

## **ABSTRAK**

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Skripsi

Analisa Aspek Ergonomi di Restoran Pipe & Barrel Surabaya Terhadap  
Kenyamanan Karyawan dan Konsumen.

Penelitian ini dilakukan di Restoran Pipe & Barrel Surabaya, dengan tujuan untuk mengetahui apakah aspek ergonomi berpengaruh terhadap kenyamanan karyawan dan konsumen. Penelitian ini mengambil sampel sebanyak 3 karyawan sebagai informan dan 100 konsumen sebagai responden. Penelitian ini menggunakan Analisa Faktor Konfirmatori untuk dimensi kenyamanan konsumen dan triangulasi untuk dimensi kenyamanan karyawan. Berdasarkan hasil penelitian, diperoleh bahwa aspek ergonomi pada dimensi kenyamanan karyawan (ergonomi fisik, lingkungan, & makro) sudah cukup baik dan aspek ergonomi pada dimensi kenyamanan konsumen (aspek antropometri dan ergonomi lingkungan) berpengaruh signifikan terhadap kenyamanan konsumen di Restoran Pipe & Barrel Surabaya.

Kata Kunci: Ergonomi Fisik, Ergonomi Lingkungan, Ergonomi Makro, Kenyamanan.

## **ABSTRACT**

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Thesis

Analysis of Ergonomics Aspects at the Pipe & Barrel Restaurant  
Surabaya Toward Employees' and Consumers' Comfort.

This research was conducted at the Pipe & Barrel Restaurant Surabaya; the objective of this study is to know whether the aspects of ergonomics effect on employees' and consumers's comfort. This research take 3 employees of informants and 100 consumers of respondent. This study uses triangulation for the employees' comfort dimension and Confirmatory Factor Analysis (CFA) for the consumers' comfort dimension. Based on the result, ergonomic aspects of employees' comfort dimension (physical, environmental, & macro ergonomics) are proper enough and ergonomic aspects of consumers' comfort dimension (anthropometrics and environmental ergonomics) affect on consumers' comfort in Pipe & Barrel Restaurant Surabaya.

Keywords:

Physical Ergonomics, Environmental Ergonomics, Macro Ergonomics, Comfort.

## DAFTAR REFERENSI

- Abdurrahman. (2003). Pengaruh Faktor Tipe Huruf, Warna Karakter dan Layar, Panjang Baris serta Lebar Spasi Terhadap Kemampuan Membaca Web Berita. *Published Ungraduated Thesis of Institut Teknologi Bandung (ITB) University*.
- Angelia, L. (2014, November 10). *Pipe and Barrel Review*. Retrieved March 11, 2016, from Laura Angelia and the Journey Begin: <http://www.laurangelia.com/2014/11/pipe-barrel-surabaya-review.html>
- Aryani, Y. (n.d.). Rumah dan Kelembaban. *Mitra Properti Indonesia Magazine*. Retrieved March 3, 2016, from <https://udararuang.wordpress.com/author/yanuaryani/>
- Auliciems, A., & Szokolay, S. (2007). *PLEA (Passive And Low Energy Architecture): NOTE 3 Thermal Comfort*. Brisbane: Department of Architecture The University of Queensland.
- Badan Standardisasi Nasional. (2000). *Konservasi Energi Pada Sistem Pencahayaan*. Jakarta: Standar Nasional Indonesia.
- Badan Standardisasi Nasional. (2001). *Tata Cara Perancangan Sistem Ventilasi dan Pengkondisian Udara Pada Bangunan Gedung*. Jakarta: Standar Nasional Indonesia.
- Buchari. (2007). Kebisingan Industri dan Hearing Conversation Program. *USU Repository Medan*. Retrieved March 11, 2016, from <http://www.library.usu.ac.id/download/ft/07002749.pdf>
- Chakabarti, D. (2005). Ergonomics/ Human Factors: Human Aspect of Technology. Retrieved February 27, 2015, from [http://www.iitk.ac.in/directions/march2005/13\\_DebKC.pdf](http://www.iitk.ac.in/directions/march2005/13_DebKC.pdf)

