

## References

- AMIR, N., BEARD, C., BURNS, M., AND BOMYEA, J. Attention modification program in individuals with generalized anxiety disorder. *Journal of Abnormal Psychology* 118 (2009).
- AN, H., AND LIN, W. Cerebral oxygen extraction fraction and cerebral venous blood volume measurements using mri: Effects of magnetic field variation. *Magnetic Resonance in Medicine* 47 (5 2002).
- AN, H., AND LIN, W. Impact of intravascular signal on quantitative measures of cerebral oxygen extraction and blood volume under normo- and hypercapnic conditions using an asymmetric spin echo approach. *Magnetic Resonance in Medicine* 50 (10 2003).
- ARNELL, K. M., KILLMAN, K. V., AND FIJAVZ, D. Blinded by emotion: Target misses follow attention capture by arousing distractors in rsvp. *Emotion* 7 (2007).
- BERMAN, A. J., AND PIKE, G. B. Transverse signal decay under the weak field approximation: Theory and validation. *Magnetic Resonance in Medicine* 80 (7 2018).
- BLOCKLEY, N. P., AND STONE, A. J. Improving the specificity of r2 to the deoxyhaemoglobin content of brain tissue: Prospective correction of macroscopic magnetic field gradients. *NeuroImage* 135 (7 2016).
- BREDEMEIER, K., BERENBAUM, H., MOST, S. B., AND SIMONS, D. J. Links between neuroticism, emotional distress, and disengaging attention: Evidence from a single-target rsvp task. *Cognition Emotion* 25 (12 2011).
- BUXTON, B. *Sketching User Experiences*. 2007.
- CADDICK, R., AND CABLE, S. *Communicating the User Experience: A Practical Guide for Creating Useful UX Documentation*, 1st ed. Wiley Publishing, 2011.
- CATTELL, R. B., AND SCHEIER, I. H. *The meaning and measurement of neuroticism and anxiety*. Ronald, 1961.
- CHERUKARA, M. T., STONE, A. J., CHAPPELL, M. A., AND BLOCKLEY, N. P. Model-based bayesian inference of brain oxygenation using quantitative bold. *NeuroImage* 202 (2019).
- CISLER, J. M., AND KOSTER, E. H. Mechanisms of attentional biases towards threat in anxiety disorders: An integrative review. *Clinical Psychology Review* 30 (3 2010).
- CURTIS, C. E., AND D’ESPOSITO, M. Persistent activity in the prefrontal cortex during working memory, 9 2003.

- CYR, D., HEAD, M., AND LARIOS, H. Colour appeal in website design within and across cultures: A multi-method evaluation. *International Journal of Human-Computer Studies* 68 (1 2010), –.
- DEFFIEUX, T., DEMENE, C., PERNOT, M., AND TANter, M. Functional ultrasound neuroimaging: a review of the preclinical and clinical state of the art, 2018.
- DOMSCH, S., MÜRLE, B., WEINGÄRTNER, S., ZAPP, J., WENZ, F., AND SCHAD, L. R. Oxygen extraction fraction mapping at 3 tesla using an artificial neural network: A feasibility study. *Magnetic Resonance in Medicine* 79 (2 2018).
- EICHLING, J. O., RAICHLE, M. E., GRUBB, R. L., LARSON, K. B., AND TER-POGOSSIAN, M. M. In vivo determination of cerebral blood volume with radioactive oxygen-15 in the monkey. *Circulation Research* 37 (12 1975).
- EISENBERG, D., GOLLUST, S. E., GOLBERSTEIN, E., AND HEFNER, J. L. Prevalence and correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry* 77 (10 2007).
- ELEY, T. C., AND STEVENSON, J. Exploring the covariation between anxiety and depression symptoms: A genetic analysis of the effects of age and sex. *Journal of Child Psychology and Psychiatry* 40 (11 1999).
- FARLEY, B., AND CLARK, W. Simulation of self-organizing systems by digital computer. *Transactions of the IRE Professional Group on Information Theory* 4 (9 1954).
- FAULKNER, L. Beyond the five-user assumption: Benefits of increased sample sizes in usability testing. *Behavior Research Methods, Instruments, Computers* 35 (8 2003).
- FISCHER, G. User modeling in human–computer interaction. *User Modeling and User-Adapted Interaction* 11 (2001).
- FITTS, P. M. The information capacity of the human motor system in controlling the amplitude of movement. *Journal of Experimental Psychology* 47 (1954).
- FORSTER, K. I. Visual perception of rapidly presented word sequences of varying complexity. *Perception Psychophysics* 8 (7 1970).
- FORSTER, S., ELIZALDE, A. O. N., CASTLE, E., AND BISHOP, S. J. Unraveling the anxious mind: Anxiety, worry, and frontal engagement in sustained attention versus off-task processing. *Cerebral Cortex* 25 (3 2015).
- FOX, E., RUSSO, R., AND GEORGIU, G. A. Anxiety modulates the degree of attentive resources required to process emotional faces. *Cognitive, Affective, Behavioral Neuroscience* 5 (12 2005).

