

## Daftar Pustaka

- Abtahi, F. et al., 2017. *Association of Drivers' sleepiness with heart rate variability: A Pilot Study with Drivers on Real Roads*. Singapore, Springer, pp. 149-152.
- Adam, M., Retey, J., Khatami, R. & Landolt, H., 2006. Age-related changes in the time course of vigilant attention during 40hours without sleep in men. *Journal of Sleep*, 29(1), pp. 55-57.
- ADB-ASEAN, 2005. *Regional Road Safety Program: Indonesia*, s.l.: Association of Southeast Asian Nations.
- Akersted, T. & Gillberg, M., 1990. Subjective and Objective sleepiness in the active individual. *International Journal of Neuroscience*, pp. 29 - 37.
- Akerstedt, T. et al., 2010. Reaction of sleepiness indicators to partial sleep deprivation, time of day and time on task in a driving simulator- a DROWSI project. *Journal of Sleep Restriction*, Volume 19, pp. 298-309.
- Akerstedt, T., Peters, B., Anund, A. & Kecklund, G., 2005. Impaired alertness and performance driving home from the night shift: a driving simulator study. *Journal Sleep Restriction*, Volume 14, pp. 17-20.
- Alhola, P. & Polo-Kantola, P., 2007. Sleep deprivation: Impact on cognitive performance. *Neuropsychiatric disease and treatment*, 3(5), p. 553.
- Anund, A. et al., 2008. Driver impairment at night and its relation to physiological sleepiness. *Scand Journal of Work Environment and Health*, Volume 34, pp. 142-150.
- Ashcraft, M., 2002. Math anxiety: Personal, educational, and cognitive consequences. *Current Directions in Psychological Science*, Volume 11, pp. 181- 185.
- Barbato, G. et al., 2007. Increased sponaneous eye blink rate following prolonged wakefulness. *Physiology & Behaviour*, pp. 151-154.
- Barbato, G. et al., 2000. Diurnal variation in spontaneous eye-blink rate. *Psychiatry Research*, pp. 145-151.
- Barbato, G. et al., 1995. Sleep deprivation effects on eye blink rate and alpha EEG power. *Journal of Biological Psychiatry*, Volume 38, pp. 340-341.
- Baron, R. & Kenny, D., 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), pp. 1173-1182.

- Belz, S., 2000. *An On-Road Investigation of Self-Rating of Alertness and Temporan Separation as Indicator of Driver Fatigue in Commercial Motor Vehicle Operators*, Virginia: Faculty of the Virginia Polytechnic Institute and State University.
- Benedetto, S. et al., 2011. Driver workload and eye blink duration. *Transportation Research Part*, Volume 14, pp. 199-208.
- Biggs, S. N. et al., 2007. Perception of simulated driving performance after sleep restriction and caffeine. *Journal of Psychosomatic Research*, pp. 573-577.
- Blanco, M., 1999. *Effects of In-Vehicle Information Systems (IVIS) Tasks on the Information Processing Demands of a Commercial Vehicle Operations (CVO) Driver*, Blacksburg: irginia Polytechnic Institute and State University.
- Bonnet, M. & Arand, D., 1997. Hyperarousal and Insomnia. *Sleep Medicine Review*, Volume 1, pp. 97-108.
- Boucsein, W. & Baks, R., 1999. Engineering psychophysiology as a discipline Historical and theoretical aspects. In: *Engineering Psychophysiology : issues and applications*. NJ: Lawrence Erlbaum Associates, Inc., pp. 3-30.
- Boucsein, W. & Baks, R., 1999. Engineering psychophysiology as a discipline: Historical and theoretical aspects.. In: R. Back, W. Boucsein & Mahwah, eds. *Engineering psychophysiology: issues and applications*. NJ: Lawrence Erlbaum Associates, Inc, pp. 3 - 30.
- Burgess, H., Trinder, J., Kim, Y. & Luke, D., 1997. Sleep and circadian influences on cardiac autonomic nervous system activity. *Journal of Physiology*, Volume 273, pp. H1761-1768.
- Byeon, M. et al., 2006. *A Study of HRV analysis to detect drowsiness states of driven*. Innsbruck, Austria, IASTED international conference on Biomedical engineering, pp. 153-155.
- Caffier, P., Erdmann, U. & UIIsperger, P., 2003. Experimental evaluation of eye-blink parameters as a drowsiness measure. *Journal Applied Physiology*, pp. 319-325.
- Carrington, M. et al., 2003. The Influence of sleep onset on the diurnal in cardiac activity and cardiac control. *Journal of sleep restriction*, 12(3), pp. 213-21.
- Carskadon, M. & Rechtschaffen, A., 2000. Monitoring and staging human sleep. *Principles and practice of sleep medicine*, Volume 3, pp. 1197-1215.
- Cauter, E. V. et al., 2007. Impact of Sleep and Sleep Loss on Neuroendocrine and Metabolic Function. *Journal of Hormone Research*, Volume 67, pp. 2-9.

