1. Record Nr. UNISA996204585603316 Engineering Psychology and Cognitive Ergonomics [[electronic resource] **Titolo** 1: 12th International Conference, EPCE 2015, Held as Part of HCI International 2015, Los Angeles, CA, USA, August 2-7, 2015, Proceedings / / edited by Don Harris Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-20373-8 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (XVII, 524 p. 218 illus.) Collana Lecture Notes in Artificial Intelligence;; 9174 Disciplina 620.82 Soggetti Artificial intelligence Computers and civilization Computers User interfaces (Computer systems) Artificial Intelligence Computers and Society Models and Principles User Interfaces and Human Computer Interaction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Cognitive Aspects of Display and Information Design -- The Development of a Method to Assess the Effects of Traffic Situation and Time Pressure on Driver Information Preferences -- Distraction and Driving Behavior by Presenting Information on an "Emissive Projection" Display" Compared to a Head-up Display -- Modeling Situation Awareness on Alarm Displays in Nuclear Power Plants -- A Study of Multi-target Visual Search by Eye Movement Behavior -- Effects of Auditory and Tactile Warning on Drivers' Response to Hazard Under Noisy Environment -- Study on Event-Related Potential of Information Alarm in Monitoring Interface -- Effect of Icon Density and Color Contrast on Users' Visual Perception in Human Computer Interaction --

Prevalence Effects in X-Ray Screening Tasks with a Static or Dynamic Visual Display: Is There Any Difference -- Visual Comfort and Fatigue

Between Watching Linear Polarized and Circular Polarized LCD TVs as Measured by Eye Tracking -- Applied Cognitive Psychology -- Visual Behavior Analysis of Human Performance in Precision Tasks -- The Effect of Simulated Threat on Task Performance During Emotion Recognition -- It's Dark in There: Using Systems Analysis to Investigate Trust and Engagement in Dark Web Forums -- A CMF Database Framework Design-A Case of Application of User Mental Model --Gamification Design Based Research on Speech Training System for Hearing-Impaired Children -- Military Vehicle Dashboard Design Using Semantics Method in Cognitive Ergonomics Framework -- Seeing Officiating as a Sociotechnical System – The Case for Applying Distributed Situation Awareness to Officials in Sport -- Towards a Continuous Method for Mental Workload Registration -- Black or White? Influence of Robot Arm Contrast on Distraction in Human-Robot Interaction -- New Knowledge for Built Environments: Exploring Urban Design from Socio-technical System Perspectives -- Safety, Risk and Human Reliability -- Bridging the Research-Practice Gap: Validity of a Software Tool Designed to Support Systemic Accident Analysis by Risk Managers -- "How Do I Save It?" Usability Evaluation of a Systems Theory-Based Incident Reporting Software Prototype by Novice End Users -- Sorry, I'm Late: I'm Not in the Mood: Negative Emotions Lengthen Driving Time -- Primacy of Immediate Reward Underlying Violation: Basic Study on Safety Management -- An Attempt to Predict Driver's Drowsiness Using Trend Analysis of Behavioral Measures -- An Attempt to Predict Point in Time with High Risk of Crash Using Psychological Rating on Drowsiness and X-Bar Chart of Behavioral Measures -- The Elephant in the Room: Normal Performance and Accident Analysis -- Inverting Traditional Views on Human Task-Processing Behavior by Focusing on Abilities Instead of Disabilities - A Discussion on the Functional Situation Management of Drivers to Solve Demanding Situations -- What the Death Star Can Tell Us About System Safety -- Aviation and Space Safety -- How 3D-Displays in ATC Permit Direct Event Perception -- How Automation Effect Mental Workload of Novice Operators in Space Rendezvous and Docking -- Evaluating Operator Performance in Teleoperated Manipulator System Factored by Camera Configurations -- On the Development of a Monitoring Test for the Selection of Aviation Operators -- Supporting Fighter Pilot Decision Making Through Team Option Awareness -- Visual Movement and Mental-Workload for Pilot Performance Assessment -- Dual Pilot and Single Pilot Operations – Hierarchical Task Decomposition Analysis of Doing More with Less -- Flight Safety Margin Theory - A Theory for the Engineering Analysis of Flight Safety -- Visualization and Analysis of Controllers' Working Processes in En Route Air Traffic Control -- The Efficiency of New Audio Alerts in the COOPANS Eurocat System --Interface Design and Pilot Attention Distribution Whilst Pursuing a Dynamic Target -- Effectiveness of Advanced Collaboration Tools on Crew Communication in Reduced Crew Operations -- The Analysis of Human Error Prevention Strategies in Military Aviation -- An Integrated Framework for Crew - Centric Flight Operations -- Improving Target Acquisition Performance by Integrating Human Behavior Models and Unmanned Aerial Vehicle Control Automation -- Bridging the Gap Between Desktop Research and Full Flight Simulators for Human Factors Research -- Understanding Team Effectiveness in a Tactical Air Unit --How to Make the Most of Your Human: Design Considerations for Single Pilot Operations -- Research on Error Proofing Design of Boeing and Airbus Cockpit from Pilots Survey -- Comfort Evaluation Method of Commercial Pilot Posture -- Relational Complexity Network and Air Traffic Controllers' Workload and Performance.

Sommario/riassunto

This book constitutes the refereed proceedings of the 12th International Conference on Engineering Psychology and Cognitive Ergonomics, EPCE 2015, held as part of the 17th International Conference on Human-Computer Interaction, HCII 2015, held in Los Angeles, CA, USA, in August 2015. The total of 1462 papers and 246 poster papers presented at the HCII 2015 conferences was carefully reviewed and selected from 4843 submissions. 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. The 49 contributions included in the EPCE proceedings were organized in the following topical sections: cognitive aspects of display and information design; applied cognitive psychology; safety, risk and human reliability; and aviation and space safety.