

RELATED COVERAGE
On the Runway Blog: Does the Apple Watch Look Good On? Assessing From a Fashion Point of View
SEPT. 9, 2014

HOME PAGE | TODAY'S PAPER | VIDEO | MOST POPULAR | TIMES TOPICS
Log In | Register Now | Help
The New York Times
Business Day
Technology
Search All NYTimes.com
WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION | ARTS | STYLE | TRAVEL | JOBS | REAL ESTATE

GRADING THE DIGITAL SCHOOL

A Silicon Valley School That Doesn't Compute

The Waldorf School in Los Altos, Calif., eschews technology. Here, Bryn Perry reads on a desktop. More Photos »

By MATT RICHTEL
Published: October 22, 2011

LOS ALTOS, Calif. — The chief technology officer of eBay sends his children to a nine-classroom school here. So do employees of Silicon Valley giants like Google, Apple, Yahoo and Hewlett-Packard.

But the school's chief teaching tools are anything but high-tech: pens and paper, knitting needles and, occasionally, mud. Not a computer to be found. No screens at all. They are not allowed in the classroom, and the school even frowns on their use at home.

Schools nationwide have rushed to supply their classrooms with computers, and many policy makers say it is foolish to do otherwise. But the contrarian point of view can be found at the epicenter of the tech economy, where some parents and educators have a message: computers and schools don't mix.

Grading the Digital School
Blackboards, Not Laptops
Articles in this series are looking at the intersection of education, technology and business as schools embrace digital learning.
Previous Articles in the Series »

Multimedia