



DAFTAR PUSTAKA

- Abbasi, M., Mamdoohi, A. R., Sierpiński, G., & Ciari, F., 2023, Usage Intention of Shared Autonomous Vehicles with Dynamic Ride Sharing on Long-Distance Trips. *Sustainability*, 15(2), 1649. <https://doi.org/10.3390/su15021649>
- Agrawal, S., & Peeta, S., 2021, Evaluating the Impacts of Situational Awareness and Mental Stress on Takeover Performance Under Conditional Automation. *Transportation Research Part F: Traffic Psychology and Behaviour*, 83, 210–225. <https://doi.org/10.1016/j.trf.2021.10.002>
- American Automobile Association, 2020, *Self-Driving Cars Stuck In Neutral On The Road To Acceptance*. <https://newsroom.aaa.com/2020/03/self-driving-cars-stuck-in-neutral-on-the-road-toacceptance/>
- Bailey, B. P., & Iqbal, S. T., 2008, Understanding Changes in Mental Workload During Execution of Goal-Directed Tasks and Its Application for Interruption Management. *ACM Transactions on Computer-Human Interaction*, 14(4), 1–28. <https://doi.org/10.1145/1314683.1314689>
- Balfe, N., Sharples, S., & Wilson, J. R., 2015, Impact of automation: Measurement of performance, workload and behaviour in a complex control environment. *Applied Ergonomics*, 47, 52–64. <https://doi.org/10.1016/j.apergo.2014.08.002>
- Bansal, P., & Kockelman, K. M., 2017, Forecasting Americans' Long-Term Adoption of Connected and Autonomous Vehicle Technologies. *Transportation Research Part A: Policy and Practice*, 95, 49–63. <https://doi.org/10.1016/j.tra.2016.10.013>
- Bansal, P., Kockelman, K. M., & Singh, A., 2016, Assessing Public Opinions of and Interest in New Vehicle Technologies: An Austin Perspective. *Transportation Research Part C: Emerging Technologies*, 67, 1–14. <https://doi.org/10.1016/j.trc.2016.01.019>
- Beller, J., Heesen, M., & Vollrath, M., 2013, Improving the Driver–Automation Interaction: An Approach Using Automation Uncertainty. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 55(6), 1130–1141. <https://doi.org/10.1177/0018720813482327>
- Blanca, M. J., Arnau, J., García-Castro, F. J., Alarcón, R., & Bono, R., 2023, Non-normal Data in Repeated Measures ANOVA: Impact on Type I Error and Power. *Psicothema*, 35.1, 21–29. <https://doi.org/10.7334/psicothema2022.292>
- Boff, K. R., Kaufman, L., & Thomas, J. P., 1994, *Workload Assessment Methodology: Vol. II*. Wiley-Interscience.
- Chen, W., Sawaragi, T., & Horiguchi, Y., 2019, Measurement of Driver's Mental Workload in Partial Autonomous Driving. *IFAC-PapersOnLine*, 52(19), 347–352. <https://doi.org/10.1016/j.ifacol.2019.12.083>
- Choi, J. K., & Ji, Y. G., 2015, Investigating the Importance of Trust on Adopting an Autonomous Vehicle. *International Journal of Human-Computer*



