К отчету по проекту "Влияние когнитивных искажений на восприятие (дез)информации, связанной со здоровьем, и их поведенческие и нейрональные корреляты", 2023-2024 год (1 год выполнения проекта)

#### СПИСОК ЛИТЕРАТУРЫ

- (a) Феномен когнитивных искажений предвзятости подтверждения (confirmation bias) и его влияние на доверие к информации о здоровье
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236.
- Ashley, S., Maksl, A., & Craft, S. (2013). Developing a news media literacy scale. *Journalism & Mass Communication Educator*, 68(1), 7–21. https://doi.org/10.1177/1077695812469802
- Aufderheide, P. (2018). Media literacy: From a report of the National Leadership Conference on Media Literacy. In Routledge eBooks (pp. 79–86). https://doi.org/10.4324/9781351292924-4
- Bail, C. A., Argyle, L. P., Brown, T., Bumpus, J. P., Chen, H., Hunzaker, M. B. F., Lee, J., Mann, M., Merhout, F., & Volfovsky, A. (2018). Exposure to opposing views on social media can increase political polarization. *Proceedings of the National Academy of Sciences of the United States of America*, 115(37), 9216–9221. https://doi.org/10.1073/pnas.1804840115
- Bates, D. M., Mächler, M., Bolker, B. M., & Walker, S. C. (2015). Fitting Linear Mixed-Effects Models Usinglme4. *Journal of Statistical Software*, 67(1). https://doi.org/10.18637/jss.v067.i01
- Beauvais, C. (2022). Fake news: Why do we believe it? *Joint Bone Spine*, 89(4), 105371. https://doi.org/10.1016/j.jbspin.2022.105371
- Bronstein, M. V., Pennycook, G., Bear, A., Rand, D. G., & Cannon, T. D. (2019). Belief in Fake News is Associated with Delusionality, Dogmatism, Religious Fundamentalism, and Reduced Analytic Thinking. *Journal of Applied Research in Memory and Cognition*, 8(1), 108–117. https://doi.org/10.1016/j.jarmac.2018.09.005
- Butler, L. H., Fay, N., & Ecker, U. K. H. (2023). Social endorsement influences the continued belief in corrected misinformation. *Journal of Applied Research in Memory and Cognition*, 12(3), 364–375. https://doi.org/10.1037/mac0000080
- Calvillo, D. P., Rutchick, A. M., & Garcia, R. J. B. (2021). Individual Differences in Belief in Fake News about Election Fraud after the 2020 U.S. Election. *Behavioral Sciences*, *11*(12), 175. https://doi.org/10.3390/bs11120175

- Chaiken, S. (1980). Heuristic Versus Systematic Information Processing and the Use of Source Versus Message Cues in Persuasion. *Journal of Personality and Social Psychology*, 39(5), 752–766.
- Chauhan, K., & Pillai, A. (2013). Role of Content Strategy in Social Media Brand Communities: A Case of Higher Education Institutes in India. *Journal of Product & Brand Management*, 22(1), 40–51. https://arxiv.org/pdf/2106.05401.pdf
- Coutts, A. (2018). Good news and bad news are still news: experimental evidence on belief updating. *Experimental Economics*, 22(2), 369–395. https://doi.org/10.1007/s10683-018-9572-5
- Del Vicario, M., Bessi, A., Zollo, F., Petroni, F., Scala, A., Caldarelli, G., Stanley, H. E., & Quattrociocchi, W. (2016). The spreading of misinformation online. *Proceedings of the National Academy of Sciences of the United States of America*, 113(3), 554–559. https://doi.org/10.1073/pnas.1517441113
- Dohle, M. (2017). Recipients' assessment of journalistic quality. *Digital Journalism*, *6*(5), 563–582. https://doi.org/10.1080/21670811.2017.1388748
- Dunbar, N. E., Miller, C. H., Adame, B. J., Elizondo, J., Wilson, S., Lane, B. L., Kauffman, A. A., Bessarabova, E., Jensen, M. L., Straub, S. K., Lee, Y., Burgoon, J. K., Valacich, J. J., & Zhang, J. (2014). Implicit and explicit training in the mitigation of cognitive bias through the use of a serious game. *Computers in Human Behavior*, *37*, 307–318. https://doi.org/10.1016/j.chb.2014.04.053
- Ehinger, B. V., Groß, K., Ibs, I., & König, P. (2019). A new comprehensive eye-tracking test battery concurrently evaluating the Pupil Labs glasses and the EyeLink 1000. *PeerJ*, 7, e7086. https://doi.org/10.7717/peerj.7086
- Eil, D., & Rao, J. M. (2011). The good news-bad news effect: Asymmetric processing of objective information about yourself. *American Economic Journal: Microeconomics*, 3(2), 114–138.
- Festinger, L. (1957). A theory of cognitive dissonance. In *Stanford University Press eBooks*. https://doi.org/10.1515/9781503620766
- Figl, K., Kießling, S., & Remus, U. (2023). Do symbol and device matter? The effects of symbol choice of fake news flags and device on human interaction with fake news on social media platforms. *Computers in Human Behavior*, 144, 107704. https://doi.org/10.1016/j.chb.2023.107704
- Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic Perspectives*, 19(4), 25–42. https://doi.org/10.1257/089533005775196732
- Guess, A. M., Lerner, M., Lyons, B. A., Montgomery, J. M., Nyhan, B., Reifler, J., & Sircar, N. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the National Academy of Sciences of the United States of America*, 117(27), 15536–15545. https://doi.org/10.1073/pnas.1920498117
  - Howe, L., & Krosnick, J. A. (2017). Attitude strength. Annual Review of

- Psychology, 68(1), 327–351. https://doi.org/10.1146/annurev-psych-122414-033600
- Jiang, B., Karami, M., Lu, C., Black, T., & Liu, H. (2021). Mechanisms and attributes of echo chambers in social media. *arXiv* (*Cornell University*). https://doi.org/10.48550/arxiv.2106.05401
- Jiménez, Á. V., Mesoudi, A., & Tehrani, J. J. (2020). No evidence that omission and confirmation biases affect the perception and recall of vaccine-related information. *PLOS ONE*, *15*(3), e0228898. https://doi.org/10.1371/journal.pone.0228898
- Johnson, T. J., & Kaye, B. K. (2015). Reasons to Believe: Influence of Credibility on Motivations for Using Social Networks. *Computers in Human Behavior, 50*, 544-555.
- Jonas, E., Schulz-Hardt, S., Frey, D., & Thelen, N. (2001). Confirmation bias in sequential information search after preliminary decisions: An expansion of dissonance theoretical research on selective exposure to information. *Journal of Personality and Social Psychology*, 80(4), 557–571.
- Jones-Jang, S. M., Mortensen, T., & Liu, J. (2021). Does Media Literacy Help Identification of Fake News? Information Literacy Helps, but Other Literacies Don't. *American Behavioral Scientist*, 65(2), 371–388. https://doi.org/10.1177/0002764219869406
  - Kahneman, D. (2011). *Thinking, fast and slow*. http://ci.nii.ac.jp/ncid/BB2184891X
- Kim, A., & Dennis, A. R. (2018). Says who?: How news presentation format influences perceived believability and the engagement level of social media users. *Proceedings of the Annual Hawaii International Conference on System Sciences*. https://doi.org/10.24251/hicss.2018.497
- Kim, A., Moravec, P. L., & Dennis, A. R. (2019). Combating Fake News on Social Media with Source Ratings: The Effects of User and Expert Reputation Ratings. *Journal of Management Information Systems*, 36(3), 931–968. https://doi.org/10.1080/07421222.2019.1628921
- Kim, B., Xiong, A., Lee, D., & Han, K. (2021). A systematic review on fake news research through the lens of news creation and consumption: Research efforts, challenges, and future directions. *PLOS ONE*, *16*(12), e0260080. https://doi.org/10.1371/journal.pone.0260080
- Klayman, J. (1995). Varieties of confirmation bias. *The psychology of learning and motivation*, 32, 385-418.
- Kluck, J. P., Schaewitz, L., & Krämer, N. C. (2019). Doubters are more convincing than advocates. The impact of user comments and ratings on credibility perceptions of false news stories on social media. *Studies in Communication, Media, 8*(4), 446–470. https://doi.org/10.5771/2192-4007-2019-4-446
- Kluck, J. P., Schaewitz, L., & Kramer, N. C. (2019). Doubters are more convincing than advocates: The impact of user comments and ratings on credibility perceptions of false news stories on social media. *Studies in Communication Media*, 8(4), 446–470.
- Knobloch-Westerwick, S., Johnson, B. K., & Westerwick, A. (2014). Confirmation Bias in Online Searches: Impacts of Selective Exposure Before an Election on Political

