### Program overview

#### Sunday, 7 July 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-15:00</td>
<td>Registration &amp; Submit PowerPoints &amp; Slides</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>Workshop</td>
<td>Meth E0.06</td>
</tr>
<tr>
<td>18:00-20:00</td>
<td>Registration &amp; PPT submission</td>
<td>Meth E0.06</td>
</tr>
<tr>
<td>19:00-19:30</td>
<td>Opening session</td>
<td>D0.03</td>
</tr>
<tr>
<td>19:30-21:00</td>
<td>Get-Together-Party</td>
<td>D0 Hall</td>
</tr>
</tbody>
</table>

#### Monday, 8 July 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-9:30</td>
<td>Registration &amp; Coffee &amp; Submit PowerPoints &amp; Slides</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>9:30-10:20</td>
<td>Keynote 1: Filip De Fruyt</td>
<td>Pers D0.03</td>
</tr>
<tr>
<td>10:30-12:00</td>
<td>Session 1</td>
<td>1-Org E0.05, 2-Intell E0.06, 3-Meth D0.08, 4-Clin D2.13</td>
</tr>
<tr>
<td>12:00-13:00</td>
<td>Lunch</td>
<td>Restaurant</td>
</tr>
<tr>
<td>13:00-13:50</td>
<td>Keynote 2: Alberto Maydeu-Olivares</td>
<td>Meth D0.03</td>
</tr>
<tr>
<td>14:00-15:00</td>
<td>Fons van de Vijver symposium</td>
<td>Cult D0.03</td>
</tr>
<tr>
<td>15:00-16:00</td>
<td>Poster session</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>15:30-16:00</td>
<td>Registration &amp; Coffee</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>16:00-17:30</td>
<td>Session 2</td>
<td>1-Educ D0.08, 2-Intell E0.05, 3-Meth D2.13, 4-Pers E0.06</td>
</tr>
<tr>
<td>17:30-19:30</td>
<td>Executive Committee</td>
<td>D2.13</td>
</tr>
</tbody>
</table>

Peter Theuns (Editor), Vrije Universiteit Brussel, Belgium, June 2019.
### Tuesday, 9 July 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-9:30</td>
<td>Registration &amp; Coffee &amp; Submit PowerPoints &amp; Slides</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>9:30-10:20</td>
<td>Keynote 3: Ricarda Steinmayr</td>
<td>Educ D0.03</td>
</tr>
<tr>
<td>10:30-12:00</td>
<td>Session 3</td>
<td>1-Clin D0.08  2-Intell E0.05  3-Meth D2.13  4-Pers E0.06</td>
</tr>
<tr>
<td>12:00-13:00</td>
<td>Lunch</td>
<td>Restaurant</td>
</tr>
<tr>
<td>13:00-13:50</td>
<td>Keynote 4: Roberto Colom</td>
<td>Intell D0.03</td>
</tr>
<tr>
<td>14:00-15:30</td>
<td>Symposia 1</td>
<td>1-Pers D0.08  2-Clin E0.05  3-Pers E0.06  4a-Meth D2.13</td>
</tr>
<tr>
<td>15:30-16:00</td>
<td>Registration &amp; Coffee</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>16:00-17:30</td>
<td>Session 4</td>
<td>1-Educ D0.08  2-Org E0.05  3-Meth D2.13  4-Pers E0.06</td>
</tr>
<tr>
<td>17:30-19:00</td>
<td>Assembly meeting</td>
<td>D2.13</td>
</tr>
<tr>
<td>19:30-22:00</td>
<td>Conference dinner</td>
<td></td>
</tr>
</tbody>
</table>

### Wednesday, 10 July 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-9:30</td>
<td>Registration &amp; Coffee &amp; Submit PowerPoints &amp; Slides</td>
<td>D0 Hall</td>
</tr>
<tr>
<td>9:30-10:20</td>
<td>Keynote 5: Jennifer L. Tackett</td>
<td>Clin D0.03</td>
</tr>
<tr>
<td>10:30-12:00</td>
<td>Session 5</td>
<td>1-Educ D0.08  2-Org E0.05  4-Pers D2.13</td>
</tr>
<tr>
<td>12:00-13:00</td>
<td>Lunch</td>
<td>Restaurant</td>
</tr>
<tr>
<td>13:00-14:30</td>
<td>Symposia 2</td>
<td>1-Meth D0.08  2-Clin E0.05  3-Intell E0.06  4b-Meth D2.13</td>
</tr>
<tr>
<td>14:35-15:30</td>
<td>Plenary Conclusion</td>
<td>D0.03</td>
</tr>
</tbody>
</table>
Table of Contents

PROGRAM OVERVIEW ................................................................. 2
WELCOME .................................................................................. 6
EAPA PRESIDENT’S WELCOME ......................................................... 7
A NOTE FROM THE EAPA PRESIDENT-ELECT ...................................... 8
COMMITTEES .............................................................................. 9
Organizing Committee .................................................................... 9
International Scientific Committee ..................................................... 9
GENERAL INFORMATION ................................................................ 10
Conference venue ........................................................................ 10
Official language ......................................................................... 11
Weather ...................................................................................... 11
Internet ....................................................................................... 11
Lunches and coffee breaks ............................................................. 11
Papers and posters ...................................................................... 11
SOCIAL PROGRAM ...................................................................... 12
Get-together-party ........................................................................ 12
Conference dinner ....................................................................... 12
Visit Brussels ............................................................................... 12
WORKSHOP ................................................................................. 13
Workshop on Decision Tree Methods: Sunday 7 July, 15:00-17:00, Room E0.06 (Marjolein Fokkema) ...................................................... 13
KEYNOTE SESSIONS AND ABSTRACTS .......................................... 14
Keynote 1: Filip De Fruyt: Current Assessment Challenges in Personality. Monday 8 July, 09:30-10:20, Room D0.03 (Chair: Laurence Claes) .................................................................................. 14
Keynote 2: Alberto Maydeu-Olivares: Estimating causal effects in linear regression models with observational data: The instrumental variables regression model. Monday 8 July, 13:00-13:50, Room D0.03 (Chair: Jonny Fontaine) .......................................................... 14
Keynote 3: Ricarda Steinmayr: Predicting academic achievement: challenges and directions for future research. Tuesday 9 July, 09:30-10:20, Room D0.03 (Chair: Peter Theuns) .......................................................................... 15
Keynote 4: Roberto Co lum: The assessment of intelligence in the XXI Century: Designing the future standing on the shoulders of giants. Tuesday 9 July, 13:00-13:50, Room D0.03 (Chair: Mark Schittkatte) .............................................. 15
Keynote 5: Jennifer L. Tackett: Thoughts on the Replication Crisis for Clinical Psychology Wednesday 10 July, 09:30-10:20, Room D0.03 (Chair: Matthias Ziegler) .......................................................... 16
SYMPOSIUM ................................................................................. 17
Symposium - Fons Van de Vijver’s Legacy: Challenges of Assessment across Countries and Cultures. Monday 8 July, 14:00-15:00, Room D0.03 (Organizer: Johnny Fontaine) ........................................................................ 17
Symposium 1.1: The Alternative Model of Personality Disorders in the Spotlight. Tuesday 9 July, 14:00-15:30, Room D0.08 (Organizer: Laurence Claes) .................................................................................................. 17
Symposium 1.2: New Instruments, Constructs and Challenges in the Children’s Psychological Assessment. Tuesday 9 July, 14:00-15:30, Room E0.05 (Organizer: Miguel Angel Carrasco) .................................................................................. 18
Symposium 1.3: Alternative Ways to Assess Personality Characteristics. Tuesday 9 July, 14:00-15:30, Room E0.06 (Organizers: Kai T. Horstmann & Clemens Stachl) ........................................................................ 19
Symposium 1.4A: Lies, Damned Lies, and Response Styles (Part A): Tuesday 9 July, 14:00-15:30, Room D2.13 (Organizer: Matthias Ziegler) ........................................................................... 20
Symposium 2.1: From Web-based assessment to Virtual Reality: New Technologies Applied to Increase Psychological Assessment Ecological Validity. Wednesday 10 July, 13:00-14:30, Room D0.08 (Organizer: Victor J. Rubio) .................................................................................. 21
SYMPOSIUM 2.2: EMBEDDING THE ASSESSMENT OF EMOTIONS AND EMOTIONAL COMPETENCE IN THE COMPONENTIAL EMOTION APPROACH: WEDNESDAY 10 JULY, 13:00-14:30, ROOM E0.05 (Organizer: Johnny Fontaine) ........................................... 22

SYMPOSIUM 2.3: THE ART OF ASSESSING INTELLIGENCE: QUALITY ISSUES, TEST DEVELOPMENT AND APPLICATIONS IN FLANDERS: WEDNESDAY 10 JULY, 13:00-14:30, ROOM E0.06 (Organizer: Marlies Tierens) ................................................................. 23

SYMPOSIUM 2.4B: LIES, DAMNED LIES, AND RESPONSE STYLES (PART B): WEDNESDAY 10 JULY, 13:00-14:30, ROOM D2.13 (Organizer: Matthias Ziegler) ........................................... 23

ORAL SESSIONS ........................................................................................................................................................................ 25

SESSION 1.1 ORGANISATIONAL: MONDAY 8 JULY, 10:30-12:00, ROOM E0.05 (Chair: Nathalie Parent) ......................... 25
SESSION 1.2 INTELLIGENCE: MONDAY 8 JULY, 10:30-12:00, ROOM E0.06 (Chair: Mark Schittekatte) ......................... 25
SESSION 1.3 METHODS: MONDAY 8 JULY, 10:30-12:00, ROOM D0.08 (Chair: Victor Ortuño) ................................. 25
SESSION 1.4 CLINICAL & HEALTH: MONDAY 8 JULY, 10:30-12:00, ROOM D2.13 (Chair: Steven Degrauwe) ........ 26
SESSION 2.1 EDUCATIONAL: MONDAY 8 JULY, 16:00-17:30, ROOM D0.08 (Chair: Beth Perkins) ......................... 26
SESSION 2.2 INTELLIGENCE: MONDAY 8 JULY, 16:00-17:30, ROOM E0.05 (Chair: George Spanoudis) ............... 26
SESSION 2.3 METHODS: MONDAY 8 JULY, 16:00-17:30, ROOM D2.13 (Chair: Julie De Ganck) ............................... 26
SESSION 2.4 PERSONALITY: MONDAY 8 JULY, 16:00-17:30, ROOM E0.06 (Chair: John Magnus Roos) ............. 27
SESSION 3.1 CLINICAL: TUESDAY 9 JULY, 10:30-12:00, ROOM D0.08 (Chair: Imke Baetens) .............................. 27
SESSION 3.2 INTELLIGENCE: TUESDAY 9 JULY, 10:30-12:00, ROOM E0.05 (Chair: Marlies Tierens) ................... 27
SESSION 3.3 METHODS: TUESDAY 9 JULY, 10:30-12:00, ROOM D2.13 (Chair: René Proyer) ............................ 28
SESSION 3.4 PERSONALITY: TUESDAY 9 JULY, 10:30-12:00, ROOM E0.06 (Chair: Scott R. Ross) ....................... 28
SESSION 4.1 INTELLIGENCE: TUESDAY 9 JULY, 16:00-17:30, ROOM D0.08 (Chair: Bea Kreemers) .................. 28
SESSION 4.2 ORGANISATIONAL: TUESDAY 9 JULY, 16:00-17:30, ROOM E0.05 (Chair: Aristides Ferreira) ....... 29
SESSION 4.3 METHODS: TUESDAY 9 JULY, 16:00-17:30, ROOM D2.13 (Chair: Yuri Chernov) ........................... 29
SESSION 4.4 PERSONALITY: TUESDAY 9 JULY, 16:00-17:30, ROOM E0.06 (Chair: Tim Bastiaens) .................. 29
SESSION 5.1 EDUCATIONAL: WEDNESDAY 10 JULY, 10:30-12:00, ROOM D0.08 (Chair: Christoph Kolb) .......... 30
SESSION 5.2 ORGANISATIONAL: WEDNESDAY 10 JULY, 10:30-12:00, ROOM E0.05 (Chair: Aristides Ferreira) ..... 30
SESSION 5.4 PERSONALITY: WEDNESDAY 10 JULY, 10:30-12:00, ROOM D2.13 (Chair: Miguel Angel Carrasco) .... 30

POSTERS .................................................................................................................................................................................. 31

Poster Session, Monday 8 July, 15:00-16:00, Room D0-Hall ......................................................................................... 31

ABSTRACTS OF CONTRIBUTED PAPERS AND POSTERS ................................................................................................. 32

AUTHOR INDEX ................................................................................................................................................................. 105

SPONSORS ........................................................................................................................................................................ 109
Dear colleagues,

It is my pleasure to wish you a warm welcome to Brussels on behalf of the organizing committee of ECPA15, 7-10 July 2019, Brussels.

Brussels is a great city, you should take the opportunity to explore it!

This edition of the ECPA conferences seems to have attracted fewer delegates than previous editions, however, I am convinced that inspiring talks and discussion will become significant for furthering your own and your colleagues’ work. A great variety of promising papers are awaiting us.

For sure this ECPA will become memorable!

I wish you a good stay in Brussels and a challenging conference!

Peter Theuns
ECPA15 Organizer
Dear conference attendees,

As the outgoing president of the European Association of Psychological Assessment I am very happy to welcome you all at the 15th European Conference on Psychological Assessment in Brussels at the Vrije Universiteit Brussel. Brussels offers an excellent context for our 15th European conference. It is not only the capital of the European Union, but also the principal seat of the European Federation of Psychologists’ Associations which stands up for the role of psychology and psychologists in Europe. With the EFPA Board of Assessment, promoting the quality of psychological assessment constitutes an integral part of their mission. The mission of our conference forms a perfect match. Psychological assessment is the linchpin between different theoretical and applied fields in psychology, and its role becomes increasingly important with the call for evidence-based interventions. The European Conferences on Psychological Assessment form an excellent forum to exchange new assessment developments in the major fields of psychology and contribute to the academic advancement of psychological assessment in Europe.

When finalizing the program of the conference we were informed about the sad news of the sudden and unexpected passing away of our past president, Prof. Dr. Fons Van de Vijver. He has greatly contributed to the development of psychological assessment, and with his focus on cultural comparability, he did this in a way that is highly relevant for Europe as a multicultural society. Many of us not only remember him as an outstanding scholar, but also as an understanding and supportive mentor and colleague. We will honour him and his legacy at this conference with a special symposium devoted to his assessment work.

I wish you all an inspiring and very fruitful conference where you can share your ideas and be inspired by those of others. I also wish you a pleasant stay in Brussels, the medieval city that became the heart of Europe.

Yours sincerely,

Johnny Fontaine
Outgoing president of EAPA
“I am excited and feel very honored to serve as the president for the European Association of Psychological Assessment. The upcoming years will present us with quite a few challenges within our research field (e.g., artificial intelligence), the association (e.g., new open access journal), and our standing in society. I hope to be able to contribute to all solutions for all of these challenges in my new role.”

Matthias Ziegler
EAPA president elect
Committees

Organizing Committee

- Imke Baetens (Vrije Universiteit Brussel, Belgium)
- Laurence Claes (KU-Leuven, Belgium)
- Marc Covents (U-Gent, Belgium)
- Johnny Fontaine (U-Gent, Belgium)
- Els Pauwels (KU-Leuven, Belgium)
- Mark Schittekatte (U-Gent, Belgium)
- Chris Schotte (Vrije Universiteit Brussel, Belgium)
- Peter Theuns (Vrije Universiteit Brussel, Belgium)
- Marlies Tierens (Thomas Moore, Belgium)
- Sylvie Van Houtvinck (Vrije Universiteit Brussel, Belgium)

International Scientific Committee

- Itziar Alonso Arbiol (Universidad Del Pais Vasco, Spain)
- Imke Baetens (Vrije Universiteit Brussel, Belgium)
- Laurence Claes (KU-Leuven, Belgium)
- Aristides Ferreira (ISCTE – Instituto Universitário de Lisboa, Portugal)
- Johnny Fontaine (U-Gent, Belgium)
- David Gallardo-Pujol (University of Barcelona, Spain)
- Joeri Hofmans (Vrije Universiteit Brussel, Belgium)
- Christoph Kemper (HSD University of Applied Sciences, Germany)
- Tuulia Ortner (Universität Salzburg, Austria)
- José Antonio Piqueras (Universidades Miguel Hernandez, Spain)
- René Prorer (UZH University of Zurich, Switzerland)
- Victor Rubio (Universidad Autonoma de Madrid, Spain)
- Willibald Ruch (Universität Zurich, Switzerland)
- Mark Schittekatte (U-Gent, Belgium)
- Karl Schweizer (UNI-Frankfurt, Germany)
- Peter Theuns (Vrije Universiteit Brussel, Belgium)
- Fons van de Vijver (Tilburg University, Netherlands)
- Tim Vantilborgh (Vrije Universiteit Brussel, Belgium)
- Matthias Ziegler (HU-Berlin, Germany)

° Passed away on 1/6/2019
General information

Conference venue

The ECPA15 conference will be held at the Vrije Universiteit Brussel (VUB), in building D. The venue is located on the VUB Etterbeek campus, Pleinlaan 2, 1050 Brussels (GPS N 50.821806; E 4.394564). ECPA15 signs will help you to find your way on campus.

Important notice! There are 2 different universities next to each other: the venue is at the VUB, the Vrije Universiteit Brussel (Dutch for Free University Brussels), the other university is the ULB, Université Libre de Bruxelles (French for Free University Brussels). The VUB is closer to the center of Brussels, near the train station Etterbeek, at the Boulevard General Jacques, the ULB is near the metro/train station Delta.

How to access the VUB campus

- By train: Etterbeek (or Delta) Station
- By metro/bus/tramway:
  - STIB-MIVB Trams 7 and 25 (stop VUB)
  - STIB-MIVB Metro 5 (stop Petillon or Delta)
  - STIB-MIVB Bus 95 (Etterbeek Station) or bus 34 (stop Strategie)
  - De Lijn Bus 341, 343, 348 or 349 (stop VUB)
  - TEC Bus C (stop VUB) or E (stop Strategie)
- By car: Entrance Campus Pleinlaan (not Triomflaan)
Official language

The official language at the conference is English. However, on the VUB campus, the major language is Dutch, although most people will be comfortable in English too. In Brussels, French is a common language as well.

Weather

The weather in Brussels is usually nice in July, about 20°C. However, Belgium is well-known for its gray skies. A drop of rain is always possible, but the weather can be really nice just as well.

Internet

Eduroam (WiFi) is available in and around all buildings on campus. Participants who have no access to Eduroam can connect using the guest login that is provided with your conference badge. WiFi access for guest accounts is limited to the duration of the conference.

Lunches and coffee breaks

The Get-Together Party, all lunches and coffee breaks are included in the conference fee. Coffee breaks are served in building D groundfloor, lunches are in the student restaurant at about 100 m from the venue (when leaving building D, go right towards building F).

Papers and Posters

Oral presentations: A computer (Windows) for PowerPoint presentations is available in each conference room. Please mail your slides timely to ECPA15@vub.be or bring your slides to the registration desk in the morning before your talk (please check the program overview). Please rename your file as follows: SessionX_X_YourName.pptx. Slides will be downloaded to the computer in the conference room where your presentation is scheduled.

Posters: The poster session is on Monday, 8 July, 15:00 to 16:00. However, posters (up to A0 format) can be put up earlier, from Monday 8 July, 9:00 onwards. Posters can remain exposed during the entire conference.
Social Program

Get-together-party

On Sunday evening 7 July, 19:30, after the Opening session, participants are welcomed with an informal walking dinner (included).

Conference dinner

The conference dinner (Tuesday 19:00-22:00) is in restaurant “l’Improbable” (Eugène Cattoirstraat 5, 1050 Elsene) at walking distance (600m) from the venue (not included in conference fee, special registration required).

Visit Brussels ...

... at your convenience. Brussels has a lot to offer! Check out https://visit.brussels/en

A few nice restaurants downtown near Sint-Katelijnplein metro (station Sint-Katelijne):

- Fish restaurants:
  - La Marée, Vlaamsesteenweg 99, 1000 Brussel
  - De Vismet, Sint-Katelijnplein 23, 1000 Brussel

- Belgian:
  - Henri, Vlaamsesteenweg 113, 1000 Brussel
  - Chez Jacques, Baksteenkaai 44, 1000 Brussel

- Italian: La Casa Mia, Vlaamsesteenweg 50, 1000 Brussel

- Spaghetti: Bavet, Sint Katelijnplein 1, 1000 Brussel

- Mussel: Bij den Boer, Baksteenkaai 60, 1000 Brussel
Workshop on Decision Tree Methods:
Sunday 7 July, 15:00-17:00, Room E0.06 (Marjolein Fokkema)

Decision tree methods for psychological assessment: An introduction to classification and regression trees, model-based trees, and trees for longitudinal and multilevel data

Marjolein Fokkema (Universiteit Leiden, The Netherlands)

Marjolein Fokkema is an expert in machine learning and statistics, as well as psychological assessment. In 2015 she obtained her PhD from the Vrije Universiteit Amsterdam, started working as an assistant professor in methods and statistics for psychology at Leiden University, and became an associate editor at the European Journal of Psychological Assessment. Her research focusses on recursive partitioning methods (RPMs), like for example classification and regression trees, random forests and boosted tree ensembles. Her central aim is developing RPMs that are easy to interpret and apply, and that can deal with multilevel and longitudinal data. She implemented RPMs in two popular packages (glmertree and pre) for the statistical programming environment R. She published papers on RPMs in journals like Behavior Research Methods, Psychological Assessment, Applied Psychological Measurement and the Journal of Statistical Software. Earlier, she taught workshops on RPMs at ETH Zurich, University of Zurich and University College London.

Summary
Recursive partitioning methods (RPMs), also known as decision tree methods, are statistical methods that provide results in the form of decision trees. A central advantage of decision trees is that they are easy to interpret and apply, even by non-statisticians. Furthermore, RPMs like classification and regression trees, random forests and boosted ensembles have gained much popularity in recent years, as they can deal with ‘big’ data, where the number of predictor variables exceeds the number of observations. This workshop provides an introduction to RPMs, and focusses on how psychological assessment and prediction problems can be addressed using RPMs. We start with a short introduction to RPMs, after which we will fit and interpret RPMs using the statistical program R. We will cover simple regression and classification problems, and from there extent to topics like longitudinal or multilevel data, variable selection bias, and detecting moderators.

Outline
The workshop aims to provide a gentle and practical introduction to RPMs. We will focus on a handful of data-analytic problems from psychological assessment. Datasets and R code will be provided, the latter in the form of a document in which code and results are combined with explanation, which will also be useful for future reference. An annotated reference list will be provided, which participants can use to guide further study on specific methods and algorithms. Some experience with R and with multiple linear and logistic regression models is advised.
Keynote sessions and Abstracts

Keynote 1: Filip De Fruyt: Current Assessment Challenges in Personality.
Monday 8 July, 09:30-10:20, Room D0.03 (Chair: Laurence Claes)

Current Assessment Challenges in Personality

Filip De Fruyt (Universiteit Gent, Belgium)

Personality research as a domain made considerable progress the past decades, but personality constructs also received considerable attention in different other disciplines of psychology, including developmental, clinical, industrial and organizational, and more recently, also in educational psychology. Part of this enthusiasm was due to the fact that traits were considered as key constructs to understand very different phenotypic expressions of behavior, but also because traits are relatively easy to assess. These increasing applications bring additional challenges to the field to assess personality traits and their dynamics. I will review several of these challenges in my keynote presentation, referring to different applied fields in psychology and beyond.

