

## DAFTAR PUSTAKA

- Afifi, A., May, S., Donatello, R., and Clark, V., 2020, *Practical Multivariate Analysis*, 6<sup>th</sup> ed, CRC Press, Boca Raton.
- Akhtar, M.J., and Utne, I.B., 2014, Human Fatigue's Effect on The Risk of Maritime Groundings—A Bayesian Network Modeling Approach, *Safety Science*, Vol.62, pp.427–440.
- Alonso, F., Esteban, C., Useche, S., and López de Cózar, E., 2016, Prevalence of Physical and Mental Fatigue Symptoms on Spanish Drivers and Its Incidence on Driving Safety. *Advances in Psychology and Neuroscience*, Vol.1, pp.10-18.
- Antony, J., 2014, *Design Of Experiments For Engineers And Scientists*, 2<sup>nd</sup> ed., Elsevier, Amsterdam.
- Bacon, L.P. and Strybel, T.Z., 2013, Assessment of the validity and intrusiveness of online-probe questions for situation awareness in a simulated air-traffic-management task with student air-traffic controllers, *Safety Science*, Vol.56, pp.89–95.
- Balk, S., Moore, K., Steele, J., Spearman, W. and Duchowski, A., 2010, Mobile phone use in a driving simulation task: Differences in eye movements, *Journal of Vision*, Vol.6, No.6, pp.872-872.
- Bongo, M. and Seva, R., 2021, Effect of Fatigue in Air Traffic Controllers' Workload, Situation Awareness, and Control Strategy, *The International Journal of Aerospace Psychology*, pp.1-24.
- Bye, R. J. and Aalberg, A. L., 2018, Maritime Navigation Accidents and Risk Indicators: An Exploratory Statistical Analysis using AIS Data and Accident Reports, *Reliability Engineering & System Safety*, Vol.176, pp.174–186.
- Charbonnier, S., Roy, R.N., Bonnet, S., and Campagne, A., 2016, EEG Index for Control Operators' Mental Fatigue Monitoring using Interactions Between Brain Regions, *Expert Syst. Appl.*, Vol.52, pp.91–98.
- Christodoulou, C., 2005, The Assessment And Measurement Of Fatigue in J. DeLuca (Ed.), *Fatigue as a Window to the Brain*, pp.19–35.
- Clemotte, A., Velasco, M., Torricelli, D., Raya, R., and Ceres, R., 2014, Accuracy and precision of the Tobii x2-30 eye-tracking under non ideal conditions, *Eye*, Vol.16, No.3, pp.2.
- DeLuca, J., 2005, *Fatigue as a Window to the Brain*, SNP Best-set Typesetter Ltd., Hong Kong.
- Durakovic, B., 2017, Design of Experiments Application, Concepts, Examples: State of The Art, *Periodicals of Engineering and Natural Sciences*, Vol.5, No.3.
- Durso, F.T., Hackworth, C.A., Truitt, T.R., Crutchfeld, J., Nikolic, D., and Manning CA., 1998, Situation awareness as a predictor of performance for en route air traffic controllers, *Air Traffic Control*, Vol.6, pp.1–20

- Endsley, M.R., 1989, A Methodology for The Objective Measurement of Pilot Situation Awareness, *AGARD Symposium on Situation Awareness in Aerospace Operations*, Copenhagen.
- Endsley, M.R., 1990a, Predictive Utility of An Objective Measure of Situation Awareness, *Proceedings of the Human Factors Society 34th Annual Meeting*, Santa Monica.
- Endsley, M.R., 1990b, *Situation Awareness in Dynamic Human Decision Making: Theory and Measurement*, Northrop Corporation, Hawthorne.
- Endsley, MR., 1995, Towards a Theory of Situation Awareness in Dynamic Systems, *Human Factors*, Vol.37, No.1, pp.32-64.
- Endsley, M.R., & Smolensky, M.W., 1998, Situation awareness in air traffic control: The picture. In M. W. Smolensky & E. S. Stein (Eds.), *Human factors in air traffic control*, Academic Press, pp. 115–154.
- Friedrich, M., Biermann, M., Gontar, P., Biella, M. and Bengler, K., 2018, The Influence of Task Load on Situation Awareness and Control Strategy in The ATC Tower Environment, *Cognition, Technology & Work*, Vol.20, No.2, pp.205-217.