- Attitude Strength and Shifts. *Journal of Computer-Mediated Communication*, 20, 171–187. https://doi.org/10.1111/jcc4.12105.
- Koriat, A., Lichtenstein, S., & Fischhoff, B. (1980). Reasons for Confidence. Journal of Experimental Psychology: Human learning and memory, 6(2), 107.
- Ladeira, W. J., Dalmoro, M., De Oliveira Santini, F., & Jardim, W. C. (2021). Visual cognition of fake news: the effects of consumer brand engagement. *Journal of Marketing Communications*, 28(6), 681–701. https://doi.org/10.1080/13527266.2021.1934083
- Liu, J., & Latane, B. (1998). The catastrophic link between the importance and extremity of political attitudes. *Political Behavior*, 20(2), 105–126.
- Gupta, M., Dennehy, D., Parra, C. M., Mäntymäki, M., & Dwivedi, Y. K. (2023). Fake news believability: The effects of political beliefs and espoused cultural values. *Information & Management*, 60(2), 103745. https://doi.org/10.1016/j.im.2022.103745
- Marquart, F., Matthes, J., & Rapp, E. (2016). Selective Exposure in the context of Political Advertising: A Behavioral approach using Eye-Tracking methodology. *International Journal of Communication*, 10, 20. https://ijoc.org/index.php/ijoc/article/download/4415/1667
- Mendel, R., Traut-Mattausch, E., Jonas, E., Leucht, S., Kane, J. M., Maino, K., Kissling, W., & Hamann, J. (2011). Confirmation bias: why psychiatrists stick to wrong preliminary diagnoses. *Psychological Medicine*, *41*(12), 2651–2659. https://doi.org/10.1017/s0033291711000808
- Meppelink, C. S., Smit, E. G., Fransen, M. L., & Diviani, N. (2019). "I was Right about Vaccination": Confirmation Bias and Health Literacy in Online Health Information Seeking. *Journal of Health Communication*, 24(2), 129–140. https://doi.org/10.1080/10810730.2019.1583701
- Modgil, S., Singh, R., Gupta, S., & Dennehy, D. (2021). A confirmation bias view on social media induced polarisation during Covid-19. *Information Systems Frontiers*. https://doi.org/10.1007/s10796-021-10222-9
- Moore, R. C., & Hancock, J. T. (2022). A digital media literacy intervention for older adults improves resilience to fake news. *Scientific Reports*, *12*(1). https://doi.org/10.1038/s41598-022-08437-0
- Moravec, P. L., Minas, R. K., & Dennis, A. R. (2018). Fake News on Social Media: People Believe What They Want to Believe When it Makes No Sense at All. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3269541
- Nickerson, R. S. (1998). Confirmation bias: a ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175–220. https://doi.org/10.1037/1089-2680.2.2.175
- Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188, 39–50. https://doi.org/10.1016/j.cognition.2018.06.011
  - Peters, U. (2020). What is the function of confirmation bias? *Erkenntnis*, 87(3),

- Prakash, A., Verma, A., Sharma, Dr., & Das, A. (2023). Disentangling the Effect of Confirmation Bias and Media Literacy on Social Media Users' Susceptibility to Fake News. *Journal of Content, Community & Communication*, 17(9), 16-30.
- Quattrociocchi, W., Scala, A., & Sunstein, C. R. (2016). Echo Chambers on Facebook. *Social Science Research Network*. https://doi.org/10.2139/ssrn.2795110
- R Core Team. (2022). R: A language and environment for statistical computing. (https://www.r-project.org/)
- Schielzeth, H., Dingemanse, N. J., Nakagawa, S., Westneat, D. F., Allegue, H., Teplitsky, C., Réale, D., Dochtermann, N. A., Garamszegi, L. Z., & Araya-Ajoy, Y. G. (2020). Robustness of linear mixed-effects models to violations of distributional assumptions. *Methods in Ecology and Evolution*, *11*(9), 1141–1152. https://doi.org/10.1111/2041-210x.13434
- Šimko, J., Hanakova, M., Racsko, P., Tomlein, M., Móro, R., & Bieliková, M. (2019). Fake News Reading on Social Media. *HT '19*,. https://doi.org/10.1145/3342220.3343642
- Spohr, D. (2017). Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review*, *34*(3), 150–160. https://doi.org/10.1177/0266382117722446
- Steinfeld, N., Samuel-Azran, T., & Lev-On, A. (2016). User comments and public opinion: Findings from an eye-tracking experiment. *Computers in Human Behavior*, *61*, 63–72. https://doi.org/10.1016/j.chb.2016.03.004
- Sharot, T., & Garrett, N. (2016). Forming Beliefs: Why Valence matters. *Trends in Cognitive Sciences*, 20(1), 25–33. https://doi.org/10.1016/j.tics.2015.11.002
- Sülflow, M., Schäfer, S., & Winter, S. (2018). Selective attention in the news feed: An eye-tracking study on the perception and selection of political news posts on Facebook. *New Media & Society, 21*(1), 168–190. https://doi.org/10.1177/1461444818791520
- Van Der Meer, T. G., & Brosius, A. (2022). Credibility and shareworthiness of negative news. *Journalism: Theory, Practice & Criticism*. https://doi.org/10.1177/14648849221110283
- Waddell, T. F. (2017). What does the crowd think? How online comments and popularity metrics affect news credibility and issue importance. *New Media & Society, 20*(8), 3068–3083. https://doi.org/10.1177/1461444817742905
- Westerwick, A., Johnson, B. K., & Knobloch-Westerwick, S. (2017). Confirmation biases in selective exposure to political online information: Source bias vs. content bias. *Communication Monographs*, 84(3), 343–364. https://doi.org/10.1080/03637751.2016.1272761
- Wickens, C. D., Hollands, J. G., Banbury, S., & Parasuraman, R. (2015). Engineering Psychology and human performance. In *Psychology Press eBooks*. https://doi.org/10.4324/9781315665177

