

Contents

Organizational Design and Management (ODAM)

The Making of Robust Schedules: Strategies to Dealing with Uncertainties	3
Laetitia Flamard, Adelaide Nascimento, Pierre Falzon, and Ghislaine Tirilly	
The Simulation of Extreme Situations for the Analysis of Resilience: An Original Methodology to Improve Simulation and Organizational Resilience	13
Cecilia De la Garza, Pierre Le Bot, and Quentin Baudard	
The Need to Present Actual Costs After an Ergonomic Intervention	23
Rafael Bezerra Vieira, Mario Cesar Vidal, José Roberto Mafra, Guilherme Bezerra Bastos, Rodrigo Arcuri, and Luiz Ricardo Moreira	
Ergonomics/Human Factors Education in United Kingdom	28
Sue Hignett and Diane Gyi	
Difficulties of the Modern Work Style in Office Environment	36
Fruzsina Pataki-Bittó	
Development of Behavior Markers for Emergency Response Training	46
Masaru Hikono, Yuko Matsui, Mari Iwasaki, and Miduho Morita	
Taking to the Skies: Developing a Dedicated MSc Course in Aviation Human Factors	57
Alex W. Stedmon, Rebecca Grant, Don Harris, Stephen Legg, Steve Scott, Dale Richards, John Huddleston, and James Blundell	
Work Activity Analysis to Support Technological Aid Supply in Vocational Training for Adolescents with Learning Difficulties	62
Marie Laberge, Aurélie Tondoux, Marie-Michèle Girard, Fanny Camiré Tremblay, and Arnaud Blanchard	

Embedding Human Factors and Ergonomics in MSc Organizational Psychology	67
Matthew C. Davis	
A Chair Assessment Model for Organizational Benefit, Safety and Asset Management	72
Alison Heller-Ono	
Managerial Simulation: A Tool for Devising Management Organization	80
Laurent Van Belleghem	
Impact of New Technology on Job Design, Skill Profiling and Assessing the Physical, Cognitive and Psychosocial Impacts on the Workforce	87
David Caple	
Working Times Profiles of Hypermarket Workers	92
F. Cravo, T. P. Cotrim, and J. D. Carvalhais	
Challenges of Telework in Brazil: A Sociotechnical Analysis	101
Lígia de Godoy and Marcelo Gitirana Gomes Ferreira	
Participatory Macroergonomics Study – Schools and Kindergartens as Shared Workplaces	112
Päivi Kekkonen and Arto Reiman	
Activity Analysis as a Method for Accompanying Industrial Craft Companies to Internal Changes and Market Challenges	122
Mariachiara Pacquola and Patrizia Magnoler	
The Effectiveness of Labour Inspectors in Improving the Prevention of Psychosocial Risks at Work	133
Rafaël Weissbrodt, Marc Arial, and Maggie Graf	
“To Him Who Has, More Will Be Given...”– A Realist Review of the OHSAS18001 Standard of OHS Management	140
Christian Uhrenholdt Madsen, Marie Louise Kirkegaard, Peter Hasle, and Johnny Dyreborg	
Creativity and Performance: A Case Study in a Highly Regulated and Constrained Domain	150
Nathalie de Beler, Christelle Casse, and Alain Noizet	
Effect of Shift Work on Health and Performance of the Workers – Comparison Between Turkey and the Czech Republic	160
Marek Bures, Andrea Machova, and Ali Altunpinar	
Ergonomic Maturity Model: A Practical Macroergonomic Tool	173
Yordán Rodríguez Ruíz and Elizabeth Pérez Mergarejo	