Keynote 2: Alberto Maydeu-Olivares: Estimating causal effects in linear regression models with observational data: The Instrumental Variables Regression Model
Monday 8 July, 13:00-13:50, Room D0.03 (Chair: Jonny Fontaine)

Estimating causal effects in linear regression models with observational data: The Instrumental Variables Regression Model

Alberto Maydeu-Olivares (University of South Carolina, Columbia, SC, USA)

Instrumental variable methods are an underutilized tool to enhance causal inference in Psychology. By way of incorporating predictors of the predictors (called “instruments” in the Econometrics literature) into the model, instrumental variable regression (IVR) is able to draw causal inferences of a predictor on an outcome. We show that by regressing the outcome y on the predictors x and the predictors on the instruments, and modeling correlated disturbance terms between the predictor and outcome, causal inferences can be drawn on y on x if the IVR model cannot be rejected in a structural equation (SEM) framework. We discuss how to identify instruments given a theoretical model, how to select the best subset of instruments when more than necessary are available, and we guide researchers on how to apply this model using SEM. We discuss Econometrics estimators to (e.g., two-stage least squares regression) from a SEM perspective, and we address the question of whether we should always use instrumental variable regression instead of ordinary regression.
Predicting Academic Achievement: Challenges and Directions for Future Research

Ricarda Steinmayr (Technische Universität Dortmund, Germany)

Students' academic achievement has critical implications for their educational and career trajectories. Furthermore, achievement indicators are routinely used for selection purposes (e.g., college admissions and academic tracking), for evaluation purposes (e.g., assessment of educational effectiveness), and for analyses of achievement-related inequality across gender, ethnicity, and social class. Understanding what factors predict students' academic achievement is therefore an important goal for educational and psychological research. Seminal reviews of available evidence (e.g. Hattie, 2009) identify a comprehensive list of such factors, including teacher-, family-, peer- and student-related aspects. The majority of research has concentrated on the relation between one factor and academic achievement. Thus, there is no scarcity of pertinent research. However, given the complexity of academic achievement, educational research must go beyond analyses of bivariate associations; a number of individual and contextual factors, as well as their interrelations must be taken into account in the prediction of achievement, as proposed in such influential theoretical models as Eccles and colleagues' expectancy-value theory (Eccles & Wigfield, 2002), Walberg's (1982) educational productivity model, and the model of students' academic attainment developed for the Programme for International Student Assessment (Baumert et al., 2001). Furthermore, it is necessary to take a closer look at the operationalization of both academic achievement (e.g., grades, standardized academic achievement tests, level of education) and its proposed antecedents, because the prediction of achievement can vary greatly as a function of which indicators are used to capture intra- and interindividual differences in scholastic ability. Last but not least, potential moderators such as age, academic stage, and different academic domains must be considered in order to contribute to a better understanding of factors that potentially shape student achievement across different contexts. The keynote will focus on a multivariate approach to the prediction of academic achievement, on methodological challenges associated with the conceptualization and operationalization of achievement, and will outline a number of open questions regarding the prediction of academic achievement across different settings and populations.
placement, job selection and design, as well as neuropsychological screening are examples). These applications are mainly derived from the classic psychometric approach. However, scientific research has accumulated sound and valuable knowledge regarding the genetic, brain, and cognitive factors related with the intelligence construct. This knowledge is still unfortunately divorced from the applied contexts in which psychologists display their practice. This lecture suggests how we can respond to the challenge of translating basic research findings into the assessment of intelligence in the XXI Century. With this purpose in mind, I discuss four examples: (1) cognitive system design, (2) videogames, (3) artificial intelligence, and (4) neurometrics. As underscored by Earl B. Hunt (2011) “a great deal has been learned using the testing techniques that are ubiquitous today (...) but it is time to move on to new techniques of measurement if we want to obtain any major breakthrough (...) the biggest challenge will be to expand assessment on intelligence from observations within the conventional testing paradigm to observations of behavior in everyday life” (pp. 864, 882).

Reference


Keynote 5: Jennifer L. Tackett: Thoughts on the Replication Crisis for Clinical Psychology

Wednesday 10 July, 09:30-10:20, Room D0.03 (Chair: Matthias Ziegler)

Thoughts on the Replication Crisis for Clinical Psychology

Jennifer L. Tackett (Northwestern University, IL, USA)

Methods and practices in psychological science have been the target of intense scrutiny over the last 6-7 years, partly in response to a series of replication failures and identification of problematic research practices in psychological research. Identification of problems and development of potential solutions has primarily emerged in the context of those psychological domains actively participating in this broader conversation, namely, social and cognitive psychology. In this presentation, I discuss potential reasons why clinical psychology has been absent from this debate and consequences of this absence—namely, delayed progress in identifying those areas of clinical research likely burdened by reproducibility problems and a gap in developing appropriate solutions for our research topics and practices. I will review some ongoing efforts related to preregistration, data sharing, and statistical and methodological practices that aim to move clinical psychological science toward more open, transparent, reproducible, and replicable research.
Symposia

Symposium - Fons Van de Vijver’s legacy: Challenges of assessment across countries and cultures
Monday 8 July, 14:00-15:00, Room D0.03 (Organizer: Johnny Fontaine)

Challenges of assessment across countries and cultures

On June 1, Fons van de Vijver, former EAPA president, unexpectedly passed away at 66 in Maidenwell, Queensland, Australia. This symposium is set up to his honor.

Contributors: Johnny Fontaine, Ype H. Poortinga, Velicho Fetvadjiev, and Noémie Le Donné

Assessment as a core feature of cross-cultural psychology
Ype H. Poortinga, Tilburg University, The Netherlands

Bias and equivalence: Psychometric approaches and beyond
Johnny R. J. Fontaine, Ghent University, Belgium

Cross-cultural assessment of personality: Development the South African Personality Inventory
Velichko Fetvadjiev, Victoria University, New Zealand

Challenges to comparability in OECD large-scale surveys in education
Noémie Le Donné, OECD, France

Symposium 1.1: The Alternative Model of Personality Disorders in the Spotlight.
Tuesday 9 July, 14:00-15:30, Room D0.08 (Organizer: Laurence Claes)

The Alternative Model of Personality Disorders in the Spotlight

Laurence Claes, PhD, clinical psychologist and behavioral therapist, is full professor at the KU Leuven, Faculty of Psychology and Educational Sciences, and at the University of Antwerp, Faculty of Medicine and Mental Health. Her teaching focuses on psychopathology, clinical assessment and interventions; her research focuses on the associations between personality (disorders) and psychopathology (non-suicidal self-injury, eating disorders, and pathological buying).

Summary
In the Alternative Model of Personality Disorders, section III of DSM-5, two new criteria are introduced for the assessment of personality disorders (PDs). Criterion A involves impairments in self (identity/self-direction) and interpersonal (empathy/intimacy) functioning. Criterion B is a constellation of pathological personality traits descriptive of the PDs. In the present symposium, we present four studies which focus on the assessment of criterion A and B, and their interplay in different samples. A. Bogaerts focuses on the assessment of Criterion A (identity) and PDs, and L. Claes on the assessment of Criterion B (PID-5) and PDs in adult community and clinical samples. T. Bastiaens explores the interplay between Criterion A and B in an adult community sample. And finally, E. Pauwels investigates
the association between personality schemata and criteria A/B of PDs in a clinical sample. Strengths and weaknesses of the assessment of the AMPD will be discussed.

Contributed papers:
Annabel Bogaerts, The association between identity (criterion A) and PDs in adult community and clinical samples.
Laurence Claes, The association between criterion B (PID-5) and PDs in adult community and clinical samples.
Tim Bastiaens, The interplay between criterion A and B of the AMPD in an adult community sample.
Els Pauwels, The association between personality schemata and criterion A/B of PDs in a clinical sample.

Symposium 1.2: New instruments, constructs and challenges in the children’s psychological assessment
Tuesday 9 July, 14:00-15:30, Room E0.05 (Organizer: Miguel Ángel Carrasco)

New instruments, constructs and challenges in the children’s psychological assessment

Miguel A. Carrasco is a professor of clinical psychological assessment in the Faculty of Psychology at the National University of Distance Education (UNED) in Madrid, Spain. He is also coordinator of the Clinical Psychological Center at that University. In addition, he is member of both the International Society for Interpersonal Acceptance and Rejection and the European Association of Psychological Assessment. His research interests focus on parenting behavior, children’s psychological problems (mainly aggression and depression), and clinical assessment, especially in children and adolescents. To get more information about his research background, please go to his website.

Summary
The psychological assessment of Children and adolescents has become to a specialized subject that requires new challenges and the development of particular instruments, tools and constructs in order to improve the reliability and accuracy of the assessment in this population. This symposium will deal with different issues regarding children’s psychological assessment in the field of clinical and health psychology: adaptation of new instruments (i.e., Children and Adolescent Assessment System, screening tool to evaluate the adolescents’ self-harm and suicide) and the study of its psychometric properties, the assessment of parents-children discrepancy patterns to predict children’s psychological adjustment, and how emotional instability, coping and emotional self-efficacy are related to adolescents’ depression. Participants from different universities of Europe will be part of this symposium and they will show their new research data and will take us to discuss and reflex about new results and challenges of the children and adolescents’ psychological assessment.

Contributed papers:

2) Wrocławska-Warchala, E., & Joanna Niedziela, MA. “Spanish tool in Polish cultural context Polish adaptation of Children and Adolescent Assessment System SENA Psychometric properties of the tool”


---

**Symposium 1.3: Alternative Ways to Assess Personality Characteristics:**
Tuesday 9 July, 14:00-15:30, Room E0.06 (Organizers: Kai T. Horstmann & Clemens Stachl)

---

**Alternative Ways to Assess Personality Characteristics**

Kai T. Horstmann & Clemens Stachl

1Humboldt-Universität zu Berlin, Germany
1Ludwig-Maximilians-Universität München, Department of Psychology, Psychological Methods and Assessment

Kai T. Horstmann is a post-doctoral researcher in the workgroup of Prof. Dr. Matthias Ziegler at Humboldt-Universität zu Berlin, Germany, where he also obtained his Ph.D. in psychology. His research focuses on the assessment and prediction of behavior in daily life, the relation of personality states and personality traits, and the description and assessment of situational characteristics.

**Summary**

New technological advancements provide alternative ways to assess personality characteristics. Especially the wide availability of smartphones and their daily use provides a new window into a person’s everyday behavior and experience. The current symposium showcases different approaches to the assessment of personality characteristics using information gathered with or from smartphones. In the first talk, Sust and colleagues showcase how personality characteristics can be inferred from music consumption. Horstmann and Ziegler then present recommendations for the construction of personality state measures. Finally, Roemer and colleagues present results from an experience sampling study for the assessment of intra-individual differences in vocational interests, using a planned missingness design. Combined, this symposium highlights the new possibilities and challenges that personality psychologist encounter when using smartphones for the assessment of personality characteristics.

**Contributed papers:**

Inferring personality traits from natural music listening on smartphones (Larissa Sust, Theresa Ullmann, Daniel Buschek, Markus Bühner & Clemens Stachl)

What to Consider when Constructing State Measures (Kai T. Horstmann & M. Ziegler)
Matthias Ziegler is a professor for psychological assessment at the Humboldt-Universität zu Berlin. His research focuses on the assessment of personality and intelligence, their interplay in predicting performance and learning, and faking. He has authored more than 100 scientific papers. He has served the association as editor in chief of the European Journal of Psychological Assessment from 2013 until 2016.

Summary
Psychological research relies on people self-reporting about traits, states, feelings, and behavior. While this has undoubtedly been successful, an uneasy feeling remains when response biases are considered. This irritation not only plagues researchers but also practitioners. This two-parted symposium aims at providing insights into theoretical developments as well as potential solutions to the problem. Ziegler, Buck, and Paulhus report three studies focusing on the situation dependence of social desirable responding (SDR). Using correlative and experimental approaches the authors demonstrate that SDR should not be considered as a unidimensional construct. The idea of identifying predictors of faking is also pursued by Duerr who differentiates faking motivation from ability. Using data from a mock selection, both aspects are related to stages of the faking process. Brown details a new methodological approach to identifying faking using mixture modeling. In a mixed-method-approach the theoretical notions are empirically underpinned.

Contributed papers:
Social Desirable Responding – A tale of how many cities exactly?
Matthias Ziegler, Humboldt-Universität zu Berlin, Germany, zieglema@hu-berlin.de
Lilly Buck, Humboldt-Universität zu Berlin, Germany
Delroy Paulhus, University of British Columbia

Faking ≠ Successful Faking: Distinguishing Motivation to Fake from Ability to Fake
Daniel Duerr, Giessen University, Daniel.Duerr@psychol.uni-giessen.de

Modelling faking behaviour in high-stakes personality assessments:
A pragmatic approach
Anna Brown, University of Kent, United Kingdom, A.A.Brown@kent.ac.uk
Symposium 2.1: From web-based assessment to virtual reality: New technologies applied to increase psychological assessment ecological validity:
Wednesday 10 July, 13:00-14:30, Room D0.08 (Organizer: Víctor J. Rubio)

From web-based assessment to virtual reality: New technologies applied to increase psychological assessment ecological validity

Victor Rubio, PhD, CCP, associate professor in the Department of Biological and Health Psychology at the University Autonoma Madrid (Spain), has an extended experience in the field of psychological assessment and has been actively involved in the European Association of Psychological Assessment since its foundation.

Dr. Rubio’s current research interests are focused on health and sport psychology. Particularly, he is keen on analyzing psychological variables that might make athletes more vulnerable to injury (e.g., stress responses, risk-taking behaviors), as well as those which can affect the rehabilitation process.

Víctor Rubio is particularly interested in the introduction of new approaches, such as ecological momentary assessment, and technologies, such as mobile devices, in psychological assessment in order to increase accuracy, reduce missing values and decrease examinee active participation in gathering data.

Summary
New technologies have led to innovative developments and possibilities virtually unthinkable few decades ago that represent a remarkable contribution to some of the challenges psychological assessment has to face. This symposium presents some examples.

Piqueras et al. show a new web-based adolescents’ mental health assessment system which assists to identify mental health problems but also individuals’ strengths in educational settings.

Brondino et al. focus on the utility of different electronical devices to assess positive emotions related to natural environments exposure in a daily basis.

Rubio et al. presentation, also from an ecological assessment approach, presents the feasibility and utility of a mobile app designed to assess cognitive appraisals, emotions and behaviors associated to a severe sport injury during the rehab process.

Finally, Menardo et al. analyzes the usability of a virtual reality device to present face-valid stimuli in the assessment of positive and negative emotions associated to natural environments.

Presenters:

Margherita Brondino, Daniela Raccanello, Roberto Burro, & Margherita Pasini: Positive emotions’ ecological assessment with multiple devices in a diary study

Symposium 2.2: Embedding the assessment of emotions and emotional competence in the componential emotion approach:
Wednesday 10 July, 13:00-14:30, Room E0.05 (Organizer: Johnny Fontaine)

Embedding the assessment of emotions and emotional competence in the componential emotion approach

Johnny Fontaine made his PhD on the cross-cultural comparability of the Schwartz Value Survey at the KU Leuven in Belgium. He currently teaches psychological assessment and cross-cultural psychology at Ghent University in Belgium. He is the outgoing president of the European Association for Psychological Assessment. Ever since his PhD he has focused on the challenges of assessment in a cross-cultural context. His current research focuses on assessment of emotions and emotional intelligence.

Summary
For the assessment of emotions and emotional intelligence (EI), it is seldom made explicit what emotions are. However, a theoretical framework is important for evaluating the construct validity of assessment instruments. In this symposium four emotion/EI assessment studies are presented that embed assessment of emotions and EI in the componential emotion approach (CEA). The CEA defines an emotion as a process characterized by a dynamic interplay between cognitive, motivational, expressive, bodily, and subjective components in reaction to goal-relevant events. Within the CEA, EI can be defined as the ability to identify an emotion process based on information from one or more components, to understand the dynamic interplay between these components during an emotion process, and to know how to regulate the emotion process in order to maximally attain one’s goals. The CEA allows to identify which (aspect of) emotions or EI is assessed and how it/they can be best operationalized.

Contributed papers:
Céline Baele & Johnny R. J. Fontaine: A componential emotion approach to the assessment of Moral Distress
Sanja Budimir, Johnny R. J. Fontaine & Etienne Roesch: Assessing emotional experiences of cyberattack victims
Eva Sekwena & Johnny R. J. Fontaine: Emotional intelligence as a buffer to stressful police work
Arpine Hovasapian, Veerle Huyghe, Johnny R. J. Fontaine: Validation of the short Components of Emotion Understanding Test (CEUT)
Symposium 2.3: The art of assessing intelligence: Quality issues, test development and applications in Flanders:
Wednesday 10 July, 13:00-14:30, Room E0.06 (Organizer: Marlies Tierens)

The art of assessing intelligence: Quality issues, test development and applications in Flanders

Marlies Tierens, PhD, is the head of the Centre for Psychological Assessment and lecturer in psychological assessment at Thomas More Antwerp, Applied Psychology. Together with her colleagues, she's working on the development of the CoVaT-CHC, a Dutch test for cognitive assessment based on the CHC model. She also gives lectures and workshops about the CHC model and how cognitive profiles can be translated into practical advice. She's a member of the Psychodiagnostics Section of the Belgian Federation of Psychologists and the Flemish Diagnostics Forum (VFD, Vlaams Forum voor Diagnostiek).

Summary
In the assessment of intelligence, several issues need consideration to ensure qualitative test results. Today, tests on cognitive abilities are often, explicitly or implicitly, based on the Cattell – Horn – Carroll (CHC) taxonomy. This symposium provides more insight into the translation of theoretical guidelines of test development into practice. The first presentation highlights quality issues in test construction and the assessment of cognitive abilities. The second speaker illustrates some of these principles for the development of the CHC-based Dutch cognitive ability test. The third presentation discusses the importance of an objective instrument to identify talented pupils. Finally, the last presenter addresses the development of decisions rules for interpreting cognitive profiles.

Contributed papers:
Quality issues (psychometrical and theoretical) in developing and adapting measures for assessment of cognitive abilities. (Mark Schittekatte, UGent)
How to applicate quality criteria in the development of a Dutch Cognitive Ability Test: an illustration. (Katrijn Van Parijs, Thomas More)
Student characteristics affecting the recognition of high cognitive ability. (Jeroen Lavrijsen, KU Leuven)
Translating cognitive profiles into advice: establishing principles for interpretation (Marlies Tierens, Thomas More)

Symposium 2.4b: Lies, damned lies, and response styles (Part B):
Wednesday 10 July, 13:00-14:30, Room D2.13 (Organizer: Matthias Ziegler)

Lies, damned lies, and response styles (Part B)

Matthias Ziegler is a professor for psychological assessment at the Humboldt-Universität zu Berlin. His research focuses on the assessment of personality and intelligence, their interplay in predicting performance and learning, and faking. He has authored more than 100 scientific papers. He has served the association as editor in chief of the European Journal of Psychological Assessment from 2013 until 2016.
Summary
In part B, the talk by Rouco and colleagues adds acquiescence to the symposium. Using US, Spanish, and German BFI-2 data, an acquiescence factor is compared. The results imply cultural differences in this response style. Bäckström and Björklund introduce one way of dealing with SDR and faking: Neutralized items. The authors here present first empirical evidence supporting the utility of the approach even in high stakes settings. In the final talk, Meijer, Niessen, and Neumann elaborate on the problems associated with combining information from questionnaires with other assessment methods in order to derive decisions. They specifically focus on the comparison of mechanical and expert-based decision making.

Contributed papers:
Acquiescence across cultural borders: An investigation using the BFI-2
Victor Rouco, Ghent University, victor.rouco@ugent.be
David Gallardo-Pujol, University Barcelona
Christopher Soto, Colby College
Oliver John, Berkeley University

Personality Self-ratings in High Stake Situations: The case of neutralized items
Prof. Dr. Martin Bäckström
Dr. Fredrik Björklund
Lund University, Sweden

How should we combine personality data with other information in individual decision-making: Some practical suggestions
Rob R. Meijer, University of Groningen, psychometrics and statistics, the Netherlands, r.r.meijer@rug.nl
A. Susan M. Niessen, University of Groningen, psychometrics and statistics, the Netherlands
Marvin Neumann, University of Groningen, psychometrics and statistics, the Netherlands
Oral sessions

Session 1.1 Organisational:
Monday 8 July, 10:30-12:00, Room E0.05 (Chair: Nathalie Parent)

- Individual Dealing with Social Heterogeneity – Diversity Competence and its Relation to Personality, Resources and Competences (Pietzonka, Manuel; Kolb, Christoph J.)
- Predictive validity of the Career Orientation Guide (GROP) with groups of workers (Parent, Nathalie; Bélanger, Marie-Pierre)
- Revisiting the Internal Structure of the English Version of the Career Decision-Making Difficulties Questionnaire in Seven Countries (Levin, Nimrod; Braunstein-Bercovitz, Hedva; Lipshits-Braziler, Yuliya; Gati, Itamar; Rossier, Jérôme)
- Orientations toward Higher Education Among Arab Young Adults in Israel: Measurement Invariance and Criterion Validity (Lipshits-Braziler, Yuliya; Kashkoush, Shada)

Session 1.2 Intelligence:
Monday 8 July, 10:30-12:00, Room E0.06 (Chair: Mark Schittekatte)

- Should students be smart, curious, or both? Fluid intelligence, Openness, and interest co-shape the acquisition of reading and math competence (Lechner, Clemens; Miyamoto, Ai; Knopf, Thomas)
- Construct validity of the French WISC-V: Analyses based on a clinical sample (Döll Salome; Lecerf Thierry; Peiffer Elsa; Bovet-Boone Françoise; Geistlich Sophie)
- From Paper-And-Pencil to Computer-Based Testing: how the format influences test development (Joris, Steven; Van Parijs, Katrijn; Tierens, Marlies; Magez, Walter)
- An investigation of the processes underlying the item-position effect observed in the assessment of reasoning (Schweizer, Karl; Reiß, Siegbert; Zeller, Florian)

Session 1.3 Methods:
Monday 8 July, 10:30-12:00, Room D0.08 (Chair: Victor Ortuño)

- Data quality metrics and reliability of validation experiments for psychometric instruments (Chernov, Yury)
- Testing a 15-item Zimbardo Time Perspective Inventory (ZTPI) with Exploratory Structural Equation Modeling (ESEM) (Ortuño, Victor)
- Multilevel Discrete-time Survival Analysis: Using Adolescents School Dropout Intention (Hyojin Kim; Sehee Hong)
- Testing the adequacy of scales measuring compulsive buying behavior in terms of their applicability in the processes of classification of examined individuals (Tarka Piotr)
- Fitting decision trees to multilevel and longitudinal data (Fokkema, Marjolein)
Session 1.4 Clinical & Health:
Monday 8 July, 10:30-12:00, Room D2.13 (Chair: Steven Degrauwe)

- Risk Assessment in Forensic-Psychiatric Care from Indicators of Institutional Adaptation: The Relevance of Personality Pathology (Degrauwe, Steven; De Clercq, Barbara)
- Examining transactions between daily situations and borderline personality traits in early adulthood and the role of childhood experiences of parenting (Vanwoerden, Salome; Hofmans, Joeri; De Clercq, Barbara)
- Study of the impact of non-pharmacological techniques (self-hypnosis/self-care) on cognitive complaints in cancer patients (Bicego, Aminata; Grégoire, Charlotte; Cassol, Helena; Faymonville, Marie-Elisabeth, Pr.; Nyssen, Anne-Sophie, Pr.; Rousseaux, Floriane; Guy, Jerusalem, Pr.; Laureys, Steven, Pr.; Bragard, Isabelle, PhD.; Vanhaudenhuysse, Audrey, PhD.)