- Interaction*, 31(10), 692–702.
<https://doi.org/10.1080/10447318.2015.1070549>
- Cui, J., Liew, L. S., Sabaliauskaite, G., & Zhou, F., 2019, A Review on Safety Failures, Security Attacks, and Available Countermeasures for Autonomous Vehicles. *Ad Hoc Networks*, 90, 101823.
<https://doi.org/10.1016/j.adhoc.2018.12.006>
- Daziano, R. A., Sarrias, M., & Leard, B., 2017, Are Consumers Willing to Pay to Let Cars Drive for Them?: Analyzing Response to Autonomous Vehicles. *RFF DP 16- 35-REV*.
- de Winter, J. C. F., Happee, R., Martens, M. H., & Stanton, N. A., 2014, Effects of Adaptive Cruise Control and Highly Automated Driving on Workload and Situation Awareness: A Review of the Empirical Evidence. *Transportation Research Part F: Traffic Psychology and Behaviour*, 27, 196–217.
<https://doi.org/10.1016/j.trf.2014.06.016>
- Desai, M., Medvedev, M., Vázquez, M., McSheehy, S., Gadea-Omelchenko, S., Bruggeman, C., Steinfeld, A., & Yanco, H., 2012, Effects of Changing Reliability on Trust of Robot Systems. *Proceedings of the Seventh Annual ACM/IEEE International Conference on Human-Robot Interaction - HRI '12*, 73. <https://doi.org/10.1145/2157689.2157702>
- Dikmen, M., & Burns, C. M., 2016, Autonomous Driving in the Real World: Experiences with Tesla Autopilot and Summon. *Proceedings of the 8th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*, 225–228. <https://doi.org/10.1145/3003715.3005465>
- Dixit, V. V., Chand, S., & Nair, D. J., 2016, Autonomous Vehicles: Disengagements, Accidents and Reaction Times. *PLOS ONE*, 11(12), e0168054. <https://doi.org/10.1371/journal.pone.0168054>
- Endsley, M.R., Esin O. Kiris, 1995, The Out-of-the-Loop Performance Problem and Level of Control in Automation, *Human Factors: The Journal of Human Factors and Ergonomics Society*.
- Endsley, M. R., 1995, Toward a Theory of Situation Awareness in Dynamic Systems. *Human Factors*, 37(1), 32–64.
- Endsley, M. R., 2021, A Systematic Review and Meta-Analysis of Direct Objective Measures of Situation Awareness: A Comparison of SAGAT and SPAM. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 63(1), 124–150. <https://doi.org/10.1177/0018720819875376>
- Favarò, F., Eurich, S., & Nader, N., 2018, Autonomous Vehicles' Disengagements: Trends, Triggers, and Regulatory Limitations. *Accident Analysis & Prevention*, 110, 136–148. <https://doi.org/10.1016/j.aap.2017.11.001>
- Feipeng, W., Yan, F. L., & Diana, F. A., 2022, Reliability assessment of autonomous vehicles based on the safety control structure. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*. <https://doi.org/10.1177/1748006X211069705>
- Fouladinejad, N., Fouladinejad, N., Abd Jalil, M. K., & Taib, J. M., 2011, Modelling Virtual Driving Environment for a Driving Simulator. *2011 IEEE International Conference on Control System, Computing and Engineering*, 27–32. <https://doi.org/10.1109/ICCSCE.2011.6190490>



- Gupta, R., 2023, Fault Tree Analysis of the Reliability of Electric Vehicles in India. *Journal of Applied Mathematics and Physics*, 11(07), 1930–1944. <https://doi.org/10.4236/jamp.2023.117125>
- Heikoop, D. D., de Winter, J. C. F., van Arem, B., & Stanton, N. A., 2019, Acclimatizing to Automation: Driver Workload and Stress During Partially Automated Car Following in Real Traffic. *Transportation Research Part F: Traffic Psychology and Behaviour*, 65, 503–517. <https://doi.org/10.1016/j.trf.2019.07.024>
- Hoff, K. A., & Bashir, M., 2015, Trust in Automation: Integrating Empirical Evidence on Factors That Influence Trust. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 57(3), 407–434. <https://doi.org/10.1177/0018720814547570>
- Ilková, V., & Ilka, A., 2017, Legal Aspects of Autonomous Vehicles – an Overview. *International Conference on Process Control (PC)*, 428–433.
- Jiang, X., Yu, W., Li, W., Guo, J., Chen, X., Guo, H., Wang, W., & Chen, T., 2021, Factors Affecting the Acceptance and Willingness-to-Pay of End-Users: A Survey Analysis on Automated Vehicles. *Sustainability*, 13(23), 13272. <https://doi.org/10.3390/su132313272>
- Kalesanwo, Awodele, Eze, & Kuyoro, 2020, Reliability Assessment of Autonomous Systems: A Systematic Review. *International Journal of Computer Trends and Technology*, 68(3), 48–52. <https://doi.org/10.14445/22312803/IJCTT-V68I3P109>
- Kass, S. J., Cole, K. S., & Stanny, C. J., 2007, Effects of Distraction and Experience on Situation Awareness and Simulated Driving. *Transportation Research Part F: Traffic Psychology and Behaviour*, 10(4), 321–329. <https://doi.org/10.1016/j.trf.2006.12.002>
- Kohn, S. C., de Visser, E. J., Wiese, E., Lee, Y.-C., & Shaw, T. H., 2021, Measurement of Trust in Automation: A Narrative Review and Reference Guide. *Frontiers in Psychology*, 12, 604977. <https://doi.org/10.3389/fpsyg.2021.604977>
- Körber, M., 2018, Theoretical Considerations and Development of a Questionnaire to Measure Trust in Automation. *Proceedings 20th Triennial Congress of the IEA*. Springer. <https://doi.org/10.31234/osf.io/nfc45>
- Körber, M., Baseler, E., & Bengler, K., 2018, Introduction Matters: Manipulating Trust in Automation and Reliance in Automated Driving. *Applied Ergonomics*, 66, 18–31. <https://doi.org/10.1016/j.apergo.2017.07.006>
- Kyriakidis, M., Happee, R., & de Winter, J. C. F., 2015, Public Opinion on Automated Driving: Results of an International Questionnaire Among 5,000 Respondents. *Transportation Research Part F: Traffic Psychology and Behaviour*, 32, 127–140.
- Lanctot, R., 2017, Accelerating the Future: The Economic Impact of the Emerging Passenger Economy. *Strategy Analytics*.
- Langan-Fox, J., Sankey, M. J., & Canty, J. M., 2009, Human Factors Measurement for Future Air Traffic Control Systems. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 51(5), 595–637. <https://doi.org/10.1177/0018720809355278>