- Chisty & Gill, J., 2015. A Review: Driver Drowsiness Detection System. *International Journal of Computer Science Trends and Technology (IJCST)*, pp. 243 - 252.
- Connor, M., Norton, R. & Ameratunga, S., 2002. Driver sleepiness and risk of serious injury to car occupants: population based case control study.. *Journal of Medical*, p. 1125.
- Danisman, T., Bilasco, I., Djeraba, C. & Ihaddadene, N., 2010. *Drowsy driver detection system using eye blink patterns*.. Algiers, Algeria, International Conference on Machine and Web Intelligence.
- De gennaro, L., Ferrara, M., Urbani, L. & Bertini, M., 2000. Oculomotor impairment after 1 night of total sleep deprivation: a dissociation between measures of speed and accuracy. *Clinical Neurophysiology*, 111(10), pp. 1771-1778.
- De valck, E. & Cluydts, R., 2001. Slow-release caffeine as a countermeasure to driver sleepiness induce by partial sleep deprivation. *Journal of Sleep Restriction*, Volume 10, pp. 203-209.
- De Valck, E., Cluydts, R. & Pierrera, S., 2004. Effect of cognitive arousal on sleep latency, somatic and cortical arousal following partial sleep deprivation. *Journal of sleep restriction*, pp. 295-304.
- de Waard, D., 1996. *The Measurement of Drivers' Mental Workload*, Den Haag: The Traffic Research Centre VSC, University of Groningen.
- Dinges, D. et al., 1997. Cumulative sleepiness, mood disturbance, and psychomotor vigilance performance decrements during a week of sleep restricted to 4-5 hours per night. *Journal of Sleep*, pp. 267-277.
- Divekar, G., 2011. *The Effect of External Distractions on Novice and Experienced Drivers' Anticipation of Hazards and Vehicle Control*, Amherst: ScholarWorks@UMass Amherst.
- Dorrian, J., Lamond, J. & Dawson, D., 2000. The ability to self-monitor performance when fatigued. *Journal Sleep Restriction*, pp. 137-144.
- Duffy, E., 1962. *Activation and behaviour*, NY: John Wiley & Sons, Inc.
- Durmer, J. & Dinges, D., 2005. Neurocognitive consequences of sleep deprivation. *Seminars in neurology*, 25(1), pp. 117-129.
- Francis, G. & Rash, C., 2001. *Helmet-Mounted Displays: Design Issues for Rotary Wing Aircraft*., Cardiff: SPIE-Internation Society for Optical Engineering.
- Gaba, D. & Howard, S., 2002. Fatigue among clinicians and the safety of patients. *Journal of Medical*, pp. 1249 - 1255.