Winter, S., Brückner, C., & Krämer, N. C. (2015). They came, they liked, they commented: Social influence on Facebook news channels. *Cyberpsychology, Behavior, and Social Networking*, 18(8), 431–436. https://doi.org/10.1089/cyber.2015.0005

# (б) Методики оценки имплицитного и эксплицитного компонентов отношений

- Benet-Martínez, V. (2007). Cross-cultural personality research: Conceptual and methodological issues. In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 170–189). The Guilford Press.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.
- Martin, L. R., & Petrie, K. J. (2017). Understanding the Dimensions of Anti-Vaccination Attitudes: the Vaccination Attitudes Examination (VAX) Scale. *Annals of behavioral medicine: a publication of the Society of Behavioral Medicine*, *51*(5), 652–660. https://doi.org/10.1007/s12160-017-9888-y
- West, L. M., Borg Theuma, R., & Cordina, M. (2020). The 'Necessity-Concerns Framework' as a means of understanding non-adherence by applying polynomial regression in three chronic conditions. *Chronic illness*, *16*(4), 253–265. https://doi.org/10.1177/1742395318799847
- Вишняков А. В., Буфетова А. М., & Паршин А. А. (2023). Апробация и валидизация русской версии опросника для оценки отношения населения к вакцинации от COVID-19 «Covid-Vaccination Attitude Scale (C-VAS)». Университетская клиника, *1*(46), 23-28.
- Карпинский К. В. (2022). Психологические факторы противопрививочного поведения белорусов в условиях пандемии COVID-19. *Вестник Санкт-Петербургского университета*. *Психология*, *12*(3), 265-284.
- Марголис А. А., Сорокова М. Г., Шведовская А. А., & Радчикова Н. П. (2022). Разработка и стандартизация опросника "Шкала отношения к вакцинации от COVID-19". *Психология. Журнал Высшей школы экономики, 19*(3), 454-474.
- Угланова И. Л., Михайлова А. М., Бельская Т. В., & Гетман А. В. (2021). Конспирологические представления о вакцинации: валидизация опросника. *Вестник Санкт-Петербургского университета*. *Социология*, *14*(1), 14-32.
- Axt, J. R., Feng, T. Y., & Bar-Anan, Y. (2021). The good and the bad: Are some attribute words better than others in the Implicit Association Test?. *Behavior research methods*, 53(6), 2512–2527. https://doi.org/10.3758/s13428-021-01592-8
- Banaji, M. R. (2004). The opposite of a great truth is also true: Homage of Koan #7. In J. T. Jost, M. R. Banaji, & D. A. Prentice (Eds.), *Perspectivism in social psychology: The yin and yang of scientific progress* (pp. 127–140). American Psychological Association. https://doi.org/10.1037/10750-010

- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81–105. https://doi.org/10.1037/h0046016
- Cunningham, W. A., Preacher, K. J., & Banaji, M. R. (2001). Implicit Attitude Measures: Consistency, Stability, and Convergent Validity. *Psychological Science*, *12*(2), 163-170. https://doi.org/10.1111/1467-9280.00328
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, *56*(1), 5–18. https://doi.org/10.1037/0022-3514.56.1.5
- Dovidio, J. F., Kawakami, K., Johnson, C., Johnson, B., & Howard, A. (1997). On the nature of prejudice: Automatic and controlled processes. *Journal of Experimental Social Psychology*, *33*(5), 510–540. https://doi.org/10.1006/jesp.1997.1331
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition research: Their meaning and uses. *Annual Review of Psychology*, *54*, 297–327. https://doi.org/10.1146/annurev.psych.54.101601.145225
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology, 69*(6), 1013–1027. https://doi.org/10.1037/0022-3514.69.6.1013
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*(1), 4–27. https://doi.org/10.1037/0033-295X.102.1.4
- Greenwald, A. G., & Farnham, S. D. (2000). Using the Implicit Association Test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, 79(6), 1022–1038. https://doi.org/10.1037/0022-3514.79.6.1022
- Greenwald, A. G., Brendl, M., Cai, H., Cvencek, D., Dovidio, J. F., Friese, M., Hahn, A., Hehman, E., Hofmann, W., Hughes, S., Hussey, I., Jordan, C., Kirby, T. A., Lai, C. K., Lang, J. W. B., Lindgren, K. P., Maison, D., Ostafin, B. D., Rae, J. R., Ratliff, K. A., ... Wiers, R. W. (2022). Best research practices for using the Implicit Association Test. *Behavior research methods*, *54*(3), 1161–1180. https://doi.org/10.3758/s13428-021-01624-3
- Greenwald, A. G., Brendl, M., Cai, H., Cvencek, D., Dovidio, J., Friese, M., Wiers, R. (2020). The Implicit Association Test at age 20: What is known and what is not known about implicit bias. https://doi.org/10.31234/osf.io/bf97c
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, *97*(1), 17–41. https://doi.org/10.1037/a0015575
- Howell, J. L., Gasser, M. L., Kaysen, D., & Lindgren, K. P. (2022). Understanding parental vaccine refusal: Implicit and explicit associations about vaccines as potential building blocks of vaccine beliefs and behavior. *Social science & medicine*, 310, 115275.

#### https://doi.org/10.1016/j.socscimed.2022.115275

- Lindgren, K. P., Baldwin, S. A., Olin, C. C., Wiers, R. W., Teachman, B. A., Norris, J., Kaysen, D., & Neighbors, C. (2018). Evaluating within-person change in implicit measures of alcohol associations: Increases in alcohol associations predict increases in drinking risk and vice versa. *Alcohol and Alcoholism*, *53*(4), 386–393. https://doi.org/10.1093/alcalc/agy012
- Nosek, B. A. (2005). Moderators of the Relationship Between Implicit and Explicit Evaluation. *Journal of Experimental Psychology: General*, 134(4), 565–584. https://doi.org/10.1037/0096-3445.134.4.565
- Nosek, B. A., & Hansen, J. J. (2008). Personalizing the implicit association test increases explicit evaluation of target concepts. *European Journal of Psychological Assessment*, 24(4), 226–236. https://doi.org/10.1027/1015-5759.24.4.226
- Nosek, B. A., & Smyth, F. L. (2007). A multitrait-multimethod validation of the Implicit Association Test: Implicit and explicit attitudes are related but distinct constructs. *Experimental Psychology*, *54*(1), 14–29. https://doi.org/10.1027/1618-3169.54.1.14
- Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review, 107*(1), 101–126. https://doi.org/10.1037/0033-295X.107.1.101
- Марголис, А. А., Сорокова, М. Г., Шведовская, А. А., & Радчикова, Н. П. (2022). Разработка и стандартизация опросника "Шкала отношения к вакцинации от COVID-19". *Психология. Журнал Высшей школы экономики*, 19(3), 454-474.
- Угланова, И. Л., Михайлова, А. М., Бельская, Т. В., & Гетман, А. В. (2021). Конспирологические представления о вакцинации: валидизация опросника. *Вестник Санкт-Петербургского университета*. *Социология*, *14*(1), 14-32.