Fragility of Tertiary Ergonomics/Human Factors Programmes	186
Stephen J. Legg and Alex W. Stedmon	
An Exploratory Study of the Issues of a Professionalization to the Industrial Safety in a French Railway Company	192
Audrey Marquet, Vincent Boccara, Stella Duvenci-Langa, and Catherine Delgoulet	
The Contribution of Creativity of Action to Safety: The Key Role of Requisite Imagination	199
Justine Arnoud	
The Association Between Safety Climate and Musculoskeletal Symptoms in the U.S. Logging Industry	214
Elise Lagerstrom and John Rosecrance	
Quality of Work Life and Differences in Demographic Characteristics Among Managerial Staff in Algerian Tertiary Sector	220
Bouhafs Mebarki, Mohammed El Amine Ahmed Fouatih, and Mohamed Mokdad	
How Holistic Approaches of Activity Analysis in Ergonomics Renew Training Design?	233
Christine Vidal-Gomel, Vincent Boccara, Dominique Cau-Bareille, and Catherine Delgoulet	
Collaborative Design Methods and Macroergonomics as Organizational Tools for Distance Education's Design Teams	242
Cid Boechat and Claudia Mont'Alvão	
A Cooperative and Transversal Methodology to Improve the Making of Prescriptions in a High Reliability Organization: A Constructive Ergonomics Approach	252
C. Thomas, F. Barcellini, Y. Quatrain, B. Ricard, and P. Falzon	
Management of Psychosocial Work Environment: Outline of a Multidisciplinary Preventive Intervention in a Large North Italian Municipality	259
Angela Carta, Paola Manfredi, and Stefano Porru	
Event Cross-Simulation: A Tool for Structuring Debates on Work, Enhancing Collective Learning and Improving Safety Management . . .	267
Christelle Casse	
The Nature of the Firm – A Social Cybernetic Analysis	276
Thomas J. Smith and Robert Henning	
Chronicle Workshops as Data Collection Method in Evaluation of National Work Environment Intervention	286
Kirsten Olsen, Mark Lidegaard, and Stephen Legg	

Current Status of Exercise Habits and Job Satisfaction of Nurses in Japan	297
Takumi Iwaasa, Motoki Mizuno, and Yuki Mizuno	
Ergonomics Integrated into Degree Program in Health Promotion in the University of Eastern Finland	304
Susanna Järvelin-Pasanen and Kimmo Räsänen	
The Dynamics of a Service Relationship: The Example of Technicians Working for Pension Schemes	310
Valérie Zara-Meylan and Serge Volkoff	
Conceptual and Practical Strategy Work to Promote Ergonomics/Human Factors in Sweden	320
Cecilia Österman, Anna-Lisa Osvalder, Hillevi Hemphälä, Jörgen Frohm, Susanne Glimme, Göran M. Hägg, Olle Janzon, Per Johan Pettersson, Mathias Stavervik, and Jane Ahlin	
Autonomy at Work, Can (Too) High Autonomy Cause Health Complaints and Sick Leave?	330
Kari Anne Holte, Kåre Hansen, Lars Lyby, and Astrid Solberg	
Integrating Humans, Technology and Organization (HTO) in European Railway Safety Management Systems	337
Lena Kecklund, Jan Skriver, Sara Petterson, and Marcus Lavin	
The Team Building for Human Resource Development in Elite Youth Soccer Players in Japan	344
Yasuyuki Hochi, Yasuyuki Yamada, Yukihiro Aoba, Tomoki Ebato, and Motoki Mizuno	
Ergonomics in the Age of Creative Knowledge Workers – Define, Assess, Optimize	349
Lorenz Prasch and Klaus Bengler	
Implementing Tele Presence Robots in Distance Work: Experiences and Effects on Work	358
Christine Ipsen, Giulia Nardelli, Signe Poulsen, and Marco Ronzoni	
Language Issues in the Activity of Interaction with the Company Players	366
Marta Santos and Denise Alvarez	
Tutor/Trainee Cooperation in Work-Based Training Situation: Which Creative Process for Mentoring Interactions in Care Situation?	374
Vanessa Rémerly	

