

**References: Science and the Usability Specialist: Recent Research Findings You Might Have Missed  
UPA 2011 Tutorial**

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- Albert, W., Gribbons, W., & Almadras, J. (2009). Pre-Conscious Assessment of Trust: A Case Study of Financial and Health Care Web Sites. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 53, 449-453. Also [http://www.measuringux.com/Albert\\_Gribbons\\_Preconsciousness.pdf](http://www.measuringux.com/Albert_Gribbons_Preconsciousness.pdf).
- Aten, T. R., Gugerty, L., & Tyrrell, R. A. (2002). Legibility of Words Rendered using ClearType. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 46, 1684-1687.
- Bargas-Avila, J.A., Orsini, S., Piosczyk, H., Urwyler, D., & Opwis, K. (2011). Enhancing online forms: Use format specifications for fields with format restrictions to help respondents. *Interacting with Computers*, 23(2), 33-39.
- Beymer, D., Russell, D., & Orton, P. (2008). *An Eye Tracking Study of How Font Size and Type Influence Online Reading*. Paper presented at the Proceedings of the HCI'08 Conference on People and Computers XXII.
- Buscher, G., Cutrell, E., & Morris, M. R. (2009). *What do you see when you're surfing?: using eye tracking to predict salient regions of web pages*. Paper presented at the Proceedings of the 27th international conference on Human factors in computing systems.
- Campbell, A. & Pisterman, S., 1996, A Fitting Approach to Interactive Service Design, The Importance of Emotional Needs. *Design Management Journal*, Fall, pp. 10-14.
- Chaparro, B. S., Shaikh, A. D., & Chaparro, A. (2006). Examining the Legibility of Two New ClearType Fonts. *Usability News* 8.1. Retrieved March 13, 2010, from <http://psychology.wichita.edu/surl/usabilitynews/81/legibility.asp>
- Diemand-Yauman, C., Oppenheimer, D., & Vaughan, E. (2010). Fortune favors the bold (and the italicised): Effects of disfluency on educational outcomes. *Cognition*. [http://web.princeton.edu/sites/opplab/papers/Diemand-Yauman\\_Oppenheimer\\_2010.pdf](http://web.princeton.edu/sites/opplab/papers/Diemand-Yauman_Oppenheimer_2010.pdf)
- Dillon, A., Kleinman, L., Choi, G. O., & Bias, R. (2006). *Visual search and reading tasks using ClearType and regular displays: two experiments*. Paper presented at the Proceedings of the SIGCHI conference on Human Factors in computing systems.
- Duchinicky, R.L., & Kolars, P.A., 1983, Readability of text scrolled on visual display terminals as a function of window size. *Human Factors*, 25, 683-692.
- Elouri, Y., Akladios, M., Peres, S.C., & Amos, A. (2010) Effects of font size on muscle activity. *Proceedings of Human Factors and Ergonomics Society 54th Annual Meeting*, pp. 1105-1109.
- Enders, J. (2008). Zebra Striping: More Data for the Case. *A List Apart*. Retrieved from <http://www.alistapart.com/articles/zebrastripingmoredataforthecase/>
- Jennings, M., 2000, Theory and models for creating engaging and immersive ecommerce Websites. *Proceedings of the 200 ACM SIGCPR Conference on Computer Personnel Research* (New York: ACM Press), pp. 77-85.
- Karvonen, K., 2000. The beauty of simplicity, *Proceedings on the Conference on Universal Usability*. ACM, Arlington, Virginia, pp. 85-90.
- Lindgaard, G., Fernandes, G., Dudek, C., & Brown, J. (2006). Attention web designers: you have 50 milliseconds to make a first good impression! *Behaviour & Information Technology*, 25, 115-126.
- Lindgaard, G., and Dudek, C. User satisfaction, aesthetics and usability: beyond reductionism. *IFIP 17th World Computer Congress*, Montreal, Canada, 2002.
- Ling, J., & Schaik, P. v. (2006). The influence of font type and line length on visual search and information retrieval in web pages. *Int. J. Hum.-Comput. Stud.*, 64(5), 395-404.
- Loiacono, E.T., Watson, R.T., Goodhue, D.L., 2002. WebQual: a measure of Web site quality. *Marketing Theory and Applications*.
- Monk, A. F., Walsh, P., & Dix, A. J. (1988). A comparison of hypertext, scrolling and folding as mechanisms for program browsing. In D. M. Jones & R. Winder (Eds.), *People and Computers IV: Proceedings of the fourth conference of the British Computer Society* (pp. 421-435). Cambridge, UK: Cambridge University Press.
- Mosconi, M., Porta, M., & Ravarelli, A. (2008). *On-line newspapers and multimedia content: an eye tracking study*. Paper presented at the Proceedings of the 26th annual ACM international conference on Design of communication.