### (в) Нейрофизиологические корреляты имплицитных процессов

Боброва, Л. А. (2021). Когнитивные искажения. Социальные и гуманитарные науки. Отечественная и зарубежная литература. Серия 3, Философия: Реферативный журнал, 2021(2), 69–79.

Канеман, Д. (2016). Думай медленно... решай быстро. М.: АСТ.

- Осин, Е. Н. (2012). Измерение позитивных и негативных эмоций: разработка русскоязычного аналога методики PANAS. *Психология*. *Журнал Высшей школы экономики*, *9*(4), 91–110.
- Aldayel, M., Ykhlef, M., & Al-Nafjan, A. (2021). Recognition of Consumer Preference by Analysis and Classification EEG Signals. *Front. Hum. Neurosci.*, *14*, 604639. https://doi.org/10.3389/fnhum.2020.604639.
- Anzures, G., & Mildort, M. (2021). Do perceptual expertise and implicit racial bias predict early face-sensitive ERP responses? *Brain Cogn.*, *147*, 105671. https://doi.org/10.1016/j.bandc.2020.105671.

- Barsade, S. G., Ramarajan, L., & Westen, D. (2009). Implicit affect in organizations. *Research in Organizational Behavior*, *29*, 135–162. doi.org/10.1016/j.riob.2009.06.008.
- Bhat, D., Kollu, T., Ricci, J. A., & Patel, A. (2021). What's in a Name? Implicit Bias Affects Patient Perception of Surgeon Skill. *Plast. Reconstr. Surg.*, 147(6), 948–956. https://doi.org/10.1097/PRS.00000000000008171
- Bosshard, S. S., Bourke, J. D., Kunaharan, S., Koller, M., Walla, P., & Heinonen, J. (2016). Established liked versus disliked brands: Brain activity, implicit associations and explicit responses. *Cogent Psychology, 3:1*. https://doi.org/10.1080/23311908.2016.1176691
- Camsari, D. D., Lewis, C. P., Sonmez, A. I., Ozger, C., Fatih, P., Yuruk, D., Shekunov, J., Vande Voort, J. L., & Croarkin, P. E. (2023). Event-Related Potential Markers of Suicidality in Adolescents. *Int. J. Neuropsychopharmacol.*, *26*(8), 566–575. <a href="https://doi.org/10.1093/ijnp/pyad039">https://doi.org/10.1093/ijnp/pyad039</a>
- Cai, H., & Wu, L. (2021). The self-esteem implicit association test is valid: Evidence from brain activity. *Psych Journal*, *10*(3), 465-477. <a href="https://doi.org/10.1002/pchj.422">https://doi.org/10.1002/pchj.422</a>
- Chaiyanan, C., Iramina, K., & Kaewkamnerdpong, B. (2021). Investigation on Identifying Implicit Learning Event from EEG Signal Using Multiscale Entropy and Artificial Bee Colony. *Entropy*, 23(5), 617. doi.org/10.3390/e23050617
- Chen, L., Zhou, H., Gu, Y., Wang, S., Wang, J., Tian, L., Zhu, H., & Zhou, Z. (2018). The Neural Correlates of Implicit Cognitive Bias Toward Internet-Related Cues in Internet Addiction: An ERP Study. *Frontiers in Psychiatry*, *9*, 421. doi: 10.3389/fpsyt.2018.00421
- Cui, Y., Engelmann, J. M., Gilbert, D. G., Waters, A. J., Cinciripini, P. M., & Robinson, J. D. (2019). The impact of nicotine dose and instructed dose on smokers' implicit attitudes to smoking cues: An ERP study. *Psychology of Addictive Behaviors*, *33*(8), 710-720. doi: 10.1037/adb0000523
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464-1480. doi: 10.1037//0022-3514.74.6.1464
- Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, 97(1), 17–41. doi: 10.1037/a0015575
- Healy, G. F., Boran, L., & Smeaton, A. F. (2015). Neural Patterns of the Implicit Association Test. *Frontiers in Human Neuroscience*, *9*, 605. doi: 10.3389/fnhum.2015.00605
- Hilgard, J., Bartholow, B. D., Dickter, C. L., & Blanton, H. (2015). Characterizing switching and congruency effects in the Implicit Association Test as reactive and proactive cognitive control. *Social Cognitive and Affective Neuroscience*, 10(3), 381–388. doi.org/10.1093/scan/nsu060
- Howell, J. L., Gasser, M. L., Kaysen, D., & Lindgren, K. P. (2022). Understanding parental vaccine refusal: Implicit and explicit associations about vaccines as potential building blocks of vaccine beliefs and behavior. *Social Science & Medicine*, 310, 115275.

#### doi.org/10.1016/j.socscimed.2022.115275

- Lahtinen, A., Juvonen, K., Lapveteläinen, A., Kolehmainen, M., Lindholm, M., Tanila, H., Kantanen, T., Sinikallio, S., Karhunen, L., & Närväinen, J. (2019). Metabolic state as a modulator of neural event-related potentials for food stimuli in an implicit association test. *Physiology & Behavior*, 209, 112589. doi: 10.1016/j.physbeh.2019.112589
- Le Bouc, R., & Pessiglione, M. (2022). A neuro-computational account of procrastination behavior. *Nature Communications*, 13(1), 5639. doi.org/10.1038/s41467-022-33119-w
- Lou, Y., Lei, Y., Astikainen, P., Peng, W., Otieno, S., & Leppänen, P. H. T. (2021). Brain responses of dysphoric and control participants during a self-esteem implicit association test. *Psychophysiology*, *58*(4), e13768. doi: 10.1111/psyp.13768
- Meissner, F., Grigutsch, L. A., Koranyi, N., Müller, F., & Rothermund, K. (2019). Predicting Behavior With Implicit Measures: Disillusioning Findings, Reasonable Explanations, and Sophisticated Solutions. *Frontiers in Psychology*, 10, 2483. doi:10.3389/fpsyg.2019.02483
- Nosek, B. A., Hawkins, C. B., & Frazier, R. S. (2011). Implicit social cognition: From measures to mechanisms. *Trends in Cognitive Sciences*, *15*(4), 152–159. doi: 10.1016/j.tics.2011.01.005
- Pesciarelli, F., Leo, I., & Serafini, L. (2021). Electrophysiological correlates of unconscious processes of race. \*Scientific Reports, 11\*, 11646. https://doi.org/10.1038/s41598-021-91133-2
- Peters, U. (2022). What is the function of confirmation bias? *Erkenntnis*, 87(3), 1351–1376. doi: <a href="https://doi.org/10.1007/s10670-020-00252-1">https://doi.org/10.1007/s10670-020-00252-1</a>
- Qian, Y., Xiaoyun, L., & Weiwei, P. (2020). Individual Variation in Pain Sensitivity and Implicit Negative Bias Toward Pain. *Psychosomatic Medicine*, 82(8), 796–804. doi: 10.1097/PSY.0000000000000044
- Portengen, C. M., Huffmeijer, R., van Baar, A. L., & Endendijk, J. J. (2022). Measuring the neural correlates of the violation of social expectations: A comparison of two experimental tasks. *Social Neuroscience*, 17(1), 58-72. doi: 10.1080/17470919.2022.2032327
- Quirin, M., Kazén, M., & Kuhl, J. (2009). When nonsense sounds happy or helpless: The Implicit Positive and Negative Affect Test (IPANAT). *Journal of Personality and Social Psychology*, *97*, 500–516. doi: 10.1037/a0016063
- Schiller, B., Gianotti, L. R., Baumgartner, T., Nash, K., Koenig, T., & Knoch, D. (2016). Clocking the social mind by identifying mental processes in the IAT with electrical neuroimaging. *Proceedings of the National Academy of Sciences of the United States of America*, 113(10), 2786–2791. doi: 10.1073/pnas.1515828113
- Schiller, B., Sperl, M. F. J., Kleinert, T., Nash, K., & Gianotti, L. R. R. (2023). EEG Microstates in Social and Affective Neuroscience. *Brain Topography*. doi: 10.1007/s10548-023-00987-4
  - Shah, H. S., & Bohlen, J. (2023, March 4). Implicit Bias. In: StatPearls [Internet].

