1991

Title and Contents- THE COMPUTER AND THE DECISION-MAKING PROCESS

Jane Close Conoley  
*University of California - Riverside*

Terry B. Gutkin  
*University of Nebraska-Lincoln*

Steven L. Wise  
*University of Nebraska-Lincoln*

Follow this and additional works at: [http://digitalcommons.unl.edu/buroscomputerdecision](http://digitalcommons.unl.edu/buroscomputerdecision)

Part of the [Educational Assessment, Evaluation, and Research Commons](http://digitalcommons.unl.edu/educationalassessment), and the [Educational Methods Commons](http://digitalcommons.unl.edu/educationalmethods)


[http://digitalcommons.unl.edu/buroscomputerdecision/1](http://digitalcommons.unl.edu/buroscomputerdecision/1)

This Article is brought to you for free and open access by the Buros-Nebraska Series on Measurement and Testing at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in The Computer and the Decision-Making Process by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
THE COMPUTER
AND
THE DECISION-MAKING
PROCESS
Buros-Nebraska Symposium on Measurement & Testing

Series Editor

JANE CLOSE CONOLEY

Buros Institute of Mental Measurements and Department of Educational Psychology
University of Nebraska-Lincoln
THE COMPUTER AND THE DECISION-MAKING PROCESS

Edited by
TERRY B. GUTKIN
STEVEN L. WISE

UNIVERSITY OF NEBRASKA-LINCOLN

LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS
1991
Hillsdale, New Jersey  Hove and London
Contents

Preface ix

1. Computer-Assisted Personality Test Interpretation: The Dawn of Discovery
   Douglas N. Jackson
   Some Preconditions for Valid Computer-Assisted Test Interpretation 1
   The Dawn of Discovery 6
   References 9

2. Psychodiagnostic Computing: From Interpretive Programs to Expert Systems
   Marley W. Watkins and Paul A. McDermott
   Development of Administration and Interpretation Programs 11
   Novel Administration and Interpretation Programs 14
   Computerized Interpretation Systems 16
   A Psychoeducational Diagnostic Model 19
   A Computerized Psychoeducational Diagnostic System 23
   Summary 36
   References 37
### 3. Assessment of Validity in Computer-Based Test Interpretations

*Kevin L. Moreland*

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some History</td>
<td>44</td>
</tr>
<tr>
<td>Types of CBTI Systems</td>
<td>45</td>
</tr>
<tr>
<td>Validity Studies to Date</td>
<td>51</td>
</tr>
<tr>
<td>How to Validate “Automated Clinical” CBTIS</td>
<td>66</td>
</tr>
<tr>
<td>Epilogue</td>
<td>67</td>
</tr>
<tr>
<td>References</td>
<td>68</td>
</tr>
</tbody>
</table>

---

### 4. The Validity of Computer-Based Test Interpretations of the MMPI

*Lorraine D. Eyde, Dennis M. Kowal, and Francis J. Fishburne, Jr.*

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMPI Elements for CBTI Use</td>
<td>77</td>
</tr>
<tr>
<td>Criticisms of Research on CBTI Systems</td>
<td>80</td>
</tr>
<tr>
<td>WRAMC Research Design and Setting</td>
<td>81</td>
</tr>
<tr>
<td>Results</td>
<td>93</td>
</tr>
<tr>
<td>Discussion</td>
<td>110</td>
</tr>
<tr>
<td>Further Research</td>
<td>113</td>
</tr>
<tr>
<td>References</td>
<td>114</td>
</tr>
<tr>
<td>Appendix A</td>
<td>117</td>
</tr>
<tr>
<td>Appendix B</td>
<td>120</td>
</tr>
</tbody>
</table>

---

### 5. Use of Computer Technology in Behavioral Assessments

*Thomas R. Kratochwill, Elizabeth J. Doll, and W. Patrick Dickson*

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions of Behavioral Assessment</td>
<td>127</td>
</tr>
<tr>
<td>Applications of Microcomputers in Behavioral Assessment</td>
<td>129</td>
</tr>
<tr>
<td>Considerations in the Use of Computer-Based Behavioral Assessment</td>
<td>142</td>
</tr>
<tr>
<td>Conclusions</td>
<td>149</td>
</tr>
<tr>
<td>References</td>
<td>150</td>
</tr>
</tbody>
</table>
CONTENTS

6. The Use of the Computer in the Practice of Industrial/Organizational Psychology
   Lyle F. Schoenfeldt and Jorge L. Mendoza
   Human Resource Planning 156
   Job Analysis 158
   Selection 159
   Placement 161
   Performance Evaluation 164
   Computer-Based Training 166
   Career Progression 168
   Organizational Issues 172
   Summary 173
   References 174

7. Implementation Decisions in Designing Computer-Based Instructional Testing Programs
   John V. Noonan and Paul D. Sarvela
   Introduction 177
   Summary 194
   References 194
   Appendix A 196

   Harold F. O'Neil, Jr., and Eva L. Baker
   Intelligent Computer-Assisted Instruction (ICA1) 199
   Artificial Intelligence and Test Development 217
   References 221

9. Legal Issues in Computerized Psychological Testing
   Donald N. Bersoff and Paul J. Hofer
   The Legal Profession's Response to CPT 226
   Psychology's Response to CPT 228
   Rights and Responsibilities of Professionals 230
   Intellectual Property 232
   The Rights of Test Takers 239
   Conclusion 241
   References 242
10. *Guidelines for Computer Testing*  
*Bert F. Green*

Establishing the Equivalence of Scores  247  
Test Administration  250  
Test Interpretations  251  
References  253  
Appendix  254  
The User's Responsibilities  257  
Guidelines for Users of Computer-Based Tests and Interpretations  259  
The Developer’s Responsibilities  263  
Guidelines for the Developers of Computer-Based Test Services  265  
References  272

Author Index  275  
Subject Index  285