- Gao, Y. & Qin, H., 2007. Study in driver fatigue state surveillance system. *Journal of Instrumentation Technology Sensors*, Volume 01, pp. 60-62.
- Goel, N., Rao, H., Drumer, J. & Dinges, D., 2009. Neurocognitive consequences of sleep deprivation. *Seminars in Neurology*, Volume 29, pp. 320-339.
- Goldberg, J., 2014. Measuring software screen complexity: relating eye tracking emotional valence, and subjective ratings. *international Journal Human Computer Interaction*, Volume 30, pp. 518-532.
- Hilburn, B. & Jorna, P., 2001. Workload and air traffic control;. In: *Stress, workload, and fatigue*.. NJ: L. Erlbaum.
- Holmes, A. L., Burges, H. J. & Dawson, D., 2002. Effects of sleep pressure on endogenous cardiac autonomic activity and bony temperature. *Journal of Applied Physiology*, pp. 2578-2584.
- Horberry, T., Anderson, J. & Regan, M., 2006. Driver distraction: The effects of concurrent in-vehicle tasks, road environment complexity and age on driving performance. *Accident Analysis and Prevention*, pp. 185 - 191.
- Horne, J. & Reyner, L., 1995. Sleep Related Vehicle Accidents. *British Medical Journal*, pp. 565 - 567.
- Howard, M. E. et al., 2014. Specific sleepiness symptoms are indicators of performance impairment during sleep deprivation. *Accident Analysis and Prevention*, Volume 62, pp. 1-8.
- Isnainiyah, I. N., Samopa, F., Suryotrisongko, H. & Riksakomara, E., 2014. Analysis of Sleep Deprivation Effect to Driving Performance Using ReactionTest Simulation. *Jurnal Teknologi*, 72(4), pp. 61-66.
- Jackowska, M. et al., 2012. Sleep problems and heart rate variability over the working day. *Journal of Sleep Restriction*, pp. 434-440.
- Jiang, X.-l. et al., 2014. A blunted sympathetic and accentuated parasympathetic response to postural change in subjects with depressive disorders. *Journal of Affective Disorders*, Volume 175, pp. 269-274.
- Kalat, J., 2007. *Biological Psychology*, Belmont: Thomson Wadsworth.
- Karson, C., Dykman, R. & Paige, S., 1990. Blink Rates is schizophrenia. *Schizophir Bull.*, pp. 345-354.
- Killgore, W. D., 2010. Effects of Sleep Deprivation on Cognition. *Progress in Brain Research*, pp. 105-129.

- Kircher, A., Uddman, M. & Sandin, J., 2002. *Vehicle Control and Drowsiness*, Linkoping Sweden: Swedish National Road and Transport Research Institute.
- Klauer, S. et al., 2006. *The Impact of Driving Inattention on Near-crash/Cash risk: An Analysis Using the 100-car Naturalistic Driving Study Data.*, Blacksburg, Virginia: Virginia Tech Transportation Institute.
- Kleiger, R., Stein, P. & Bigger Jr, J., 2005. Heart rate variability: Measurement and clinical utility. *Ann Noninvasive Electrocardial*, Volume 10, pp. 1-14.
- Kolb, B. & Wishaw, I., 2003. *Fundamentals of Human Neuropsychology*, NY: Worth Publishers..
- Kramer, A., 1990. Physiological metrics of mental workload: A review of recent progress. In: *In D. Damos (Ed.) : Multiple-task Performance*. London: Taylor & Francis, pp. 279-328.
- Lanthier, S., Risko, E., Smilek, D. & Kingstone, A., 2013. *Measuring the separate effects of practice and fatigue on eye movements during visual search*. California, eScholarship : University of California, pp. 2820 - 2825.
- Lee, J., Caven, B., Haake, S. & Brown, T., 2001. Speech-based interactions with in-vehicle computers: the effect of speech-based e-mail on drivers' attention to the roadway. *Human Factor*, pp. 631 - 640.
- Lerman, S. E. et al., 2012. Fatigue Risk Management in the Workplace. *JOEM*, pp. 231 - 258.
- Li, L., Wang, F., Zheng, N. & Zhang, Y., 2007. Research and developments of intelligent driving behavior analysis. *Acta Automatica Sinica*, 33(10), pp. 1014-1022.
- Lin, C. & Widyaningrum, R., 2018. The effect of parallax on eye fixation parameter in projection-based. *Applied Ergonomics*, Volume 66, pp. 10-16.
- Liu, Q., Zhou, R., Liu, L. & Zhao, X., 2015. Effects of 72hours total sleep deprivation on male astronauts' executive functions and emotion. *Comprehensive Psychiatry*, Volume 61, pp. 28-35.
- Li, Z., 2016. New equipment of the safety car. *Automobile Parts*, Volume 11, pp. 50-53.
- Mahachandra, M., Yassierli, Sitalaksana, I. & Suryadi, K., 2011. Sleepiness Pattern of Indonesian Professional Driver Based on Subjective Scale and Eye Closure Activity. *International Journal of Basic & Applied Sciences IJBAS-IJENS*, 11(06), pp. 87-96.