- Treasure Island (FL): StatPearls Publishing, 2024.
- Simione, L., Vagni, M., Maiorano, T., Giostra, V., & Pajardi, D. (2022). How Implicit Attitudes toward Vaccination Affect Vaccine Hesitancy and Behaviour: Developing and Validating the V-IRAP. *International Journal of Environmental Research and Public Health*, 19, 4205. doi.org/10.3390/ijerph19074205
- Tao, D., Leng, Y., Peng, S., Xu, J., Ge, S., & Deng, H. (2022). Temporal dynamics of explicit and implicit moral evaluations. *International Journal of Psychophysiology*, *172*, 1–9. doi.org/10.1016/j.ijpsycho.2021.12.006
- Tschuemperlin, R. M., Batschelet, H. M., Moggi, F., Koenig, T., Roesner, S., Keller, A., Pfeifer, P., Soravia, L. M., & Stein, M. (2020). The Neurophysiology of Implicit Alcohol Associations in Recently Abstinent Patients With Alcohol Use Disorder: An Event-Related Potential Study Considering Gender Effects. *Alcoholism, Clinical and Experimental Research*, 44(10), 2031-2044. doi: 10.1111/acer.14444
- van Nunspeet, F., Ellemers, N., Derks, B., & Nieuwenhuis, S. (2014). Moral concerns increase attention and response monitoring during IAT performance: ERP evidence. *Social Cognitive and Affective Neuroscience*, *9*(2), 141–149.
- Wagner-Altendorf, T. A., van der Lugt, A. H., Kroeber, A., Cirkel, A., Heldmann, M., & Münte, T. F. (2023). Differences in Implicit Attitudes in West and East Germans as Measured by the Go/NoGo Association Task and Event-related EEG Potentials. *Cognitive and Behavioral Neurology*, 36(3), 145–158. doi: 10.1097/WNN.0000000000000338
- Wang, Y., & Li, X. (2017). Temporal course of implicit emotion regulation during a Priming-Identify task: an ERP study. *Scientific Reports*, 7(2), 41941. doi: 10.1038/srep41941
- Williams, J. K., & Themanson, J. R. (2011). Neural correlates of the implicit association test: evidence for semantic and emotional processing. *Social Cognitive and Affective Neuroscience*, 6(4), 468–476. https://doi.org/10.1093/scan/nsq065
- Schielzeth, H., Dingemanse, N. J., Nakagawa, S., Westneat, D. F., Allegue, H., Teplitsky, C., Réale, D., Dochtermann, N. A., Garamszegi, L. Z., & Araya-Ajoy, Y. G. (2020). Robustness of linear mixed-effects models to violations of distributional assumptions. *Methods in Ecology and Evolution*, *11*(9), 1141–1152. https://doi.org/10.1111/2041-210x.13434
- Cortes, P. M., García-Hernández, J. P., Iribe-Burgos, F. A., et al. (2023). Effects of emotional congruency and task complexity on decision-making. *Cognitive Processing*, *24*(2), 161–171. https://doi.org/10.1007/s10339-023-01129-1
- Fugelsang, J. A., Stein, C. B., Green, A. E., & Dunbar, K. N. (2004). Theory and data interactions of the scientific mind: Evidence from the molecular and the cognitive laboratory. *Canadian Journal of Experimental Psychology*, *58*, 86–95. http://dx.doi.org/10.1037/h0085799
- Pines, J. M. (2006). Profiles in patient safety: Confirmation bias in emergency medicine. *Academic Emergency Medicine*, *13*, 90–94. http://dx.doi.org/10.1197/j.aem.2005.07.028

- Amodio, D. M., Harmon-Jones, E., & Devine, P. G. (2003). Individual differences in the activation and control of affective race bias as assessed by startle eyeblink response and self-report. *Journal of Personality and Social Psychology*, 84(4), 738–753. https://doi.org/10.1037/0022-3514.84.4.738
- Benedek, M., Stoiser, R., Walcher, S., & Körner, C. (2017). Eye Behavior Associated with Internally versus Externally Directed Cognition. *Frontiers in Psychology*, 8, 1092. https://doi.org/10.3389/fpsyg.2017.01092
- Glenberg, A. M., Schroeder, J. L., & Robertson, D. A. (1998). Averting the gaze disengages the environment and facilitates remembering. *Memory & Cognition*, 26(4), 651–658. https://doi.org/10.3758/bf03211385
- Goette, L., Han, H. J., & Leung, B. T. K. (2020, March 23). Information Overload and Confirmation Bias. https://doi.org/10.17863/CAM.52487
- Mahaffey, A., Bryan, A., & Hutchison, K. (2005). Using Startle Eye Blink to Measure the zAffective Component of Antigay Bias. *Basic and Applied Social Psychology*, 27, 37–45. https://doi.org/10.1207/s15324834basp2701\_4
- Mahaffey, A. L., Bryan, A. D., Ito, T. A., & Hutchison, K. E. (2011). In search of the defensive function of sexual prejudice: Exploring antigay bias through shorter and longer lead startle eye blink. *Journal of Applied Social Psychology*, 41(1), 27–44. https://doi.org/10.1111/j.1559-1816.2010.00700.x
- Rajsic, J., Wilson, D. E., & Pratt, J. (2015). Confirmation bias in visual search. *Journal of Experimental Psychology: Human Perception and Performance*, 41(5), 1353–1364. https://doi.org/10.1037/xhp0000090
- Salvi, C., Bricolo, E., Franconeri, S. L., Kounios, J., & Beeman, M. (2015). Sudden insight is associated with shutting out visual inputs. *Psychonomic Bulletin & Review*, 22(6), 1814–1819. https://doi.org/10.3758/s13423-015-0845-0
- Smilek, D., Carriere, J. S. A., & Cheyne, J. A. (2010). Out of mind, out of sight: Eye blinking as indicator and embodiment of mind wandering. *Psychological Science*, *21*(6), 786–789. https://doi.org/10.1177/0956797610368063
- Ueda, Y., Tominaga, A., Kajimura, S., & Nomura, M. (2016). Spontaneous eye blinks during creative task correlate with divergent processing. *Psychological Research*, 80(4), 652–659. https://doi.org/10.1007/s00426-015-0665-x
- Veltman, J. A., & Gaillard, A. W. (1998). Physiological workload reactions to increasing levels of task difficulty. *Ergonomics*, 41(5), 656–669. https://doi.org/10.1080/001401398186829
- Wood, J. G., & Hassett, J. (1983). Eyeblinking during problem solving: The effect of problem difficulty and internally vs externally directed attention. *Psychophysiology*, *20*(1), 18–20. https://doi.org/10.1111/j.1469-8986.1983.tb00893.x
- Yang, X.-F., Pavarini, G., Schnall, S., & Immordino-Yang, M. H. (2018). Looking up to virtue: Averting gaze facilitates moral construals via posteromedial activations. *Social Cognitive and Affective Neuroscience*, *13*(11), 1131–1139.