- Fu, S., Zhuang, H., Zhang, C., and Xi, Y., 2021, A Preliminary Mapping Network Model for Unsafe Acts in Maritime Accidents, *IOP Conference Series: Materials Science and Engineering*, Vol.1043, No.5.
- Funke, G., Greenlee, E., Carter, M., Dukes, A., Brown, R., and Menke, L., 2016, Which eye tracker is right for your research? performance evaluation of several cost variant eye trackers, *In Proceedings of the Human Factors and Ergonomics Society annual meeting*, Los Angeles: SAGE Publications Sage CA, Vol. 60, pp. 1240–1244.
- Gawron, V.J., 2008, *Human Performance, Workload, and SA Measures Handbook*, 2<sup>nd</sup> ed., Taylor & Francis Group, United States of America.
- Gegenfurtner, A., Lehtinen, E., Säljö, R., 2011, Expertise Differences in The Comprehension of Visualizations: A Meta-Analysis of Eye-Tracking Research in Professional Domains, *Educ. Psychol. Rv*, Vol.23, pp.523–552.
- Hauland, G., 2008, Measuring Individual and Team Situation Awareness During Planning Tasks in Training of En Route Air Traffic Control, *THE INTERNATIONAL JOURNAL OF AVIATION PSYCHOLOGY*, Vol.18, No.3, pp.290-304.
- Hachard, B., Noé, F., Ceyte, H., Trajin, B., and Paillard, T., 2020, Balance Control is Impaired by Mental Fatigue due to The Fulfilment of as Continuous Cognitive Task or by The Watching of a Documentary, *Experimental Brain Research*.
- Hasanzadeh, S., Esmaeili, B., and Dodd, M.D., 2018, Examining The Relationship Between Construction Workers' Visual Attention and Situation Awareness Under Fall and Tripping Hazard Conditions: Using Mobile Eye Tracking, *Journal of Construction Engineering and Management*, Vol.144.
- Herlambang, M., Taatgen, N., and Clossen, F., 2019, The Role of Motivation as a Factor in Mental Fatigue, *Human Factors: The Journal of the Human Factors and Ergonomics Society*, Vol.61, No.7, pp.1171-1185.

- Holmqvist, K., 2015, *Eye Tracking: A Comprehensive Guide to Methods and Measures*. Oxford: Oxford Univ. Press.
- Horstmann, G., Becker, S., and Ernst, D., 2017, Dwelling, rescanning, and skipping of distractors explain search efficiency in difficult search better than guidance by the target, *Visual Cognition*, Vol.25, No.1-3, pp.291-305.
- Hyun, S., Kim, K., Song, S., Yoon, J., Lee, J., Cho, S. and Sohn, Y., 2006, Effects of Expertise and Situation Complexity on Visual Attention and Action Planning for Air Traffic Control, *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Vol.50, No.3, pp.420-423.
- Jacquet, T., Lepers, R., Poulin-Charronnat, B., Bard, P., Pfister, P., and Pageaux, B., 2021, Mental Fatigue Induced by Prolonged Motor Imagery increases Perception of Effort and The Activity of Motor Areas, *Neuropsychologia*, Vol.150.
- Kotkowska, D., and Marcjan, K., 2021, Identification of Errors Committed by Vessel Traffic Service Operators, *Scientific Journals of Maritime University of Szczecin*, Vol.65, pp.137.
- Kum, S., Furusho, M., Duru, O., and Satir, T., 2007, Mental Workload of The VTS Operators by Utilising Heart Rate, *TransNav International Journal on Marine Navigation and Safety of Sea Transportation*, Vol.1, No.2, pp.145-151.
- Larrazabal, A., García Cena, C., and Martínez, C., 2019, Video-oculography eye tracking towards clinical applications: A review, *Computers in Biology and Medicine*, Vol.108, pp.57-66.
- Li, F., Chen, C., Lee, C., and Khoo, L., 2019a, A User Requirement-driven Approach Incorporating TRIZ and QFD for Designing a Smart Vessel Alarm System to Reduce Alarm Fatigue, *Journal of Navigation*, Vol.73, No.1, pp.212-232.
- Li, F., Lee, C., Chen, C., and Khoo, L., 2019b, Hybrid Data-Driven Vigilance Model in Traffic Control Center Using Eye-Tracking Data and Context Data, *Advanced Engineering Informatics*, Vol.42.