Virtual Simulations for Incorporating Ergonomics into Design Projects: Opportunities and Limitations of Different Media and Approaches	381
Esdras Paravizo and Daniel Braatz	
A Framework of Participatory Ergonomics Simulation	391
Ole Broberg and Carolina Conceicao	
Perspectives on Autonomy – Exploring Future Applications and Implications for Safety Critical Domains	396
Steven C. Mallam, Salman Nazir, Amit Sharma, and Sunniva Veie	
Enablers and Barriers for Implementing Crisis Preparedness on Local and Regional Levels in Sweden	406
Eva Leth, Jonas Borell, and Åsa Ek	
Worker’s Management and Skills Development in a Temporary Team	413
Fabiola Maureira, Tahar-Hakim Benchekroun, and Pierre Falzon	
Retention Management of Nurses: A Case of University Hospital in Japan	422
Motoki Mizuno, Yasuyuki Yamada, Takumi Iwaasa, Emiko Togashi, Michiko Suzuki, and Yuki Mizuno	
Developing an International Master’s Programme in Ergonomics at a Technical University in Sweden	429
Linda M. Rose and Cecilia Österman	
Designing an Organizational Readiness Survey for Total Worker Health® Workplace Initiatives	437
Michelle M. Robertson, Diana Tubbs, Robert A. Henning, Suzanne Nobrega, Alec Calvo, and Lauren Murphy	
Similarity of Risk Factors for Musculoskeletal Disorders and Poor Product Quality in Manufacturing	446
W. Patrick Neumann, Ahmet Kolus, and Richard Wells	
A Developmental Framework to Analyze Productive and Constructive Dimensions of Collaborative Activity in Simulation Workshops	452
Flore Barcellini	
Simulation in Diagnosing and Redesigning Knowledge Transfer Systems in the Offshore Oil Industry	457
Carolina Conceição and Ole Broberg	
Exploring the Relationships Among Safety Climate, Job Satisfaction, Organizational Commitment and Healthcare Performance	466
Sabina Nuti, Milena Vainieri, Giorgio Giacomelli, and Nicola Bellè	

From Diagnosis and Recommendation to a Formative Intervention: Contributions of the Change Laboratory	473
Rodolfo Andrade de Gouveia Vilela, Susana Vicentina Costa, Amanda Aparecida Silva Macaia, Marco Antonio Pereira Querol, Sayuri Tanaka Maeda, and Laura Elina Seppanen	
Application of the HTO Concept for a Powered Pallet Truck	482
Jörgen Eklund	
New Public Management, Performance Measurement, and Reconfiguration of Work in the Public Sector	486
Bruno César Kawasaki, Ruri Giannini, Selma Lancman, and Laerte Idal Sznelwar	
Simulating Work Systems: Anticipation or Development of Experiences. An Activity Approach	494
Pascal Béguin, Francisco Duarte, Joao Bittencourt, and Valérie Pueyo	
Implementing Sustainable Work Discussion Spaces (WDSs), a Challenge for Managers and Organizations	503
Lauriane Domette and Pierre Falzon	
When Employee Driven Innovation Becomes an Organizational Recipe – Implications for What It Means to Be an Innovative Employee	511
Kristiane M. F. Lindland	
Work Macroergonomics Analysis (AMT Method): Identification of Ergonomic Demands in Sewing Laboratory	521
Luiza Debastiani e Silva, Bruna Marina Bischof, Raquel Pizzolato Cunha de Oliveira, Ricardo Schwinn Rodrigues, and Elton Moura Nickel	
On Human Terms – A First Evaluation of a Massive Open Online Course (MOOC) in Ergonomics	530
Martina Berglund and Anna-Lisa Osvalder	
HTO at Vattenfall from External Requirements to Strategic Advantage	539
Fredrik Barchéus	
A Rose by Any Other Name	549
Fredrik Barchéus	
From Safety I to Safety II: Applying an HTO Perspective on Supervisory Work Within Aviation	558
Martina Berglund and Oscar Arman	