# https://doi.org/10.1093/scan/nsy081

- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453–458. http://dx.doi.org/10.1126/science.7455683
- Morrison, T. G., & Trinder, K. (2018). Affective responses to gay men using facial electromyography: Is there a psychophysiological "Look" of Anti-Gay bias. *Journal of Homosexuality*, 66(9), 1238–1261. https://doi.org/10.1080/00918369.2018.1500779
- Green, P., & MacLeod, C. J. (2016). SIMR: An R package for power analysis of generalized linear mixed models by simulation. *Methods in Ecology and Evolution*, 7(4), 493–4.
- Klayman, J. (1995). Varieties of confirmation bias. *The Psychology of Learning and Motivation*, 32, 385–418.
- Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology, 2*(2), 175–220. https://doi.org/10.1037/1089-2680.2.2.175
- Koriat, A., Lichtenstein, S., & Fischhoff, B. (1980). Reasons for Confidence. Journal of Experimental Psychology: Human Learning and Memory, 6(2), 107.
- Wickens, C. D., Hollands, J. G., Banbury, S., & Parasuraman, R. (2015). *Engineering Psychology and Human Performance*. Psychology Press eBooks. https://doi.org/10.4324/9781315665177
- Peters, U. (2020). What is the function of confirmation bias? *Erkenntnis*, 87(3), 1351–1376. https://doi.org/10.1007/s10670-020-00252-1
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford University Press eBooks. https://doi.org/10.1515/9781503620766
- Jonas, E., Schulz-Hardt, S., Frey, D., & Thelen, N. (2001). Confirmation bias in sequential information search after preliminary decisions: An expansion of dissonance theoretical research on selective exposure to information. *Journal of Personality and Social Psychology*, 80(4), 557–571.
- Knobloch-Westerwick, S., Johnson, B. K., & Westerwick, A. (2014). Confirmation bias in online searches: Impacts of selective exposure before an election on political attitude strength and shifts. *Journal of Computer-Mediated Communication*, 20, 171–187. https://doi.org/10.1111/jcc4.12105
- Moravec, P. L., Minas, R. K., & Dennis, A. R. (2018). Fake news on social media: People believe what they want to believe when it makes no sense at all. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3269541
- Howell, J. L., Gasser, M. L., Kaysen, D., & Lindgren, K. P. (2022). Understanding parental vaccine refusal: Implicit and explicit associations about vaccines as potential building blocks of vaccine beliefs and behavior. *Social Science & Medicine*, *310*, 115275. https://doi.org/10.1016/j.socscimed.2022.115275

- (г) Применение методов машинного обучения для анализа поведенческих окуломоторных и электрофизиологических данных.
- Beltrán, J., García-Vázquez, M. S., Benois-Pineau, J., Gutierrez-Robledo, L. M., & Dartigues, J. F. (2018). Computational techniques for eye movements analysis towards supporting early diagnosis of Alzheimer's disease: A review. *Computational and Mathematical Methods in Medicine*, 2018, 2676409. https://doi.org/10.1155/2018/2676409
- Rayner, K. (2009). The 35th Sir Frederick Bartlett lecture: Eye movements and attention in reading, scene perception, and visual search. *Quarterly Journal of Experimental Psychology*, 62, 1457–1506. https://doi.org/10.1080/17470210902816461
- Lim, J. Z., Mountstephens, J., & Teo, J. (2022). Eye-tracking feature extraction for biometric machine learning. *Frontiers in Neurorobotics*, *15*, 796895. https://doi.org/10.3389/fnbot.2021.796895
  - Duchowski, A. (2017). Eye Tracking Methodology: Theory and Practice. Springer.
- Lagun, D., Manzanares, C., Zola, S. M., Buffalo, E. A., & Agichtein, E. (2011). Detecting cognitive impairment by eye movement analysis using automatic classification algorithms. *Journal of Neuroscience Methods*, *201*, 196–203. https://doi.org/10.1016/j.jneumeth.2011.06.027
- Cao, Y., Miura, S., Kobayashi, Y., Kawamura, K., Sugano, S., & Fujie, M. G. (2016). Pupil variation applied to the eye tracking control of an endoscopic manipulator. *IEEE Robotics and Automation Letters, 1,* 531–538. https://doi.org/10.1109/LRA.2016.2521894
- Zhang, Y., & Juhola, M. (2016). On biometrics with eye movements. *IEEE Journal of Biomedical and Health Informatics*, 21, 1360–1366. https://doi.org/10.1109/JBHI.2016.2551862
- Sargezeh, B. A., Tavakoli, N., & Daliri, M. R. (2019). Gender-based eye movement differences in passive indoor picture viewing: An eye-tracking study. *Physiology & Behavior*, *206*, 43–50. https://doi.org/10.1016/j.physbeh.2019.03.023
- Labibah, Z., Nasrun, M., & Setianingsih, C. (2018). Lie detector with the analysis of the change of diameter pupil and the eye movement use method Gabor wavelet transform and decision tree. In *2018 IEEE International Conference on Internet of Things and Intelligence System (IOTAIS)* (pp. 214–220). IEEE.
- Orlosky, J., Huynh, B., & Hollerer, T. (2019). Using eye-tracked virtual reality to classify understanding of vocabulary in recall tasks. In *2019 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR)* (pp. 666–667). IEEE.
- Tamuly, S., Jyotsna, C., & Amudha, J. (2019). Tracking eye movements to predict the valence of a scene. In 2019 10th International Conference on Computing, Communication and Networking Technologies (ICCCNT) (pp. 1–7). IEEE.
- Roy, A. K., Akhtar, M. N., Mahadevappa, M., Guha, R., & Mukherjee, J. (2017). A novel technique to develop cognitive models for ambiguous image identification using eye