- Li, F., Chen, C., Xu, G., Chang, D., and Khoo, L., 2020a, Causal Factors and Symptoms of Task-Related Human Fatigue in Vessel Traffic Service: A Task-Driven Approach, *Journal of Navigation*, Vol.73, No.6, pp.1340-1357.
- Li, F., Chen, C., Xu, G., and Khoo, L., 2020b, Hierarchical Eye-Tracking Data Analytics for Human Fatigue Detection at a Traffic Control Center, *IEEE Transactions on Human-Machine Systems*, Vol.50, No.5, pp.465-474.
- Li, F., Chen, C., Zheng, P., Feng, S., Xu, G., and Khoo, L., 2020c, An Explorative Context-Aware Machine Learning Approach to Reducing Human Fatigue Risk of Traffic Control Operators, *Safety Science*, Vol.125.
- Li, J., Li, H., Wang, H., Umer, W., Fu, H. and Xing, X., 2019, Evaluating The Impact of Mental Fatigue on Construction Equipment Operators' Ability to Detect Hazards Using Wearable Eye-Tracking Technology, *Automation in Construction*, Vol.105.
- Liu, Y., Lan, Z., Tschoerner, B., Viridi, S., Cui, J., Li, F., Sourina, O., Zhang, D., Chai, D., and Muller-Wittig, W., 2020, Human Factors Assessment in VR-

- based Firefighting Training in Maritime: A Pilot Study, 2020 *International Conference on Cyberworlds (CW)*.
- Lounis, C., Peysakhovich, V. and Causse, M., 2021, Visual scanning strategies in the cockpit are modulated by pilots' expertise: A flight simulator study. *PLOS ONE*, Vol.16, No.2, p.e0247061.
- McMorris, T., Barwood, M., Hale, B., Dicks, M. and Corbett, J., 2018, Cognitive Fatigue Effects on Physical Performance: A Systematic Review and Meta-Analysis, *Physiology & Behavior*, Vol.188, pp.103-107.
- Merwe, K.V.D., Dijk, H.V., and Zon, R., 2012, Eye Movements as an Indicator of Situation Awareness in a Flight Simulator Experiment, *The International Journal of Aviation Psychology*, Vol.22, No.1, pp.78-95.
- Michalaki, P., Quddus, M. A., Pitfield, D. and Huetson, A., 2015, Exploring The Factors Affecting Motorway Accident Severity in England Using The Generalised Ordered Logistic Regression Model, *Journal of Safety Research*, Vol.55, pp.89-97.
- Morgante, J. D., Zolfaghari, R., and Johnson, S. P., 2012, A critical test of temporal and spatial accuracy of the Tobii t60xl eye tracker, *Infancy*, Vol.17, No.1, pp.9-32.
- Moore, K., & Gugerty, L., 2010, Development of a Novel Measure of Situation Awareness: The Case for Eye Movement Analysis, *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Vol.54, No.19.
- Nitzschner, M.M., Nagler, U.K.J.N., Rauthmann, J.F., Steger, A., and Furtner, M., 2015, The role of personality in advertising perception: an eye-tracking study, *Journal Psychologie des Alltagshandelns / Psychology of Everyday Activity*, Vol.8, No.1.
- Nguyen, T., Lim, C., Nguyen, N., Gordon-Brown, L. and Nahavandi, S., 2019, A Review of Situation Awareness Assessment Approaches in Aviation Environments, *IEEE Systems Journal*, Vol.13, No.3, pp.3590-3603.
- O'Keefe, K., Hodder, S. and Lloyd, A., 2019, A Comparison of Methods Used for Inducing Mental Fatigue in Performance Research: Individualised, Dual-Task And Short Duration Cognitive Tests are Most Effective, *Ergonomics*, Vol.63, No.1, pp.1-12.
- Paolo, F., Gianfranco, F., Luca, F., Marco, M., Andrea, M., Francesco, M., Vittorio, P., Mattia, P., and Patrizia, S., 2021, Investigating the Role of the Human Element in Maritime Accidents using Semi-Supervised Hierarchical Methods, *Transportation Research Procedia*, Vol.52, pp.252-259.
- Peissl, S. and Kallus, W., 2015, Attention, Performance and Cardiac Activity: A Flight Simulator Study, *Psychology of Everyday Activity*, No.8, pp.4-9.