- Mynatt, C.R., Doherty, M.E., & Tweeney, R.D., 1977, Confirmation bias in a simulated research environment: An experimental study on scientific inference. *Quarterly Journal of Experimental Psychology*, 37, pp. 1085-1089.
- Nisbett, R.E., Ross, L., 1980. *Human Inferences: Strategies and Shortcomings of Social Judgment*. Prentice-Hall, Englewood Cliffs, NJ.
- Nielsen, J. (2006). F-Shaped Pattern For Reading Web Content. *Alertbox*. Retrieved from [http://www.useit.com/alertbox/reading\\_pattern.html](http://www.useit.com/alertbox/reading_pattern.html)
- Nielsen, J. (2007) Show numbers as numerals when writing for online readers. *Alertbox*, April 16, 2007. Retrieved 3/30/2011 from <http://www.useit.com/alertbox/writing-numbers.html>.
- Nielsen, J. (2009). Mega Drop-Down Navigation Menus Work Well. *AlertBox*, March 23, 2009. <http://www.useit.com/alertbox/mega-dropdown-menus.html>.
- Nielsen, J. (2009). First 2 Words: A Signal for the Scanning Eye. *Alertbox*, April 6, 2009. <http://www.useit.com/alertbox/nanocontent.html>.
- Nielsen, J. (2010). Mega-Menu Gone Wrong. *Alertbox*, November 16, 2010. <http://www.useit.com/alertbox/mega-menu-wrong.html>
- Nisbett, R.E., Ross, L., 1980. *Human Inferences: Strategies and Shortcomings of Social Judgment*. Prentice-Hall, Englewood Cliffs, NJ.
- Owens, J. W., & Shrestha, S. (2008). How Do Users Browse a Portal Website? An Examination of User Eye Movements. *Usability News*, 10(2). Retrieved from [http://surl.org/usabilitynews/102/portal\\_column.asp](http://surl.org/usabilitynews/102/portal_column.asp)
- Pauwels, S. L., Hübscher, C., Leuthold, S., Bargas-Avila, J. A., & Opwis, K. (2009). Error prevention in online forms: Use color instead of asterisks to mark required-fields. *Interact. Comput.*, 21(4), 257-262.
- Penzo, M. (2006). Label Placement in Forms. *UXmatters*. Retrieved from <http://www.uxmatters.com/mt/archives/2006/07/label-placement-in-forms.php>
- Piolat, A., Roussey, J. Y., & Thunin, O. (1997). Effects of screen presentation on text reading and revising. *International Journal of Human-Computer Studies*, 47, 565-589.
- Redish, J. (2007). *Letting Go of the Words: Writing Web Content that Works (The Morgan Kaufmann Series in Interactive Technologies)*: Morgan Kaufmann Publishers Inc.
- Sanchez, C. A., & Wiley, J. (2009). To Scroll or Not to Scroll: Scrolling, Working Memory Capacity, and Comprehending Complex Texts. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 51(5), 730-738.
- Scharff, L., & Ahumada, A. (2008). Contrast polarity in letter identification. *Journal of Vision*, 8(6), 627-627.
- Shaikh, A. D., Chaparro, B. S., & Fox, D. (2006). *Personality of ClearType Fonts*. Paper presented at the Proceedings of the Human Factors and Ergonomics Society 50th Annual Meeting.
- Sharek, D., & Wogalter, M. (2010) Show-all-links: Identifying hyperlinks in websites that use non-standard formatting. Proceedings of the Human Factors Society 54th Annual Meeting, pp. 1387-1390.
- Sheedy, J., Tai, Y.-C., Subbaram, M., Gowrisankaran, S., & Hayes, J. (2008). ClearType sub-pixel text rendering: Preference, legibility and reading performance. [doi: DOI: 10.1016/j.displa.2007.09.016]. *Displays*, 29(2), 138-151.
- Shrestha, S., & Owens, J. (2009). Eye Movement Analysis of Text-Based Web Page Layouts. *Usability News*, 11(1). Retrieved from <http://www.surl.org/usabilitynews/111/eyetracking.asp>
- Shrestha, S., & Owens, J. W. (2008). Eye Movement Patterns on Single and Dual-Column Web Pages. *Usability News*, 10(1). Retrieved from <http://www.surl.org/usabilitynews/101/column.asp>
- Slattery, T. J., & Rayner, K. (2009). The influence of text legibility on eye movements during reading. *Applied Cognitive Psychology*, 9999(9999), n/a.
- Spool, J., Scanlon, T., Schroeder, W., Snyder, C., & DeAngelo, T. (1999). *Web site usability: A designer's guide*. San Francisco: Morgan Kaufman.
- Tan, C. C. (2009). Web form design guidelines: an eyetracking study. from [http://www.cpartners.co.uk/thoughts/web\\_forms\\_design\\_guidelines\\_an\\_eyetracking\\_study.htm](http://www.cpartners.co.uk/thoughts/web_forms_design_guidelines_an_eyetracking_study.htm)
- Tractinsky, N., Katz, A.S., Ikar, D., 2000. What is beautiful is usable. *Interacting with Computers* 13 (2), 127-145.
- Tullis, T., Siegel, M., & Sun, E. (2009). *Are people drawn to faces on webpages?* Paper presented at the CHI 2009 Conference on Human factors in computing systems, extended abstracts.

- Tullis, T. S., & Siegel, M. (2010, April 10-15, 2010). *Does Underlining Links Help or Hurt?* Paper presented at the CHI 2010 Conference on Human Factors in Computing Systems, Atlanta, Georgia, USA.
- Tyrrell, R., Pasquale, T., Aten, T., & Francis, E. (2001). Empirical evaluation of user responses to reading text rendered using ClearType technologies. *Society for Information Display, Digest of Technical Papers*, 1205-1207.
- van Nimwegen, C., Pouw, M., & van Oostendorp, H. (1999). The influence of structure and reading-manipulation on usability of hypertexts. *Interacting With Computers*, 12, 7–21.
- Wroblewski, L. (2008). *Web Form Design: Filling in the Blanks*: Rosenfeld Media.
- Wroblewski, L. (2009). Inline Validation in Web Forms. *A List Apart*. Retrieved from <http://www.alistapart.com/articles/inline-validation-in-web-forms/>