Session 2.1 Educational:
Monday 8 July, 16:00-17:30, Room D0.08 (Chair: Beth Perkins)

- Predicting Examinee Effort and Test Performance from Change in Emotions During a Test: A Latent Growth Model (Perkins, Beth, A; Finney, Sara, J; Satkus, Paulius)
- The Russian adaptation of the Handelman’s Adolescent Apathy Inventory (Zolotareva, Alena)
- Adaptation and Validity Evidence for Russian Version of Elementary School Motivation Scale (Parmaksiz, Leonid; Kulikova, Alena; Kanonire, Tatjana)
- Boys’ loneliness at age 8 years predicts psychiatric symptoms at age 18 years (Junttila, Niina; Lempinen, Lotta; Sourander, Andre)

Session 2.2 Intelligence:
Monday 8 July, 16:00-17:30, Room E0.05 (Chair: George Spanoudis)

- Speed of processing, control of processing, working memory and crystallized and fluid intelligence: Evidence for a Developmental Cascade (George Spanoudis; Anna Tourva)
- The Effect of Game Based Cognitive Development Support Classroom Guidance Programme on Intelligence of Fourth Grade Primary School Students (Sezgin, Mehtap; Gündoğdu, Mehmet, H.)
- Categorization and the cultural aspects thereof (Denglerova, Denisa)
- You can play the game without rules – but you’re better with: The influence of rule knowledge in figural matrices tests (Levacher, Julie; Koch, Marco; Spinath, Frank, M.; Becker, Nicolas)

Session 2.3 Methods:
Monday 8 July, 16:00-17:30, Room D2.13 (Chair: Julie De Ganck)

- Dialogue and diagnostics: children’s lived experiences of a diagnostic process (De Ganck, Dorothee; De Ganck, Julie; Boeckmans, Ivan)
• Responding to negatively-worded items: the role of neuroticism, effortful control and attentional bias (Michaelides, Michalis, P.; Koutsogiorgi, Chrystalla)
• The large-scale assessment of social and emotional skills in secondary school context: case of Russia (Kulikova, Alena; Orel, Ekaterina)
• Usefulness versus Complexity: Practical Implications of IRT Model Selection (Crișan, Daniela; Tendeiro, Jorge; Meijer, Rob)
• Challenges in Longitudinal Multi-Stage Testing in Educational Large-Scale Assessments (Timo Gnambs; Claus H. Carstensen)

Session 2.4 Personality:
Monday 8 July, 16:00-17:30, Room E0.06 (Chair: John Magnus Roos)

• Sex Differences in Personality are larger in Gender Equal Countries: Replicating a Surprising Finding with Mahalanobis Distances (Petri J. Kajonius, *; Erik Mac Giolla; John Magnus Roos)
• Expert validity on non-verbal personality characters of the Big Five (Roos, John Magnus; Persson, Björn; Kajonius, Petri)
• Comparable Measurement of Religiosity Across Different Religious Groups (Bluemke, Matthias; Groskurth, Katharina)
• Mapping interests to the landscape of occupations in Germany (Sander, Nicolas; Sengewald, Erik)

Session 3.1 Clinical:
Tuesday 9 July, 10:30-12:00, Room D0.08 (Chair: Imke Baetens)

• Body experience in patients with mental disorders; results of self-report measures and their relevance for clinical practice (Scheffers, Mia; Van Busschbach, Jooske T.; Van Duijn, Marijtte A. J.; Schoevers, Robert. A.)
• Culinary cultural identity as a protective factor for health in prevention of cardiovascular disease (Tabenero, Carmen; Castillo Mayén, Rosario; Gutierrez Domingo, Tamara; Cuadrado, Esther; Rubio, Sebastián; Arenas, Alicia; Luque, Bárbara)
• A Functional Measurement Study On The Assessment Of Decision-Making Capacity In The Context Of Euthanasia (Theuns, Peter & De Wette, Céline)

Session 3.2 Intelligence:
Tuesday 9 July, 10:30-12:00, Room E0.05 (Chair: Marlies Tierens)

• Which IQ test’s differentiate better Giftedness (Gallopeni, Florim. Goma Frixanet, Montserrat. Thaci, Jusuf. Hysenaj, Arben.)
• Psychometric properties of Cattell’s Fluid Intelligence Test (CFT 20-R) in Lithuanian sample of 8–15 year olds (Butkienė, Dovilė; Gintilienė, Gražina; Girdzijauskienė, Sigita; Nasvytienė, Dalia)
• Situational effects in emotional reasoning assessment: A contribution to validity evidence on the two performance-based measures (Buško, Vesna; Babić Čikeš, Ana)
- The one and only IQ (Tierens, Marlies; Magez, Walter)
- The incidental information processing as a factor of language aptitude (Gavrilova Evgeniya)

**Session 3.3 Methods:**
Tuesday 9 July, 10:30-12:00, Room D2.13 (Chair: René Proyer)

- Diagnostic Evaluation of Autism Spectrum Disorders (De Ganck, Julie; Schouppe, Nathalie)
- Assessing Dispositions Towards Ridicule and Being Laughed at with the PhoPhiKat-45: A Comparison of the Rating-Scale and Expanded Answer Format-Version (Brauer, Kay; Proyer, René, T.)
- Developmental Resources of Chinese Youths: A Chinese Adaption of the German Questionnaire “FRKJ” (Teuber, Ziwen; Wang, Qichen; Su, Yanjie; Lohaus, Arnold; Nussbeck, Fridtjof W.)
- Bring your own device: Validity of intelligence tests conducted on own smartphones (Koch, Marco; Levacher, Julie; Spinath, Frank, M.; Becker, Nicolas)

**Session 3.4 Personality:**
Tuesday 9 July, 10:30-12:00, Room E0.06 (Chair: Scott R. Ross)

- Differences in personality traits of selected/not selected applicants to Swedish Counter Terror Police Unit (Peter G Tedeholm; Anders Sjöberg; Agneta C Larsson)
- Narcissistic Resilience? The Possible Role of Mediating Components in a Structural Equation Modeling Paradigm (Bandi, Szabolcs; Marko, Eva; Kiss, Eniko Csilla; Nagy, Laszlo)
- Assessment of Openness to Change & Conservation values in Ukrainian, Polish and Romanian young adults (Romanyuk, Lyudmyla, V.)
- Toward Shorter (and More Content-Valid) Measures of Character Strengths: Revising the IPIP-VIA Scales (Bluemke, Matthias; Partsch, Melanie; Lechner, Clemens; Saucier, Gerard)
- Development of the NEO-BFAS: Using Cross-validation in Initial Phases to Maximize Generalizability (Ross, Scott R.; DeYoung, Colin G.)

**Session 4.1 Intelligence:**
Tuesday 9 July, 16:00-17:30, Room D0.08 (Chair: Bea Kreemers)

- Insights from multimethod identification study of gifted and high ability students in Lithuania (Girdzijauskiene Sigita*; Gintiliene Grazina*; Butkiene Dovile*; Nasvytiene Dalia*; Dragunevicius Kestutis*)
- A study on Formative Assessment with Cognitive Diagnosis Model Application for Math Proficiency (Ayan, Cansu; Çikrikçi, Nükhet)
- Creativity and Behavioral Characteristics of Gifted Underachievers in Primary School (Nasvytiene, Dalia; Girdzijauskiene, Sigita; Gintiliene, Grazina; Butkiene, Dovile; Dragunevicius, Kestutis)
• The Adaptive Behavior Assessment System: Reliability, validity and norms for the Flemish general population (Kreemers, Bea; Maljaars, Jarymke; Storms, Gert; Maes Bea; Noens, Ilse)

• Interrelations between students’ affects, collaboration and achievement in a virtual science learning environment (Laakkonen Eero; Pietarinen Tarja; Vauras Marja; Kinnunen Riitta; Volet Simone)

Session 4.2 Organisational:
Tuesday 9 July, 16:00-17:30, Room E0.05 (Chair: Aristides Ferreira)

• Biomarkers and hormones: Contributions to a fuller understanding of alternative measures to assess productivity despite presenteeism. (Ferreira, Aristides; Pérez-Nebra, Amalia R.; Aguiar, Maria L. A.; Costa, Eva E.; Costa, Carla G.; Zambonato, Adriane; Modesto, João G.)

• Gender Differences in Corruption Tolerance: Effect of Ambivalent Attitudes Toward Men (Kolachev Nikita)

• A predictive criterion-related validation study of a short version of the Hazard Awareness Test (Burt, Christopher D B, and Hunt, Jason, Z)

Session 4.3 Methods:
Tuesday 9 July, 16:00-17:30, Room D2.13 (Chair: Yury Chernov)

• Validation of computer-aided handwriting analysis and its integration into psychological assessment (Chernov, Yury)

• Measuring personality similarity and its relationship to divorce (Lovik, Anikó; Nassiri, Vahid; Molenberghs, Geert; Verbeke, Geert)

• Using eye-tracking as an implicit measure of prejudice (Esteves, Francisco; Jansson, Billy; Zakrisson, Ingrid)

• Using Generalizability Theory to estimate conditional standard error of measurement of HEXACO Personality Inventory (Gempp, René)

Session 4.4 Personality:
Tuesday 9 July, 16:00-17:30, Room E0.06 (Chair: Tim Bastiaens)

• Portuguese version of the Spence Children’s Anxiety Scale, self- (SCAS) and parent-report (SCAS-P) (Alves, Diana *; Canário, Ana, C.; Barbosa, Ana C.; Gomes, Flávia S. *)

• Exploring personality structure in South Africa using the NEO-PI-R: Does the FFM hold? (August, Justin; Laher, Sumaya; Takalani, James)

• Identity as an area of dysfunction among all personality disorders (Bogaerts, Annabel; Luyckx, Koen; Bastiaens, Tim; Kaufman, Erin A.; Claes, Laurence)

• Further validation of a situational judgement tool (SJT) for borderline personality pathology (Verbeke Lize; De Clercq Barbara)

• Assessing Four Facets of Adult Playfulness with 12 Items: The OLIW-S (Brauer, Kay; Proyer, René, T.)
Session 5.1 Educational:
Wednesday 10 July, 10:30-12:00, Room D0.08 (Chair: Christoph Kolb)

- Examining the Functioning of Test Emotion Items across Testing Platforms and Gender: A Measurement Invariance Study (Satkus, Paulius; Finney, Sara, J; Perkins, Beth, A)
- Psychometric properties of Multisource Assessment of Children’s Social Competence and Bryant Empathy Index with Spanish schoolchildren (Rocio Luque-González; Olga Gómez-Ortiz; Rosario Ortega-Ruiz; Eva M. Romera)
- Efficacy in teachers: psychometric properties and relation with emotional intelligence (Camacho, Antonio; Gómez-Ortiz, Olga; Ortega-Ruiz, Rosario; Romera, Eva M.)
- The Rating Scale AdoDiko for the Measurement of Diversity Competence in Adolescents (Kolb, Christoph J.; Pietzko, Manuel)
- Analyses of acceptance of a multimethod Online Self-Assessment under the condition of mandatory participation for prospective students (Ortner, Tuulia, M.; Scherndl, Thomas; Leiner, Julia, E.M.)

Session 5.2 Organisational:
Wednesday 10 July, 10:30-12:00, Room E0.05 (Chair: Aristides Ferreira)

- Leadership presenteeism engagement: Construction and psychometric evidence of a new instrument (Ferreira, Aristides I.; Lopes, Sara L.)
- Non-Metric Personal Map: A new conceptual framework for life coaching. (Dr. Rimmer, Avigdor)
- The Development of Workplace Friendship Scale (Sen-Kai, Yang; Cheng-Hsien, Li)
- The Requirement-based Occupational Classification (ROC-2019) – Clusteranalytic construction and application (Münscher, Johann-Christoph; Bliem, Wolfgang)

Session 5.4 Personality:
Wednesday 10 July, 10:30-12:00, Room D2.13 (Chair: Miguel Angel Carrasco)

- Measuring Empathy in Dark Personalities: There is the Ability but not the Disposition to Empathize (Kajonius, Petri J.; Roos, Magnus J.; Björkman, T.)
- Children’s negative affect and effortful control on aggression: The role of mothers’ reactions. (Holgado-Tello, F.P.; Carrasco, M.A.; Delgado, B)
- Comparing the psychometric quality of three short-scale measures assessing the Big Five (Rammstedt, Beatrice; Danner, Daniel; Lechner, Clemens, M.)
- On the structure of explicit motives: Bottom-up factor analysis of a motivational inventory (Kemper, C. J.; Lang, J. W. B.)
Poster Session, Monday 8 July, 15:00-16:00, Room D0-Hall

- Gender differential item functioning in the Slovak version of Big Five Inventory 2 (Kohút, Michal; Halama, Peter)
- The differences between self-reported and measured height and weight among adults with type 1 diabetes (Kkeli, Natalie; Merwin, Rhonda M.; Michaelides, Michalis, P.)
- Atrial fibrillation treatment adherence and subjective correlates of the disease (Belova Sofya; Gavrilova Evgeniya; Ovsyannikova Victoria; Shepeleva Elena; Valueva Ekaterina)
- Everyday hassles, adverse events and traumas: the role of children’ coping and mother’s mental health on elementary school-aged children adjustment. (Parent, Nathalie; Lemardelet, Laura)
- The development and validation of the respecting-teachers scale in a Confucian cultural context (Chien, Chin-Lung ; Hsu, Shih-Chi ; Lin, Tzu-Hsiang ; Chen, Yi-Chao ; Huang, Shih-Chen ; Huang Chung-Ping ; Chen, Wei-Ying)
- The level of anxiety and diagnostic attitudes of psychology students (Słysz, Anna; Stypińska, Małgorzata)
- Flow as a Mediator in the Relationship between Passion and Visual Art Creativity of Primary School Students in Taiwan (Liu Pei Yun)
- Early screening of mental disorders at school: usefulness of the Dominic Interactive with elementary school-aged children (Parent, Nathalie; Lemardelet, Laura)
- Situational Judgment Tests in the assessment of emotional and social abilities (Valueva Ekaterina; Shepeleva Elena; Ovsyannikova Victoriya)
- How dark is the future? The Dark Future Scale adaptation to Uruguay: Factor Structure & Psychometric Characteristics. (- Murnikovas, Alexas.; - Ortuño, Victor.)
- Online and social media recruitment: An exploratory study in Portugal (Correia, Anabela ; Martins, Sara)
- Exploring gender differences on dangerous driving behavior: A meta-analysis (Sarbescu Paul; Rostescu Daniela Carina)
- Meditation experience and trait-mindfulness are associated with reduced self-reported mind-wandering – German validation of the Daydreaming Frequency Scale (Linares Gutiérrez, Damisela; Pfeifer, Eric; Schmidt, Stefan; Wittmann, Marc)
Individual Dealing with Social Heterogeneity—Diversity Competence and its Relation to Personality, Resources and Competences

Pietzonka, Manuel; Kolb, Christoph J.

FOM Hochschule
Leibniz Universität Hannover

Processes of societal change confront people with an ever-increasing social diversity in private contexts as well as organisational ones. Causes for this effect are demographic change, increasing migration along with globalisation, pluralisation and tendencies of individualisation, amongst others. Thus, diverse life and work contexts are not only positively perceived, but also as a dissolution of order, disengagement from security or as demands that can drag, burden or create fear. Therefore, diversity competence can be defined as the individual ability to handle human heterogeneity in a constructive and goal-oriented way. It can be a personal resource, which enables an individual to deal with heterogeneity in an unbiased and expedient manner when within diverse contexts. Although often mentioned in literature, diversity competence is seldom researched quantitatively. For that reason, the new rating scale “DiKo” (6 subscales) has been developed, which aims at operationalising this competence. The testing phase showed that the quality criteria of the new scale are sufficient; the factor analysis showed that the model has good statistical characteristics. In the planned presentation, research results will be presented that reveal relation between diversity competence and selected traits as well as sociographic parameters. A covariance analysis (ANCOVA) between DiKo and eight independent variables and different dummy variables was performed (n = 2443). The results of three selected surveys on the relationship between diversity competence, personality, resources and competences are presented and discussed (multivariate regression analysis).

Predictive validity of the Career Orientation Guide (GROP) with groups of workers

Parent, Nathalie; Bélanger, Marie-Pierre

University Laval, Quebec, Canada

Choosing a career is an important decision and guidance counsellors often use tests to help their clients making choices based on their personal preferences. In the province of Quebec (Canada), the Career Orientation Guide (GROP) is known as the most used vocational test by school counsellors (Le Corff, Yergeau, & Savard, 2011). GROP-4 (Roy & Roy, 2018) includes 277 Likert-type items assessing the six personality types of Holland’s vocational theory (RIASEC) and a new type called Advocate (Z). It provides information about vocational interests, personality traits and values. GROP-4 is available in French and English and can be completed online. Some studies have demonstrated the validity of the GROP-3 with students (Gingras, 2013; Keck, 2015), but none with the GROP-4, nor with groups of
workers. In this regard, 477 participants from various groups of workers representing each type of the RIASEC theory completed the Self-Directed Search (SDS; Holland, 1994), the Mini International Personality Item Pool (Donnellan, Oswald, Baird, & Lucas, 2006) and the GROP-4. Correlations between GROP-4 and other measures provide good evidence of convergent and divergent validity. Workers from each type of the RIASEC theory showed higher vocational interests scores than other workers. GROP scores can predict the field of work in 77.5% of cases. These results are comparable to some well-known tests such as the Strong Interest Inventory (SII; Donnay, Moris, Schaubhut, & Thompson, 2005). Overall, these results suggest that the GROP-4 is a valid tool to assess interests and personality in the context of vocational guidance.

Revisiting the Internal Structure of the English Version of the Career Decision-Making Difficulties Questionnaire in Seven Countries

Levin, Nimrod¹; Braunstein-Bercovitz, Hedva²; Lipshits-Brazilier, Yuliya¹; Gati, Itamar¹; Rossier, Jérôme³

1 The Hebrew University of Jerusalem, Israel
2 The Academic College of Tel Aviv–Yaffo, Israel
3 University of Lausanne, Switzerland

Many individuals face difficulties in the process of making a career decision. Gati, Krausz, and Osipow (1996) proposed a taxonomy that divides such difficulties into three major clusters, which are further subdivided into 10 categories. They developed the Career Decision-making Difficulties Questionnaire (CDDQ), which has been since adopted and administered in more than 50 countries. Nevertheless, despite its widespread use, the dimensionality of the CDDQ has not yet been fully demonstrated (Creed & Yin, 2006; Vahedi et al., 2012; Xu & Bhang, 2018), and its measurement invariance was not sufficiently confirmed. To provide validity evidence for the internal structure of the CDDQ, we analyzed the data of 32,556 individuals from Australia, Canada, China, India, South Africa, United Kingdom, and the United States of America, who filled out the English version of the CDDQ on their own initiative. Confirmatory factor analysis supported the original taxonomy of the CDDQ and the reliability of its scores. The CDDQ also demonstrated scalar invariance across seven countries, gender, age, but not across career decision status. Revisiting and validating the internal structure of the CDDQ is a fundamental psychometric step with important theoretical, research, and practical implications for vocational development and decision-making.

Orientations toward Higher Education Among Arab Young Adults in Israel: Measurement Invariance and Criterion Validity

Lipshits-Brazilier, Yuliya; Kashkoush, Shada

Hebrew University of Jerusalem, Israel

Young people’s conceptions about the purposes of attaining higher education play a critical role in their optimal integration, persistence, and success in their academic pursuits. This relationship is particularly significant for students belonging to minority groups. The goal of the present research is
to test for the measurement equivalence of a five-factor measure of Higher Education Orientation (HEO) among Christian and Muslim Arab students in Israel (N = 970). Derived from the work orientation model and measure (Willner, Lipshits-Brazier, & Gati, 2018), the HEO was conceptualized with five main orientation categories (Gantz & Gati, 2019): profession (attaining an occupation), enlightenment (attaining knowledge and expanding horizons), external (satisfying people one’s immediate surroundings), prestige (achieving prestige and social status), and social embeddedness (improving social belonging and integration). Preliminary evidence of measurement invariance suggests that the HEO is appropriate for use with both Christian and Muslim Arab students and that it provides meaningful comparisons and interpretations. In addition, the ability of three of the five orientations (profession [β = .16], enlightenment [β = .29], and social embeddedness [β = .33]) to predict overall psychosocial college readiness, over and above religious background, partially supports the criterion validity of the HEO. Given its psychometric and practical value, the HEO provides a useful tool for researchers and practitioners seeking to assess the various meanings that young adults attribute to higher education in order to provide quality career development services.

Oral Session 1.2.

Should students be smart, curious, or both? Fluid intelligence, Openness, and interest co-shape the acquisition of reading and math competence

Lechner, Clemens; Miyamoto, Ai; Knopf, Thomas

GESIS - Leibniz Institute for the Social Sciences

Developmental theories of intelligence in the tradition of Cattell’s investment theory highlight the fact that gains in crystallized intelligence (gc) depend not only on fluid intelligence (gf) but also on a range of so-called intellectual investment traits such as Openness to Experience and interest in a subject area. However, the relative predictive power of, and the precise nature of the interplay between, gf and intellectual investment traits remains incompletely understood. In this study, we present one of the most comprehensive and rigorous empirical tests of developmental theories of intelligence in the investment theory tradition to date. Using large-scale, multi-wave data on secondary school students from the German National Educational Panel Study (NEPS; N = 4,464), we investigate how gf, Openness, and subject-specific interest relate to gc as measured by standardized competence tests in two domains, reading and math. Results of latent-variable models indicate that gf and interest, but less so Openness, predict higher initial levels of, and gains over two years in, gc. Most importantly, our results yield strong support for the notion that gf and interest (but not Openness) interact synergistically in shaping (gains in) gc. This suggests that gf and interest cross-fertilize each other, with students who score high on both gf and interest showing the highest rate of skill and knowledge acquisition. These results contribute to developmental theories of intelligence by providing support for the claim that gf and intellectual investment traits are important in co-shaping the development of gc and by clarifying that the relation between them is interactive in nature.
Oral Session 1.2.

**Construct validity of the French WISC-V: Analyses based on a clinical sample**

Döll Salome¹; Lecerf Thierry ¹,²; Peiffer Elsa ³; Bovet-Boone Françoise ³; Geistlich Sophie ¹,²

1. Faculty of psychology and educational sciences, university of Geneva, 40, boulevard du Pont-d’Arve, 1205 Geneva, Switzerland
2. Distance Learning University, Brig, Switzerland
3. Centre Multidys Petit Lancy, Genève, Switzerland

The French WISC-V has a hierarchical structure, with a general intelligence factor and five group factors: Verbal Comprehension, Visual Spatial, Fluid Reasoning, Working Memory and Processing Speed. This five-factor structure only relies on Confirmatory Factor Analyses, setting aside Exploratory Factor Analyses. However, studies on the standardization sample failed to support this five first-order structure, and suggested a bi-factorial structure with only four group factors, which explained a weak part of the variance.

The goal of our study was to use Exploratory Factorial Analyses to explore the structure of the French WISC-V with a clinical sample of children with diagnostic of neurodevelopmental disorders (Language Disorder, Attention-Deficit/Hyperactivity Disorder, Specific Learning Disorder, Developmental Coordination Disorder). The current sample consists of 97 children aged from 6 to 16 years (mean age = 9.51; SD = 2.64).

Exploratory Factor Analyses with a promax rotation and a Schmid-Leiman transformation suggested a bi-factor structure with four first-order factors. Results suggested to merge the Visual Spatial and Fluid Reasoning into a Perceptual Reasoning factor.

Results indicated that the g factor explained 42.3% of the common variance and that the group factors explained 5.6 to 23% of the common variance.

These results replicate and confirm previous analyses based on the French standardization sample of the WISC-V. We are planning to apply Confirmatory Factor Analyses to examine the models proposed by the French WISC-V publishers and to test alternative bi-factorial models. We are also planning to apply these analyses to a non-clinical sample.

Oral Session 1.2.

**From Paper-And-Pencil to Computer-Based Testing: how the format influences test development**

Joris, Steven; Van Parijs, Katrijn; Tierens, Marlies; Magez, Walter

Thomas More University College, Applied Psychology, Antwerp, Belgium
Coordination team Antwerp for Psychological Assessment (Cap vzw), Brasschaat, Belgium

Digital technology has an impact on psychological assessment. It offers a number of potential benefits to health professionals relative to traditional paper-and-pencil tests. Examples are significant time reduction and quality improvement through instant scoring, adaptive testing, and higher
standardization. However, the translation of paper-and-pencil assessment tools to a digital format is not without challenges.

The COVAT-3, a digital cognitive ability test currently in development, started as a translation of the paper-and-pencil Dutch Cognitive Ability Test (CoVaT-CHC). Due to format restrictions, exact digitization of some original subtests was difficult and a novel approach was required. The translation of a specific subtest from paper-and-pencil ("Figure Sequences") to its digitized form ("Pattern Sequences") is a good illustration of the ways in which the specific format used in test administration determines what form a test will take and what is measured by it.

The digitization process of the original subtest ultimately led to a significant divergence of both subtests in terms of item construction and response method. This poster will address the challenges of the digitization process and will present preliminary results for Pattern Sequences in order to illustrate how the test format drives test development.

Keywords: Cognitive Abilities, Computer-based testing (CBT)

Oral Session 1.2.

**An investigation of the processes underlying the item-position effect observed in the assessment of reasoning**

Schweizer, Karl; Reiß, Siegbert; Zeller, Florian

Goethe Universität Frankfurt

The item-position effect has been demonstrated in a number of studies using different statistical methods. Whereas this effect appears to be a scientific fact, the source of the effect is still unclear. Several hypotheses regarding the source have been proposed. Regarding the assessment of reasoning, the majority of researchers support the learning hypothesis although the empirical evidence in favor of this hypothesis is still weak. This hypothesis states that the item-position-effect is due to learning. However, it is unclear regarding the type of learning. The reported study investigated the relationship of the item-position effect in reasoning data and three types of learning in a sample of 287 university students; the types were rule learning, learning as the development of automaticity and associative learning. The statistical investigation revealed that the scores representing the item-position effect are associated with all learning scores. However, the correlations with rule learning and learning as the development of automaticity were larger than .4 whereas the correlation with associative learning was virtually negligible.
Psychometric instruments must be properly validated before they are practically implemented. Reliability of these validation experiments is very important. One of the essential aspects of reliability is quality of experiment data. The intention of the current work is to formalize the data quality evaluation and to work out a quality determinant, which is used to compare experiments and to evaluate the influence on their reliability. The concept of the data quality is well known in informatics, where it has more technical nature. In psychology, the usability of the data is of major importance. In the presented work, we formulate relevant requirements on the data quality metrics. They include four major dimensions, i.e. the metrics should be clear (user understands the metrics), comparative (it is possible to compare metrics across time and objects), differentiated (data sets are distinguished from each other) and scalable (it is applicable for the whole experiment and any part of it).

