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Nota di contenuto	I: Health and Well Being in the Working Environment -- Can Visual Discomfort Influence on Muscle Pain and Muscle Load for Visual Display Unit (VDU) Workers? -- Neuromuscular Principles in the Visual System and Their Potential Role in Visual Discomfort -- Forget About Aesthetics in Chair Design: Ergonomics Should Provide the Basis for

Comfort -- Effects of the Office Environment on Health and Productivity 1: Auditory and Visual Distraction -- Effects of Using Dynamic Office Chairs on Posture and EMG in Standardized Office Tasks -- Video Display Terminals and Neck Pain: When Ophthalmology Explains the Failure of Biomechanical Intervention -- Performance Monitoring, Supervisory Support, and Job Characteristics and Their Impact on Employee Well-Being Amongst Four Samples of Call Centre Agents in South Africa -- Mechanisms for Work Related Disorders Among Computer Workers -- Do Background Luminance Levels or Character Size Effect the Eye Blink Rate During Visual Display Unit (VDU) Work – Comparing Young Adults with Presbyopes? -- Do the Luminance Levels of the Surroundings of Visual Display Units (VDU) and the Size of the Characters on the Screen Effect the Accommodation, the Muscle Load and Productivity During VDU Work? -- Complexity and Workload Factors in Virtual Work Environments of Mobile Work -- A Study of Personal Space in Communicating Information -- Musculoskeletal and Performance Effects of Monocular Display Augmented, Articulated Arm Based Laser Digitizing -- Work Environment and Health Effects of Operators at Light-on-Test Process in TFT-LCD Plants -- Techno Stress: A Study Among Academic and Non Academic Staff -- Call Centres in the Domain of Telecommunications: Ergonomic Issues for Well-Being Improvement -- Health and Performance Consequences of Office Ergonomic Interventions Among Computer Workers -- Splint Effect on the Range of Wrist Motion and Typing Performance -- The Impact of VDU Tasks and Continuous Feedback on Arousal and Well-Being: Preliminary Findings -- Effects of the Office Environment on Health and Productivity 1: Effects of Coffee Corner Position -- Guerilla Ergonomics: Perceiving the Affordances for Workplace Design -- II: Ergonomics and Design -- Constraints on Demarcating Left and Right Areas in Designing of a Performance-Based Workstation -- Design of an Adaptive Feedback Based Steering Wheel -- Virtual Reality in the Study of Warnings Effectiveness -- An Interactive System to Measure the Human Behaviour: An Analysis Model for the Human-Product-Environment Interaction -- Computer, Television and Playstation Use in Developmental Age: Friends or Enemies of Growth and Health? Study on a Northern Italy Sample 6-14 Year Old -- Ergonomic Requirements for Input Devices -- Factors Relating to Computer Use for People with Mental Illness -- A Biomechanical Analysis System to Evaluate Physical Usability of Kimchi Refrigerator -- An Experimental Study on Physiological Parameters Toward Driver Emotion Recognition -- A Kinematic Analysis of Directional Effects on Trackball Mouse Control in Novel Normal Users: An Alternating Treatments Single Subject Design -- An Evaluation Study for a 3D Input Device Based on Ergonomic Design Criteria -- Investigation and Implementation of the Advanced Wireless Medical Registration Solution in China -- Effectiveness of Multimedia Systems in Children’s Education -- An Expert System to Support Clothing Design Process -- Interaction and Ergonomics Issues in the Development of a Mixed Reality Construction Machinery Simulator for Safety Training -- Performance Improvement of Pulse Oximetry-Based Respiration Detection by Selective Mode Bandpass Filtering -- Development of Electric Wheelchair with Operational Force Detecting Interface for Persons with Becker’s Muscular Dystrophy -- How Users with RSI Review the Usability of Notebook Input Devices -- Dynamic Mouse Speed Scheme Design Based on Trajectory Analysis -- Problematic Internet Use in South African Information Technology Workers -- A Novel Design for an Ultra-Large Screen Display for Industrial Process Control -- Methodology to Apply a Usability Testing by Non Specialized People: Evaluation of the European Platform "e-

Exhibitions" -- Evaluation of Guiard’s Theory of Bimanual Control for Navigation and Selection -- Evaluation Approach for Post-stroke Rehabilitation Via Virtual Reality Aided Motor Training.

Sommario/riassunto

The 12th International Conference on Human-Computer Interaction, HCI International 2007, was held in Beijing, P.R. China, 22-27 July 2007, jointly with the Symposium on Human Interface (Japan) 2007, the 7th International Conference on Engineering Psychology and Cognitive Ergonomics, the 4th International Conference on Universal Access in Human-Computer Interaction, the 2nd International Conference on Virtual Reality, the 2nd International Conference on Usability and Internationalization, the 2nd International Conference on Online Communities and Social Computing, the 3rd International Conference on Augmented Cognition, and the 1st International Conference on Digital Human Modeling. A total of 3403 individuals from academia, research institutes, industry and governmental agencies from 76 countries submitted contributions, and 1681 papers, judged to be of high scientific quality, were included in the program. These papers address the latest research and development efforts and highlight the human aspects of design and use of computing systems. The papers accepted for presentation thoroughly cover the entire field of Human-Computer Interaction, addressing major - advances in knowledge and effective use of computers in a variety of application areas. This volume, edited by Marvin J. Dainoff, contains papers in the thematic area of Ergonomics and Health Aspects of Work with Computers, addressing the following major topics: • Health and Well Being in the Working Environment • Ergonomics and Design.