- Christan, R. (n.d.). *Nordic Body Map*. Retrieved March 6, 2016, from Academia:  
[https://www.academia.edu/11273837/Nordic\\_Body\\_Map](https://www.academia.edu/11273837/Nordic_Body_Map)
- Cocci, S., Namasivayam, K., & Bordy, P. (2005). An Investigation of Ergonomic Design and Productivity Improvements in Food Service Production Tables. *Journal of Hospitality Management The Pennsylvania State University*. Retrieved March 4, 2016, from [https://www.sefa.com/forms/Ergonomics\\_Study.pdf](https://www.sefa.com/forms/Ergonomics_Study.pdf)
- Dewi, L. (2015, February 5). *Pipe & Barrel (Surabaya); Ooh, Ken ..*. Retrieved March 11, 2016, from According to Laurenciadewi:  
<http://laurenciadewi.com/37512/comment-page-1>
- Djaja, I., & Wulandari, R. (2005). Pengaruh Bising Lalu Lintas Terhadap Gangguan Kesehatan Psikologis Anak SDN Cipinang Muara, Kecamatan Jati Negara, Kota Jakarta Timur, Provinsi DKI Jakarta Tahun 2005. *Published Ungraduated Thesis of FKM Universitas Airlangga Jakarta*.
- Ekawatiningsih, P., Komariah, K., & Purwanti, S. (2008). *RESTORAN*. Jakarta: Direktorat Pembinaan Sekolah Menengah Kejuruan.
- Freivalds, A., & Niebel, B. (2014). *Niebel Methods, Standards, and Work Design* (13th ed.). Singapore: Mc Graw-Hill.
- Ghozali, I. (2014). *Structural Equation Modeling: Metode Alternatif Dengan Partial Least Squares (PLS)* (4th ed.). Semarang: Universitas Diponegoro Semarang.
- Hendrarto, T., Rachman, M., Sulastio, O., & Afrinaldi, D. (2012). Kajian Proporsi Ruang Dalam Bangunan Baru Hotel Concordia Bandung. *Online Journal of Institut Teknologi Nasional (ITENAS)*. Retrieved March 4, 2016, from <http://jurnalonline.itenas.ac.id/index.php/rekayasa/artice/download/42/4>
- Indriantoro, N., & Supomo, B. (2009). *Metodologi Penelitian Bisnis untuk Akuntansi dan Manajemen* (1st ed.). Yogyakarta: BPFY Yogyakarta.

- International Standard Organization. (2005). ISO 7730: Ergonomics of the Thermal Environment. Retrieved March 16, 2016, from <http://iso.org>
- Inyang, N., Al-Hussein, M., El-Rich, M., & Al-Jibouri, S. (2012). Ergonomic Analysis and the Need for Its Integration for Planning and Assessing Construction Tasks. *Journal of Construction Engineering and Management*. Retrieved March 4, 2016, from [http://ascelibrary.org/doi/abs/10.1061/\(ASCE\)CO.1943-7862.0000556](http://ascelibrary.org/doi/abs/10.1061/(ASCE)CO.1943-7862.0000556)
- Iridiastadi, H., & Yassierli. (2014). *Ergonomi: Suatu Pengantar*. Bandung: PT Remaja Rosdakarya.
- Ivena, C. (2014, November 28). *Lunch at Pipe & Barrel*. Retrieved March 11, 2016, from Clarissa Ivena: <http://beyondtheplates.blogspot.co.id/2014/11/pipe-and-barrel.html>
- Karlen, Mark, & Benya, J. (2008). *Dasar-dasar Desain Pencahayaan*. Jakarta: Erlangga.
- Kolbaca, K. (2003). *Comfort Theory and Practice: a Vision for Holistic Health Care and Research*. New York: Springer Publishing Company.
- Kompasiana. (2012). *Kenapa Musik di Supermarket itu Slow Terus Yah*. Retrieved March 11, 2016, from [http://www.kompasiana.com/mejuah\\_juah/kenapa-musik-di-supermarket-itu-slow-terus-yah\\_550d881f813311692db1e3b2](http://www.kompasiana.com/mejuah_juah/kenapa-musik-di-supermarket-itu-slow-terus-yah_550d881f813311692db1e3b2)
- Kotler, Bowen, & Makens, J. (2003). *Pemasaran Perhotelan dan Kepariwisataaan* (2nd ed.). Jakarta: PT Prenhallindo.
- Kountur, R. (2007). *Metode Penelitian untuk Penulisan Skripsi dan Tesis*. Jakarta: PPM.
- Kuncoro, M. (2003). *Metode Kuantitative: Teori dan Aplikasi untuk Bisnis dan Ekonomi* (1st ed.). Yogyakarta: Penerbit AAP AMP YKPN.
- Kuttruff, H. (2009). *Room Acoustics* (5th ed.). Oxon: Spon Press.

- Madjid, M. (2011). *Dasar Perencanaan Dapur Hotel*. Retrieved April 13, 2016, from <http://mukhtarlecturer.blogspot.co.id/2011/03/dasar-perencanaan-dapur-hotel.html>
- Mangkunegara, P. A. (2002). *Manajemen Sumber Daya Manusia*. Bandung: PT Remaja Rosda Karya.
- Mehta, N., & Chungan, P. (2014). Impact of Visual Merchandising on Consumer Behavior: A Study of Furniture Outlets. *Journal Management's Institute of Nirma University, Ahmedabad, India*. Retrieved March 3, 2016, from <http://www.hrpub.org/download/20140801/UJM1-12102458.pdf>
- Menteri Kesehatan RI. (2002). Persyaratan Lingkungan Kerja Perkantoran dan Industri. Retrieved March 16, 2016, from [http://hukum.unsrat.ac.id/men/menkes\\_1405\\_2002.pdf](http://hukum.unsrat.ac.id/men/menkes_1405_2002.pdf)
- Mercede, A. (2014). *Understanding Customer Convenience*. Retrieved March 17, 2016, from <http://screwedopinion.blogspot.co.id/2014/06/understanding-customer-convenience.html>
- Merriam-Webster's Collegiate Dictionary. (2015). (11th). Retrieved March 16, 2016, from <http://www.merriam-webster.com/>
- Moleong, L. J. (2002). *Metodologi Penelitian Kualitatif*. Bandung: PT Remaja Rosda Karya.
- Nurmianto, E. (2004). *Ergonomi Konsep Dasar dan Aplikasinya* (2nd ed.). Surabaya: Penerbit Guna Widya.
- OSHA. (n.d.). *Definition of Ergonomics*. Retrieved February 27, 2016, from Occupational Safety Head Administration (OSHA): <https://www.osha.gov/SLTC/ergonomics/>
- Panero, J., & Zelnik, M. (2003). *Dimensi Manusia dan Ruang Interior*. (D. Kurniawan, Trans.) Jakarta: Erlangga.

