Recent Developments in Job Analysis

Edited by
Kurt Landau

and Walter Rohmert


Taylor & Francis
London • New York • Philadelphia
1989
## CONTENTS

### Session I: Comparison of Job Analysis Methods

**K. Landau/W. Rohmert, University of Hohenheim and University of Technology, Darmstadt, Federal Republic of Germany**

Introduction to the Problems of Job Analysis - On the Development Status of the Procedure and its Theoretical Foundation

**A. Seeber/K.-H. Schmidt/E. Kiesswetter/J. Rutenfranz, University of Dortmund, Federal Republic of Germany**

On the Application of AET, TBS, and VERA to Discriminate Between Work Demands at Repetitive Short Cycle Tasks

**R. Wagner, ARBED Division de Differdange, Luxemburg**

Standard Methods Used in French-speaking Countries for Workplace Analysis

###Session II: Psychological Job Analysis Methods

**D.V. Kunak, University of South Florida, Tampa, USA**

The Critical Event Technique in Job Analysis

**B. Greiner/ K. Leitner, University of Technology, West Berlin**

Assessment of Job Stress: The RHIA-Instrument

**N. Semmer/D. Zapf, University of Bern, Switzerland and University of Technology, Munich, Federal Republic of Germany**

Validity of Various Methods of Measurement in Job Analysis

**I. Udris/H. Nibel, Swiss Federal Institute of Technology, Zurich, Switzerland**

Situational Diagnosis vs. Social Construction of Jobs - Meta-analysis of the Questionnaire "Subjective Job Analysis"

**A.-L. Elo, Institute of Occupational Health, Helsinki, Finland**

Method for Monitoring Psychic Stress Factors by Occupational Health Personnel
Session III: Practical Applications of Psychological Job Analysis Methods

W. Weber/R. Oesterreich, University of Technology, West Berlin
VERA Microanalysis: Applied to a Flexible Manufacturing System

M. Resch, University of Hannover, Federal Republic of Germany
Analysing the Social Impact of New Technologies in the Engineering Office

M. Vartiainen, University of Helsinki, Finland
Controversial or Logical Results? Comparisons With Different Methods

H. Dunckel, University of Technology, West Berlin
Contrastive Task Analysis

Session IV: Job Analysis, Occupational Health and Safety

K. Kemmlert, National Institute of Occupational Health, Solna, Sweden
Identification of Ergonomic Factors Which May Have Injurious Effects

R. Brauchler/K. Landau, University of Hohenheim, Federal Republic of Germany
Epidemiological Analysis of Workload Data Using Ergonomic Data Bases

A. C. Mandal
The Influence of Seat Angle and Furniture Height on Backpain

F. Ruppert/C. Graf Hoyos, University of Technology, Munich, Federal Republic of Germany
Safety Diagnosis in Industrial Plants: Concepts and Preliminary Results

M. Mattila/P. Kivi, Tampere University of Technology, Finland
Job Load and Hazard Analysis: A Method for Hazard Screening and Evaluation
H. Beutnagel/W. Hammer, Institute of Production Engineering of the Federal Research Centre for Agriculture, Braunschweig, Federal Republic of Germany
Risk Analyses Of Mounting and Dismounting Agricultural Vehicles by Means of a Near-accident Survey

Session V: Job Analysis and Physiological Aspects

L. Price/F. Fayzmehr/ R. Beaton Virginia Polytechnic, Institute and State University, Blacksburg, USA
Field Observations on the Ergonomics of Typewriting

M. Bier, University of Technology, Darmstadt, Federal Republic of Germany
BVA, A New Method to Investigate Combined Stress Factors

C.-H. Nygård/S. Lusa/A. Peltomaa/J. Ilmarinen, Institute of Occupational Health, Helsinki, Finland
Stress and Strain in Kitchen Work

J. Weimann, Humboldt-University of Berlin, Dep. Psychology, Berlin, German Democratic Republic
Mental Effort in Problem Solving as Manifest in the Power Spectra of Heart-interbeat Intervals

R. Wieland-Eckelmann/ U. Kleinbeck/ R. Schwarz/ H. Hacker, University of Wuppertal, West Germany
The Assessment of Mental Workload in Dual-task Performance: Task Specific and Task Unspecific Influences

Session VI: Job Analysis and Technological Change

K. Groth, University of Technology, Darmstadt, Federal Republic of Germany
The Modular Work Analysis System (MAS)

W. Kannheiser/ R. Hormel/ R.K. Bidmon,
The P-TAI-Concept: An Integrative Approach

J. Sydow, University of Berlin, West Berlin
Office Communication Analysis: Its Contribution to Work Design

R. Upmann, University of Aachen, Federal Republic of Germany
Work Analysis as a Tool for Task- and Work Oriented Design of Computer Assisted Cooperative Work Systems
Session VII: Examples for Analysis in Job Design

G. Kaucsek, University of Budapest, Hungary
Analysis of CAD/CAM Job Content and Workplace Characteristics 319

F. Klimmer/ H. Kylian/K.-H. Schmidt/J. Rutenfranz,
University of Dortmund, Federal Republic of Germany
Work Analysis and Load Components in an Automobile Plant
After the Implementation of New Technologies 331

Th. Muller/ J. Springer/ Th. Langner,
University of Technology, West Berlin
Job Analysis in Design Work 341