- Peißl, S., Wickens, C., and Baruah, R., 2018, Eye-Tracking Measures in Aviation: A Selective Literature Review, *The International Journal of Aerospace Psychology*, Vol.28, No.3-4, pp.98-112.
- Peysakhovich, V., Lefrançois, O., Dehais, F. and Causse, M., 2018, The Neuroergonomics of Aircraft Cockpits: The Four Stages of Eye-Tracking Integration to Enhance Flight Safety, *Safety*, Vol.4, No.1, pp.8.
- Radüntz, T., Mühlhausen, T., Freyer, M., Fürstenau, N. and Meffert, B., 2020, Cardiovascular Biomarkers' Inherent Timescales in Mental Workload

- Assessment During Simulated Air Traffic Control Tasks, *Applied Psychophysiology and Biofeedback*, Vol.46, No.1, pp.43-59.
- Renata, V., Li, F., Lee, C.H. and Chen, C.H., 2018, Investigation on the Correlation Between Eye Movement and Reaction Time under Mental Fatigue Influence, *In Proceedings of the 17th Cyberworlds International Conference (CW)*.
- Salmon, P. M., Stanton, N. A., Walker, G. H., Jenkins, D., Ladva, D., Rafferty, L., and Young, M., 2009, Measuring Situation Awareness in complex systems: Comparison of measures study, *International Journal of Industrial Ergonomics*, Vol.39, No.3, pp.490–500.
- Singh, H. and Singh, J., 2012, Human Eye Tracking and Related Issues: A Review, *International Journal of Scientific and Research Publications*, Vol.2, No.9.
- Shi, X., Zhuang, H., and Xu, D., 2021, Structured Survey of Human Factor-Related Maritime Accident Research, *Ocean Engineering*, Vol.237.
- Smith, M., Chai, R., Nguyen, H., Marcora, S., and Coutts, A., 2019, Comparing the Effects of Three Cognitive Tasks on Indicators of Mental Fatigue, *The Journal of Psychology*, Vol.153, No.8, pp.759-783.
- Song B., Itoh H., Kawamura Y., and Fukuto, J., 2018, Analysis of Cognitive Processes of Operators of Vessel Traffic Service. *Proceedings of the 2018 International Association of Institutes of Navigation*.
- Song, B., Itoh, H., and Kawamura, Y., 2021, Development of Training Method for Vessel Traffic Service Based on Cognitive Process, *Cognition, Technology & Work*.
- Sullivan, J., Yang, J.H., Day, M., and Kennedy, Q., 2011, Training Simulation for Helicopter Navigation by Characterizing Visual Scan Patterns, *Aviat. Space Environ. Med*, Vol.82, pp.871–878.
- Terry, P.C., Lane, A.M., and Fogarty, G.J., 2003, Construct Validity of The Profile of Mood States-Adolescents for Use with Adults, *Psychology of Sport and Exercise*, Vol.4, No.2, pp.125–139.
- Wickens, C., Williams, A., Clegg, B., and Smith, C., 2019, Nautical Collision Avoidance, *Human Factors: The Journal of the Human Factors and Ergonomics Society*, Vol.62, No.8, pp.1304-1321.
- Wiersma, E. and Mastenbroek, N., 1998, Measurement of Vessel Traffic Service Operator Performance, *AI and Society*, Vol.12, No.1-2, pp.78-86.
- Wiersma, J.W.F., 2010, *Assessing Vessel Traffic Service Operator Situation Awareness*, *Doctoral dissertation*, TU Delft, Delft University of Technology, Delft, Netherlands.
- Xu, G., Chen, C., Li, F., and Qiu, X., 2020, AIS Data Analytics for Adaptive Rotating Shift in Vessel Traffic Service, *Industrial Management & Data Systems*, Vol.120, No.4, pp.749-767.
- Yoo, Y. and Lee, J.S., 2021, Collision Risk Assessment Support System for MASS RO and VTSO Support in Multi-Ship Environment of Vessel Traffic Service Area, *J. Mar. Sci. Eng*, Vol.9, pp.1143.
- Zhang, T., Yang, J., Liang, N., Pitts, B., Prakah-Asante, K., Curry, R., Duerstock, B., Wachs, J. and Yu, D., 2020, Physiological Measurements of Situation Awareness: A Systematic Review. *Human Factors: The Journal of the Human Factors and Ergonomics Society*.