SOCIAL PRESENCE AND USE OF INTERNET-DELIVERED INTERVENTIONS: A MULTI-METHOD APPROACH

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PAPER

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PROBLEM DESCRIPTION

EFFECTIVENESS?

Review

Computer-delivered interventions for health promotion
and behavioral risk reduction: A meta-analysis
of 75 randomized controlled trials, 1988–2007

David B. Portnoy [a,*], Lori A.J. Scott-Sheldon [b,*], Blair T. Johnson [a], Michael P. Carey [b]

"Participants who received a computer-delivered intervention improved health behaviors (nutrition, tobacco use, substance use, safer sexual behavior, binge/purge behaviors)"

HOWEVER

Server statistics of an intervention promoting heart-healthy behaviors

- 285,146 unique visitors in a 36-month period
- 56.3% of them left the intervention website within 30 seconds!

SYSTEMATIC REVIEW

Strategies to Facilitate Exposure to Internet-Delivered Health Behavior Change Interventions Aimed at Adolescents or Young Adults: A Systematic Review

Rik Crutzen[1], Jascha de Nooijer[1], Wendy Brouwer[2], Anke Oenema[2], Johannes Brug[3], and Nanne K. de Vries[1]

WHAT IS NEEDED?

Theory-development regarding attrition/actual use

Experimental research to increase evidence-based insight into effectiveness of factors to prevent attrition/stimulate actual use

NWO
Veni scheme

1b. Title of research proposal
Improving the public health impact of Internet-delivered interventions

SOCIAL PRESENCE

SOCIAL PRESENCE

Social presence can be seen as the extent to which a medium is perceived to convey a feeling of human contact, sociability, and sensitivity

Previous studies: Social presence positively affects attitude towards shopping websites (Hassanein & Head, 2007) as well as intention to purchase (Weisberg, Te'eni, & Arman, 2011) and to future use of a website (Cyr, Hassanein, Head, & Ivanov, 2007)

Hypothesis: social presence is expected to increase website use in a public health context

WORKING MECHANISMS

Social presence positively affects perceptions of both effectiveness and enjoyment regarding shopping websites (Cyr, Hassanein, Head, & Ivanov, 2007; Cyr & Head, 2008; Hassanein & Head, 2007)

Interest besides enjoyment: Although interest is sometimes defined as feelings of enjoyment (Chen, Darst, & Pangrazi, 2001), interest and enjoyment differ in critical ways (Silvia, 2006)

ATTENTION

Do social presence elements attract attention?

Previous studies successfully applied eye-tracking with regard to perceptions of health-related information (Smerecnik et al., 2010) and websites (Cyr, Head, Larios, & Pan, 2009)

General agreement on the strong association between eye movements and attention (Rayner, 1998)

SOCIAL PRESENCE ELEMENTS

Figure showing the HepatitisInfo website with navigation menu (WELCOME, HEPATITIS A, HEPATITIS B, HEPATITIS C with TRANSMISSION, CONSEQUENCES, PREVENTION subsections), a main text panel titled "Hepatitis B - consequences" labeled "Main text", and a testimonial panel labeled "Social presence elements".
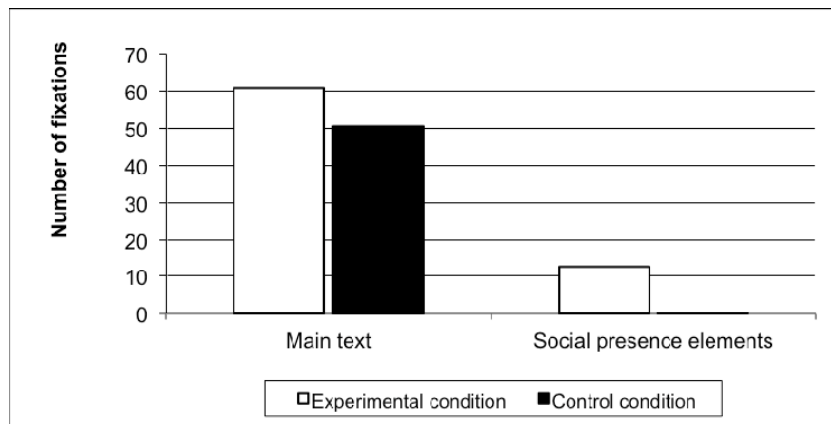
PREPARATORY STUDY