- Lee, J., Abe, G., Sato, K., & Itoh, M., 2021, Developing Human-Machine Trust: Impacts of Prior Instruction and Automation Failure on Driver Trust in Partially Automated Vehicles. *Transportation Research Part F: Traffic Psychology and Behaviour*, 81, 384–395. <https://doi.org/10.1016/j.trf.2021.06.013>
- Lee, J. D., & See, K. A., 2004, Trust in Automation: Designing for Appropriate Reliance. *Human Factors*, 46, 50–80.
- Li, X., & Sun, J.-Q., 2017, Defensive Driving Strategy for Autonomous Ground Vehicle in Mixed Traffic. *The Interdisciplinary Journal of Discontinuity, Nonlinearity and Complexity*, 6(1), 87–103. <https://doi.org/10.5890/DNC.2017.03.008>
- Litman, T., 2022, *Autonomous Vehicle Implementation Predictions: Implications for Transport Planning*. Victoria Transport Policy Institute. <https://www.vtpi.org/avip.pdf>
- Livia, A., 2019, *Analisis Pengaruh Kesesuaian Gaya Mengemudi Automated Vehicle Dan Pengemudi Terhadap Tingkat Penerimaan Teknologi*. Universitas Gadjah Mada.
- Lu, Y., Yi, B., Song, X., Zhao, S., Wang, J., & Cao, H., 2022, Can We Adapt to Highly Automated Vehicles as Passengers? The Mediating Effect of Trust and Situational Awareness on Role Adaption Moderated by Automated Driving Style. *Transportation Research Part F: Traffic Psychology and Behaviour*, 90, 269–286. <https://doi.org/10.1016/j.trf.2022.08.011>
- Ma, Z., & Zhang, Y., 2021, Driver's trust, acceptance, and takeover behaviors in fully automated vehicles: Effects of automated driving styles and driver's driving styles. *Accident Analysis & Prevention*, 159, 106238. <https://doi.org/10.1016/j.aap.2021.106238>
- MBUSA, 2023, *Mercedes-Benz world's first automotive company to certify SAE Level 3 system for U.S. market*. <https://media.mbusa.com/releases/mercedes-benz-worlds-first-automotive-company-to-certify-sae-level-3-system-for-us-market>
- Miller, D., Sun, A., & Ju, W., 2014, Situation Awareness with Different Levels of Automation. *2014 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, 688–693. <https://doi.org/10.1109/SMC.2014.6973989>
- Othman, K., 2021, *Public acceptance and perception of autonomous vehicles: A comprehensive review*. <https://link.springer.com/article/10.1007/s43681-021-00041-8>
- Pai, G., Widrow, S., Radadiya, J., Fitzpatrick, C. D., Knodler, M., & Pradhan, A. K., 2020, A Wizard-of-Oz Experimental Approach to Study the Human Factors of Automated Vehicles: Platform and Methods Evaluation. *Traffic Injury Prevention*, 21(sup1), S140–S144. <https://doi.org/10.1080/15389588.2020.1810243>
- Payre, W., Cestac, J., & Delhomme, P., 2014, Intention to Use a Fully Automated Car: Attitudes and a Priori Acceptability. *Transportation Research Part F: Traffic Psychology and Behaviour*, 27, 252–263. <https://doi.org/10.1016/j.trf.2014.04.009>