The proposed metrics includes experiment, subject and application components. The experiment component consists of four dimensions: sample size (based on power analysis), outliers, missing data and normality of the sample distribution. The subject component includes goodness of the age, gender, education, and profession distribution of subjects. The application component covers the quality of provided handwriting samples. The data quality determinant is a weighted combination of dimensions. The metrics is demonstrated on the example of six validation experiments with computer-aided handwriting analysis against the following psychometric tests: NEO-FFI, 16PF, PVQ, EQ-i 2.0, TAT and D2.
tested: independent cluster model, second order hierarchical model, bifactor model and exploratory structural equation modeling. The latter was the model presenting best results in tested global adjustment indices ($X^2/df = 2.45$, $CFI = .985$, $TFI = .961$, $RMSEA = .031$, $SRMR = .014$). Considering these results, can ESEM be recommended as a technique for studying ZTPI’s structure in future studies?

**Oral Session 1.3.**

**Multilevel Discrete-time Survival Analysis : Using Adolescents School Dropout Intention**

Hyojin, Kim & Sehee, Hong

Educational Measurement and Statistics, Korea University

Survival analysis is a general statistical method developed specifically to model time and events. This study concerns a subset of those methods that deals with discrete-time interval events and hierarchical observations at the same time. It aims to suggest multilevel discrete-time survival analysis and give a guideline to use this method for researchers who are specialized in education field. This study explains multilevel discrete-time survival analysis as a combination of two model, discrete-time survival model and multilevel model. Also, using data from the Korean Youth Panel Survey, this thesis focuses on yearly dropout intention from Korean students for demonstration about this model. Along the examination of the variables from both individual and environmental perspectives, the estimation of the hazard rates and time of dropout intention occurrence using covariates at both individual and area levels is also discussed.

**Oral Session 1.3.**

**Testing the adequacy of scales measuring compulsive buying behavior in terms of their applicability in the processes of classification of examined individuals**

Tarka, Piotr

Poznan University of Economics, Department of Market Strategies

Compulsive buying behaviour has since long been considered important by scholars in different fields and many scales for its measurement have been developed. As compulsive buying often begins at an early age and causes negative consequences in adolescence and later on, it is important to accurately assess to what extent individuals are inclined to developing compulsive buying behavior. In this paper, we contribute to theory and evaluate the quality of three different, but in literature well-known, measurement scales. Specifically, we investigate their technical boundaries and methodological qualities to obtain the best possible classification of compulsive buyers among young people. Data were collected from a representative sample ($N=504$) of Polish youth and were analysed using structural equation modeling. Three scales were evaluated: 1) Compulsive Buying Scale (developed by Valence, d’Astous and Fortier 1988), 2) Richmond Compulsive Buying Scale (Ridgway, Kukar-Kinney and Monroe, 2008), and 3) Compulsive Buying Screener Scale (Faber and O’Guinn 1992). Finally, for each scale a cut-off score is determined to classify individuals into compulsive- versus non-compulsive
addicts. Finally, we also compare the classified participants across scales. In sum, this methodological study adopts appropriate and stringent procedures to ensure that the proposed scales provide a satisfying quality of classification of examined individuals.

Oral Session 1.3.

**Fitting decision trees to multilevel and longitudinal data**

Fokkema, Marjolein
Leiden University

Decision-tree methods, also known as recursive partitioning methods, are statistical methods that provide results in the form of one or more decision trees. These methods have gained much popularity, as the resulting decision trees are easy to interpret. Furthermore, they can deal with data problems where the number of predictors (far) exceeds the number of observations, and decision-tree methods like random forests and boosted tree ensembles have been found to provide state-of-the-art predictive accuracy. More recently (i.e., over the last 5-10 years), decision tree methods for multilevel and longitudinal data have been developed. Such data structures are commonly encountered in psychology in general, and psychological assessment in specific. In this presentation, I will illustrate the potential of these decision tree methods for multilevel and longitudinal data assessment though data-analytic examples relevant to psychological assessment. I will discuss and compare the characteristics of the different methods, based on theory and empirical results. Finally, I will discuss how specific characteristics of the data problem can best be accounted for in fitting decision trees to multilevel and longitudinal data.

Oral Session 1.4.

**Risk Assessment in Forensic-Psychiatric Care from Indicators of Institutional Adaptation: The Relevance of Personality Pathology**

Degrauwé, Steven¹,² & De Clercq, Barbara²

¹ Academic Psychiatric Centre Sint-Kamillus, Belgium
² Ghent University, Belgium

In a subgroup of forensic-psychiatric patients, traditional treatment objectives in terms of risk reduction are difficult to achieve, often resulting in a referral to a long-stay medium- or high-secured forensic setting with no short-term perspective on reintegration into society. Consequently, traditional risk assessment measures -although highly recommended for initial screening and orientation purposes-, may not be valid to use for (intermediate) evaluation of long-stay patients, as their basic focus on actual integration within society does not align with what can be expected from these long-stay patients. From this perspective, the current study proposes a new way to assess the risk status and progress of long-stay forensic patients from a recently developed comprehensive set of constructs that tap into concrete areas of daily functioning at the ward, providing relevant information regarding different aspects of adaptation at the long-stay unit. Although the level of adaptation may be understood from various viewpoints, the current study will specifically focus on how these various domains of adaptation are related to aspects of personality pathology. Towards
this end, a group of long-stay forensic patients (N= 50) provided self-reports on the 100-item version of the PID-5 measure of the Alternative Model of Personality Disorders (AMPD, Krueger et al., 2011) as well as on each of the daily indicators of institutional adaptation. Results will be discussed in terms of the relevance of including a comprehensive measure of personality pathology in assessment procedures at long-stay forensic settings and the informational value of personality pathology traits for decision-making processes with regard to safety policy.

Oral Session 1.4.

Examining transactions between daily situations and borderline personality traits in early adulthood and the role of childhood experiences of parenting

Vanwoerden, Salome
Hofmans, Joeri
De Clercq, Barbara

University of Houston, Ghent University
Vrije Universiteit Brussel
Ghent University

The borderline personality disorder (BPD) research field is increasingly evaluating within-person dynamic processes characterized by person-situation contingencies to account for the substantial variability in symptom expression. The primary aim of the current study was to build on this research by evaluating reciprocal relations between daily situational perceptions of positivity, negativity, boredom, and stress and BPD traits of negative affectivity, antagonism, and disinhibition. Further, based on the central role that early parenting has for BPD in terms of putting individuals at risk for later symptomatology, we evaluated whether parenting in childhood would have a moderating role on the relations between situational perceptions and BPD traits in early adulthood. The sample consisted of N = 157 individuals who participated in a five wave longitudinal study from the age of 10 (parenting behaviors of mothers were rated on the Ghent Parental Behavior Scale) to the age of 20 (wave 5) when they completed a 14-day diary study in which they completed daily ratings of their borderline personality traits and perceptions of their home and work environment. Results suggested that perceived situational negativity predicted increases in all BPD traits and perceived situational positivity was related to disinhibition and antagonism. Disinhibition, in turn, predicted increased perceptions of mundaneness. Experiences of positive parenting (i.e., warmth) in early childhood was associated with less maladaptive associations between perceived negativity and positivity and BPD traits. Results will be discussed in terms of the incremental knowledge obtained by conducting a more broad assessment of daily situation-personality contingencies and the mechanisms by which parenting experiences influence BPD symptom expression.
Study of the impact of non-pharmacological techniques (self-hypnosis/self-care) on cognitive complaints in cancer patients

Bicego, Aminata 1,2,3; Grégoire, Charlotte 1,4; Cassol, Helena 1; Faymonville, Marie-Elisabeth 1,3; Nyssen, Anne-Sophie 1,2; Rousseaux, Floriane 1,2,3; Jérusalem, Guy 5; Laureys, Steven 1; Bragard, Isabelle 1,4 & Vanhaudenhuyse, Audrey 1,3

1 Sensation & Perception Research Group, GIGA Consciousness, University of Liege, Belgium
2 Laboratory of Cognitive Ergonomics and Work Interventions, University of Liege, Belgium
3 Algology Department, University Hospital of Liege, University of Liege, Belgium
4 Public Health Department, University of Liege, Belgium
5 Medical Oncology Department, University Hospital of Liege, University of Liege, Belgium

Cancer generates physical, psychological and cognitive impairments that can undermine patients’ quality of life (QoL). Self-hypnosis/self-care have been used to treat these symptoms, before, during and after the cancer treatments. The impact of self-hypnosis/self-care upon cognitive difficulties has not been investigated yet. Fifty-three participants with cancer who had ended their treatment (surgery; chemotherapy; radiotherapy) were included. Patients with psychiatric disorders, metastatic cancer and/or relapse were excluded. Patients were randomly assigned to two conditions: self-hypnosis/self-care and waiting-list. They completed the FACT-COG before and after the self-hypnosis/self-care learning or the waiting list. No significant difference was observed on the FACT-COG total score pre-self-hypnosis/self-care learning between the two groups (p=0.36). Significant difference was shown on FACT-COG total score post-self-hypnosis/self-care learning between the two groups (p=0.01) with the hypnosis group showing less total cognitive complaints (X̄= -13.25, SD=18.45) than the control group (X̄= -0.2, SD=17.92). Significant difference was observed for total score of the FACT-COG, post-self-hypnosis/self-care learning, in the hypnosis group (p=0.001) whereas no significant difference was shown for the control group (p=0.95). Significant differences were observed in the subscale “functional implications of cognitive difficulties” (X̄= -6.7, SD= 12.6, p=0.01), “change in cognitive function over time” (X̄= -3.16, SD= 4.37, p=0.001) and “impact on the QoL” (X̄= -2.83, SD= 3.55, p=0.001), whereas no significant difference was observed in the subscale “perceived difficulties by others” (p=0.09). No significant difference was displayed in the four subscales for the control group. The results indicate a beneficial effect of self-hypnosis/self-care learning upon cognitive complaints. More studies are needed to generalize these results to the cancer patient population.

Oral Session 2.1.

Predicting Examinee Effort and Test Performance from Change in Emotions During a Test: A Latent Growth Model

Perkins, Beth, A; Finney, Sara, J & Satkus, Paulius

James Madison University

Theory and empirical research supports the relation between achievement-related emotions and performance (i.e., control-value (CV) theory of achievement emotions; Pekrun, 2006). Extending CV theory to the specific context of testing, we hypothesized that emotions experienced during a test...
would impact expended effort during a test, which would subsequently impact test performance. These hypothesized effects have not been empirically tested using longitudinal data during an operational testing session. Using a sample of 497 American university students, test emotions (anger, enjoyment, pride, worry) were measured three times during a low-stakes, institutional accountability test. Latent growth modeling was used to estimate the change in emotions throughout the test and how this change related to subsequent effort and performance. Throughout the test, anger and enjoyment increased, whereas pride and worry decreased, on average. There was significant variability in the initial level of and change in each emotion. Initial levels of anger, enjoyment, and worry had direct negative effects on effort and indirect negative effects on performance (via effort). Initial levels of pride had a positive direct effect on effort and a positive indirect effect on performance. Initial levels of pride and worry had direct negative effects on performance. Change in enjoyment had a negative direct effect on performance. Pride had a positive direct effect on effort and a positive indirect effect on performance. This study provides partial empirical support for CV theory. Measuring emotions throughout a test may provide a more complete understanding of the effect of emotions on subsequent effort and test performance.

Oral Session 2.1.

The Russian adaptation of the Handelman’s Adolescent Apathy Inventory

Zolotareva, Alena

National Research University Higher School of Economics

Exactly 20 years ago, Handelman (1999) developed the Adolescent Apathy Inventory (AAI). It is questionable if all the items of the AAI are still up to date, but it is a single instrument for the measurement of adolescent apathy. The goal of this study was to examine the reliability and validity of the Russian version of the AAI. The study group consists of 346 Russian-speaking students (aged 16 to 25). Results from exploratory and confirmatory factor analyses confirmed the inventory’s one-dimensional structure. Correlation analyses provided first evidence for the inventory’s convergent and divergent validity: adolescent apathy showed positive correlations with maladaptive academic dimensions (e.g., alienation from study) and negative correlations with positive dimensions (e.g., intrinsic motivation for knowledge). Finally, inventory showed good reliability (Cronbach’s $\alpha = 0.76$) and temporal stability over one-month period (mean test-retest correlation = 0.71). The present findings suggest that the Russian version of the AAI is a reliable and valid instrument for the measurement of adolescent apathy. For future studies on the Russian version of the AAI, it may also be useful to gather information on the predictive validity of the AAI scores.
Adaptation and Validity Evidence for Russian Version of Elementary School Motivation Scale

Parmaksiz, Leonid; Kulikova, Alena & Kanonire, Tatjana
National Research University Higher School of Economics

The importance of motivation for academic achievements has been thoroughly studied in the field of education (Richardson, Abraham, & Bond, 2012). One of the most prominent theories in this field is self-determination theory (SDT) by Ryan and Deci (Ryan & Deci, 2017; Deci, 1972). The abundance of instruments developed under this theory makes it possible to choose the most suitable for particular purposes. However, using most of them outside of English speaking world requires an adaptation procedure. The main purpose of this presentation is to report the results of The Elementary School Motivation Scale adaptation to Russian.

The scale was chosen for adaptation, as it met our requirements, i.e. based on SDT, developed for use with primary school students and has shown appropriate psychometric properties (Guay et al., 2010). The scale consists of three subscales, for internal, identified and external motivation types. Each subscale has three statements describing student’s motivation towards math or reading. Respondents use four-point Likert type answer format.

Two samples of primary school students from Moscow (N=1687, girls= 48.3%, mean age= 8.91, SD=0.41) and Kazan (N=1286, girls=42% mean age= 8.91, SD=0.41) were used to assess the quality of the questionnaire. We assessed the internal structure with Confirmatory Factor Analysis, using a 3-factor model, for math (CFI=0.978) and reading (CFI=0.963) separately, with factor correlations behaving accordingly to the theory. Additionally, the instrument’s quality was assessed in IRT, using the Rating Scale Model, where difficulties and category functioning were examined. More detailed results will be presented and discussed.

Boys’ loneliness at age 8 years predicts psychiatric symptoms at age 18 years

Junttila, Niina Johanna; Lempinen, Lotta & Sourander, Andre
Department of Teacher Education, Research Centre for Child Psychiatry, University of Turku, Finland

Although loneliness in itself is not pathological but rather a common experience, a wide range of research has found that it is a major precursor to many mental health problems such as anxiety, depression, psychosis and suicidal ideation. This 10-year prospective study investigates whether 8-year-old boys’ feelings of loneliness and/or their lack of social relationships reported by teachers and parents predict psychiatric symptoms and suicidality at the age of 18 years. The associations between childhood loneliness and solitude and later psychiatric symptoms were controlled with teacher-reported psychiatric health at the age of 8 years and with boys’ loneliness at the age of 18 years.

This study is a part of the Finnish nationwide 1981 birth-cohort study called LAPSET, which target population was all eight-year-old Finnish-speaking children in 1989 (N=60,007). A sample of 10% was drawn from the birth cohort (n=6,017) so that it represented urban, suburban and rural areas. Teachers’ reports on boys’ psychiatric health and solitude, parents’ reports of boys’ solitude and boys’
self-reported loneliness were collected while the children were 8 years old. The outcome variables, i.e. boys’ loneliness, psychiatric symptoms and suicidality were collected ten years later. The longitudinal effects were modelled using structural equation modeling. Teachers’ evaluations of boys’ psychiatric health predicted later somatic- and external behavior problems. Both teacher- and parent-evaluated solitude predicted later loneliness and withdrawal behavior. In addition, parents’ evaluations of their son’s solitude predicted later anxiousness and depressive feelings. However, noteworthy the strongest predictor for later psychiatric problems was boys’ self-reported loneliness which predicted all of the outcome variables, i.e. later loneliness, psychiatric symptoms and suicidality. The finding that children’s own subjective feelings of loneliness are so powerful indicators for severe psychiatric symptoms ten years later underline the importance of accurate information processing by relaying not only on the adults but also on the children’s own perceptions on their psychosocial well-being.

Oral Session 2.2.

**Speed of processing, control of processing, working memory and crystallized and fluid intelligence: Evidence for a Developmental Cascade**

Spanoudis, George; Tourva, Anna

University of Cyprus

The present study investigated the causal relations among age, speed of processing, control of processing, working memory and intelligence, fluid and crystallized. 158 participants aged from 7 to 18 years old completed a large battery of tests measuring latent factors of speed, control of processing and working memory. Intelligence was assessed using the Wechsler Abbreviated Scale of Intelligence. Structural equation modeling was performed to determine whether there is a cognitive developmental cascade in which age-related increases in processing speed lead to improvements in control of processing that leads to increases in working memory, and whether improved working memory, in turn, leads to increases in both fluid and crystallized intelligence. Several alternative models of a different cascade order of the above factors were also tested. The results of the present study provide evidence of a cognitive developmental cascade, confirming that this model describes cognitive development during childhood and adolescence.
The Effect of Game Based Cognitive Development Support Classroom Guidance Programme on Intelligence of Fourth Grade Primary School Students

Sezgin, Mehtap & Gündoğdu, Mehmet, H.

Mersin University, Education Faculty, Guidance and Psychological Counselling Department

The aim of the present study is to examine the effect of Game Based Supporting Cognitive Development Classroom Guidance Programme (GBSCDCGP) on intelligence level of 4th grade primary school students. GBSCDCGP is prepared within the context of this research. Experimental field study is used to examine the effect of the programme on intelligence. This study was a pretest-posttest semi-experimental design with control group. The study group consists of totally 58 4th grade students (Experimental group: 29 students, Control group: 29 students) randomly selected from a primary school in Mersin/Turkey at 2016-2017 academic year. Wechsler Intelligence Scale for Children-Revised form was developed by Wechsler in 1949, revised in 1974 and adapted to Turkish by Savaşır and Şahin in 1995 is used to determine the intelligence level of students. Two way ANOVA was used in order to compare the WISC-R intelligence pre and post test changing scores between control and experimental groups. According to the results, no significant difference was observed between pre and post test changing scores of information, similarities, arithmetic, comprehension, picture completion, picture arrangement, block design, object assembly, coding subscales of WISC-R and performance part of WISC-R of control and experimental groups. A significant difference was observed on the pre and post test changing scores of WISC-R vocabulary subscale, verbal part of intelligence and general intelligence of control and experimental groups. Students who attend the GBSCDCGP have higher vocabulary subscale scores, verbal part of intelligence scores and general intelligence scores than those who do not attend the program.

Categorization and the cultural aspects thereof

Denglerova, Denisa

Department of Social Education, Masaryk University

Creating culture-fair diagnostic tools testing cognitive abilities and not discriminating against children from socially disadvantaged environment has been our long-term focus. Here, we introduce a simple tool testing how children from various backgrounds categorize. It’s inspired by the Imaiová and Gentnerová (1997) research of categorization based on shape and material. In the computerized form, the task only uses a two-dimensional picture shape and colour. The task contained sixteen simple pictures on one screen. Children sorted the pictures into groups of four objects. The pictures included four geometrical shapes (square, circle, triangle, star) in four colours (blue, green, yellow, red). One of the study goals was to describe differences in cognitive abilities of children from majority population compared to children of Romany population from disadvantaged environment starting their school attendance. We assumed children from different environments would reach different scores. The research included 300 children in 3 groups: Romany children from socially disadvantaged
environment, reference group of non-Romany children of the majority Czech population and a group of foreign children who are not native Czech speakers. The results show that colour is not an important criterion for Romany children; only one tenth of them having used it, compared to one quarter of the children from other groups. Romany children also more often used no sorting principle and grouped the objects randomly. Research also resulted in specific recommendations for teachers, i.e. to lessen both usage of colours and their connection with a particular meaning.

Oral Session 2.2.

You can play the game without rules – but you’re better with: The influence of rule knowledge in figural matrices tests

Levacher, Julie; Koch, Marco ; Spinath, Frank, M. & Becker, Nicolas

Saarland University

For high stakes testing (e.g. study access, assessment centers) there is a test preparation industry. This business model consists in training people in the relevant tasks so that they achieve better results. The main factor deciding whether and to which extent participants can receive test preparation is determined by their financial situation. This can lead to problems concerning criteria of test quality, in particular the test fairness. The goal of this study was to examine in how far test preparation affects test results. A figural matrix test was administered to two groups which took part in an assessment center for medicine students ($N = 882$). Before filling out the test one group ($N = 461$) was introduced to the rules used in the test’s construction while the other was not ($N = 421$). The results show that the group with preparation received significantly higher scores than the group without preparation. However, multi group confirmatory factor analyses indicated no significant differences between the construct validity of the test in the two groups. The results show that preparation has an impact on raw test scores but does not change the construct itself. As an implication one might argue that test preparation should be made public by the test authors in order to guarantee comparability and test fairness.

Oral Session 2.3.

Dialogue and diagnostics: children’s lived experiences of a diagnostic process

De Ganck, Dorothee; De Ganck, Julie & Boeckmans, Ivan

Kwaliteitscentrum voor Diagnostiek vzw, Belgium

One of the objectives of the new Decree on Integral Youth Care (Belgium, Flanders, 2014) concerns the maximum participation and engagement of the minor and his family at all levels across the health care system, including the diagnostic process. This paper discusses the results of two qualitative studies, conducted by the Kwaliteitscentrum voor Diagnostiek (Centre of Excellence in Diagnostics), investigating the experience of participation of minors taking part in a diagnostic process. The first study resulted in a short documentary movie and utilised thematic analysis to discern recurring patterns in the lived experiences of minors (with various types of disorders and/or problems) with
different assessment models (e.g., action-oriented assessment, disorder-oriented assessment). The second study used an in-depth idiographic methodology to explore and contextualise the experiences of three minors with an action-oriented assessment program provided by a “reception, observation and orientation centre” for youngsters. More specifically this qualitative study investigated the importance of dialogue (between patient – professional and between professionals) for the realization of a qualitative and integral health care trajectory.

**Oral Session 2.3.**

**Responding to negatively-worded items: the role of neuroticism, effortful control and attentional bias**

Michaelides, Michalis, P. & Koutsogiorgi, Chrystalla

University of Cyprus

A common finding for many psychological scales consisting of positively and negatively worded items is that the two item groups form different factors in factor analytic studies, even though both are purported to measure the same characteristic. Using bifactor models, the dimensionality of the scales can be tested after specification of general (content) factors, as well as distinct specific (methodological/wording) factors. The methodological factors capture the response tendencies due to wording and have been shown to correlate with idiosyncratic characteristics such as neuroticism. For example, individuals high in neuroticism tend to endorse more strongly negatively worded items than those with lower scores. The current study aims to study the relationship between response tendencies with neuroticism and negative affectivity with data from the Greek version of Rosenberg Self-Esteem Scale in a sample of 200 students in Cyprus. In addition, it is hypothesized that attentional bias is a mediator, and effortful control is a moderator of this relationship, borrowing a model from anxiety research (Lonigan, Vasey, Phillips & Hazen, 2004). Confirmatory factor analysis results indicated that a bifactor model with specific factors for positive and negative wording fit the data well. Neuroticism predicted the substantive self-esteem factor ($b= -.54$, $p= .003$) and the negative wording factor ($b= .40$, $p= .006$). Further analyses will examine the role of attentional bias and effortful control, as mediator and moderator variables respectively, in an attempt to describe the processes that underlie response tendencies for negatively-worded items due to idiosyncratic personality characteristics.

**Oral Session 2.3.**

**The large-scale assessment of social and emotional skills in secondary school context: case of Russia**

Kulikova, Alena

Orel, Ekaterina

Institute of Education, National Research University Higher School of Economics, Moscow, Russia

The number of studies and programmes on the social and emotional skills (SES) development in schools has dramatically increased in the recent years. There is no doubt now that research and development in this area are important on every level of human being: from nursery to university.
But, despite of wide distribution in the world leading education systems, Russian educational society doesn’t have neither the common nomenclature, nor the proper measurement instruments for large-scale assessment in this area, even though SES development is included in educational standards of Russia.