Experimental condition: Main text + social presence elements

Control condition: Main text only

Participants in the experimental condition scored higher on perceived social presence (M = 4.6 vs. 3.1, Cohen's d = 1.22)
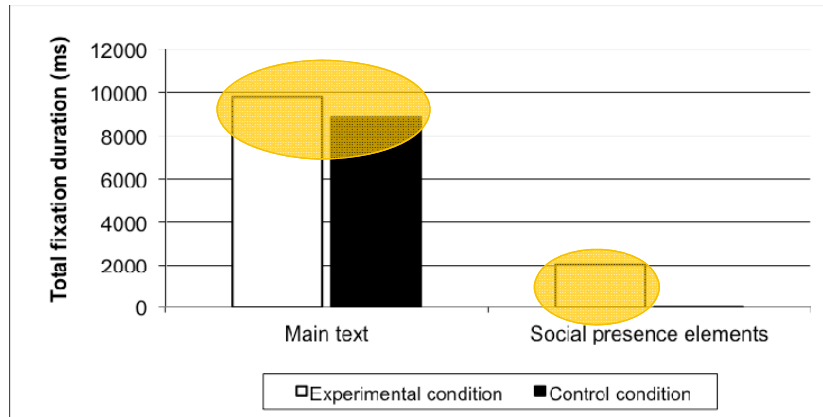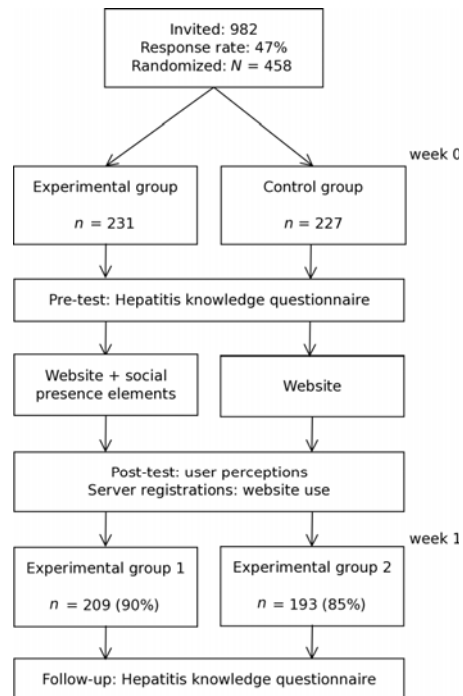
NO. OF FIXATIONS

$F(1, 98) = 40.34$, $p < .001$

DURATION

$F(1, 88) = 39.99$, $p < .001$

DESIGN MAIN STUDY

RESULTS

Participants in the experimental condition scored higher on perceived social presence in comparison with the control condition (M = 4.9 vs. 4.4, t(456) = 4.11, p < .001, Cohen's d = 0.38)

Variable	Experimental condition		Control condition		t	p	Cohen's d
	M	SD	M	SD			
1. Number of pages (0-12)	7.5	4.0	8.0	3.8	1.44	.15	0.14
2. Time on website (sec)	151.0	117.4	150.8	107.8	.01	.99	0.00
3. Δ Hepatitis knowledge	1.8	2.8	2.0	3.0	.85	.40	0.08

USER PERCEPTIONS
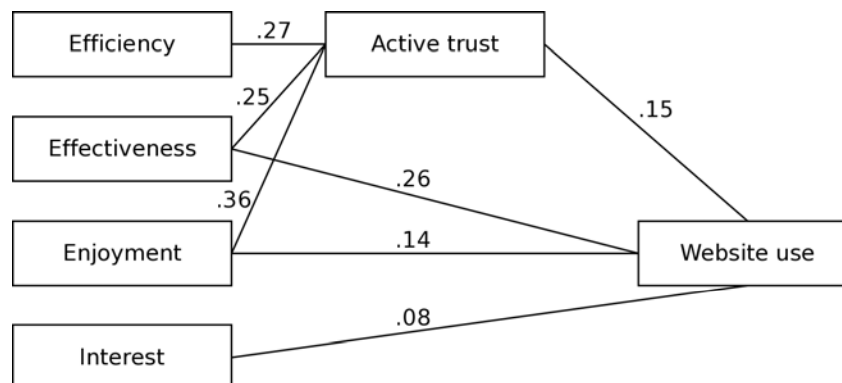
WHY?

Attention for social presence elements, but limited in comparison with main text

Utilitarian versus hedonically oriented websites

Smaller effect size in main study: in vitro versus in vivo

Intention-behavior gap

Tailored to/targeted at target group?

QUESTIONS?