

Review Essay: The Psychology of the Internet by Patricia M. Wallace, 4(3)

John Mueller

mueller@ucalgary.ca

University of Calgary

Wallace, P. **The Psychology of the Internet**. (Book).

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Wallace, Patricia. M., pwallace@rhsmith.umd.edu

Robert H. Smith School of Business

URL: <http://www.rhsmith.umd.edu/>

University of Maryland College Park, Maryland

In **The Psychology of the Internet**, Wallace examines activity on-line in terms of psychological principles derived from controlled research in psychology.

To set the stage, my first reaction was that this would be like Sherry Turkle's books (e.g., [Life on the screen, 1997](#)), and that led me to wonder how much new material there could be. On further reading though, there are differences from Turkle's book, which perhaps derive from the backgrounds of the two authors. Turkle, as a sociologist, examines on-line activity in terms of cyberculture, at an abstract and largely anecdotal level, with a speculative view of the future extrapolation of more abstract trends. Wallace, as a psychologist, focuses on how present on-line behavior can be understood as validating principles derived from research in social psychology and related areas, or alternatively why on-line behavior may be at variance with such expectations. Thus although there is some overlap with Turkle and the cyberculture genre ([Silver, 1998](#); URL: <http://otal.umd.edu/~rccs/biblio.html>), it is not as much as I had at first anticipated.

This book is easy to read in terms of general style, accessible to the reader who is neither a geek nor a psychologist. The author does an admirable job of condensing off-line psychological research in several places to prepare the general reader for her analysis of on-line activities. Wallace starts with two themes in mind: (1) how Psychology applies on-line, that is, how the on-line environment affects us, and (2) how we might affect on-line activity given what we know from Psychology.

Certain features of the on-line environment surface repeatedly as relevant. For example, the absence of the rich nonverbal cues that guide us well in face-to-face encounters are absent, so the "cold" nature of on-line communication can lead to problems. Further, many on-line activities are asynchronous, that is, my turn and now your turn, rather than simultaneous as with face-to-face. As a result, on-line activities are vulnerable to a number of issues having to do with using stereotypes to provide some of the missing detail and structure in situations that approach anonymity. The loss of gender information seems especially troublesome. And, Wallace argues that women users suffer more from losing these nonverbal cues, as they are said to be better at using them face-to-face (p. 210).

Because of this loss of nonverbal cues, the on-line activities preserve, and perhaps amplify, a number of well-known social psychology problems, such as the fundamental attribution error, where we interpret others' misbehavior as representative whereas our own mistakes have good explanations rendering them atypical: Your e-mail has spelling errors because you are an ignorant, clumsy slob, whereas I was just distracted by the silly doorbell this time. Likewise, the confirmation bias reigns, whereby we are reluctant to rethink first impressions, and on-line the first impressions are formed in the limited environment whereby stereotypes are often all we have to use.

Many cyberculture books seem preoccupied with certain activities that favor role-playing and anonymity, such as CHAT, MOO,

MUD, and so forth. This has puzzled me previously, partly because I don't go there myself, but also because such activities are engaged in by such a small proportion of on-line participants who are not especially representative of the on-line community (which Wallace notes). As I read Wallace's treatment of this though, a possible explanation emerged. In these real-world (or virtual world) situations, we witness the consequences of the adoption of deceptive practices, which includes role-playing at one level but ranges to outright misrepresentation, such as when a man assumes a female identity. We can't do that kind of research on campus anymore, but our campus ethics committees can't stop the virtual world from doing it for us! "The Internet is an identity laboratory" (Wallace, p. 48). Small wonder Internet advocates are so vocal about keeping government and other regulators out of the picture. However, concentrating on esoteric formats for group exchanges, such as anonymous CHAT, leaves a vacuum for research on productive groupwise exchanges that can occur between, for example, members of the same firm in separate geographic locations who do know one another.

Aggression, like deception, is a topic nearly impossible to study in a laboratory setting anymore. Wallace examines this in the context of verbal outbursts, "flaming," and similar displays in e-mail, CHAT, and other forums. Whether the hostility apparent in such anonymous exchanges is really comparable to physical aggression in a face-to-face context remains to be seen. The positive side of such exchanges is the way strangers become friends or collaborators, and Wallace draws upon the research on self-disclosure off-line to understand this process of on-line friendship up to and including romance.

Wallace discusses the "Internet addiction" syndrome -- people spending too much time on-line. Although the Internet can be a "time sink" as Wallace describes it, I have to agree with her that this is a prime example of a need to pathologize everything (p. 188) within psychology but also in the journalistic sense that bad news sells papers. To the extent that this "addiction" occurs at all, it seems more prominent among newcomers, especially to CHAT and such, and it has none of the physiological basis that makes other addictions so difficult to change. In short, there is no evidence of such a disorder beyond isolated anecdotes and problematic surveys (p. 178), but it makes for a grabber headline. Such biased reporting continues to be a problem, as misleading headlines about time on-line leading to depression (e.g., the Pittsburgh study, URL: <http://www.apa.org/journals/amp/amp5391017.html>) and loneliness (the Stanford survey, URL: <http://www.theregister.co.uk/000218-000007.html>) continue to appear, but the criticisms and corrections never seem to get the same coverage. In fact, the conclusion that Internet use leads to depression and isolation has been challenged at length in an article ([McKenna & Bargh, 2000](#)) published after the appearance of Wallace's book.