Co-constructing Organizational Autopoiesis: The Developmental Laboratory as a Model and Means of Enabling Interventions	566
Gianna Carta and Pierre Falzon	
Accounting Standard for Ergonomics: Relation of Ergonomics and Accounting	577
Rafael Bezerra Vieira, Mario Cesar Vidal, José Roberto Mafra, Rodrigo Arcuri, and Luiz Ricardo Moreira	
Transformation of Work Systems - Towards Remotely Supervised Controlled Work	583
Pernilla Ulfvengren	
On Human Terms – Integration of a Massive Open Online Course (MOOC) in Ergonomics in University Courses	595
Anna-Lisa Osvalder and Martina Berglund	
Safety on Working Place? The Ergonomic Approach in Pulverit	602
S. Bernardini and R. Trigona	
The Culture of Innovation: Needs and Opportunities	609
A. Augusto	
The Effect of Support from Superiors and Colleagues Between Occupational Stress and Mental Health Among Japanese Sport Facilities Workers	617
Myunghee Park, Hirokazu Otake, Iwaasa Takumi, and Motoki Mizuno	
Benefits of the Human-Technology-Organization Concept in Teaching Ergonomics – Students Perspective	627
Anette Karlton and Johan Karlton	
Contributions of Simulation for Developing New Activities: Simultaneous Approach of Activity and Space in the Case of a Fire Department Situation Room Design Process	637
Nadia Heddad	
Effectiveness of Onsite Occupational Health Clinics in Management of Work Related Musculoskeletal Disorders in 12000 Information Technology Professionals	642
Deepak Sharan, Joshua Samuel Rajkumar, and Jerrish A. Jose	
The BRICS_{plus} Network: A Historical Overview and Future Perspectives of the Network’s Role in Human Factors and Ergonomics	647
Jonathan Davy, Jose Orlando Gomes, Aleksandr Volosiuk, Arnab Jana, Gaur Ray, Anindya Kumar Ganguli, Wei Zhang, and Andrew Todd	

Professional Affairs

Gaining Recognition as an Official Profession at the National Level: The CIEHF Experience	659
David O'Neill	
The IEA Certification and Endorsement System	667
Maggie Graf	
Revising the IEA Core Competencies for Professional Ergonomists	672
Frederick Tey and Maggie Graf	
Experiences in the Development and Implementation of an Academic Master Degree in Ergonomics in Mexico	678
Rosalío Avila-Chaurand, Lilia Prado-León, Elvia González-Muñoz, Irma Cecilia Landa-Avila, and Sergio Valenzuela-Gómez	
Issues of Certification Program of Professional Ergonomist in Japan and a Challenge of Collaboration Among Asian Countries	693
Kazuo Aoki	
Education of Ergonomists in France: From the CE2 Actions to the Master Program in Ergonomics at Aix-Marseille University (Aix-en-Provence)	699
Nathalie Bonnardel	
Global Ergonomics Month: Experiences, Stories and Initiatives Around the World	706
Michelle M. Robertson, Nancy Black, Karen Jacobs, Claire Dickinson, Frederick Tey, and Gyula Szabó	
Professional Ergonomics Education in Argentina	711
Gabriela Cuenca and Michelle Aslanides	
Professional Ergonomists Education: Lessons Learned from Worldwide Existing Programs	718
Michelle Aslanides, Nelcy Arévalo, Raouf Ghram, Bouhafis Mebarki, and Frederick Tey	
Creation of a Database for the Management of Working Gesture Rehabilitation of the Injured Worker	727
A. Resti, M. T. Covelli, C. Melai, M. Paoli, L. Pieroni, S. Tavolucci, C. Tonelli, and S. Verdesca	
Forensic	
Science and the Law	739
P. A. Hancock	

Contents	xxi
Context Fidelity as a Factor in Forensic Site Inspection	745
Ian Y. Noy	
A Forensic HF/E Analysis of a Trip and Fall Injury Event Involving a Wheel Stop in a Parking Lot	751
M. S. Wogalter	
Communication-Human Information Processing (C-HIP) Model in Forensic Warning Analysis	761
M. S. Wogalter	
Relationship of Age on Responses to Automobile Warnings	770
S. David Leonard and Erica Medrano	
PWC Off-Throttle Steering Hazards: Attempted Remedy; Failure; and then Success	774
Edward W. Karnes, S. David Leonard, and David R. Lenorovitz	
Allocation of Blame for Property Damage Originating in a Cigarette Receptacle Constructed from Flammable HDPE	783
Michael J. Kalsher, Hayley McCullough, and William G. Obenauer	
Author Index	791