- Matthews, G. & Amelang, M., 1993. Extraversion, arousal theory and performance: A study of individual differences in the EEG. *Personality and Individual Differences*, Volume 14, pp. 347 - 363.
- May, F. & Baldwin, C., 2009. Driver fatigue: the importance of identifying causal factors when considering direction and countermeasure technologies. *Transportation Research Part F*, pp. 218 - 224 .
- Meerlo, P., Sgoifo, A. & Suchecki, D., 2008. Restricted and disrupted sleep: effects on autonomic function, neuroendocrine stress system and stress responsivity. *Journal of Mendicine Review*, Volume 12, pp. 197-210.
- Meerlo, P., Sgoifo, A. & Suchecki, D., 2008. Restricted and disrupted sleep: effects on autonomic function, neuroendocrine stress systems and stress responsivity. *Sleep Medicine Review*, 12(3), pp. 97-210.
- Meeus, Mira & dkk, 2013. Heart Rate Variability with Fibramyalgia and Patient with Cronich Fatigue Syndrome: Asystematic Review. Volume no. 43, pp. 279-287.
- Meshkati, N., 1988. Heart rate variability and mental workload assessment.. In: *Human Mental Workload*. North-Holand: Elsevier Science Publishers B.V., pp. 101 - 115.
- Mets, M. et al., 2012. Effects of offee on driving performance during prolonged simulated highway driving. *Psychopharmacology*, Volume 222, pp. 337-342.
- Michail, E., Kokonozi, A., Chouvarda, I. & Maglaveras, N., 2008. Journal of personality and social psychology sleepiness and loss of control during car driving. *Conference proceedings IEEE engineering in medicine and biology society*, pp. 2566-2569.
- Montano, N. et al., 2009. Heart rate variability explored in the frequency domain: a tool to investigate the link between heart and behavior. *Journal of Neuroscience Biobehavior Rev.*, 33(2), pp. 71-80.
- Mulder, G. & Mulder, L., 1999. A psychophysiological approach to working conditions.. In: *Engineering psychophysiology: issues and applications*.. NJ: Lawrence Erlbaum Associates, Inc, pp. 139 - 159.
- Neiss, R., 1988. Reconceptualizing arousal: Psychological states in motor performance. *Psychological Bulletin*, pp. 345 - 366.
- Niebel, B. & Freivelds, A., 2009. Design of Cognitive Work. In: A. Freivalds, ed. *Niebel's Methods, Standards, and Work Design*. New York: McGraw-Hill, pp. 273 - 318.