- GOODWIN, H., YIEND, J., AND HIRSCH, C. R. Generalized anxiety disorder, worry and attention to threat: A systematic review. *Clinical Psychology Review* 54 (6 2017).
- GORDON, B., AND CARAMAZZA, A. Lexical decision for open- and closed-class words: Failure to replicate differential frequency sensitivity. *Brain and Language* 15 (1 1982).
- GROSSMAN, M., KOENIG, P., GLOSSER, G., DEVITA, C., MOORE, P., RHEE, J., DETRE, J., ALSOP, D., AND GEE, J. Neural basis for semantic memory difficulty in alzheimer’s disease: An fmri study. *Brain* 126 (2003).
- HAHN, S., CARLSON, C., SINGER, S., AND GRONLUND, S. D. Aging and visual search: Automatic and controlled attentional bias to threat faces. *Acta Psychologica* 123 (11 2006).
- HAJNAL, J. V., BRYANT, D. J., KASUBOSKI, L., PATTANY, P. M., COENE, B. D., LEWIS, P. D., PENNOCK, J. M., OATRIDGE, A., YOUNG, I. R., AND BYDDER, G. M. Use of fluid attenuated inversion recovery (flair) pulse sequences in mri of the brain. *Journal of Computer Assisted Tomography* 16 (11 1992).
- HE, X., AND YABLONSKIY, D. A. Quantitative bold: Mapping of human cerebral deoxygenated blood volume and oxygen extraction fraction: Default state. *Magnetic Resonance in Medicine* 57 (1 2007).
- HEBB, D. O. *The organization of behavior; a neuropsychological theory*. Wiley, 1949.
- HICK, W. E. On the rate of gain of information. *Quarterly Journal of Experimental Psychology* 4 (3 1952).
- HUBERTUS, S., THOMAS, S., CHO, J., ZHANG, S., WANG, Y., AND SCHAD, L. R. Using an artificial neural network for fast mapping of the oxygen extraction fraction with combined qsm and quantitative bold. *Magnetic Resonance in Medicine* 82 (2019).
- KELLEY, H. J. Gradient theory of optimal flight paths. *ARS Journal* 30 (10 1960).
- KIM, Y., JERNITE, Y., SONTAG, D., AND RUSH, A. M. Character-aware neural language models.
- KLASSEN, L. M., AND MENON, R. S. Nmr simulation analysis of statistical effects on quantifying cerebrovascular parameters. *Biophysical Journal* 92 (2007).
- KROENKE, K., SPITZER, R. L., WILLIAMS, J. B., MONAHAN, P. O., AND LÖWE, B. Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine* 146 (3 2007).

- KUNDU, P., INATI, S. J., EVANS, J. W., LUH, W.-M., AND BANDETTINI, P. A. Differentiating bold and non-bold signals in fmri time series using multi-echo epi. *NeuroImage* 60 (4 2012).
- LAZAR, J., FENG, J. H., AND HOCHHEISER, H. Interviews and focus groups, 2017.
- LEE, Y., AND KOZAR, K. A. Understanding of website usability: Specifying and measuring constructs and their relationships. *Decision Support Systems* 52 (1 2012).
- LOGOTHETIS, N. K., PAULS, J., AUGATH, M., TRINATH, T., AND OELTERMANN, A. Neurophysiological investigation of the basis of the fmri signal. *Nature* 412 (7 2001).
- MACLEOD, C., AND MATHEWS, A. Anxiety and the allocation of attention to threat. *The Quarterly Journal of Experimental Psychology Section A* 40 (11 1988).
- MACLEOD, C., MATHEWS, A., AND TATA, P. Attentional bias in emotional disorders. *Journal of Abnormal Psychology* 95 (1986).
- MALHEIROS, M. Sign-up or give-up : Exploring user drop-out in web service registration.
- MARAZZITI, D., CONSOLI, G., PICCHETTI, M., CARLINI, M., AND FARAVELLI, L. Cognitive impairment in major depression. *European Journal of Pharmacology* 626 (1 2010).
- MCCULLOCH, W. S., AND PITTS, W. A logical calculus of the ideas immanent in nervous activity. *The Bulletin of Mathematical Biophysics* 5 (12 1943).
- MIKOLOV, T., YIH, W.-T., AND ZWEIG, G. Linguistic regularities in continuous space word representations, 2013.
- MOGG, K., AND BRADLEY, B. P. Attentional bias in generalized anxiety disorder versus depressive disorder, 2 2005.
- NICOLL, D., LU, C. M., PIGNONE, M., AND MCPHEE, S. J. *Pocket Guide to Diagnostic Tests*. 2002.
- NIELSEN, J. Usability heuristics, 1993.
- OGAWA, S., LEE, T. M., KAY, A. R., AND TANK, D. W. Brain magnetic resonance imaging with contrast dependent on blood oxygenation. *Proceedings of the National Academy of Sciences* 87 (12 1990).
- PREECE, J., SHARP, H., AND ROGERS, Y. *Interaction Design - Beyond Human-Computer Interaction, Fourth Edition*, vol. 53. 2015.