- Petersen, L., Robert, L., Yang, X. J., & Tilbury, D. M., 2019, Situational Awareness, Driver's Trust in Automated Driving Systems and Secondary Task Performance. *SAE International Journal of Connected and Autonomous Vehicles*, 26.
- Raats, K., Fors, V., & Pink, S., 2020, Trusting Autonomous Vehicles: An Interdisciplinary Approach. *Transportation Research Interdisciplinary Perspectives*, 7, 100201. <https://doi.org/10.1016/j.trip.2020.100201>
- Rahmayani, A. A., 2018, *Perbandingan Antara Pengukuran Online Dan Freeze Probing Pada Pengukuran Situational Awareness (SA) Pengemudi Menggunakan Metode Quantitative Analysis of Situational Awareness (QUASA)*. Universitas Gadjah Mada.
- Raza, M., 2018, Autonomous Vehicles: Levels, Technologies, Impacts and Concerns. *International Journal of Applied Engineering Research*, 13(16), 12710–12714.
- Rezaei, A., & Caulfield, B., 2020, Examining Public Acceptance of Autonomous Mobility. *Travel Behaviour and Society*, 21, 235–246. <https://doi.org/10.1016/j.tbs.2020.07.002>
- Robertson, I. W. T., 2021, *Development and Initial Validation of the Trust in Self-Driving Vehicles Scale (TSDV)*. Rica University.
- Ross, J. M., Szalma, J. L., Hancock, P. A., Barnett, J. S., & Taylor, G., 2008, The Effect of Automation Reliability on User Automation Trust and Reliance in a Search-and-Rescue Scenario. *Proceedings of the Human Factors and Ergonomics Society 52nd Annual Meeting*. <https://doi.org/10.1518/107118108X353444>
- Russell, S. P., Kim-Phuong, L. V., Jimmy, N., & Thomas, Z. S., 2008, The Relationship Between SPAM, Workload, and Task Performance on a Simulated ATC Task. *Proceedings of the Human Factors and Ergonomics Society 52nd Annual Meeting*.
- SAE International, 2021, SAE Levels of Driving Automation™ Refined for Clarity and International Audience. *SAE Blog*. <https://www.sae.org/blog/sae-j3016-update14>
- Salmon, P., Stanton, N., Walker, G., & Green, D., 2006, Situation Awareness Measurement: A Review of Applicability for C4i Environments. *Applied Ergonomics*, 37(2), 225–238. <https://doi.org/10.1016/j.apergo.2005.02.001>
- Schwarz, C., Gaspar, J., & Brown, T., 2019, The Effect of Reliability on Drivers' Trust and Behavior in Conditional Automation. *Cognition, Technology & Work*, 21(1), 41–54. <https://doi.org/10.1007/s10111-018-0522-y>
- Seet, M., Harvy, J., Bose, R., Dragomir, A., Bezerianos, A., & Thakor, N., 2022, Differential Impact of Autonomous Vehicle Malfunctions on Human Trust. *IEEE Transactions on Intelligent Transportation Systems*, 23(1), 548–557. <https://doi.org/10.1109/TITS.2020.3013278>
- Sogatama, E. D., & Hartono, B., 2018, *Analisis Pengaruh Perbedaan Level Otomasi Autonomous Vehicle Terhadap Kondisi Emosi Dan Aktivitas Otak Pengemudi* [Universitas Gadjah Mada]. <http://etd.repository.ugm.ac.id/penelitian/detail/181103>