The aim of the presentation is to introduce newly developed instrument for assessment of SES for students of secondary school which is based on international experience of assessing noncognitive development and replies to request for SES assessment from different levels of Russian system of education.

The psychometric properties and the validity of the instrument were tested on the sample of 376 students from secondary school (5-9 grades, age from 10 till 16, average age 12.6) of Moscow. Dimensionality, differential item functioning (DIF), reliability, model fit, and other parameters were checked. For psychometric analysis the Item Response Theory was used. Confirmatory factor analysis (CFA) was used to check the construct validity of the instrument.

The instrument showed good psychometric quality and can be used for large-scale assessment of social and emotional skills in Russian schools. Theoretical structure of the scales was confirmed. The results of the analysis will be presented.

Oral Session 2.3.

Usefulness versus Complexity: Practical Implications of IRT Model Selection

Crişan, Daniela; Tendeiro, Jorge & Meijer, Rob

University of Groningen, Department of Psychometrics and Statistics, The Netherlands

In the context of Item Response Theory (IRT), an important aspect is model fit evaluation. Statistical models clearly are only (useful) conceptualizations of the reality. A central question is which model to choose among various options available, and also whether model choice makes a sizeable difference for practical decisions. Should a researcher prefer the more complex, but better fitting, model, or does the worse fit of simpler models have a minor influence on practical decision making? To investigate this question, we conducted several studies on the practical consequences of IRT model misfit over the past three years, using both simulated and empirical data. We looked at the effect of using suboptimal items and models in the context of education, personality, and mental health research. We will discuss our findings with respect to outcomes such as score reliability, validity estimates, predictive accuracy, person rank ordering, selection, and classification. The implications of our findings extend to test users and developers in the areas of education, personality, and health.
Oral Session 2.3.

**Challenges in Longitudinal Multi-Stage Testing in Educational Large-Scale Assessments**

Timo Gnambs  
Claus H. Carstensen

Leibniz Institute for Educational Trajectories, Germany  
University of Bamberg, Germany

Computerized multi-stage testing (MST) assigns different item bundles to respondents based on their previous answers in a test. The adaptive administration approach typically allows for more precise proficiency estimates within a given time frame as compared to conventional fixed-length tests. This makes MSTs particularly attractive for situations when testing time is limited, such as in costly large-scale assessments (LSAs). Therefore, this presentation describes the development and implementation of a MST for mathematical competences in an operational longitudinal LSA in Germany. Particular challenges resulting from incorporating a MST into the longitudinal design are discussed. Finally, results of the psychometric properties of the test based on a sample of $N = 15,925$ participants are presented.

Oral Session 2.4.

**Sex Differences in Personality are larger in Gender Equal Countries: Replicating a Surprising Finding with Mahalanobis Distances**

Petri J. Kajonius $^{1,2,3}$; Erik Mac Giolla $^1$ & John Magnus Roos $^4$

1 Department of Psychology, University of Gothenburg, Göteborg, Sweden  
2 Department of Behavioral Sciences, University West, Trollhättan, Sweden  
3 Department of Cognitive Neuroscience and Philosophy, University of Skovde, Skövde, Sweden  
4 Chalmers University, Gothenburg, Sweden

Sex differences in personality have repeatedly been shown to be larger in more gender equal and individualistic nations. We advance this research by using an extensive personality measure, the IPIP-NEO-120 (Johnson, 2014), with large country samples ($N > 1000$), from 22 countries ($N_{\text{total}} = 130,602$). Furthermore, to capture the renowned multidimensionality of personality traits we measure sex differences with a multivariate effect size (Mahalanobis distance $D$). Replicating and extending past research, there was a strong correlation ($r = .70$) between a country’s sex differences in personality and respective Gender Equality Index (World Economic Forum). Values across countries for $D$ varied substantially; ranging from 0.39 for China to 1.02 for the Netherlands ($D$-corrected ranged from 0.47 – 1.17). Our results indicate that using only univariate statistics may underestimate the size of sex differences in personality. Additional analyses showed that all five-trait factors were associated with higher scores in women, relative to men, in more gender equal countries.
Oral Session 2.4.

**Expert validity on non-verbal personality characters of the Big Five**

John Magnus Roos $^{1,2,6}$; Björn Persson $^{3,4}$ & Petri Kajonius $^5$

1 Division of Physical Resource Theory, Chalmers University of Technology, 412 58 Gothenburg, Sweden.
2 Centre for Consumer Research, School of Business, Economics and Law, University of Gothenburg, P.O. Box 606, 405 30 Gothenburg, Sweden.
3 Department of Cognitive Neuroscience and Philosophy, University of Skövde, Sweden.
4 Department of Psychology, University of Turku, Finland.
5 Department of Psychology, University college West, Sweden
6 Department of Business Administration and Textile Management, University of Borås

This study explores the possibility to capture the Big Five Model of Personality with ten non-verbal characters; i.e. open-minded, conscientious, extravert, agreeable, and neurotic; versus close-minded, impulsive, introvert, antagonistic, and emotionally stable.

The ambition was to design unisexual and multicultural characters, free from physical objects (e.g. clothes and hairstyles). In the development process, we have combined personality theories with research on body languages and facial expressions. Different versions of the characters have been tested in several pilot studies and continuously improved by graphic designers at an international top-ranking design and innovation agency, Veryday. The aim of the present study was to validate the ten non-verbal characters through experts in the field of Psychological Assessment.

One hundred twenty experts at six international conferences (ECPA 2015; ICP 2016, World Conference on Personality 2016: ECPA 2017, AICP 2018 and European Conference on Personality 2018) evaluated to what degree (on a 5-point Likert scale) each non-verbal character corresponded to the Big Five Model of Personality.

Three of the Big Five personality factors seem to be possible to capture with non-verbal characters. However, Openness to experience and especially Conscientiousness, remain challenging. The non-verbal characters need to be further validated and discussed with experts in the field of personality psychology.

Oral Session 2.4.

**Comparable Measurement of Religiosity Across Different Religious Groups**

Bluemke, Matthias
Groskurth, Katharina

GESIS - Leibniz Institute for the Social Sciences

Religiosity is an essential part of human culture. Therefore items on religiosity are part of international survey programs. However, despite being one of the prime markers for strong cultural differences, the comparability of data on religious beliefs collected across different cultures and countries can be
severely hampered. The dissimilarity of religious world views so far prevented relevant comparisons of mean and covariance structures in cross-cultural research. It is fair to say that item bias is not only highly likely, but often self-evident. The problem is concealed, thus aggravated, when immigrants and their descendants are not surveyed in their country of origin but in their new environments, because the assumption of a homogeneous population will be violated even for single-group analyses. Accordingly, analyzing the supernatural belief items of the International Social Survey Programme (ISSP) shows inadequate levels of measurement invariance, reliability, and validity across countries and religious groups. The Supernatural Belief Scale (SBS-6; Jong & Halberstadt, 2017) was recently invented to address the measurement of religious beliefs from an etic perspective, while allowing adaptations from an emic perspective - without giving up the functional equivalence of the items. Even without cultural adaptations, it shows better levels of measurement equivalence, reliability and validity across countries and religious groups than the ISSP scale. The implications for cross-cultural comparisons in a domain that is difficult to analyze quantitatively will be discussed.

Oral Session 2.4.

Mapping interests to the landscape of occupations in Germany

Sander, Nicolas
Sengewald, Erik

German Federal Employment Agency, Department for applied psychological research and development, Nürnberg, Germany

When it comes to occupational counseling, it is crucial to assess interests that represent the entire range of available occupations in order to maximize Person–Environment fit. Until now, there is no systematic approach to assess gaps or coverage of given interest assessments with respect to the distribution of occupations across interests. The method proposed here utilizes the Holland’s RIASEC model as a common framework to describe interests and occupations. Each dimension was subdivided into several domains (activities, work styles, objects etc.) and operationalized by relevant terms (e.g., activities: repairing, teaching..., work styles: analytically, creative...) summing up to 197 terms across six domains and six RIASEC dimensions). Five trained experts assigned these terms to both: German occupations at the apprenticeship level (N= 379) and to 27 interest scales of an interest questionnaire of the German Federal Employment Service. Gaps and coverage were assessed by calculating Euclidian distances between occupations and interests scales resulting from multidimensional scaling. Results yield a comprehensive and metric landscape of German occupations showing inter alia the large number of R-occupations. However, the main outcome is an objective assessment of quantifiable gaps and coverages of the current interest assessment when it comes to the range of occupations. These results facilitate the development of scales measuring interests, which map the entire landscape of occupations.
Body experience in patients with mental disorders; results of self-report measures and their relevance for clinical practice

Scheffers, Mia 1; Van Busschbach, Jooske T. 1,2; Van Duijn, Marijtje A. J. 3; Schoevers, Robert A. 4

1 Windesheim University of Applied Sciences, School of Human Movement and Education, Zwolle, the Netherlands
2 University of Groningen, University Medical Center, Rob Giel Research Centre, Groningen, the Netherlands
3 University of Groningen, Department of Sociology, Groningen, the Netherlands
4 University of Groningen, University Medical Center, Department of Psychiatry, Research School of Behavioural and Cognitive Neurosciences (BCN), Interdisciplinary Center for Psychopathology and Emotion regulation (ICPE), Groningen, the Netherlands

Although negative or disturbed body experience has been reported in a broad range of psychiatric disorders, sound measurement of body experience in clinical groups is scarce. Measuring body experience is important for diagnostics as well as for the evaluation of body- and movement-oriented interventions. Three core psychological dimensions of body experience may be distinguished: body attitude, referring to cognitive, affective, and behavioural aspects; body satisfaction, defined as the degree of contentment with appearance or functionality of the body; and body awareness, defined as the perception of bodily states and processes.

We report on results of three studies using self-report instruments to measure body attitude (Dresdner Body Image Questionnaire), body satisfaction (Body Cathexis Scale) and body awareness (Somatic Awareness Questionnaire). In addition to providing substantial empirical evidence for disturbed body attitude and disturbed body satisfaction as a common problem in patients with mental disorders, the studies also show differences in these dimensions of body experience between three groups of patients (somatoform disorder, trauma-related disorders, and depression). Patients with trauma-related disorders, especially women with early sexual trauma, are the most severely damaged group.

With respect to body awareness our findings provide evidence for significantly lower self-reported body awareness in patients with trauma-related disorders, but not for other disorders.

Our findings lead to the general conclusion that addressing body experience may be a way to influence psychopathology in patients with mental disorders. Studying body experience in a variety of disorders may contribute to a better understanding of the relevance of body experience as a transdiagnostic factor.
Culinary cultural identity as a protective factor for health in prevention of cardiovascular disease

Tabernero, Carmen¹; Castillo Mayén, Rosario²; Gutierrez Domingo, Tamara²; Cuadrado, Esther²; Rubio, Sebastián²; Arenas, Alicia³ & Luque, Bárbara³

1 University of Salamanca, Instituto de Neurociencias de Castilla y León
2 University of Cordoba, Instituto Maimónides de Investigación Biomédica de Córdoba
3 Universidad de Sevilla

Previous research had shown a strong relationship between lower levels of education with poor global health, lower life expectancy and the risk of cardiovascular disease. Our main research hypothesis is that education can play a protective role against the disease by influencing culinary cultural identity that is built through personal and emotional experiences shared by family and friends around food. In this way the meaning of food is shared and the culinary identity is constructed along three dimensions: from personal and emotional experiences: personal identity; from social and family roots - Social identity; and from cultural and regional roots - community identity.

Method. 587 patients with cardiovascular disease participate in the research ($M_{age} = 64.72, SD = 9.09$), in a second phase, 279 patients ($M_{age} = 64.38, SD = 9.45$). They respond in both phases to a questionnaire related to educational level, cultural culinary identity and other psychosocial variables related to global health. EFA and CFA procedures were followed to develop and validate the identity culinary scale along 15 items constructed with this proposal. An EFA showed three factors explained 59.21% of variance: first factor related to the regional identity with the culinary culture (5i, a=.78, Our cultural roots determine the current diet), family identity with the culinary culture (5i, a=.80, I identify with the culinary heritage of our family) and emotional identity with the culinary culture (5i, a=.79, I value the meals as experiences to enjoy). In a second phase, a CFA was performed and showed goof fit index. The results showed that the three factors of culinary identity are positive and significantly related to vital satisfaction and self-efficacy for adherence Mediterranean diet; and negative related to depression. The family identity factor was negative and significantly related to anxiety level (HADS), type D personality (negative affect) and, positively to perceived global health (SF12). Cultural and family heritage that affects the culinary identity had an important relationship with the perceived quality of life, life satisfaction and other variables of psychological health.

A Functional Measurement Study On The Assessment Of Decision-Making Capacity In The Context Of Euthanasia

Peter Theuns & Céline De Wette
Dept. of Psychology, Vrije Universiteit Brussel, Belgium

In Belgium and a few other countries (The Netherlands, Luxemburg, Canada, Colombia and the state Victoria in Australia) euthanasia has been legalized. In Belgium, the legal procedure for euthanasia comprises that physicians are required to evaluate the patient’s decision-making capacity in the context of euthanasia. This involves examining whether the patient can make choices about what she (no longer) wants, by being aware of their own health status, treatment options, consequences and alternatives. This paper evaluates, with a functional measurement approach, how physicians combine
(a selection of) relevant patient variables (cognitive functioning and illness) to evaluate the decision-making capacity in patients who apply for euthanasia. It is found that in case of mental illness (chronical depression), physicians tend to give less support to a euthanasia request than in case of colon cancer (which seems to get a similar appraisal as a combination of both diagnoses). Levels of cognitive functioning, evaluated by a psychiatrist and expressed as a percentage relative to normal, healthy cognitive functioning, seem to contribute to the assessment of competence in a linear manner, that is, lesser degrees of cognitive functioning result in a lesser support of the euthanasia request, but do not trigger a unanimous “no” when a high level of cognitive functioning is not achieved. It is concluded that physicians do not consider cognitive functioning independently from the illness when assessing a request for euthanasia. Further research is needed to disentangle “support for a euthanasia request” on the one hand, and “assessment of the mental competence of a patient” on the other, and to see which further variables contribute to the decisions made by physicians. It is hoped that further insights in the professional assessments made by physicians can help further refinement of procedures and legislation on euthanasia.

Oral Session 3.2.

Which IQ tests differentiate better Giftedness

Gallopeni, Florim; Goma Frixanet, Montserrat; Thaci, Jusuf & Hysenaj, Arben

University Autonoma de Barcelona, Heimerer College
University Autonoma de Barcelona, Atomi Institute
University of Bamberg.

Giftedness is something of a controversial concept and has been variously defined in different situations and perspectives. Actually we are talking more about the G factor of Intelligence and the category of people above 131 of IQ.

APM was developed to refine the differentiation at the upper level of the tests scores of the SMP especially for the results scored above 95 of Percentile Rank, (Matthews, 2010). Although the authors are aware of the limitations of this measure and the possible inflation of scores due to the Flynn effect, it was mainly chosen for practical reasons (i.e., group administration and availability) (Kroesbergen, Hooijdonk, Viersen, Middel-lalleman, & Reijnders, 2016).

Methodology: The sample consisted of 1872 school students, age 13-18, who were tested with Raven’s Standard Progressive Matrices Test, Advanced Progressive Matrice Test, (Raven) and Leiter International Performance test as part of identification and supporting of gifted students.

Results show that the scores above 91 of Percentil Rank in SPM+, was very easy to achieve, because of the uni-dimensional of the Raven test tasks, it was same in the APM, the only difference is that APM is standardized in the sample of 20 % of people with high intelligence, and predicted Giftedness better than SPM+. Leiter International Performance test measures and differentiate giftedness better than SPM+ and APM. In the regression analysis SPM+ and APM as an predictors, explained just 9% of variances of depended variable Leiter results, and predicted significantly just APM.

Conclusions: Uni-dimensional test are better for screening, also to use for general population for measuring IQ, when we are talking about Giftedness it is necessary to be measured through Tests that are multidimensional. Differentiation it’s key indicator in measuring and defining giftedness.
Psychometric properties of Cattell’s Fluid Intelligence Test (CFT 20-R) in a Lithuanian sample of 8–15 year olds

Butkienė, Dovilė; Gintilienė, Gražina; Girdzijauskienė, Sigita; Nasvytienė, Dalia

Institute of Psychology, Vilnius University, Lithuania

The CFT 20-R (Weiβ, 2006), German version of Culture Fair Intelligence Test, is language-free test which measures fluid intelligence. The test is often used as a tool for screening of giftedness. Over the last decade, there has been a growing interest in using the CFT 20-R in European countries. The aim of this study was to examine psychometric properties of the CFT 20-R in Lithuanian sample of children and adolescents. A sample of 2216 children and adolescents (1108 boys and 1108 girls), from 2nd to 8th grade, were administered the full-length CFT 20-R with extended time limits. Sample size for test-retest reliability was 88 children. 296 children participated in validation study using Berlin Structure of Intelligence Test for Youth: Assessment of Talent and Giftedness (BIS-HB; Jäger et al., 2006). Split-half reliabilities for age groups ranged from 0.87 to 0.93 (Total score), from 0.80 to 0.89 (Part 1) and from 0.76 to 0.85 (Part 2). Retest reliabilities for whole sample ranged from 0.69 (Part 1) to 0.76 (Total score). The validity of the CFT 20-R was supported by strong correlation between the CFT 20-R IQ and BIS-HB Reasoning (r=0.68), General intelligence (r=0.58), Figural abilities (r=0.56) and weak correlation between the CFT 20-R IQ and BIS-HB Creativity (r=0.27). The CFT 20-R identified gifted children (BIS-HB score ≥ 125) with a specificity of 76.8% and a sensitivity of 76.7%. To conclude, the CFT 20-R seems to be a reliable and valid instrument to assess fluid intelligence among Lithuanian children and adolescents.

Situational effects in emotional reasoning assessment: A contribution to validity evidence on the two performance-based measures

Buško, Vesna, Babić Čikeš, Ana

Department of Psychology, Faculty of Humanities and Social Sciences, University of Zagreb, Faculty of Humanities and Social Sciences, J. J. Strossmayer University of Osijek

The study demonstrates the results of the use of a particular class of structural equation models in acquiring validity evidence on two performance-based instruments intended to measure understanding and regulation of emotions, as widely agreed dimensions of emotional intelligence (EI) within ability-based models. Based on the assumptions of the latent state-trait theory (LST; Steyer et al., 1992, 2015), several multi-construct LST structural equation models are formulated and tested against the EI data to identify and separate the portions of the observed variability in EI scores which can be attributed to dispositional and/or to situation-related factors. The same LST framework was applied to examine the relationships between the specified EI latent variables, i.e., component scores theoretically reflecting trait and situational/interactional effects, respectively, with general cognitive ability and self-concept measures. The analyses are based on the two sets of empirical data collected in three and two time points with adolescent and student samples, respectively. Relative amount of
situation-specific variance appeared to vary across subsamples defined by gender and age groups, and in particular with time points and the instrument used. Expectedly, the structure of the observed relationships among the specified latent traits of all the measures examined showed to vary accordingly, as well. The implications of the results in terms of reaching more accurate estimates of relationships among the constructs of interest and thus more convincing convergent and discriminant validity evidence will be discussed.

Oral Session 3.2.

The one and only IQ

Tierens, Marlies¹; Magez, Walter²

¹ Thomas More University College, Applied Psychology, Antwerp, Belgium  
² Coordination team Antwerp for Psychological Assessment (Cap vzw), Brasschaat, Belgium

The Intelligence Quotient (IQ) is the most used measure to describe human cognitive functioning. The meaning of IQ has changed over time from a quotient between mental and chronological age to a normative score. Intelligence tests claim to measure IQ and pretend to say something about intelligence. However, in reality these tests are divers and not interchangeable. This leads to miscomprehension, miscommunication, and misuse of IQ scores by outsiders, but also by intelligence experts. To avoid communication and interpretations problems in research and practice, it would be useful to pursue conceptual clarity about the meaning of IQ and the content of an IQ test.

Given that the Cattell-Horn-Carroll (CHC; McGrew & Flanagan, 1998) model provides the most comprehensive and empirically supported model of the structure of human cognitive abilities, it logically follows that the interpretation of intelligence tests are most appropriately made in this framework. The model also provides tools to clarify the concept of IQ, referring to the broadest and most general level of ability. This general intelligence has the strongest association with Fluid Intelligence (Gf), followed next by Crystallized Intelligence (Gc) and continuing through the remaining abilities of the CHC-model. In Flanders there is a consensus that an IQ-score can only be calculated based on a General Intelligence Test that measures at least four broad cognitive skills, under which Gf and Gc. This paper proposes the general application of the 'Flemish' IQ consensus in the psychological and related domains, wherever it benefits science and practice.

Oral Session 3.2.

The incidental information processing as a factor of language aptitude

Gavrilova Evgeniya

Moscow State University of psychology and education

This study was aimed at revealing the relationships between efficiency in incidental information processing in cognitive task and individual differences in language aptitude. The incidental information processing implies usage of stimuli that were previously accepted out of external instructions and is considered to contribute substantially to language acquisition. 70 participants were exposed to pairs of words. They had to decide whether city names were presented in each pair of words. Some pairs
could be rhymed, but this aspect of information was processed incidentally. After that participants needed to invent as many rhymes as they could produce to a special list of new words. All rhymed words presented before were thought to be used during this rhyme generation task. At the end of procedure participants recalled as many words as they were able to remember.

Two Language Aptitude Tests were elaborated especially to measure language aptitude. The results revealed that high language-skilled participants tended to use exactly the rhymed words in rhyme generation task ($r = 0.4, p = 0.05$). Furthermore, there was no significant correlation between number of recalled rhymed stimuli and high level of language abilities ($r = 0.13, p = 0.6$). In its turn, middle language-skilled participants showed no advantage in using of rhymed stimuli by rhyme generation task, but were able enough to recall total number of stimuli and especially rhymed stimuli. We discuss our findings focusing on certain aspects of mnemonic and perceptive processes which are involved in language proficiency on different levels of its acquisition.

(The present research was supported by the “Foundation of the President of RF for young PhD scientists” (contract №: MK-487.2019.6))

Oral Session 3.3.

Diagnostic Evaluation of Autism Spectrum Disorders

De Ganck, Julie
Schouppe, Nathalie

Kwaliteitscentrum voor Diagnostiek vzw, Belgium

The ‘Kwaliteitscentrum voor Diagnostiek’ (Centre of Excellence in Diagnostics) has positioned itself as a scientific research and knowledge centre that aims to facilitate and improve diagnostic practices in Flanders (Belgium). Related to this mission, the centre developed in 2018 two protocols for the identification and evaluation of Autism Spectrum Disorders in minors and adults, respectively. This paper discusses how these protocols were developed based on both expert working groups and patient focus groups. Guidelines for qualitative (action-oriented) assessment are formulated and the latest research on diagnostic tools and their recommended use are reviewed.

Oral Session 3.3.

Assessing Dispositions Towards Ridicule and Being Laughed at with the PhoPhiKat-45: A Comparison of the Rating-Scale and Expanded Answer Format-Version

Brauer, Kay
Proyer, René, T.

Martin Luther University Halle-Wittenberg

Despite being widely popular in the field of subjective assessment, the usage of rating scales (Likert-type) has been criticized for distorting item- and scale characteristics (e.g., by enabling acquiescent or careless responding). Recently, the Expanded-format has been proposed as an alternative, in which participants chose one of $k$ presented fully explicated statements. While initial research for the expanded format has shown benefits (e.g., eliminating reverse-wording method factors) with respect
to psychometrics, no study has tested its usage in a multi-dimensional measure yet. We will narrow this gap by comparing the factorial structure and psychometric properties (e.g., measurement invariance, internal consistency, score distributions) between the Likert-style and Expanded version of the 45-item standard instrument for the assessment of three dispositions towards ridicule and being laughed at (PhoPhiKat-45; Ruch & Proyer, 2009). Data from two samples \( (N = 323/261) \) showed that the Expanded version produces stable item/scale parameters and that the 3-factorial structure could be retained. The analysis of self-peer ratings \( (n = 80 \text{ dyads}) \) provided further evidence for the validity of the Expanded-version. However, comparisons with the Likert version (Sample 3, \( N = 460 \)) only supported metric measurement invariance. Practical implications (usage of established cut-offs scores), costs (testing time), and benefits (low acquiescence) are discussed.