- Ogawa, Y. et al., 2003. Total sleep deprivation elevates blood pressure though aretnial baroreflex resetting: a study with microneurographic technique. *Journal of Sleep*, 26(8), pp. 986-989.
- Otmani, S., Pabayle, T., Roge, J. & Muzet, A., 2005. Effect of Driving and Partian Sleep Deprivation on Subsequent alertness and Performance of Car. *Journal of Physiology and Behavior*, Volume 84, pp. 715-724.
- Parasuraman, R. & Hancock, P., 2001. Adaptive control of mental workload. In: P. Hancock & P. Desmond, eds. *Stress, workload, and fatigue*. NJ: Lawrence Erlbaum Associates Inc.
- Patel, M., Lal, S., Kavanagh, D. & Rossiter, P., 2011. Applying neural network analysis on Heart rate variability data to assess driver fatigue. *Expert System with Application*, Volume 38, pp. 7245-7242.
- Patten, C., Kircher, J. & Ostlund, 2006. Driver experience and cognitive workload in different traffic environments. *Accident Analysis and Prevention*, pp. 887 - 894.
- Perrier, J. et al., 2016. Driving performance and EEG fluctuations during on-the-road driving following sleep deprivation. *Biological Psychology*, Volume 121, pp. 1-11.
- Philip, P. et al., 2005. Fatigue, sleep restriction and driving performance. *Accident Analysis & Preventive*, pp. 474 - 478.
- Radun, I., 2009. *Fatigue Driving : prevalence, risk factors and groups, and the law*, Helsinki: University of Helsinki.
- Raggait, P. & Morrissey, S., 1997. A field study of stress and fatigue in long distance bus driver. *Behavior Medical*, Volume 23, pp. 122-129.
- Rasmussen, J., 1983. Skills, Rules, and Knowledge; signals, signs, and symbols, and other distinctions in human performance models. *IEEE transactions on System, Man, and Cybernatics*, Volume 13, pp. 257 - 266.
- Rasmussen, J., 1984. Information Processing and Human-machine Interaction. In: *An Approach to Cognitive Engineering*. North-Holland, New York: North-Holland Series in System Science and Engineering, p. 215.
- Rayner, K., 1998. Eye movements in reading and information processing: 20 years of research. *Psychological Bulletin*, Volume 124, pp. 372-422.
- Reimer, B. et al., 2009. *An On-Road Assessment of the Impact of Cognitive Workload on Physiological Arousal in Young Adult Drivers*. Essen, s.n., pp. 115 - 118.

- Rouse, W., Edward, S. & Hammer, J., 1993. Modelling the dynamics of mental workload and human performance in complex systems.. *IEEE transactions on systems, man, and cybernetics*, Volume 23, pp. 1662 - 1671.
- Sanders, M. & McCormick, E., 1993. *Human factors in engineering and design*. New York: McGraw-Hill.
- Schießl, C., 2008. Subjective strain estimation depending on driving manoeuvres and traffic situation. *IET Intelligent Transport System*, 2(4), pp. 258-265.
- Schleicher, R., Galley, N., Briest, S. & Galley, L., 2008. Blinks and saccades as indicators of fatigue in sleepiness warners: looking tired?. *Journal of Ergonomic*, 51(7), pp. 982-1010.
- Scholz, U., Bianchi, A., Cerutti, S. & Kubicki, S., 1997. Vegetative background of sleep: Vegetative background of sleep:. *Journal of Physiology Behavior*, 275(3), pp. H946-950.
- Schutte, P. & Maldonado, C., 2003. *Factors affecting driver alertness during the operation of haul trucks in the South African mining industry*, Johannesburg: Safety in Mines Research Advisory Committee.
- Sforza, E. et al., 2004. Heart rate activation during spontaneous arousals from sleep: effect of sleep deprivation. *Clinical Neurophysiology*, Volume 115, pp. 2442-2451.
- Shen, J. et al., 2006. Fatigue and shift work. *Journal of sleep research*, pp. 1 - 5.
- Slavin, R., 2000. *Educational Psychology: Theory and Practice*. Sixth ed. Boston: Allyn and Bacon.
- Smith, S. S., Horswill, M. s., Brooke, C. & Wetton, M., 2009. Hazard perception in novice and experienced drivers: The effects of sleepiness. *Accident Analysis and Prevention*, Volume 41, pp. 729-733.
- Snyder, S., 2003. *The Effects of Sleep Deprivation on Individual*, West Virginia: Marshall Digital Scholar.
- Soukupova, T., 2016. *Eye-Blink Detection Using Facial Landmarks*, Prague, Czech Republic: Chech Technical University.
- Staal, M. A., 2004. *Stress, Cognition, and Human Performance: A Literature Review and Conceptual Framework*, California: NASA Ames Research Center.
- Svensson, U., 2004. *Blink behaviour based drowsiness detection* , Linköping: Linköping University.