- Souka, M., Böger, D., Decker, R., Stummer, C., & Wiemann, A., 2020, Is More Automation Always Better? An Empirical Study of Customers' Willingness to Use Autonomous Vehicle Functions. *Int. J. Automotive Technology and Management*, 20(1).
- Stapel, J., Mullakkal-Babu, F. A., & Happee, R., 2017, *Driver Behavior and Workload in an On-road Automated Vehicle*.
- Statista, 2022, *Expected Arrival of Commercially Operational Autonomous Vehicles (AVs) in Indonesia as of July 2021*. Statista Research Department. <https://www.statista.com/statistics/1290236/indonesia-expected-arrival-of-commercially-operational-autonomous-vehicles/>
- Thapa, D., Gabrhele, V., & Mishra, S., 2021, What Are the Factors Determining User Intentions to Use Av While Impaired? *Transportation Research Part F: Traffic Psychology and Behaviour*, 82, 238–255. <https://doi.org/10.1016/j.trf.2021.08.008>
- Thomas, A., 2016, *Design Principles of Post-Autonomous Vehicles*. FORMForum 2016.
- Topolšek, D., Babić, D., Babić, D., & Cvahtě Ojsteršek, T., 2020, Factors Influencing the Purchase Intention of Autonomous Cars. *Sustainability*, 12(24), 10303. <https://doi.org/10.3390/su122410303>
- Wakabayashi, D., 2018, Self-Driving Uber Car Kills Pedestrian in Arizona, Where Robots Roam. *The New York Times*. <https://www.nytimes.com/2018/03/19/technology/uber-driverless-fatality.html>
- Wang, J., Zhang, L., Huang, Y., Zhao, J., & Bella, F., 2020, Safety of Autonomous Vehicles. *Journal of Advanced Transportation*, 2020, 1–13. <https://doi.org/10.1155/2020/8867757>
- Weigl, K., Eisele, D., & Riener, A., 2022, Estimated Years Until the Acceptance and Adoption of Automated Vehicles and the Willingness to Pay for Them in Germany: Focus on Age and Gender. *International Journal of Transportation Science and Technology*, 11(2), 216–228. <https://doi.org/10.1016/j.ijtst.2022.03.006>
- Wickens, C. D., Gempler, K., & Morphew, M. E., 2000, Workload and Reliability of Predictor Displays in Aircraft Traffic Avoidance. *Transportation Human Factors*, 2(2), 99–126. https://doi.org/10.1207/STHF0202_01
- Wogalter, M. S., & Laughery, K. R., 2006, Warnings and hazard communications. In *Handbook of Human Factors/Ergonomics* (3rd ed., pp. 889–911). Wiley.
- Wohleber, R. W., Calhoun, G. L., Funke, G. J., Ruff, H., Chiu, C.-Y. P., Lin, J., & Matthews, G., 2016, The Impact of Automation Reliability and Operator Fatigue on Performance and Reliance. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 60(1), 211–215. <https://doi.org/10.1177/1541931213601047>
- Xu, W., 2021, From Automation to Autonomy and Autonomous Vehicles, Challenges and Opportunities for Human-Computer Interaction. *Interactions: Intel Corporation*, 49–53.
- Yoo, S., Kumagai, J., Kawabata, Y., Keeley, A., & Shunsuke, M., 2021, Willingness to Buy and/or Pay Disparity: Evidence from Fully Autonomous



UNIVERSITAS
GADJAH MADA

**ANALISIS PENGARUH PERBEDAAN LEVEL OTOMASI DAN JENIS PESAN ERROR PADA
AUTONOMOUS VEHICLE TERHADAP
PENGEMUDI MENURUT PERSPEKTIF ERGONOMI**

Yassii Pemula Gusfi, r.Fitri Trapsilawati, S.T., Ph.D., IPM. ASEAN.Eng.

Universitas Gadjah Mada, 2023 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Vehicles. *Munich Personal RePEc Archive*. <https://mpra.ub.uni-muenchen.de/108882/>

Yoo, S., & Managi, S., 2021, To Fully Automate or Not? Investigating Demands and Willingness to Pay for Autonomous Vehicles Based on Automation Levels. *IATSS Research*, 45(4), 459–468. <https://doi.org/10.1016/j.iatssr.2021.11.002>

Zang, J., & Jeon, M., 2022, The Effects of Transparency and Reliability of In-Vehicle Intelligent Agents on Driver Perception, Takeover Performance, Workload and Situation Awareness in Conditionally Automated Vehicles. *Multimodal Technologies and Interaction*, 6(9), 82. <https://doi.org/10.3390/mti6090082>

Zhang, T., Tao, D., Qu, X., Zhang, X., Lin, R., & Zhang, W., 2019, The Roles of Initial Trust and Perceived Risk in Public's Acceptance of Automated Vehicles. *Transportation Research Part C: Emerging Technologies*, 98, 207–220. <https://doi.org/10.1016/j.trc.2018.11.018>