**Oral Session 3.3.**

**Developmental Resources of Chinese Youths: A Chinese Adaption of the German Questionnaire “FRKJ”**

Teuber, Ziwen\(^1\); Wang, Qichen\(^2\); Su, Yanjie\(^2\); Lohaus, Arnold\(^1\) & Nussbeck, Fridtjof W. (3)

1 Bielefeld University, Department of Psychology
2 Peking University, School of Psychological and Cognitive Sciences and Beijing Key Laboratory of Behavior and Mental Health
3 University of Konstanz, Department of Psychology

The German Questionnaire to Assess Developmental Resources for Children and Adolescents (FRKJ; Lohaus & Nussbeck, 2016b) is a theoretically-based and empirically-validated diagnostic questionnaire which estimates six personal resources (empathy, self-efficacy, self-esteem, self-control, sense of coherence, optimism) and four environmental resources (peers, parenting, parental support, educational integration). The main purpose of the study was to develop a Chinese version for the FRKJ-questionnaire. In addition, due to presumed cultural differences, this study aimed to investigate if the resources can also validly be assessed in Chinese youngsters and if the associations between the resources show a similar pattern in the Chinese sample compared to the German sample. Using a back-translation procedure and a self-report pilot study \( (N = 312; M = 11.94 \text{ years}, SD = 2.39) \) from Beijing, China similar factorial structure as for the German sample was found. In the validation study \( (N = 2600 \text{ students and } N = 393 \text{ parents}; M = 12.51 \text{ years}, SD = 1.84) \), we replicated the factorial structure and could confirm the findings of the German sample with respect to the test-retest-reliability as well as convergent, and discriminant validity. To the best of our knowledge, this is the first Chinese measure assessing various personal and environmental resources for children and adolescents simultaneously.
Bring your own device: Validity of intelligence tests conducted on own smartphones

Koch, Marco; Levacher, Julie; Spinath, Frank, M. & Becker, Nicolas

Saarland University

Computerized testing offers many advantages compared to traditional pen-and-paper tests. However, the initial costs of hardware acquisition are quite large, and keep growing the more applicants are to be tested simultaneously. Thus computerized tests are not used as frequently as desired. Nowadays, most people always keep at least one smartphone or tablet computer with mobile internet at hand, which are more than powerful enough in order to be used for psychological testing. The current study aimed to examine in how far tests conducted on one’s own personal device are comparable to results from a standardized device when one inspects the main criteria for test quality. To answer this question, participants were tested in standardized laboratories as well as in a field setting. They were asked to work on a short version of an established intelligence test in its usual pen-and-paper version as well as a computerized form of its parallel form. The digital version was administered on the participant’s own device and/or on a standardized smartphone. The results are analyzed regarding measurement invariance and construct validity, as well as item characteristics. Implications of using smartphones for ability assessment are discussed.

Differences in personality traits of selected/not selected applicants to Swedish Counter Terror Police Unit

Tedeholm, Peter G¹; Sjöberg, Anders² & Larsson, Agneta C³

¹ Police Officer (PhD student), Swedish Counter Terror Unit (SCTU), Karolinska Institutet
² Associate Professor, Stockholm University
³ M.D, PhD, Karolinska Institutet

The personality–job fit theory postulates that a person's personality traits will reveal insight as to adaptability within an organization. Few studies have investigated the impact of personality–job fit in extremely high demand occupations. The purpose of this study was to investigate if there is a difference in personality between the Swedish normal population and two groups of applicants, selected and non-selected, to the Swedish Counter Terror Police Unit (SCTU). The applicants (N=159) completed the Five Factor Model (FFM) test NEO PI–R (Costa & McCrae, 1992) as a part of the pre-employment psychological evaluation. To analyze the differences between the groups, Cohen's d was calculated. The results show differences in personality between the Swedish normal population and the selected (N=9) and non-selected (N=150) applicants regarding all FFM traits; Conscientiousness (Cohens d selected 1.28/not selected 0.47), Neuroticism (Cohens d selected 1.05/not selected 0.50), Openness (Cohens d selected .53/not selected 0.73), Extraversion (Cohens d selected 0.38/not selected 0.27) and Agreeableness (Cohens d selected 0.40/not selected 0.26. The result is discussed in relation to previous research studying personality in high-demand employment contexts.
Narcissistic Resilience? The Possible Role of Mediating Components in a Structural Equation Modeling Paradigm

Szabolcs, Bandi¹; Eva, Marko¹,³,⁴; Kiss, Eniko Csilla¹,³,⁴ & Nagy, Laszlo¹,²,³

University of Pecs - Faculty of Humanities - Institute of Psychology; Psychopathology Research Group; Doctoral School of Psychology; Research Center of Health Psychology

Most of the literature dealing with narcissism emphasize the negative aspects of it, while there is only a few that focuses on the potential positive impact of this phenomena. The aim of this study was to explore the possible effects of narcissistic grandiosity on resilience with the integration of mediating components. The number of participants was 408 (78.5% females) with the average age of 28.9 years (SD=14). We used online versions of paper-pencil based self-report scales to assess grandiose narcissism, sense of coherence, coping style and resilience with cross sectional snowball sampling method. The participation was voluntary and could be recalled anytime. The results revealed that grandiose narcissism has both a direct and an indirect effect on resilience, in which the role of the coping mechanisms seems to be more important than the subjective sense of coherence. The model’s statistical indices show outstanding fitting (Chi-square (4)=12.866; CFI=0.992; RMSEA=0.073; SRMR=0.026). Our findings support the concept that (subclinical) grandiose narcissism may play a positive role in our mental well-being. We deem that the impact of narcissism on resilience is an important topic for further investigations, too.

Assessment of Openness to Change & Conservation values in Ukrainian, Polish and Romanian young adults

Romanyuk, Lyudmyla, V.

Taras Shevchenko National University of Kyiv, V.I.Vernadsky Taurida National University

This study makes use of Openness & Conservation Values Questionnaire (OCVQ-9; Romanyuk, 2013) based on Schwartz’s Portrait Values Questionnaire (PVQ; Schwartz, 1994; Schwartz et al., 2001) to examine the psychometric properties of Openness to Change (OC) and Conservation factors in large young adults sample from Poland, Romania and Ukraine. Additional purpose is to examine value differences across cultures by applying a one-factor model focused on O&C as salient process of personality development. Participants were 383 young adults aged from 18 to 45 years from Poland (n = 220), Romania (n = 183) and Ukraine (n = 200). Results support for the generalizability of the one-factor model on openness & conservation values in Poland, Ukraine and Romania. Three separate models were tested in the Polish, Romanian and Ukrainian groups, respectively. The models showed a very good fit. The CFA model estimated via SEM was analyzed for the Polish data set \( \chi^2(N = 603) = 72.01, p = .026, CFI = .919, RMSEA = .095 \), for the Romanian data set \( \chi^2(N = 603) = 26.03, p = .026, CFI = .939, RMSEA = .069 \) and for the Ukraine data set \( \chi^2(N = 603) = 25.91, p = .017, CFI = .929, RMSEA = .071 \) separately. The associations of self-direction and stimulation items & tradition, conformity and security loadings within three groups were all statistically significant. The results showed a consistent relation between factor loadings for O&C two-factor model in Ukrainian, Polish and Romanian groups. We found support for path models for all samples testing three separate models in the Polish,
Romanian and Ukrainian groups, respectively. The results of the models fit statistics were largely satisfactory. The prospective of future research is cross-cultural comparison with data for Belgian, Polish, Romanian and Ukrainian samples to study such basic concept about personality development and values’ becoming in social and cultural space as openness to changes in the personal system of values including west- and east- Europeans spaces.

Key words: values, axio-factor of openness to change, Ukrainian, Polish and Romanian young adults, PVQ

Oral Session 3.4.

**Toward Shorter (and More Content-Valid) Measures of Character Strengths: Revising the IPIP-VIA Scales**

Bluemke, Matthias¹; Partsch, Melanie¹; Lechner, Clemens¹ & Saucier, Gerard²

1 GESIS – Leibniz Institute for the Social Sciences
2 University of Oregon

The “values-in-action” (VIA) framework targets at 24 universally recognized character strengths that cluster under six human virtues. However, the psychometric quality of the current 252-item version of the IPIP-VIA questionnaire measuring these strengths appears questionable (blurred factor structures; low content validity), and the cross-cultural comparability of the questionnaire can be debated. Moreover, no short form is available. To remedy these limitations, we developed a considerably shorter, more content-valid measure on the basis of IPIP items for surveys that are suitable for testing cross-cultural equivalence. According to exploratory and confirmatory factor analyses on a U.S. community sample (N=700), the 24 revised scales are made up by exactly 24 factors, and the respective measurement models achieve good model fit. Cross-validating these results, we present an analysis of representative samples from the U.K. and Germany (N=1000), underscoring the quality of the IPIP-VIA-R scales and allowing for testing cross-cultural measurement invariance.

Oral Session 3.4.

**Development of the NEO-BFAS: Using Cross-validation in Initial Phases to Maximize Generalizability**

Ross, Scott R.
DeYoung, Colin G.

Department of Psychology and Neuroscience, DePauw University
Department of Psychology, University of Minnesota, Twin Cities

Traditional psychometric practice for scale development has typically favored utilizing two primary samples, an initial sample upon which items are chosen for scale inclusion, and a cross-validation sample for examining generalizability of initial validity coefficients. This method sacrifices using cross-sample consistency at the outset, which maximizes generalizability on the backend, for psychometric purity of process. In a recent review of psychological scales developed between 1975 and 2015, Morgana et al. (2017) found limitations to generalizability were most important among most studies
reviewed. Using cross-validation methods in the initial item selection process should be better for forming scales that ultimately have better long-term utility in terms of validity and generalizability, than using a single sample for item selection. With the Big Five Aspect Scales (BFAS; DeYoung et al., 2007) as our criterion, we developed the NEO-BFAS using a multi-sample approach in item selection. Three independent samples of varying homogeneity, an undergraduate sample, Mechanical Turk sample, and the Eugene-Springfield Community Sample (N=1265; Goldberg, 1995) completed the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992). Items selected from the NEO met inclusion criteria across multiple independent samples early in test construction. Cross-validation on 510 Mechanical Turksters collected two years later, after initial scale development, demonstrated a very similar pattern of validity coefficients in a multitrait-multimethod matrix. This study highlights a method for scale development that may be practically obvious, but is generally under-utilized.

Oral Session 4.1.

**Insights from multimethod identification study of gifted and high ability students in Lithuania**

Girdzijauskienė, Sigita; Gintliienė, Gražina; Butkienė, Dovilė; Nasvytienė, Dalia & Dragunevicius, Kestutis

Institute of Psychology, Vilnius University, Lithuania

One of the most discussed and most controversial area of concern within the field of gifted and talented is the process of screening and identification of gifted students. Historically, Lithuania has lacked a consistent approach to identifying gifted and high ability children. The project on identification of high ability students and meeting their educational needs was implemented in 2016–2019 and supported by Ministry of Education of Lithuania. One of the objectives of the project was to develop the identification system of gifted and highly achieving students in mainstream schools. The purpose of this presentation is to discuss some insights from research on applying of multiple methods in identifying high ability students. 3621 2–8 grade students from 29 schools from all over the country participated in the project. Students had been identified on the basis of multiple criteria, including intelligence (Cattell Culture Fair Intelligence Test 20-R), achievement tests, checklists of characteristics and teacher nominations. 700 (19.3 %) students were identified as gifted or highly achieving. Identification system introduced in the presentation is based on the de-emphasis of identification as a barrier to most gifted programming, instead arguing that identification should be used as a means of inclusion (locating more students) as opposed to exclusion (keeping students out) and that each instrument should act as a separate entry point to a gifted program, not as an additional hurdle.
A study on Formative Assessment with Cognitive Diagnosis Model Application for Math Proficiency

Ayan, Cansu
Çıkrıkçı, Nükhet
Ankara University, Turkey
Istanbul Aydın University, Turkey

To improve quality of education, diagnosis of learnings should be identified by formative assessment methods. As a way of using formative assessment, Cognitive Diagnostic Model (CDM) is a psychometric model that allows the assessment of students’ weaknesses and strengths. In this model, individuals are assigned to some latent classes according to their item response patterns; thus, it provides researchers information to identify how well test takers perform in the cognitive processes required to answer the items correctly.

In this study, a Hierarchical CDM is developed to reveal the skills regarding the fractions learning domain at Math for this purpose, a mathematics test consisting of 5 forms with 89 items was constructed to measure the four (4) critical cognitive skills in mathematics fractions sub-learning domain. These forms were applied to 1380 students of 6th-7th and 8th grades from 12 public schools in Ankara, Turkey. Latent class estimations were conducted via Hierarchical CDM to reveal the skills regarding the fractions learning domain. In the light of the findings, the number of individuals assigned to each latent class was determined at class level. CDM-based Diagnostic Result Reports were designed, and detailed outputs were presented regarding the individuals’ cognitive development level. Furthermore, members of each latent class were specified for what they can and cannot do. Discussions regarding how two people with same total score could take place in different latent classes if the estimations were made with CDM, and the advantages of presenting detailed feedback when using CDM were provided.

Creativity and Behavioral Characteristics of Gifted Underachievers in Primary School

Nasvytienė, Dalia; Girdzijauskienė, Sigita; Gintilienė, Gražina; Butkienė, Dovilė & Dragunevicius, Kestutis
Institute of Psycholog, Vilnius University, Lithuania

One third of gifted primary school children in Lithuania may be labeled as „underachievers“ whose academic performance is below their intellectual level (Girdzijauskienė et al, 2018). Practitioners claim for evidence-based data on the characteristics of this heterogenous group to foster its learning potential.

The present study was carried out as part of a larger research project on the development of pupils’ academic skills. It aimed to examine the behavioral characteristics and creativity of gifted 8-of 11-years-old underachievers and their gifted achieving counterparts. 1396 children from 26 schools nationwide were enrolled; the targeted sample consisted of 46 gifted underachievers and 50 gifted
achievers (with extremely high intelligence as measured using Cattell Culture Fair Intelligence Test 20-R). Comparison of these two groups was based on the reference about importance to rely on research that can distinguish gifted achievers and underachievers (White et al, 2018). Teachers and parents of participating children completed the Strengths and Difficulties Questionnaire [Goodman, 1997] standardised in Lithuania; Test for Creative Thinking-Drawing Production (TCT-DP) was administered to children.

Our findings suggest that parents highlight difficult relationships with peers while teachers point out an externalizing behaviour of gifted primary underachievers. We can’t support the overall problematic profile of these children (Hanses & Rost, 1998) and advocate for a more differentiated picture of their behavior (McCoach & Siegle, 2001). Gifted primary underachievers are distinguished by the specific pattern of creativity as they underperform their gifted achieving classmates on B-part of TCT-DP. This is line with Kim (2008) insights.

Oral Session 4.1.

The Adaptive Behavior Assessment System: Reliability, validity and norms for the Flemish general population

Kreemers, Bea1,2; Maljaars Jarymke1,2; Storms, Gert3; Maes Bea1; Noens Ilse1,2

1 Parenting and Special Education Research Unit, KU Leuven, Belgium
2 Leuven Autism Research, KU Leuven, Belgium
3 Laboratory for Experimental Psychology, KU Leuven, Belgium

The Adaptive Behavior Assessment System (ABAS-3) is a questionnaire to assess adaptive skills (i.e., skills learned by people to enable them to function in their everyday lives) in individuals of all ages. The ABAS-3 measures performance in three domains (conceptual, social, and practical) by a broad range of skill areas, for example communication, home living, health & safety, and self-care. The ABAS-3 was translated into Dutch: the translation process included forward and backward translation, revision by experts and a pilot study. Subsequently, data of a large general population sample have been collected. The aim of this study is to evaluate the reliability and validity of the ABAS-3-NL.

Over 3500 Flemish children and adults participated in our ABAS-3-NL-study: 0-5y parent version (n≈1200), 2,5-5y teacher version (n≈300), 5-21y parent version (n≈1500), 5-21y teacher version (n≈500), 18y+ self-report version (n≈600), 18y+ other report version (n≈500). Additional information was collected using a background questionnaire, the Vineland-Screener 0-6 (another adaptive behavior measure), and the ASEBA (emotional and behavioral problems).

Preliminary analyses on the first wave of data collection showed moderate to high levels of reliability for the different ABAS-3-NL questionnaires, concerning internal consistency, inter-rater reliability, test-retest reliability and cross-form consistency. Moderate to strong correlations between chronological age and adaptive behavior were present in samples of children (0-21y), but not in samples of adults. Other validation analyses on internal structure and convergent and divergent validity measures will be performed. Questions and issues concerning psychometric properties and traditional or continuous test norms will be discussed.
Interrelations between students’ affects, collaboration and achievement in a virtual science learning environment

Laakkonen Eero¹; Pietarinen Tarja¹; Vauras Marja¹; Kinnunen Riitta¹ & Volet Simone²

1 Department of Teacher Education and Centre for Learning Research, University of Turku, Turku, Finland
2 School of Education, Murdoch University, Murdoch, Western Australia, Australia

Interest in the relationship between learning and affect has gained more attention, based on growing empirical evidence of the importance of affect in learning and the interrelatedness of students’ cognitive, emotional, motivational, and volitional processes. Learning in technology-based environments has become an important issue in education because of the progress of information technology and new possibilities for developing advanced technology-based learning environments. The purpose of this study was to examine affect and collaborative group work during computer-supported inquiry learning in science in real classroom settings. The study focused on students’ self-reported affect, the relationship between affect and perceived nature of collaboration, and their relationship with the level of productive group outcome. Participants (high school students, 16-18 years old, N = 120) worked in small groups in a web-based learning environment ViBSE during their regular science lessons. Students self-evaluated their affects and collaboration during learning activities at three phases using constructed questionnaires. At the end of the working period, the group outcomes were evaluated by qualified professionals. PCA and CFA were used to examine the factor structures of the affects and collaboration. SEM was used to model the interrelations between student’s affects, collaboration and group performance. Longitudinal cross-lagged path modeling was utilized to test the relationship between affects and collaboration across the three measurement points. Three factors were constructed for the affects (joviality, self-assurance and serenity) and two for the collaboration (collaboration & support and scientific understanding). Results showed that self-assurance had a significant effect on collaboration & support, intertwined with scientific understanding and group performance. Cross-lagged analysis showed a reciprocal relation between positive affect, scientific understanding and collaboration & support.

Biomarkers and hormones: Contributions to a fuller understanding of alternative measures to assess productivity despite presenteeism.

Ferreira, Aristides¹; Pérez-Nebra, Amalia R.²; Aguiar, Maria L. A.²; Costa, Eva E.¹; Costa, Carla G.¹; Zambonato, Adriane² & Modesto, João G.²

1 Instituto Superior de Ciências do Trabalho e da Empresa-Instituto Universitário de Lisboa (ISCTE-IUL)
2 Centro Universitário de Brasília (UniCEUB)

Objective: This study aims to combine current psychometric instruments with emerging physiologic approaches measuring presenteeism productivity and health at work. This study assesses whether
productivity despite presenteeism is affected by biomarkers and hormones, and how these physiological indicators interact with each other.

Method: One hundred and eighty workers completed a self-reported measure of presenteeism. Levels of cortisol, thyroid stimulating hormone (TSH), C-reactive protein (CRP), glycemia and vitamin D were assessed.

Results: CRP and glycemia moderated the relationship between cortisol and productivity despite illness. Moreover, glycemia moderated the relationship between hyperthyroidism and productivity despite illness, and the interaction between TSH and vitamin D explained the variance of the employees’ capacity to complete work tasks while sick. The results provide valuable new dimensions in the study of presenteeism, with good psychometric evidences.

Conclusion: The results highlight the moderator role of CRP, high glycemia and vitamin D in decreasing employees’ capacity to fulfil tasks while ill. In the future, other direct measures could be used as alternatives to traditional models used to evaluate workers’ productivity. These findings have implications based on a fuller understanding of how biomarkers and hormones explain productivity despite illness.

Oral Session 4.2.

Gender Differences in Corruption Tolerance: Effect of Ambivalent Attitudes Toward Men

Kolachev, Nikita
National Research University Higher School of Economics

There is an opinion that women are less tolerant of corruption than men (Chaudhuri, 2012; Agerberg, 2014). Corruption is more beneficial for men and often discriminates women by taking sexist forms like sexual extortion (Chene & Fagan, 2014). People with high rates of sexism are more inclined to condemn one gender or another for participating in corruption (Barnes, Beaulieu & Saxton, 2018).

To examine whether sexism to men is related to corruption tolerance and whether the effect of the former is different for men and women, we used corruption tolerance questionnaire (Cronbach’s $\alpha = 0.83$) and the Ambivalence Toward Men Inventory (Glick & Fiske, 1999; Krivoshchekov, Gulevich, and Lyubkina, 2018), benevolent form $\alpha = 0.82$, the hostile one is 0.75. Also, using the MIMIC method, we excluded items with DIF.

On a sample of 412 Russian respondents ($M_{\text{age}} = 35.76, SD = 13.18$) we showed that sexism toward men is positively associated with corruption tolerance: $r(412) = .16, p < .01$ for benevolent attitudes and $r(412) = .17, p < .01$, for the hostile ones. Gender effect on corruption acceptance were not found ($t = 0.31, p = .76$). Benevolent attitudes are significantly more strongly associated with corruption tolerance in men ($t = 2.69, p = .007$).

Both studied phenomena are related to each other because they reflect the group hierarchy in society. Moreover, it is likely that the fight against the acceptance of corruption and the presence of stereotypes about men in society may go side by side and include measures reducing gender inequality.
A predictive criterion-related validation study of a short version of the Hazard Awareness Test

Burt, Christopher D B, and Hunt, Jason, Z

Department of Psychology, University of Canterbury, New Zealand

A predictive criterion-related validation study of a short version of the Hazard Awareness Test, termed the 4pHAT, is reported. Participants completed the 4pHAT assessment, which consists of 4 puzzles in which work-related hazards can be identified. Approximately one week later participants were asked to complete a hazard register for an environment which included 16 fake hazards. Data were also collected from an independent person who had rated the participants’ hazard recognition ability. Scores on the 4pHAT correlated significantly with the number of hazards the participant identified and recorded in the hazard register ($r = .53$), and with their rated hazard recognition ability ($r = .43$). Both results support the criterion-related validity of the 4pHAT. Hazard recognition forms a key stage in numerous model of accident causation, and using the 4pHAT to screen for this ability during employee recruitment should help reduce workplace accidents. Furthermore, the objective measurement feature of the 4pHAT avoids self-report bias such as impression management and social desirability, and thus its use can be extended to theory development in a field where many of the available measures generate self-report data.

Validation of computer-aided handwriting analysis and its integration into psychological assessment

Chernov, Yury

Institute for Handwriting Sciences (Zurich)

Computer-aided handwriting analysis has two important properties. It provides a wide coverage of personal characteristics and ensures exclusion of social desirability. It could be thus a good supplement to the standard psychological assessment. Especially under unconventional conditions, where questionnaire-based psychometric instruments have restricted application, e.g. forensic psychology. The traditional handwriting analysis has been strongly criticized for the lack of validation. The proposed procedure, which is maximally free from subjectivity of experts, improves validity of the method. It is based on a clear and unambiguous definition of involved handwriting signs, mathematical modeling of psychological traits and formal evaluation procedure.

The current study presents validation results for six psychometric tests (NEO-FFI, 16PF, PVQ, EQ-i 2.0, TAT and D2). It includes 245 subjects and 330 data sets. Each subject executed one or several of mentioned tests and provided his handwriting sample. The samples were evaluated with HS Detect program that implements computer-aided handwriting analysis with 546 handwriting signs and over 300 psychological traits and behavior patterns. The results were validated against tests. They demonstrated a good statistical agreement for majority of test dimensions. Cases of disagreement were statistically insignificant.
These formal nature of the presented procedure enables its good integration into psychological assessment, which improves reliability of the assessment procedure due to adding “the second opinion”. The integration model itself is as well presented in the current work. The data of the study builds the normative database that is a good prerequisite for the further studies with additional subjects and psychometric instruments.

Oral Session 4.3.

Measuring personality similarity and its relationship to divorce

Lovik, Anikó¹ ; Nassiri, Vahid¹ ; Molenberghs, Geert¹,² & Verbeke, Geert¹,²

1 KU Leuven - University of Leuven, I-BioStat, Leuven, Belgium
2 Hasselt University, I-BioStat, Diepenbeek, Belgium

While the chosen methodology often, if not always, has an impact on the conclusions the researchers (can) draw, choices made during the analysis of the data are rarely discussed. The goal of this paper is twofold. First, we would like to examine the relationship between divorce and personality based on the Big Five factors measured under the auspices of the Divorce in Flanders study. Second, we would like to investigate whether and, potentially, how the choices made during data analysis influence the results. For this reason, several different ways and approaches of analysis are explored and compared, ranging from simple correlations and t-tests to more complex models, such as mixed models and joint modelling. While we were able to replicate some of the findings in the literature, the results clearly indicate that, quite unsurprisingly, that the choices made during data analysis, have a severe impact of the results and therefore also on the conclusions.