- tracker. *IEEE Transactions on Affective Computing, 11*, 63–77. https://doi.org/10.1109/TAFFC.2017.2768026
- Saab, K., Hooper, S. M., Sohoni, N. S., Parmar, J., Pogatchnik, B., Wu, S., et al. (2021). Observational supervision for medical image classification using gaze data. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 603–614). Springer.
- Horng, G. J., & Lin, J. Y. (2019). Using multimodal bio-signals for prediction of physiological cognitive state under free-living conditions. *IEEE Sensors Journal*, 20, 4469–4484. https://doi.org/10.1109/JSEN.2019.2962339
- Liu, Z., Yang, Z., Gu, Y., Liu, H., & Wang, P. (2021). The effectiveness of eye tracking in the diagnosis of cognitive disorders: A systematic review and meta-analysis. *PLoS ONE*, *16*(7), e0254059. https://doi.org/10.1371/journal.pone.0254059
- Bazgir, O., Mohammadi, Z., & Habibi, S. A. H. (2018). Emotion recognition with machine learning using EEG signals. In *Proceedings of the 2018 25th National and 3rd International Iranian Conference on Biomedical Engineering (ICBME)* (pp. 1–5).
- Doma, V., & Pirouz, M. (2020). A comparative analysis of machine learning methods for emotion recognition using EEG and peripheral physiological signals. *Journal of Big Data*, 7, 1–21.
- Gupta, A., & Agrawal, R. (2012). Relevant feature selection from EEG signal for mental task classification. In *Pacific-Asia Conference on Knowledge Discovery and Data Mining* (pp. 431–442). Springer.
- Peng, C. J., Chen, Y. C., Chen, C. C., Chen, S. J., Cagneau, B., & Chassagne, L. (2020). An EEG-based attentiveness recognition system using Hilbert–Huang transform and support vector machine. *Journal of Medical and Biological Engineering*, 40, 230–238.
- Ebrahimi, F., Mikaeili, M., Estrada, E., & Nazeran, H. (2008). Automatic sleep stage classification based on EEG signals by using neural networks and wavelet packet coefficients. In 2008 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (pp. 1151–1154).
- Jamal, S., Cruz, M. V., Chakravarthy, S., Wahl, C., & Wimmer, H. (2023). Integration of EEG and Eye Tracking Technology: A Systematic Review. In *SoutheastCon 2023* (pp. 209-216). Orlando, FL, USA. https://doi.org/10.1109/SoutheastCon51012.2023.10115167
- Saeidi, M., Karwowski, W., Farahani, F. V., Fiok, K., Taiar, R., Hancock, P. A., & Al-Juaid, A. (2021). Neural Decoding of EEG Signals with Machine Learning: A Systematic Review. *Brain Sciences*, *11*(11), 1525. https://doi.org/10.3390/
- Rajpura, P. S., Cecotti, H., & Meena, Y. K. (2023). Explainable artificial intelligence approaches for brain-computer interfaces: A review and design space. *arXiv*. https://arxiv.org/abs/2312.13033
- Murugavel, A. M., & Ramakrishnan, S. (2016). Hierarchical multi-class SVM with ELM kernel for epileptic EEG signal classification. *Medical & Biological Engineering &*

- Computing, 54, 149–161.
- Lu, D., & Triesch, J. (2019). Residual deep convolutional neural network for EEG signal classification in epilepsy. *arXiv*. https://arxiv.org/abs/1903.08100
- Ullah, I., Hussain, M., & Aboalsamh, H. (2018). An automated system for epilepsy detection using EEG brain signals based on deep learning approach. *Expert Systems with Applications*, 107, 61–71.
- Jaiswal, A. K., & Banka, H. (2018). Epileptic seizure detection in EEG signal using machine learning techniques. *Australasian Physical & Engineering Sciences in Medicine, 41*, 81–94.
- Hamad, A., Hassanien, A. E., Fahmy, A. A., & Houssein, E. H. (2018). A hybrid automated detection of epileptic seizures in EEG based on wavelet and machine learning techniques. *arXiv*. https://arxiv.org/abs/1807.10723
- Ebrahimi, F., Mikaeili, M., Estrada, E., & Nazeran, H. (2008). Automatic sleep stage classification based on EEG signals by using neural networks and wavelet packet coefficients. In *Proceedings of the 2008 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society* (pp. 1151–1154).
- Kuo, C. E., & Liang, S. F. (2011). Automatic stage scoring of single-channel sleep EEG based on multiscale permutation entropy. In *Proceedings of the 2011 IEEE Biomedical Circuits and Systems Conference (BioCAS)* (pp. 448–451).
- Santaji, S., & Desai, V. (2020). Analysis of EEG signal to classify sleep stages using machine learning. *SleepVigil*, *4*, 145–152.
- Kulkarni, N. (2019). EEG Signal Analysis for Mild Alzheimer's Disease Diagnosis by Means of Spectral-and Complexity-Based Features and Machine Learning Techniques. In *Proceedings of the 2nd International Conference on Data Engineering and Communication Technology* (pp. 395–403).
- Fiscon, G., Weitschek, E., Felici, G., Bertolazzi, P., De Salvo, S., Bramanti, P., & De Cola, M. C. (2014). Alzheimer's disease patients classification through EEG signals processing. In *Proceedings of the 2014 IEEE Symposium on Computational Intelligence and Data Mining (CIDM)* (pp. 105–112).
- Chang, V. C. Y., & Chen, I.-F. (2023). Translation directionality and the Inhibitory Control Model: A machine learning approach to an eye-tracking study. *Frontiers in Psychology, 14*. https://doi.org/10.3389/fpsyg.2023.1196910
- Martínez-González, E. A., Alba, A., Arce-Santana, E., et al. (2023). A novel system for the automatic reconstruction of visual field based on eye tracking and machine learning. *Multimedia Tools and Applications*, 82, 27193–27215. https://doi.org/10.1007/s11042-023-14464-4
- Brien, D. C., Riek, H. C., Yep, R., Huang, J., Coe, B., Areshenkoff, C., Grimes, D., Jog, M., Lang, A., Marras, C., Masellis, M., McLaughlin, P., Peltsch, A., Roberts, A., Tan, B., Beaton, D., Lou, W., & Swartz, R. (2023). Classification and staging of Parkinson's disease using video-based eye tracking. *Parkinsonism & Related Disorders*, 110.

# https://doi.org/10.1016/j.parkreldis.2023.105316

- Vajs, I. A., Kvaščev, G. S., Papić, T. M., & Janković, M. M. (2023). Eye-Tracking Image Encoding: Autoencoders for the Crossing of Language Boundaries in Developmental Dyslexia Detection. *IEEE Access, 11*, 3024-3033. https://doi.org/10.1109/ACCESS.2023.3234438
- Vajs, I., Papić, T., Ković, V., Savić, A. M., & Janković, M. M. (2023). Accessible Dyslexia Detection with Real-Time Reading Feedback through Robust Interpretable Eye-Tracking Features. *Brain Sciences*, *13*(4), 405. https://doi.org/10.3390/brainsci13030405
- Ruiz de Miras, J., Ibáñez-Molina, A. J., Soriano, M. F., & Iglesias-Parro, S. (2023). Schizophrenia classification using machine learning on resting state EEG signal. *Biomedical Signal Processing and Control*, 79(Part 2). https://doi.org/10.1016/j.bspc.2022.104233
- Hassan, F., Hussain, S. F., & Qaisar, S. M. (2023). Fusion of multivariate EEG signals for schizophrenia detection using CNN and machine learning techniques. *Information Fusion*, 92, 466-478. https://doi.org/10.1016/j.inffus.2022.12.019
- Fouad, I. A., & Labib, F. E. M. (2023). Identification of Alzheimer's disease from central lobe EEG signals utilizing machine learning and residual neural network. *Biomedical Signal Processing and Control*, 86(Part B). https://doi.org/10.1016/j.bspc.2023.105266
- Karpov, O. E., Afinogenov, S., Grubov, V. V., et al. (2023). Detecting epileptic seizures using machine learning and interpretable features of human EEG. *European Physical Journal Special Topics*, 232, 673–682. https://doi.org/10.1140/epjs/s11734-022-00714-3
- Ahire, N., Awale, R. N., & Wagh, A. (2023). Electroencephalogram (EEG) based prediction of attention deficit hyperactivity disorder (ADHD) using machine learning. *Applied Neuropsychology: Adult.* https://doi.org/10.1080/23279095.2023.2247702
- Kaushik, P., Yang, H., Roy, P. P., et al. (2023). Comparing resting state and task-based EEG using machine learning to predict vulnerability to depression in a non-clinical population. *Scientific Reports*, 13, 7467. https://doi.org/10.1038/s41598-023-34298-2
- Escobar-Ipuz, F. A., Torres, A. M., García-Jiménez, M. A., Basar, C., Cascón, J., & Mateo, J. (2023). Prediction of patients with idiopathic generalized epilepsy from healthy controls using machine learning from scalp EEG recordings. *Brain Research*, *1798*. https://doi.org/10.1016/j.brainres.2022.148131
- Skaramagkas, V., Ktistakis, E., Manousos, D., et al. (2023). eSEE-d: Emotional State Estimation Based on Eye-Tracking Dataset. *Brain Sciences*, *13*(4), 589. https://doi.org/10.3390/brainsci13040589
- Nandini, D., Yadav, J., Rani, A., & Singh, V. (2023). Design of subject independent 3D VAD emotion detection system using EEG signals and machine learning algorithms. *Biomedical Signal Processing and Control*, 85. https://doi.org/10.1016/j.bspc.2023.104894
- Abdel-Hamid, L. (2023). An Efficient Machine Learning-Based Emotional Valence Recognition Approach Towards Wearable EEG. *Sensors*, *23*(3), 1255. https://doi.org/10.3390/s23031255

