

# **Advances in Intelligent Systems and Computing**

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Pedro M. Arezes  
Editor

# Advances in Safety Management and Human Factors

Proceedings of the AHFE 2019 International  
Conference on Safety Management  
and Human Factors, July 24–28, 2019,  
Washington D.C., USA

*Editor*

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# Advances in Human Factors and Ergonomics 2019

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10th International Conference on Applied Human Factors and Ergonomics and the  
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Proceedings of the AHFE 2019 International Conference on Safety Management  
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# Preface

Safety management and risk prevention is a common thread throughout every workplace, yet keeping employee safety and health knowledge current is a continual challenge for all employers. The discipline of safety management and human factors is a cross-disciplinary area concerned with protecting the safety, health, and welfare of people engaged in work or employment and in society at large. The book offers a platform to showcase research and for the exchange of information in safety management and human factors. Mastering safety management and human factors concepts is fundamental both to the creation of products and systems that people are able to use and for work systems design, avoiding stresses, and minimizing the risk for accidents.

This book focuses on the advances in the safety management and its relationship with human factors, which are a critical aspect in the design of any human-centered technological system. The ideas and practical solutions described in the book are the outcome of dedicated research by academics and practitioners aiming to advance theory and practice in this dynamic and all-encompassing discipline.

A total of seven sections are presented in this book:

- Section 1 Workplace Safety and Human Factors
- Section 2 Safety Culture
- Section 3 Safety and Human Factors at a Societal Level
- Section 4 Safety Methods for Assessment and Evaluation
- Section 5 Safety Perception and Behavior Analysis
- Section 6 Safety Management and Digital Transformation
- Section 7 Revitalizing Safety Management and Practice

Each section contains research papers that have been reviewed by members of the International Editorial Board. Our sincere thanks and appreciation to the board members as listed below:

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We hope that this book, which is the international state of the art in safety management domain of human factors, will be a valuable source of theoretical and applied knowledge for global markets.

July 2019

Pedro M. Arezes



# Contents

## Workplace Safety and Human Factors

<b>Human-System Interaction Design Requirements to Improve Machinery and Systems Safety</b> . . . . .	3
Peter Nickel, Peter Bärenz, Siegfried Radandt, Michael Wichtl, Urs Kaufmann, Luigi Monica, Hans-Jürgen Bischoff, and Manobhram Nellutla	
<b>A Susceptibility Model for Organizational Accidents</b> . . . . .	14
Douglas Minnema and Monique Helfrich	
<b>How Ergonomics Is Contributing to Overall Equipment Effectiveness: A Case Study</b> . . . . .	24
Mariana Rodrigues, Isabel Loureiro, Celina Pinto Leão, and Nelson Costa	
<b>Integrated Management in Disaster: A Discussion of Competences in a Real Simulation</b> . . . . .	33
Salvador Ávila, Ivone Cerqueira, Valter Junior, Júlio Nascimento, Camille Peres, Cassio Brunoro Ahumada, and Pedro Arezes	
<b>Implementing the REPAIRER Human Factors Safety Reporting System Through MRM (MxHF) to Meet SMS Compliance in Aviation Maintenance</b> . . . . .	46
Mark Miller and Bettina Mrusek	
<b>Influence of the Human Factor on the Risk of Work on Scaffolding</b> . . .	58
Katarzyna Szaniawska, Krzysztof Czarnocki, Zbigniew Wisniewski, and Malgorzata Wisniewska	
<b>The Sailport Project: A Trilateral Approach to the Improvement of Workers' Safety and Health in Ports</b> . . . . .	69
Alessandro Filippeschi, Mauro Pellicci, Federico Vanni, Giulia Forte, Giulia Bassani, Lorenzo Landolfi, Diego De Merich, Giuseppe Campo, Carlo Alberto Avizzano, and Massimo Bergamasco	

<b>Robots and Human Interaction in a Furniture Manufacturing Industry - Risk Assessment</b> .....	81
Ana Colim, Susana Costa, André Cardoso, Pedro Arezes, and Cláudia Silva	
<b>Safety in Date Palm Tree Work in Algeria: The Role of Belt Design and Use</b> .....	91
Mohamed Mokdad, Bouhafis Mebarki, Lahcen Bouabdallah, and Ibrahim Mokdad	
<b>Development of Assistive Technologies in Additive Manufacturing (AM) for People with Disabilities</b> .....	100
Eloiza Aparecida Silva Ávila de Matos and Ângela Paloma Zelli Wiedemann	
<b>Welders' Knowledge of Personal Protective Equipment Usage and Occupational Hazards Awareness in the Ghanaian Informal Auto-mechanic Industrial Sector</b> .....	111
Mohammed-Aminu Sanda and Juliet Nugble	
<b>Determination of Safe Work Practiced in a Confine Space Work: A Case Study Research of an Organisation in Onne, Nigeria.</b> .....	123
Mercy Osato Omoifo-Irefo	
<b>Occupational Psychosocial Toxicology in Health Workers of Radiological Units in Bogotá-Colombia</b> .....	134
Olga Piñeros and Carlos Marín	
<b>Theory of Safety Quantification and Equivalence Oriented Industrial System</b> .....	143
Yang Song and Xuefei Yang	
<b>Safety Culture</b>	
<b>Safety Culture as a Team Sport: The Football Metaphor</b> .....	155
Frank W. Guldenmund and Dylan Smibert	
<b>Developing a Safety Culture Index for Construction Projects in Developing Countries: A Proposed Fuzzy Synthetic Evaluation Approach</b> .....	167
Emmanuel B. Boateng, Manikam Pillay, and Peter Davis	
<b>Aggregate-Level Data Characteristics of Safety Climate with Different Likert-Type Scales</b> .....	180
Siu Shing Man, Jacky Yu Ki Ng, Kar Ying Law, and Alan Hoi Shou Chan	