Oral Session 4.3.

Using eye-tracking as an implicit measure of prejudice

Esteves, Francisco ; Jansson, Billy & Zakrisson, Ingrid

Department of Psychology and Social Work, Mid Sweden University, Östersund, Sweden

Despite an increase in nationalistic ideas in many European countries, prejudices against other ethnic groups is not generally socially accepted. However, it is difficult to study prejudice by using self-report data and implicit measures (i.e., IAT) have previously been used. The aim of the present study was to test if gazing behavior, measured using eye-tracking, could be used as an indirect measure of prejudice against other ethnical groups. In two subsequent studies, university students were first exposed to a series of trials in which faces were paired with adjectives, and instructed to learn a specific adjective associated with each face. Faces represented “nordic” or “non-nordic” people, and the adjectives were either positive or negative (e.g., happy or lazy). After the leaning phase, participants were exposed to a test phase. On each trial, one of the adjectives was presented together with four faces (two nordic, two non-nordic). Participants were asked to first inspect all pictures and afterwards point to the face previously associated with the adjective. On half of the trials, the face associated with the word was not present-
When faces have not previously been associated with the word, a general pattern was observed. When positive words were exposed, the gaze duration was longer to the nordic faces, while the gaze duration was longer in the non-nordic faces with adjectives negative words. That the participants automatically associated the valence of the words to different ethnic categories of the faces suggests that eye-tracking could be used as an interesting tool to measure ethnic prejudice.

Oral Session 4.3.

Using Generalizability Theory to estimate conditional standard error of measurement of HEXACO Personality Inventory

Gempp, René
Universidad Diego Portales

While the Standards for Educational and Psychological Testing recommend the reporting of Conditional Standard Errors of Measurement (CSEM) for ability tests, the issue rarely discussed at length with respect to personality scale scores. In fact, there are very few published studies on CSEM in personality measures. One explanation is the widespread misunderstanding of thinking that CSEMs can only be estimated by applying IRT models.

The aim of this study is to demonstrate a simple procedure for estimating CSEM using GT, in personality scales.

The method is demonstrated using a sample of 820 university students who answered the HEXACO-PI-R, a popular measure of the HEXACO model (Honesty-Humility, Emotionality, eXtraversion, Agreeableness, Conscientiousness, and Openness to Experience), an extended and slightly modified version of the Big Five framework.

The results show acceptable CSEM for the scales and subscales of the questionnaire. Also, as expected, the CSEMs are smaller for the full version (100 items) than for the abbreviated version (60 items) of the questionnaire.

The strengths and limitations of the method are discussed.

Oral Session 4.4.

Portuguese version of the Spence Children’s Anxiety Scale, self-(SCAS) and parent-report (SCAS-P)

Alves, Diana ; Canário, Ana, C. ; Barbosa, Ana C. & Gomes, Flávia S.

Faculty of Psychology and Education Sciences of the University of Porto

This study analyzed the psychometric properties of the Spence Children’ Anxiety Scale, self- (SCAS) and parent-report (SCAS-P) in a community sample of 729 children and adolescents from the north of Portugal, aged between 7 and 16 years, and 444 parents. The confirmatory factor analysis revealed better fit indexes in a five inter-correlated factor structure than in a six inter-correlated factor
structure, as presented by Spence (1998) and Nauta and colleagues (2004), respectively. The five-factor structure was driven by the anxiety disorders described in DSM-5 (APA, 2013), including generalized anxiety, separation anxiety, social phobia, panic, and agoraphobia. Results revealed good psychometric properties of SCAS and SCAS-P, specifically regarding factor structure and composite reliability. Measurement invariance of SCAS was not found between parents and children. Nevertheless, results point out the convergent and divergent validities of the measures and also suggest it as relevant when screening for anxiety disorders.

The current study corroborates previous findings regarding the validity and utility of the instrument, and represents a significant contribution to national research and clinical practice aimed towards children and adolescents aged between 7 and 16 years.

Keywords: anxiety disorders, assessment, SCAS, SCAS-P, children and adolescents, confirmatory factor analysis.

Oral Session 4.4.
Exploring personality structure in South Africa using the NEO-PI-R: Does the FFM hold?

August, Justin¹ ; Laher, Sumaya² & Takalani, James³

1 Nelson Mandela University
2 Wits University
3 University of Venda

The universality of the Five-Factor Model (FFM) of personality and the NEO-PI-R as an operationalization of the FFM has been well established in the literature. However research from African and Asian countries suggests that the FFM does not adequately describe personality in these contexts. It has been argued that the collectivist dimension in particular is not captured in the FFM. This study presents results from the South African context based on data collected in the Gauteng and Eastern Cape regions of the country on student and community samples. The results speak to the universal expression of some personality factors and facets like Neuroticism and Conscientiousness but also indicate the possibility for culturally specific expressions of other factors like Agreeableness. These findings are discussed within the continued debates on the universal applicability of the FFM.

Oral Session 4.4.
Identity as an area of dysfunction among all personality disorders

Bogaerts, Annabel¹ ; Luyckx, Koen¹² ; Bastiaens, Tim¹ ; Kaufman, Erin A.³ ; Claes, Laurence¹⁴

1 Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium
2 UNIBS, University of the Free State, Bloemfontein, South Africa
3 Western Psychiatric Institute and Clinic/University of Pittsburgh Medical Center, Pittsburgh, USA
4 Faculty of Medicine and Health Sciences, University Antwerp, Antwerp, Belgium

Section III of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders includes an alternative model for personality disorders (PDs), in which identity impairment is considered an
essential criterion of all PDs. This alternative approach has stimulated researchers to characterize identity across PDs. In the present study, we examined associations between identity and PD symptomatology among 242 Flemish community adults (49.2% female; $M_{age} = 42.76, SD = 14.42$). Participants completed the Self-Concept and Identity Measure (Kaufman, Cundiff, & Crowell, 2015) to assess identity functioning (with subscales measuring consolidated identity, disturbed identity, and lack of identity) and the Assessment of DSM-IV Personality Disorders (Schotte, De Doncker, Vankerckhoven, Vertommen, & Cosyns, 1998) to assess dimensionally measured PDs. Bivariate correlational analyses and hierarchical regression analyses were performed to investigate associations. Additionally, to test if the standardized beta weights for the disturbed identity and lack of identity scales were significantly different from one another, we estimated their corresponding 95% confidence intervals via bias corrected bootstrap. Bivariate correlational analyses yielded negative associations between the consolidated identity subscale and all PDs, whereas scores on disturbed identity and lack of identity scales were positively related to all PDs. Hierarchical regression analyses indicated that the consolidated identity scale negatively predicted variance in borderline PD. Disturbed identity and lack of identity scales positively predicted variance in all PDs, with lack of identity being the stronger predictor of paranoid, schizoid, schizotypal, borderline, and avoidant PDs. These findings generally support identity impairment as a central dysfunction among all PDs in a Flemish community sample.

Oral Session 4.4.

Further validation of a situational judgement tool (SJT) for borderline personality pathology

Verbeke, Lize
De Clercq, Barbara
Ghent University

During the past years, a situational judgement tool (SJT) for borderline personality pathology (BPD) was constructed at the personality psychology lab of Ghent University. This instrument consists of 18 situations that may trigger BPD pathology (Miskewicz et al., 2015), along with 7 response options that are rooted in the DSM-5 BPD traits. This new assessment tool adds a much-needed situational perspective to the assessment of personality disorders and has the potential to shed light on within-person dynamics in a standardized and time-efficient manner (Lievens et al., 2018). In this contribution, further validation results with this newly constructed tool in a community sample will be presented. In a first step, we will focus on the validity of the situation stems and explore whether participants’ perception of these situations corresponds with the presumed theoretical triggers. In a second step, we will focus on the validity of the SJT response options by comparing the SJT BPD scores with DSM-5 BPD trait scores in the prediction of general impairment and other BPD criterion measures. Finally, also the potential of the SJT to represent within-person variability will be explored, by comparing the standard deviations of the SJT with the standard deviations of the DSM-5 trait measure. In doing so, the current study hopes to make an empirically-driven argument for the relevance and validity of this situational perspective on personality disorders and hopes to set the stage for a generation of PD assessment that takes it a step further than the traditional personality pathology diagnostics.
Assessing Four Facets of Adult Playfulness with 12 Items: The OLIW-S

Brauer, Kay
Proyer, René, T.

Martin Luther University Halle-Wittenberg

Adult playfulness is an understudied individual differences variable that has been studied with increased interest over the past few years. A recent conceptualization differentiates among four facets of playfulness; namely, Other-directed, Lighthearted, Intellectual, and Whimsical playfulness (OLIW; Proyer, 2017). The OLIW-facets relate differently to outcomes such as relationship satisfaction, physical/mental health, or indicators of creativity. While robust evidence for the reliability and validity of the 28-item standard measure for the assessment of the OLIW facets exists, there is desire for a short-form for an economic assessment in specific research designs (e.g., longitudinal or dyadic research). We report data on a 12-item short form (OLIW-S) and tested its psychometric properties in four independently collected samples (N = 1,168/696/166/463). The findings from Confirmatory Factor Analyses, reliability analyses (test-retest/alpha/omega; .54-.87), and item analyses show good psychometric- and structural properties for the OLIW-S. Further, the overlap between self- and peer-ratings in the four facets and their localization within measures of global playfulness and the Big Five personality traits support the validity. Finally, correlational and structural analyses support the distinction of the four OLIW facets from five broad dimensions of maladaptive personality (PID-5). Overall, the OLIW-S allows researchers to assess four facets of adult playfulness in large-scale studies (e.g., frequent measurements over time or judgments of many targets in zero-acquaintance research) with short testing times.

Examining the Functioning of Test Emotion Items across Testing Platforms and Gender: A Measurement Invariance Study

Satkus, Paulius
Finney, Sara, J
Perkins, Beth, A

James Madison University

Test-taking emotions are often gathered using self-report instruments (e.g., Test Emotions Questionnaire; Pekrun et al., 2004). However, few studies have examined how such instruments function when emotions are assessed during testing sessions. For the current study, 955 American college students provided responses to 15 items measuring anger, pride, boredom, joy, and worry during an exam. We examined configural, metric, and scalar invariance across testing platform (i.e., computer-based and paper and pencil tests) and gender. Configural invariance was established, indicating the five test emotions were distinct across testing platform and gender. Metric invariance was established, indicating the items measuring each emotion were equally salient for students completing computer-based and paper and pencil tests and for males and females (i.e., items did not display non-uniform differential item functioning). Scalar invariance was established, indicating that...
students with equivalent values on the latent construct (e.g., anger) have equivalent values on the items (i.e., items do not display uniform differential item functioning). When assessing invariance, both global fit (e.g., CFI) and local fit (i.e., correlation and mean residuals) were assessed. Although global fit was adequate, small amounts of local misfit were identified. To assess the stability of these areas of misfit, we collected emotions at two additional points during the test. We found the local misfit did not replicate, other than for one item. Hence, recommendations for improving this item are provided. Given this level of measurement invariance, researchers can make more valid inferences about differences in test emotions across testing platforms and gender.

Oral Session 5.1.

Psychometric properties of Multisource Assessment of Children's Social Competence and Bryant Empathy Index with Spanish schoolchildren

Luque-González, Rocío ; Olga Gómez-Ortiz ; Rosario Ortega-Ruiz & Eva M. Romera

University of Córdoba

Social competence and empathy have shown to be higher in adolescent girls. However, there is a lack of evidence focused on childhood mainly due to the difficulty to assess this construct in children. The aim of this study was to validate the Spanish version of the Multisource Assessment Scale of Children's Social Competence (MASCS, Junttila, Voeten, Kaukiainen & Vauras, 2006) and Bryant Empathy Index (BEI, Bryant, 1982) for use with Spanish Elementary School students and to determine possible differences according to the gender of the participants. The sample consisted on 340 children aged between 6 and 12 years. The reports of the students are complemented with those of the families, who completed the same instruments. Exploratory and confirmatory factor analysis (EFA and CFA) and t-student were performed. Both instruments were validated and showed good psychometric properties. Three dimensions made up BEI: feelings of sadness, understanding feelings and tearful reaction. Four dimensions composed MASCS: cooperation skills, empathy, impulsivity and disruptivity. In both cases the scores of girls were higher. Results suggest that the MACSC and BEI are valid and reliable to assess social competence and empathy in children from 6 to 12 years and that girls seem to be more social competent and empathetic. This findings contribute to the understanding of the differences between boys and girls offering the chance to analyse multi-reports measures of social competence and empathy which provides greater reliability to the data collected.

Oral Session 5.1.

Efficacy in teachers: psychometric properties and relation with emotional intelligence

Camacho, Antonio ; Gómez-Ortiz, Olga ; Ortega-Ruiz, Rosario ; Romera, Eva M.

University of Cordoba, Spain

The relation between efficacy and emotional intelligence (EI) in teachers has been studied in some countries through the self-efficacy. However, studies recommend studying teachers' efficacy
considering self-efficacy and collective teacher. In such a way, it is important to examine the relationship between emotional intelligence of teachers and collective and individual effectiveness, for which it is necessary to provide adequate instruments to evaluate all constructs. This study aims to validate the Spanish version of two instruments to measure self-efficacy and perceived collective efficacy of elementary school teachers, and determine their relationship with emotional intelligence. Questionnaires were completed by 307 teachers. Exploratory and Confirmatory factor analysis (EFA and CFA), correlation and multiple regression analysis were performed. The Norwegian Teacher Self-Efficacy Scale (NSES; Skaalvik & Skaalvik, 2007) and Perceived Collective Teacher Efficacy Scale (Skaalvik & Skaalvik, 2007) were validated with good psychometric properties. The results corroborated the existence of six dimensions in NSES (instruction, adapting education to individual student’s needs, motivating students, keeping discipline, cooperating with colleagues and parents, and coping with changes and challenges) and one-dimension in Perceived Collective Efficacy Teacher. Correlation and multiple regression analysis showed the positive relationship between teacher self-efficacy and teacher collective efficacy with emotional intelligence. Therefore, this promising research topic could be useful further advancement of quality of teaching to get a better understanding about the relationship between efficacy and emotional intelligence.

Keywords: validation; elementary school teachers; self-efficacy; perceived collective efficacy

Oral Session 5.1.

The Rating Scale AdoDiko for the Measurement of Diversity Competence in Adolescents

Kolb, Christoph J.; Pietzonka, Manuel
Leibniz Universität Hannover
FOM Hochschule

Diversity competence is the individual ability to handle human heterogeneity in a constructive and goal-oriented way. It can be a personal resource, which enables an individual to deal with heterogeneity in an unbiased and expedient manner when within diverse contexts. Although often mentioned in literature, diversity competence is a construct that is seldom researched quantitatively. For that reason, this paper presents a new rating scale, which aims at operationalising diversity competence: “DiKo” measures diversity competence in adults (6-point-Likert scale), while “AdoDiKo” is adapted for adolescents (13-18 years). The scales are forced, balanced (symmetrical) and bipolar. The methods used to develop the scale can roughly be divided into three parts: Firstly, an adaptation of the DiKo items for adolescents was created. That also included a qualitative pre-test for the understanding of the items as well as their age adequacy. Secondly, an analysis of the inter-correlations of the item pairs (DiKo/AdoDiKo) was computed. The third step then was the factor analysis. Here, the sample was divided into two parts: in a sample for explorative factor analysis (regarding a multivariate outlier analysis using the Projection Pursuit method) and a second sample for the confirmatory factor analysis. The proportion of declared variance is 0.53. The parameters show a high model quality. Testing phases show that the quality criteria of the scale is sufficient ($\alpha=.79$, re-test-reliability $r=.71$, Guttman’s-Split-Half $r=.78$), so that it can be used as a survey instrument. Further research is needed in order to understand the nature of the construct diversity competence and its psychological implications even better.
Oral Session 5.1.

Analyses of acceptance of a multimethod Online Self-Assessment under the condition of mandatory participation for prospective students

Ortner, Tuulia, M.; Scherndl, Thomas; Leiner, Julia, E.M.

Division for Psychological Assessment, Department of Psychology, University of Salzburg, Austria

While online self-assessments are usually handled anonymously and voluntarily, the online self-assessment to advise interested persons in teaching studies in Salzburg and Upper Austria is mandatory. A successful completion of the OSA is defined by a successful login and the processing of the individual elements to the end, with about a click through counts as processing. The procedure includes informational elements, assessment elements, and self-experience elements - methodologically considered questionnaires, work samples and a voluntary video interview. There is an individual feedback by means of a multi-page feedback, which prospective students receive after two weeks. The talk presents the self-assessment tool and reports different indicators of acceptance of the procedure: Participation rates in the course of the process, data on processing care (error frequency of the work samples and click through indicators) as well as results on explicit acceptance of the procedure (raised via short questionnaire and open format) from two years of implementation with more than 2900 participants.

Oral Session 5.2.

Leadership presenteeism engagement: Construction and psychometric evidence of a new instrument

Ferreira, Aristides I. & Lopes, Sara L..

ISCTE - Instituto Universitário de Lisboa

Leadership behavior may explain the presenteeism phenomenon (i.e., the behavior of going to work despite ill). Hence, leaders may have a determining role in spreading a presenteeism-climate among their employees because they can affect the latter’s engagement and commitment with their own work. According to the existing literature, there is a lack of psychometric instruments to test the climate of presenteeism and specifically, how leadership presenteeism influences sickness presence at work on behalf of their subordinates. Therefore, we intend to contribute to the literature by developing a new instrument to measure leadership presenteeism. In Study 1 (N=337) a Principal Component Analysis (PCA) was performed to assess the factor structure of the scale dimensions and to investigate the variance explained of the dimensions of Leadership Presenteeism Scale. The Kaiser-Meyer-Olkin measure of sampling adequacy was .92, while the Bartlett Sphericity was χ²(66) = 2804.03 (p < .001). Two factors were obtained (36.94% explained variance for Factor 1; 70.19% explained variance for Factor 2). In Study 2 (N=189) we performed a confirmatory factor analysis (CFA). Results showed an adjustment in the independence of the two factors (emotional engagement and physical engagement). This paper provides the preliminary findings regarding a new instrument to assess leadership presenteeism and results indicate that the instrument has acceptable psychometric properties.

Rimmer, Avigdor
Western Galilee College

Coaching developed as an alternative to counselling, but coaching lacks a conceptual basis. We propose to develop the concept of Life Space (Lewin 1938) as a basis, and to apply scale-free networks (Barabasi 2002) as a complementary tool. In a nutshell, we ask individuals to relate to a sheet of paper as representing their Life Space, and to depict major people or events in their life as points on the paper. Next the person is asked to draw lines between each pair of points he sees as related. Thus he is creating his personal graph, and this is the core of his personal map.

The personal map is the beginning of the Coaching process. We observe and analyze the map and look for hubs, points where many lines are connected to. The discrimination between hubs and ordinary points is related to different type of behaviour. Ordinary points behave according to the Normal distribution, while hubs behave along the Pareto distribution. (Barabasi 2010). A major change in the individual life is suggested by approaching the hub, while changes of ordinary points are integrated within person’s life.

The Development of Workplace Friendship Scale

Sen-Kai, Yang
Cheng-Hsien, Li

This study focused on the development of a new Workplace Friendship Scale. The original theoretical framework proposed by Pillemer and Rothbard (2018) comprises four major dimensions related to workplace friendship: Informal, Socioemotional, Voluntary, and Communal. We developed a total of 43 items for workplace friendship. The new scale was then administered to a sample of 409 full-time experienced workers in Taiwan. After filtering by the reverse question design and deleting some invalid responses, a sample of 329 participants remained. This subsequent sample was randomly divided into two subsamples in order for two-stage data analyses: EFA and CFA.

The first subsample \( n = 165 \) was used to perform EFA using principal axis factoring and direct oblimin rotation method in SPSS 24. Four factors with eigenvalues greater than 1 were determined to keep and together explained 61.72% of variation in total. Given factor loadings greater than 0.4, the best four items were selected for each factor. A second-order CFA model with the 4 first-order factors was verified using another independent subsample \( n = 164 \) in Mplus 8. The results showed that the second-order CFA model well fitted to the data, \( \chi^{2} = 179.519, df = 98, p < .001, CFI=0.94, TLI=0.93, SRMR=0.05, \) and \( RMSEA = 0.07 \). The Cronbach’s alphas were 0.79 for Informal, 0.89 for Socioemotional, 0.89 for Voluntary, and 0.87 for Communal.

For follow-up data analyses, we will continue to collect more empirical data for gathering evidence of test-retest reliability, discriminant and criterion validity of the new Workplace Friendship Scale.
The Requirement-based Occupational Classification (ROC-2019) – Clusteranalytic construction and application

Münscher, Johann-Christoph
Bliem, Wolfgang

Helmut Schmidt University / University of the German Federal Armed Forces Hamburg
ibw Austria - Research and Development in Vocational Education and Training

In psychological assessment, determining person-job fit is a routine goal or sub goal. During this process, job descriptions from job databases or classifications are regularly used to find information on job demands. A common difficulty in this process is covering the descriptions with appropriate measures of psychological variables. Jobs are often described in terms of tasks that need to be performed while psychological measures are also geared towards an individual's latent variables. In most systems classifying occupations (i.e. ISCO, SOC) however, classification and description are based entirely on tasks, not requirements. This leads to a relative disconnect between job descriptions and psychological assessment. To bridge this gap and aid decision-making, the present analysis aimed to create an occupational classification based on underlying requirements rather than tasks. To this end, data from the BIC.at occupational database, maintained by the Austrian Chamber of Commerce was used. A bi-clustering approach resulted in a semi-hierarchical model of five occupational groups and eleven requirement classes. Occupational groups in this model do not express commonality in tasks but in groups of requirements. This requirement-driven perspective on over 1000 occupations matches the approach commonly taken in psychological assessment more closely. The provided system outlines occupational groups with characteristic requirement patterns. Thus, it aids the practitioner in selecting the appropriate measures for assessment or finding matching occupations based on an individual's information. The methods of construction as well as the result will be presented alongside comparisons to existing systems and illustrations of benefits for practical application.

Measuring Empathy in Dark Personalities: There is the Ability but not the Disposition to Empathize

Kajonius, Petri J. 1; Roos, Magnus J. 2 & Björkman, T. 3

1 Department of Social and Behavioral Studies, University West, Sweden; Department of Psychology, University of Gothenburg, Sweden; Department of Cognitive Neuroscience, University of Skövde, Sweden
2 Chalmers University, Gothenburg, Sweden
3 Department of Social and Behavioral Studies, University West, Sweden

Empathy is central to social cognition and can both be measured as a mental ability or a personality trait. Empathy involves components such as perspective-taking and emotional concern as well as the aptitude to imagine the content of other people’s minds. We tested whether the notorious low empathy in dark personalities (Machiavellianism, psychopathy, and narcissism; also called the Dark Triad) is mostly characterized by a lack of ability or lack of trait-disposition. A community sample was
collected \((N = 278)\) through an anonymous online study consisting of a cognitive ability-test (ICAR16; Condon, 2014), the Dark Triad (SD3), an ability-based empathy test (MET), and a trait-based empathy test (IRI). The results clearly showed that ability-based empathy is implicated by cognitive ability, while trait-based empathy by the Dark Triad trait-dispositions. We interpret this as dark personalities are cognizant to empathize but have low inclinations to do so. This finding may help shed light on how to more precisely measure empathy.

Oral Session 5.4.

**Children’s negative affect and effortful control on aggression: The role of mothers’ reactions.**

Holgado-Tello, F.P, Carrasco, M.A. & Delgado, B.