- Takase, B. et al., 2004. Effect of chronic sleep deprivation on autonomic activity by examining heart rate variability, plasma catecholamine, and intracellular magnesium. *Biomedicine & Pharmacotherapy*, Volume 58, pp. S35-S39.
- Tamminen, J. et al., 2010. Sleep Spindle Activity is Associated with the integration of New Memories and Existing Knowledge. *Journal of Neuroscience*, 30(43), pp. 14356-14360.
- Tao, X. & Niu, Q., 2013. Emotion classification algorithm based on blink frequency detection and bayesian network in affective learning. *Computer Science*, Volume 12, pp. 287-291.
- Teh, E., Jamson, S. & Carsten, O., 2014. Temporal fluctuations in driving demand: The effect of traffic complexity on subjective measures of workload and driving performance. *Transportation Research Part F: Traffic Psychology and Behaviour*, pp. 207 - 217.
- Treat, J. et al., 1979. *Tri-Level Study of The Causes of Traffic Accident : Final Report*, Washington: National Highway Traffic Safety Administration.
- Trick, L. M., Brandigampola, S. & Enns, J. T., 2012. How fleeting emotions affect hazard perception and steering while driving: The impact of image arousal and valence. *Accident Analysis and Prevention* , pp. 222 -229.
- Tsang, P. & Vidulich, M., 2006. Mental workload and situation awareness. In: G. Salvendy, ed. *Handbook of human factors & ergonomics*. NJ: Wiley, pp. 243 - 268.
- Unal, A., De Waard, D. & Epstude, K., 2013. Driving with music: Effects on arousal and performance. *Transportation Research Part F: Traffic Psychology and Behaviour*, pp. 52 - 65.
- Van Elslande & Fouquet, 2007a. *Analyzing 'human functional failures' in road accidents*, Paris: TRACE European project.
- Vand Order, K., Limbert, W., Makeig, S. & Jung, T., 2001. Eye activity correlates of workload during a visuospatial memory task. *Human Factors*, pp. 111-121.
- Verster, J., Sagaspe, J., Olivier, P. & Philip, P., 2011. Prolonged nocturnal driving can be as dangerous as severe alcohol-impaired driving. *Journal of Sleep Research*, 20(4), pp. 585-588.
- Vicente, J., Laguna, P., Barta, A. & Bailon, R., 2016. Drowsiness detection using heart rate variability. *Medical & biological engineering & computing*, 54(6), pp. 927-937.

- Wertheim, A., 1991. Highway hypnosis: a theoretical analysis. In: G. A.D., ed. *Vision in Vehicle III*. North-Holland: Elsevier, pp. 467 - 472.
- White, D. P., 2010. *Enhancing sleep slow waves with natural stimuli*, WI, USA: Department of Psychiatry, University of Wisconsin, Madison.
- WHO, 2017. *Road Traffic Injuries*. [Online] Available at: <http://www.who.int/mediacentre/factsheets/fs358/en/>
- Wickens, C., Dodson, J. & Liu, Y., 1997. *An Introduction to Human Factors Engineering*. New York: Longman.
- Wickens, C. & Hollands, J., 2000. *Engineering Psychology and Human Performance*. Third Ed. ed. NJ: Prentice Hall.
- Wu, C. & Liu, Y., 2007. Queuing network modeling of driver workload and performance. *IEEE Transactions on Intelligent Transportation Systems*, pp. 528 - 537.
- Yoo, S. S. et al., 2007. The Human Emotional Brain Without Sleep - a prefrontal amygdala disconnected. *Current Biology*, 17(20), pp. 877-878.
- Zhong, X., Hilton, H. & Gates, G., 2005. Increased Sympatetic and decreased parasympathetic cardiovascular modulation in normal humans with acute sleep deprivation. *Journal of Applied Physiological*, Volume 98, pp. 2024 - 2032.