- SCHMUKLE, S. C. Unreliability of the dot probe task. *European Journal of Personality* 19 (12 2005).
- SHNEIDERMAN, B. Designing the user interface strategies for effective human-computer interaction. *ACM SIGBIO Newsletter* 9 (1987), 6.
- SMITH, S. M. Fast robust automated brain extraction. *Human Brain Mapping* 17 (11 2002).
- SPEES, W. M., YABLONSKIY, D. A., OSWOOD, M. C., AND ACKERMAN, J. J. Water proton mr properties of human blood at 1.5 tesla: Magnetic susceptibility,  $T_1$ ,  $T_2$ , and non-lorentzian signal behavior. *Magnetic Resonance in Medicine* 45 (4 2001).
- SPIELBERGER, C. D. State-trait anxiety inventory. *The Corsini encyclopedia of psychology* (2010), 1.
- SPIELBERGER, C. D., GORSUCH, R. L., VAGG, P. R., AND JACOBS, G. A. Manual for the state-trait anxiety inventory.
- SPITZER, R. L., KROENKE, K., WILLIAMS, J. B. W., AND LÖWE, B. A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine* 166 (5 2006).
- STABLES, L. A., KENNAN, R. P., AND GORE, J. C. Asymmetric spin-echo imaging of magnetically inhomogeneous systems: Theory, experiment, and numerical studies. *Magnetic Resonance in Medicine* 40 (1998).
- STONE, A. J., AND BLOCKLEY, N. P. A streamlined acquisition for mapping baseline brain oxygenation using quantitative bold. *NeuroImage* 147 (2017).
- STONE, A. J., HOLLAND, N. C., BERMAN, A. J., AND BLOCKLEY, N. P. Simulations of the effect of diffusion on asymmetric spin echo based quantitative bold: An investigation of the origin of deoxygenated blood volume overestimation. *NeuroImage* 201 (2019).
- TUCH, A. N., PRESSLABER, E. E., STÖCKLIN, M., OPWIS, K., AND BARGAS-AVILA, J. A. The role of visual complexity and prototypicality regarding first impression of websites: Working towards understanding aesthetic judgments. *International Journal of Human-Computer Studies* 70 (11 2012).
- WILLIAMS, G. Overdetermined systems of linear equations. *The American Mathematical Monthly* 97 (6 1990).
- WITTCHEN, H., AND HOYER, J. Generalized anxiety disorder: nature and course. *The Journal of clinical psychiatry* 62 Suppl 11 (2001), 15–9; discussion 20–1.
- WOOLRYCH, A., AND CENTRE, I. Why and when five test users aren’t enough.

YABLONSKIY, D. A., AND HAACKE, E. M. Theory of nmr signal behavior in magnetically inhomogeneous tissues: The static dephasing regime. *Magnetic Resonance in Medicine* 32 (12 1994).

YANG, Q. X., WILLIAMS, G. D., DEMEURE, R. J., MOSHER, T. J., AND SMITH, M. B. Removal of local field gradient artifacts in t2\*-weighted images at high fields by gradient-echo slice excitation profile imaging. *Magnetic Resonance in Medicine* 39 (3 1998).

YIEND, J., AND MATHEWS, A. Anxiety and attention to threatening pictures. *The Quarterly Journal of Experimental Psychology Section A* 54 (8 2001).

ZWEIG, G., AND BURGESS, C. J. C. The microsoft research sentence completion challenge, 2011.