As Wallace points out (p. 184), what we see in this "addictive" behavior is really something psychologists have long known about, namely the way that variable reinforcement schedules lead to high rates of responding and behavioral persistence. Game developers and web sites have simply implemented the principle, knowingly or not -- Skinner's rats pressed a bar, we press a mouse; the more things change, the more they stay the same! Actually, Wallace discusses how internal locus of control individuals may be more attracted to the resources to be found on-line and thus vulnerable to the time sink effect, and this hypothesis seems worthy of further attention.

Another dark aspect that media reports invariably dwell upon has to do with on-line pornography. Wallace notes the repetition of history here, in the way that the Polaroid camera, the personal video camera and player, etc., have allowed people to indulge, at least as observers, in areas of sexual experience where otherwise they would not have dared to go. Thus it should come as no surprise that the same folks who displayed their derriere on the office photocopier found a ready use for webcams. Wallace notes that most countries have some restrictions, but the global nature of the web complicates this area. Her goal is to understand whether experiences such as this eventually become "exotic" ("ho hum") rather than "erotic," and thus she takes no position on issues such as censorship, other than to agree with other sources, such as [Tapscott \(1998\)](#), that the good sources far outweigh the bad (Wallace, p. 168). Whatever happened to the couple who planned to webcast losing their virginity? Does anyone care?

The positive side of "over-use" is seldom credited by the popular press, but Wallace connects this to the remarkable degree of altruism seen on-line. Wallace nicely reviews (p. 190 ff.) the research on helping behavior off-line, such as the bleak findings on the bystander effect and other results where help is not routinely forthcoming. Apparently the on-line context fosters more helping behavior, which she documents in the many support groups that have emerged. I think there are a number of further

examples of this volunteer activity and altruism, such as the maintainers of technical information archives (FAQs) and the volunteerism of community computer networks (FreeNets). Just why strangers appear to help one another more on-line than on the asphalt seems an interesting question to examine further.

Although I can question certain emphases, and feel that some areas of interest were not covered, nonetheless this is a valuable work. Cyberspace is still a work in progress, and Wallace identifies some interesting things we can consider as consumers and as actors. [Turkle \(1997\)](#) is more concerned with general societal trends that can be projected forward, derived extensively from anecdotes, whereas Wallace is more concerned with the extent to which present on-line activity by individuals is consistent with what we would expect based on laboratory research, and how we can "fix" what we don't like on-line. In sum, Wallace's book, along with [Turkle \(1997\)](#), [Norman \(1998\)](#), and [Birnbaum \(2000\)](#), demonstrates how we can better understand the impact that technological change is bringing to our lives, and how we can integrate psychological research into the on-line format.

Cyberspace ... it's not just for geeks and day-traders, psychos go there too -- join the stew.

References

- Birnbaum, M. (2000). **Psychological experiments on the Internet**. New York: Academic Press. URL: <http://psych.fullerton.edu/mbirnbaum/web/IntroWeb.htm>
- Kraut, R., Lundmark, V., Patterson, M., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1999). Internet Paradox: A Social Technology That Reduces Social Involvement and Psychological Well-Being? **American Psychologist**, *53*(9), 1017-1031. [On-line]. Available: <http://www.apa.org/journals/amp/amp5391017.html>
- McKenna, K. Y. A., & Bargh, J. A. (2000). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. **Personality and Social Psychology Review**, *4*(1), 57-75.
- Nie, N. H., & Erbring, L. (2000). Internet and society: A preliminary report. **Stanford Institute for the Quantitative Study of Society (SIQSS), and interSurvey Inc.** [On-line]. Available: http://www.stanford.edu/group/siqss/Press_Release/internetStudy.
- Norman, D. (1998). **The invisible computer: : Why good products can fail, the personal computer is so complex and information appliances are the solution**. New York: Basic Books. URL: <http://www.ind.org/>
- Richardson, T. (2000). Every man is an island with the Net. **The Register**, Posted 18/02/2000 11:39 am. [On-line]. Available: <http://www.theregister.co.uk/000218-000007.html>
- Silver, D. (1998). **Cyberculture: An annotated bibliography**. [On-line]. Available: <http://otal.umd.edu/~rccs/biblio.html>
- Tapscott, D. (1998). **Growing up digital : The rise of the net generation**. New York: McGraw-Hill. URL: <http://www.growingupdigital.com/>
- Turkle, S. (1997). **Life on the screen: Identity in the age of the Internet**. New York: Touchstone Books. URL: <http://web.mit.edu/sturkle/www/>

Author Note

John Mueller is a Professor in the Educational Psychology Department at the University of Calgary. He specializes in cognitive psychology, affect and learning, and computers and learning. He has taught various courses in educational computing, specializing in accessing and using the global Internet as an educational resource. He can be contacted through e-mail at mueller@ucalgary.ca. His web site address is <http://mueller.educ.ucalgary.ca/>