**Role of Human Safety Intervention on the Impact of Safety Climate on Workers Safety Behaviours in Construction Projects: A Conceptual Model** . . . . . 190  
 Emmanuel B. Boateng, Peter Davis, and Manikam Pillay

**Management of Atmospheric Hazards in a Confined Work Space in Nigeria: A Case Study Research of an Organisation in River State, Nigeria** . . . . . 201  
 Mercy Osato Omoifo Irefo

**Safety and Human Factors at a Societal Level**

**Parent Awareness of Smartphone Use and Its Health Impact** . . . . . 215  
 Regina Pope-Ford

**Development of Working at Height Management System Based on Legislation in Malaysia** . . . . . 226  
 Law Peng Hang and Ezrin Hani Sukadarin

**Safety Methods for Assessment and Evaluation**

**How Workplaces Actually Carry Out OSH-Related Risk Assessment and Management** . . . . . 239  
 Noora Nenonen, Jouni Kivistö-Rahnasto, and Sanna Anttila

**A Study on Exposure of Workers to the Risks Arising from Physical Agents in the Olive Sector in Andalusia (South Spain)**. . . . . 252  
 Raquel Nieto-Álvarez, M<sup>a</sup> Luisa de la Hoz-Torres, Antonio J. Aguilar-Aguilera, M<sup>a</sup> Dolores Martínez-Aires, and Diego P. Ruiz

**Risk Assessment of Upper Limb Musculoskeletal Disorders in a Poultry Slaughterhouse** . . . . . 265  
 Diogo Cunha dos Reis, Adriana Seára Tirloni, and Antônio Renato Pereira Moro

**An Ergonomic Assessment of Lighting Conditions of the Pedestrian Overpasses in Commonwealth Avenue, Quezon City: Commuter’s Perception of Safety** . . . . . 273  
 Alessandro Armani Aspi, Aurelio Banzon, Hillary Chelsea Cruz, and Keneth Sedilla

**Risk Assessment of Compressor Gold Mining at Camarines Norte, Philippines** . . . . . 280  
 Isachar Bernaldez and Virginia Soriano

**An Assessment of the Potential Risk of Hearing Loss from Earphones Based on the Type of Earphones and External Noise . . . . . 286**  
 Alethea Diana Villa, Ysabel Neena Gayahan, Manuel Vincent VI Chanco, Jeriko Merlo Reyes, and Lizbeth Mariano

**The Gap in the Safety Knowledge Between the Small-Scale Miners and Local Mining Monitoring Body in the Philippines . . . . . 298**  
 Virginia Soriano and Isachar Bernaldez

**Safety Perception and Behaviour Analysis**

**Gender Differences in Risk-Taking-Related Personality Traits and Risk Perception: Implications for Safety Training and Awareness Programs . . . . . 307**  
 Kapo Wong, Alan Hoi Shou Chan, and Saad A. Alabdulkarim

**Socially Oriented Design of Technical Systems and Objects: Safety and Accident Prevention . . . . . 317**  
 Evgeny Kolbachev and Yulia Salnikova

**Safety Management and Digital Transformation**

**Driving Risk Assessment Under the Effect of Alcohol Through an Eye Tracking System in Virtual Reality . . . . . 329**  
 Maria Rosaria De Blasiis, Chiara Ferrante, and Valerio Veraldi

**The Impact of Autonomous Vehicles’ Active Feedback on Trust . . . . . 342**  
 Ana Mackay, Inês Fortes, Catarina Santos, Dário Machado, Patrícia Barbosa, Vera Vilas Boas, João Pedro Ferreira, Néilson Costa, Carlos Silva, and Emanuel Sousa

**Revitalizing Safety Management and Practice**

**Collective Mindfulness as a Preventive Strategy Against Workplace Incidents: A Comparative Study of Australia and the United States . . . 355**  
 Andrew Enya, Manikam Pillay, and Shane Dempsey

**The Occupational Risk Assessment Method: A Tool to Improve Organizational Resilience in the Context of Occupational Health and Safety Management . . . . . 367**  
 Gael Morel and Manikam Pillay

**Study on Sleep Disorder in Gasoline Service Stations Workers . . . . . 377**  
 Rodrigo Domínguez, Hector Velasquez, Yuri Alvarado, and Bárbara Salas

**Process Safety Competence of Vocational Students . . . . . 383**  
 Sari Tappura, Sanna Nenonen, Noora Nenonen, and Jouni Kivistö-Rahnasto

**Occupational Exposure to Heat in Outdoor Activities in Building  
Constructions in Southeastern Brazil** ..... 393  
Adriana Amorim, Lucila Labaki, Paulo Maia, Thais Barros,  
and Alex Marcelo

**Author Index** ..... 405