- Prasetia, A. (2011). *Jogja Resto dan Galeri*. *Universitas Atma Jaya Repository*, 33-34.
- Santoso, G. (2004). *ERGONOMI: Manusia, Peralatan, dan Lingkungan*. Jakarta: Prestasi Pustaka Publisher.
- Sarwono, J. (n.d.). *Mengenal PLS-SEM Jonathan Sarwono*. Retrieved May 29, 2016, from Jonathan Sarwono: [http://www.jonathansarwono.info/teori\\_spss/PLSSEM.pdf](http://www.jonathansarwono.info/teori_spss/PLSSEM.pdf)
- Satwiko. (2009). *Pengertian Kenyamanan Dalam Suatu Bangunan*. Yogyakarta: Wignjosoebroto.
- Setiawan, I. (2012). Analisis Hubungan Faktor Karakteristik Pekerja, Durasi Kerja, Alat Kerja, dan Tingkat Pencahayaan dengan Keluhan Subjektif Kelelahan Mata Pada Penggunaan Komputer di PT Surveyor Universitas Indonesia. *Published Ungraduated Thesis of Universitas Indonesia Jakarta*. Retrieved March 16, 2016, from <http://lib.ui.ac.id/file?file=digital/20320749-S-Iwan%20Setiawan.pdf>
- Simamora, H. (2004). *Manajemen Sumber Daya Manusia* (3rd ed.). Yogyakarta: STIE YKPN.
- Sugiyono. (2010). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV Alfabeta.
- Suma'mur. (2009). *Higine Perusahaan dan Kesehatan Kerja*. Jakarta: Gunung Agung.
- Suma'mur. (2011). *Keselamatan Kerja dan Pencegahan Kecelakaan*. Jakarta: CV Haji Masagung.
- Surya, R., Wardah, S., & Hasanah, H. (2013). Penggunaan Data Antropometri Dalam Evaluasi Ergonomi Pada Tempat Duduk Penumpang Speed Boat Rute Tembilahan- Kuala Enok Kab. Indragiri Hilir Riau. *Journal of Malikussaleh Industrial Engineering*. Retrieved March 6, 2016, from [http://ft.unimal.ac.id/jurnal\\_teknik\\_industri/index.php/2013-10-06-10-01-](http://ft.unimal.ac.id/jurnal_teknik_industri/index.php/2013-10-06-10-01-)

31/2013-10-27-09-53-58/volume-1-number-2-download-pdf?download=47:Volume%201%20Number%202

Sutalaksana, I., Anggawisastra, R., & Tjakraatmadja. (2006). *Teknik Perancangan Sistem Kerja* (2nd ed.). Bandung: ITB Bandung.

Underhill. (2009). *Why We Buy: The Science of Shopping*. New York.

WebstaurantStore. (2016). *Components of Commercial Kitchen*. Retrieved April 13, 2016, from <http://www.webstaurantstore.com/article/11/restaurant-kitchen-layouts.html>

Widhiarso, W. (2009). *Praktek Model Persamaan Struktural (SEM)*. Retrieved May 26, 2016, from Diskusi Metodologi Penelitian: <http://widhiarso.staff.ugm.ac.id/>

Widhiarso, W. (2011, February 25). *Analisis Butir dengan Menggunakan Analisis Faktor*. Retrieved May 24, 2011, from Diskusi Metodologi Penelitian: <http://widhiarso.staff.ugm.ac.id/wp/analisis-butir-dengan-menggunakan-analisis-faktor/>

Winchip, S. M. (2011). *Fundamental Lighting*. Canada: FairChild Publications, Inc.

Zainuddin, M., Abidin, S., & Hashim, A. (2012). *Ergonomic Aspect and Design of Hand Tools in Perak and Serawak Ceramic Industry*. Retrieved March 4, 2016, from Academia: [https://www.academia.edu/3718665/ERGONOMIC\\_ASPECT\\_AND\\_DESIGN\\_OF\\_HAND\\_TOOLS\\_IN\\_PERAK\\_AND\\_SERAWAK\\_CERAMIC\\_INDUSTRY](https://www.academia.edu/3718665/ERGONOMIC_ASPECT_AND_DESIGN_OF_HAND_TOOLS_IN_PERAK_AND_SERAWAK_CERAMIC_INDUSTRY)

Zikmund, W. (2003). *Business Research Methods* (7th ed.). South-Western: Thomson.