- Gorji, H. T., Wilson, N., VanBree, J., et al. (2023). Feasibility of Combining Machine Learning and Electroencephalography (EEG) for Assessing Working Memory Capacity. *Frontiers in Neuroscience*, 17. https://doi.org/10.3389/fnins.2023.765277
- Collins, A., Pillai, P., Balasingam, B., & Jaekel, A. (2023). Machine Learning Technique for Data Fusion and Cognitive Load Classification Using an Eye Tracker. In K. Daimi & A. Al Sadoon (Eds.), *Proceedings of the 2023 International Conference on Advances in Computing Research (ACR'23)* (pp. 700). Springer. https://doi.org/10.1007/978-3-031-33743-7-7
- Deane, O., Toth, E., & Yeo, S. H. (2023). Deep-SAGA: a deep-learning-based system for automatic gaze annotation from eye-tracking data. *Behavior Research*, *55*, 1372–1391. <a href="https://doi.org/10.3758/s13428-022-01833-4">https://doi.org/10.3758/s13428-022-01833-4</a>
- Mikalef, P., Sharma, K., Chatterjee, S., Chaudhuri, R., Parida, V., & Gupta, S. (2023). All eyes on me: Predicting consumer intentions on social commerce platforms using eye-tracking data and ensemble learning. *Decision Support Systems*, 175. https://doi.org/10.1016/j.dss.2023.114039
- Fouad, I. A. (2023). A robust and efficient EEG-based drowsiness detection system using different machine learning algorithms. *Ain Shams Engineering Journal*, *14*(3). <a href="https://doi.org/10.1016/j.asej.2022.101895">https://doi.org/10.1016/j.asej.2022.101895</a>
- Chang, V. C. Y., & Chen, I.-F. (2023). Translation directionality and the Inhibitory Control Model: a machine learning approach to an eye-tracking study. *Frontiers in Psychology, 14*. https://doi.org/10.3389/fpsyg.2023.1196910
- Martínez-González, E. A., Alba, A., Arce-Santana, E., et al. (2023). A novel system for the automatic reconstruction of visual field based on eye tracking and machine learning. *Multimed Tools Appl, 82*, 27193–27215.

https://doi.org/10.1007/s11042-023-14464-4

- Piazzalunga, C., Dui, L.G., Termine, C., Bortolozzo, M., Matteucci, M., & Ferrante, S. (2023). Investigating Visual Perception Impairments through Serious Games and Eye Tracking to Anticipate Handwriting Difficulties. *Sensors*, 23(4), 1765. <a href="https://doi.org/10.3390/s23041765">https://doi.org/10.3390/s23041765</a>
- Hollenstein, N., Tröndle, M., Plomecka, M., Kiegeland, S., Özyurt Yilmazcan, Jäger, L. A., & Langer, N. (2023). The ZuCo benchmark on cross-subject reading task classification with EEG and eye-tracking data. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.1028824
- Jiang, H., Hou, Y., Miao, H., Ye, H., Gao, M., Li, X., Jin, R., & Liu, J. (2023). Eye tracking based deep learning analysis for the early detection of diabetic retinopathy: A pilot study. *Biomedical Signal Processing and Control*, 84. <a href="https://doi.org/10.1016/j.bspc.2023.104830">https://doi.org/10.1016/j.bspc.2023.104830</a>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G., & Group P. (2009). Preferred reporting items for systematic reviews and metaanalyses: the PRISMA statement. *PLoS Medicine*, *6*(7), e1000097.

- Novák, J.Š., Masner, J., Benda, P., Šimek, P., & Merunka, V. (2023). Eye Tracking, Usability, and User Experience: A Systematic Review. International Journal of Human–Computer Interaction.
- Gil, A.M., Birdi, S., Kishibe, T., & Grantcharov, T.P. (2022). Eye Tracking Use in Surgical Research: A Systematic Review. *The Journal of Surgical Research*, 279, 774-787.
- Washington, P., & Wall, D.P. (2023). A Review of and Roadmap for Data Science and Machine Learning for the Neuropsychiatric Phenotype of Autism. *Annual Review of Biomedical Data Science*, 6, 211-228. <a href="https://doi.org/10.1146/annurev-biodatasci-020722-125454">https://doi.org/10.1146/annurev-biodatasci-020722-125454</a>
- S, V. (2023). Predicting Dyslexia with Machine Learning: A Comprehensive Review of Feature Selection, Algorithms, and Evaluation Metrics. Journal of Behavioral Data Science, 3(1), 70-83. <a href="https://doi.org/10.35566/jbds/v3n1/s">https://doi.org/10.35566/jbds/v3n1/s</a>
- Bhirud, N.S., Tataale, S., Randive, S., & Nahar, S. (2019). A Literature Review on Chatbots in Healthcare Domain. *International Journal of Scientific & Technology Research*, 8, 225-231.
- Haque, M.R., & Rubya, S. (2022). An Overview of Chatbot-Based Mobile Mental Health Apps: Insights From App Description and User Reviews. *JMIR mHealth and uHealth,* 11.
- Moradizeyveh, S., Tabassum, M., Liu, S., Newport, R.A., Beheshti, A., & Ieva, A.D. (2024). When Eye-Tracking Meets Machine Learning: A Systematic Review on Applications in Medical Image Analysis. *ArXiv*, *abs/2403.07834*.
- Dosovitskiy, L., Beyer, A., Kolesnikov, D., Weissenborn, X., Zhai, T., Unterthiner, M., ... Gelly, S. (2020). An image is worth 16x16 words: Transformers for image recognition at scale. *arXiv preprint arXiv:2010.11929*.
- Wang, C., Zhang, D., & Ge, R. (2023). Eye-Guided Dual-Path Network for Multi-organ Segmentation of Abdomen. *International Conference on Medical Image Computing and Computer-Assisted Intervention*.