UNED (Universidad Nacional de Educación a Distancia)

Child temperament and parental socialization have been essential to explain behavioral problems (Eisenberg, Smith, & Spinrad, 2011). Thus, Parental emotion-related socialization behaviors (ERSBs) affect the child’s arousal level that could influence the outcomes of children aggression. Maternal-communication and Limit-Setting may be two important mother reactions to are related to some children’s emotions and its regulation through child negative affect and effortful control. The aim of this study is to examine the mediating role of child negative-affect and effortful-control as processes through which mothers’ reactions socialize their children aggression. We also explore the children sex and age differences on these relations. The sample was composed of 904 participants: 482 between 1 and 3 years-old, and 422 3 to 6 years-old. According to the Rothbart’s temperament model (Rothbart & Ahadi, 2007) two equivalent questionnaires were used to evaluate Negative-affect and Effortful-control: The Early Childhood Behavior Questionnaire (Putnam et al., 2006) and The Children’s Behavior Questionnaire (Rothbart et al., 2001). Maternal-communication and Setting-limits were evaluated by Parent-child Relationship Inventory (Gerard, 1994) and child aggression by The Children’s Behavior Check-list (Achenbach & Rescorla, 2007). The Path Analysis found differences across children’s sex and age. In all sex and age groups, the temperament variables seem to be more relevant than socialization ones, with more importance of negative-affect in the girls and in the youngest children. Our results sustain the mediating role of temperament variables as processes through which mothers’ reactions socialize the children aggression and suggest that parental ERSBs may not have the same consequences or function in the same way for girls and boys.

Oral Session 5.4.

**Comparing the psychometric quality of three short-scale measures assessing the Big Five**

Rammstedt, Beatrice¹ ; Danner, Daniel² & Lechner, Clemens, M.¹

1 GESIS - Leibniz Institute for the Social Sciences, Survey Design and Methodology (SDM), Mannheim, Germany
2 University of Applied Labour Studies, Psychological Assessment & Training, Mannheim, Germany
The only option for assessing personality in research settings in which assessment time and questionnaire space are limited is the use of short-scale measures. During the past decade, several short and ultra-short measures of the Big Five—currently the dominant and empirically best-validated model of personality—have been developed. These scales have enabled the assessment of personality in settings outside the core field of personality research, especially in cross-national large-scale surveys.

The present study aims to compare for the first time different short scale measures assessing the Big Five based on a comprehensive sample representing the German adult population. Our study includes the three frequently used short-scale measures: The 10-item BFI-10 (BFI-10; Rammstedt & John, 2007), the 15-item BFI-2-XS (Soto & John, 2017a), and the 30-item BFI-2-S (Soto & John, 2017b). Based on a unique large-scale random sample (N = 4,000), we compared the three scales’ (a) reliabilities, (b) their model fit and factor loadings as an indicator of their factorial validity, (c) their measurement invariance across subpopulations and (d) their predictive validity for a set of life outcomes. Despite the scales’ different lengths, results revealed that the reliability coefficients and factorial validities of the three scales are highly similar. Moreover, the correlational pattern with external criteria is highly similar. We discuss these against the background of the pros and cons of using each of the measures.

Oral Session 5.4.

**On the structure of explicit motives: Bottom-up factor analysis of a motivational inventory**

Kemper, C. J. & Lang, J. W. B.

1 HSD University of Applied Sciences, Cologne
2 Ghent University

For many decades, scholars have wondered why people engage in certain activities for no apparent reason other than that is what the person desires to do. Personality psychologists typically describe personality using two concepts: Motives (Murray, 1938) and traits (Allport, 1934). While motives capture goal-directed or needs-driven behavior, traits focus on typical and frequent behavior. Motives can be implicit but are also frequently accessible to the person and can thus also be measured using questionnaire measures. These explicit motives have been described as self-attributed or self-perceived goals or needs. While explicit motives are conceptually and empirically related to traits because both constructs are typically measured using questionnaire measures, there are also important conceptual differences. For instance, explicit motives—unlike traits—can include behavior or items that do not occur frequently and are outside the person’s behavioral repertoire (Winter et al., 1998). Despite the important conceptual differences between explicit motives and traits, there is currently limited systematic research available on the structure of explicit motives and empirical links and differences with trait measures. In the present study, we therefore used bottom-up factor analysis—the methodology used in the development of the five-factor model of personality (e.g., Ashton, Lee, & Goldberg, 2004)—and apply this methodology to a large explicit motives inventory with 144 items and 16 motive scales—the LUXXprofile (Kemper, Dörendahl, & Greiff, 2017). Results from a representative sample of N=200 participants revealed clear evidence for the multidimensionality of the measure. The bottom-up factor analysis yielded a factor marked mainly by items relating to power and structure at the top of the hierarchy, an agency and communion factor at the second level, and a power/sex/aggression, affiliation/intimacy, and a structure/conformity/security factor at the third level. At the fourth and fifth level, these latter three factors remained fairly stable, while additional factors comprised of mostly of items from the same content.
domain emerged. Correlations with the BFI-2 trait inventory provided evidence for substantial overlap but also showed important differences between the traits and explicit motives conceptualizations. Our results provide novel insights into the nature and structure of explicit motives and thereby advance psychologists’ understanding of the important domain of individual differences.

**Poster**

**Atrial fibrillation treatment adherence and subjective correlates of the disease**

Belova, Sofya\(^1\); Gavrilova, Evgeniya\(^2\); Ovsyannikova, Victoriya\(^3\); Shepeleva, Elena\(^2\) & Valueva, Ekaterina\(^1\)

1 Institute of psychology of Russian Academy of sciences  
2 Moscow State University of psychology and education  
3 National Research University "Higher School of Economics"

This study aims at revealing the role of subjective correlates of atrial fibrillation disease (AFib) alongside personality traits, anxiety and SES factors that contribute to treatment adherence. We developed three instruments for assessment of three types of subjective correlates, namely (1) subjective emotional experience of AFib episode compared to other common health troubles, (2) subjective considerations about AFib as a disease compared to a list of frequent diseases, and (3) self-report about heart’s sensations during AFib episode according to semantic differential scales. We use NEO-FFI and STAI for assessment of personality traits and anxiety, respectively. We assess SES, family environment, lifetime activities and patient’s activity in cooperation with his health care providers with a questionnaire constructed for current research. We set up three hypotheses. Firstly, AFib treatment adherence is determined by main effects of personality factors, SES factors, and subjective correlates’ factors, as well as by their interaction effects. Secondly, subjective correlates of AFib may correspond to objective parameters of the disease. And thirdly, AFib subjective correlates may mediate the relationship between seriousness of the disease and treatment adherence. We present a pilot study data carried out on a sample of Russian AFib patients (N=97, mean age 59.02, st. dev. 13.3) at the First Moscow State Medical University (Sechenov University). This research was supported by the Russian Foundation for Basic Research, project № 18-00-01326.

**Poster**

**The development and validation of the respecting-teachers scale in a Confucian cultural context**

Chien, Chin-Lung\(^1\); Hsu, Shih-Chi\(^3\); Lin, Tzu-Hsiang\(^2\); Chen, Yi-Chao\(^1\); Huang, Shih-Chen\(^1\); Huang Chung-Ping\(^1\) & Chen, Wei-Ying\(^1\)

1 Department of Psychology, Kaohsiung Medical University, Taiwan  
2 Graduate Institute of Counseling Psychology and Rehabilitation Counseling, National Kaohsiung Normal University, Taiwan

The “respect” that students have toward their teachers is highly valued in Confucian cultural societies. A previous qualitative study (Chien et al., 2018) showed that the concept “respecting teachers” can
be categorized into two types: “revering-teachers” and “fearing-teachers.” Based on the previous findings, this study aimed to develop the respecting-teachers scale (RTS) and demonstrate the psychometric properties and the factors associated with this newly-created measure. A questionnaire survey was administered to college students and high school students who were required to complete the RTS and other measures. The total sample was randomly split into an exploratory (n = 571) and a validation sample (n = 607). The results indicated that two factors, “revering-teachers” and “fearing-teachers,” were obtained via exploratory factor analysis in the exploratory sample, and both factors exhibited good internal consistency (above .88). With regard to the validation sample, the two-factor model was confirmed via confirmatory factor analysis, and the measurement invariance of the RTS between college and high school students was supported. In addition, evidence revealed that in both exploratory and validation samples, “revering-teachers” was positively correlated with positive teacher-student relationship, respecting-teacher behavior, learning behavior, but was negatively correlated with negative teacher-student relationship. On the other hand, “fearing-teachers” was negatively correlated with positive teacher-student relationship, intimacy toward teacher, learning behavior, but was positively correlated with negative teacher-student relationship. In summary, the RTS presented good psychometric properties and predictive validity. Finally, the contributions, limitations, and future direction of the study were discussed.

Poster

Online and social media recruitment: An exploratory study in Portugal

Correia, Anabela
Martins, Sara
Polytechnic Institute of Setúbal – Business School, Portugal

Nowadays, it is fundamental for human resources managers to launch proactive policies, regarding new strategies to improve the recruitment processes. The main goal of the present study is to analyse the impact of online recruitment and social media hiring processes in Portuguese companies. More specifically, the objective of this study is to measure the capacity utilization of online recruitment in companies, to understand the reasons behind the choice of this type of recruitment, to identify its advantages and disadvantages, to analyse whether or not companies use social media as a recruitment tool and to identify which are the most used, to analyse the reasons that lead companies to use social networking sites and, finally, to understand the highly and less valued aspects in the candidate’s social media profile. The study sample is made up of 76 Portuguese companies’ recruiters, using a questionnaire as the data collection tool. The results achieved indicate that online recruitment is frequent in the companies under study, mainly to collect applications and for job advertisement. Among the several advantages associated with its use, one of the most important is the fact of facilitating the communication between candidates and recruiters. The results suggest that online social networks are used to publicize jobs, to contact and to recruit people and that LinkedIn appears as the online social network most frequently used by recruiters. Finally, it was verified that the specific set of skills in a candidate social media profile is the most valued aspect to proceed to their selection and that the report of false qualifications may lead to exclusion.
The differences between self-reported and measured height and weight among adults with type 1 diabetes

Kkeli, Natalie¹, Merwin, Rhonda M.² & Michaelides, Michalis, P.

1 University of Cyprus
2 Duke University
3 University of Cyprus

Reporting error for weight in samples with adults with diabetes has been examined in a few previous studies, and the results have been inconclusive, with the degree of underestimation or overestimation exhibiting great variability. The accurate measurement of weight in particular, is important in this clinical population as their weight and health conditions are highly interconnected. To our knowledge, no previous studies have examined the height and weight reporting in adults with type 1 diabetes with or without eating disorder symptomatology. The present study aimed to examine a) the accuracy of self-reports of height and weight by adults with type 1 diabetes, and b) if the reporting errors of height and weight were associated with eating disorder symptomatology and perfectionism scores. A secondary data analysis was conducted using a US sample of 75 adults with type 1 diabetes (58 with and 17 without eating disorder pathology), aged 18 to 68 years (M=41.52, SD=12.22). Participants were asked to self-report their height and weight prior to actual measurements, and were assessed for eating disorder symptomatology and perfectionism. Results indicated that adults with type 1 diabetes with and without eating disorder pathology underestimated on average their weight and height, but the differences were not significant. Participants with high scores on eating disorder symptomatology and perfectionism were less accurate reporters of their weight. Since such measures are important in monitoring health status, and in light of the inaccuracy in self-reports, actual measurements should be taken whenever possible.

Gender differential item functioning in the Slovak version of Big Five Inventory 2

Kohút, Michal
Halama, Peter

Faculty of Philosophy and Arts, University of Trnava, Trnava, Slovakia

The Slovak adaptation of Big Five Inventory 2 (BFI-2, Soto & John, 2017) is currently being developed. As a part of the validation process, differential item functioning (DIF) between male and female respondents was analysed. Mantel’s chi-square in DIFAS software (Penfield, 2005), ordinal logistic regression and Poly-SIBTEST (Chang, Mazeo & Roussos, 1995) method were used for DIF detection. The sample consisted of 667 Slovak adults, 333 males and 334 females. Mean age was 37.31 (SD= 13.65) years, 37.69 (SD= 13.75) for males and 36.93 (SD= 13.56) for females. Altogether, 9 items showed DIF on domain level, 8 showed DIF on facet level and 8 showed DIF on domain and facet level, but in most cases DIF effect size was only negligible or very small. Nine items (15%) showed at least medium DIF identified by two or three of used methods. The impact of these items was analysed by comparing gender differences for full scales and for scales without identified items. No substantial
differences were identified in most scales. Despite the occurrence of differentially functioning items, there is no serious suspicion of equity or validity issues regarding to gender in the Slovak version of BFI-2.

Poster

**Meditation experience and trait-mindfulness are associated with reduced self-reported mind-wandering – German validation of the Daydreaming Frequency Scale**

Linares Gutiérrez, Damisela¹; Pfeifer, Eric²; Schmidt, Stefan³ & Wittmann, Marc⁴

1 Institute for Frontier Areas of Psychology and Mental Health, Freiburg, Germany
2 Catholic University of Applied Sciences, Freiburg, Germany
3 Department of Psychosomatic Medicine and Psychotherapy, Medical Faculty, Medical Center – University of Freiburg, Freiburg, Germany
4 Institute for Frontier Areas of Psychology and Mental Health, Freiburg, Germany

Mind-wandering or daydreaming can be described as spontaneous thoughts that are independent from the task at hand and the current sensory information. Mindfulness, defined as the ability to focus on the present moment with an accepting attitude towards the present experience, is considered to be in opposition to mind-wandering. Recent findings revealed that greater meditation experience is related to less mind-wandering during meditative states. Furthermore, higher self-reported levels of dispositional mindfulness have been associated with reduced self-reported mind-wandering in non-meditators. However, how long-term meditation practice influences mind-wandering in everyday life and to which extent mind-wandering and sub-processes of mindfulness are conceptually linked is less clear. First, we validated a German version of the Daydreaming Frequency Scale (DDFS) in a student population. We then employed this version in meditators to a) investigate the relationship between meditation experience and reported levels of mind-wandering in daily life and to b) explore how different facets of mindfulness, assessed with the Freiburg Mindfulness Inventory (FMI) relate to mind-wandering. Using a correlational design, we show that more meditation practice in years accounts for less self-reported mind-wandering in daily life. Moreover, the negative association between mindfulness and mind-wandering is mainly explained by the mindfulness factor of ‘acceptance’. Our results provide evidence for clarifying the relationship between mindfulness and mind-wandering and further validate the use of the FMI as a sensitive tool for assessing a two-factor structure of mindfulness.

Poster

**Flow as a Mediator in the Relationship between Passion and Visual Art Creativity of Primary School Students in Taiwan**

Liu Pei Yun

Creativity is a critical factor that decides the quality of 21st century human resources and raises national competitiveness. The purpose of this study was to investigate the relationships among passion, flow, and creativity on visual arts in primary school. Questionnaire survey has been conducted
to 557 grade 4 and grade 5 students in 2018. The survey tool included two self-report scales – the passion scale and the flow scale; and a teacher evaluation on visual arts. Researchers employed these tools to examine the mediating effect of flow in the relationship between passion and visual art creativity. The research results indicated that positive correlations among pupils’ harmonious passion, obsessive passion, flow, and creativity on visual arts were identified. Passion and flow positively predicted creativity on visual arts. Flow served as a partial mediator role between harmonious passion and creativity on visual arts. Flow also served as a full mediator role between obsessive passion and creativity on visual arts.

Poster

How dark is the future? The Dark Future Scale adaptation to Uruguay: Factor Structure & Psychometric Characteristics.

Murnikovas, Alexas1 & Ortúño, Victor1,2
1-Facultad de Psicología, Universidad de la República, Uruguay.

Future Anxiety (FA) refers to a state of apprehension, uncertainty, fear and concerns about unfavorable changes that may take place in the personal future. This negative state is caused by cognitive representations about possible adverse situations in the future. The Dark Future Scale (DFS) is a five-item instrument developed to measure Future Anxiety. The purpose of this study is to explore the factor structure and psychometric properties of a Uruguayan adaptation of DFS. The sample is composed by 232 university students (162 women, 69.8%, 70 males, 30.2%) with ages between 18 and 66 years old (M= 25.76 SD=9.22). Through an Exploratory Factor Analysis, a one-dimension factor structure was found, reporting 47% of total explained variance. All items presented high factor loadings (λ ≥ 50) and the obtained reliability was good (α = 0.81). Several Pearson correlations with relevant psychological phenomena were calculated in order to explore convergent-discriminant validity: self-esteem (r = .52, p < .01), consciousness (r = .52, p < .01), emotional stability (r = -.42, p < .01), and openness (r = -.25, p < .01). To the best of our knowledge, this is the first attempt to adapt DFS to Spanish language. The obtained results in this exploratory study, allow us to assert about DFS good factor structure and psychometric characteristics. As such, it can be considered for measuring Future Anxiety for the Uruguayan population. Future studies should test the instrument with specific samples and with a more varied set of variables.

Poster

Everyday hassles, adverse events and traumas: the role of children’ coping and mother’s mental health on elementary school-aged children adjustment.

Parent, Nathalie & Lemardelet, Laura

University Laval, Quebec, Canada

Behavioural problems of children (BP) is a growing concern: studies show that 10 to 20% of children have serious BP (Kauffman, Brigham, & Mock, 2004) and that almost 40% of them will develop BP at
some point in their life (Costello et al., 2003). While numerous studies show that everyday hassles, adverse events and traumas are related to BP, others conclude that children can react differently to the same adversity depending on individual or contextual characteristics (Cummings, Davies & Campbell, 2000). Furthermore, some children can maintain a good adjustment despite cumulative adversity. While some researchers talk about resilience, others highlight that absence of BP could be relate to latent effects (Kim-Cohen, 2007). In this context, this study focuses on children’ coping and mother’s mental health as protective factors. A total of 80 children between 9 to 12 years-old completed measures of adjustment, everyday hassles, adverse events and coping while mothers completed measures of child’s adjustment, adverse events, traumas and mother’s mental health. A follow-up on children’ adjustment was also conducted with mother and teacher after 6 and 12 months. Despite the fact that results show significant negative correlations between adversity and adjustment, children coping and mother’s mental health moderate this relation. Regression analyses highlight the significant contribution of children’s coping and mother’s mental health to adjustment, despite adversity. Overall, developing coping strategies of children and helping mothers maintain good mental health can help children to deal with adversity and should be consider in the conceptualization of prevention program for children.

Poster

Early screening of mental disorders at school: usefulness of the Dominic Interactive with elementary school-aged children

Parent, Nathalie
Lemardelet, Laura
University Laval, Quebec, Canada

Studies show that first signs of mental illness appear before the age of 14 in 50% of the cases (Kessler et al., 2005). Without detection, it can lead to behaviour problems, social difficulties and school failures (Hawkins et al., 2013). In this context, early screening of mental disorders can help children maintain good adjustment (Levitt et al., 2007). Although several behavioural assessment systems existed, a few can be used to collect the point of view of elementary school-aged kids and fit their cognitive development. In this context, the Dominic Interactive (DI; Valla, 2000) can be useful. It contains 91 cartoon-like items showing the behaviour of a child in various situations. It can be administered online or through a software. It helps to detect seven mental disorders and to assess competencies (school, social, athletic). Studies assessed the DI’s validity and showed positive results (Bergeron et al., 2017; Scott et al., 2006; Kuijpers et al., 2014), but none correlated the DI and a multi-informant behavioural assessment system for elementary school-aged children, and none assessed the competencies scales’ validity. In this context, 80 children between 9 to 12 years-old completed the DI and measures of self-esteem, social support, and coping while parents completed measures of family adjustment. The teacher completed measures of school adjustment for 32 of them. All respondents also completed the Behavioral Assessment System for Children (BASC-3; Reynolds & Kamphaus, 2015). Correlations provide good evidence of DI’s validity. Regression analyses highlighted the unique contribution of children’s point of view, especially in the case of internalized disorders.
Exploring gender differences on dangerous driving behavior: A meta-analysis

Sarbecu, Paul; Rostescu, Daniela Carina

Department of Psychology, West University of Timisoara, Romania

The purpose of this meta-analysis was to investigate gender differences in terms of dangerous driving behavior. Specifically, we focused on Errors and Violations on the road, as measured by the Driver Behaviour Questionnaire (DBQ). Research studies included in online databases (e.g. EBSCO, PsycINFO) were considered for selection. Inclusion criteria for the studies were a) to measure driving errors and violations using the DBQ, b) to include participants from both genders and c) to provide data for calculating the \( d \) Cohen effect sizes. Using a random effect model, we identified that men reported more violations (\( d = 0.27, z = 3.11, p < .01 \)). No significant differences were identified for errors.

The level of anxiety and diagnostic attitudes of psychology students

Słysz, Anna; Stypińska, Małgorzata

Adam Mickiewicz University in Poznań, Department of Psychology, Poland

The anxiety is an unpleasant emotional state, which can take many forms. It affects people who are healthy or suffering from somatic or mental disorders. A person may have more or less perceived level of anxiety, depending on many aspects. The purpose of presented study was to investigate the relationship between the level of perceived anxiety and the diagnostic attitudes shown by students of psychology (Proceduralist, Risk taker, Theoretician, Intuitionist). The sample used for this research involved fifty students of psychology (86% women, 14% men). Educational Diagnostician Inventory (Niemierko, 2017) and The State-Trait Anxiety Inventory (STAI) was used. Studies have shown the relationship between anxiety and the attitude of the Procedural and Risk taker, while the lack of connection between anxiety and the attitude of the Theoretician and the Intuitionist.
Situational Judgment Tests in the assessment of emotional and social abilities

Valueva, Ekaterina¹; Shepeleva, Elena²; Ovsyannikova, Victoriya³

1 Institute of psychology of Russian Academy of sciences
2 Moscow State University of psychology and education
3 National Research University "Higher School of Economics

Situational judgment tests (SJTs) are a good measure of social and emotional abilities (MacCann, Roberts, 2008; Schulze et al., 2007). SJTs usually depicted socially or emotionally loaded situations and one is supposed to choose (among the presented alternatives) the best way to deal with them. We developed two SJTs to measure the ability to identify emotions (eSJT) and the ability to solve social problems (sSJT). Each eSJT item represents the description of a situation which provokes emotional reactions. The testee should choose one out of six emotions which he/she regards as most appropriate one. The eSJT includes scenarios that refer to self-consciousness, communication with the siblings and communication with the peers.

Items of sSJT describe situations of interpersonal communication that schoolchildren face in everyday life. In each situation a character should overcome some socially embarrassing obstacles. A testee is supposed to choose one out of five ways to deal with the problem. The sSJT includes scenarios that refer to student’s interaction with classmates, teachers and parents. The correct answers for eSJT and sSJT were obtained by expert’s rating, which showed high inter-rater consistency (Cronbach’s Alpha is 0.9).

One hundred and fifty secondary school students from Moscow (9-18 years old) took part in our study. We administered eSJT and sSJT along with tests for verbal and nonverbal intelligence, social self-efficacy, sociometric status and psychological well-being.

We will discuss the psychometric properties of eSJT and sSJT, as well as theoretical issues of the development of SJTs for emotional and social abilities assessment.

The research is carried out with the support of the RFBR, project No. 18-013-01023 and project No 17-06-00574.

Symposium paper

Spanish tool in Polish cultural context - Polish adaptation of Children and Adolescent Assessment System SENA. Psychometric properties of the tool

Wroclawska-Warchala, Emilia
Niedziela, Joanna

Pracownia Testów Psychologicznych PTP
Psychological Test Laboratory of the Polish Psychological Association

In this paper we will present process of adaptation and psychometric properties of the Polish version of SENA – multidimensional, multi-source diagnostic system elaborated in Spain to measure wide
range of emotional and behavioral problems, areas of vulnerability and personal resources of children and adolescents (Fernández-Pinto, Santamaría, Sánchez-Sánchez, Carrasco, del Barrio, 2015).

The process of adaptation in Poland started in 2017 and will be completed at the end of 2019. In the process of translation and adaptation some necessary changes were made (e.g. in the structure of validity scales) – we will discuss them briefly in the first part of our paper.

Standardization sample included 1500 children and adolescents, aged 3 to 17. It was constructed using quota sampling method to represent Polish population. In the second part of our paper we will present the impact of demographic variables on SENA results.

The third and main part of the paper will be the presentation of reliability and validity studies. As far as validity is concerned, we checked criterion validity comparing SENA results of various clinical groups (ADHD, ASD and mood disorders groups) to comparison non-clinical samples. SENA results were also compared to results of the tools of established validity, measuring specific disorders, like Conners 3, CDI-2 (Children Depression Inventory – Second Edition) and ASRS (Autism Spectrum Rating Scales). In the final part of the paper we will present comparison of Spanish and Polish versions of SENA as far as reliability and validity are concerned and sum up impressions of Polish professionals using SENA.

Symposium paper

Can we predict children's adjustment from parents-children discrepancy patterns?

Carrasco, Miguel A.
Izquierdo-Sotorrio, E.
Holgado-Tello, Francisco P.
Universidad Nacional de Educación a Distancia
Universidad a Distancia de Madrid
Universidad Nacional de Educación a Distancia

Discrepancy patterns between informants seem to lead to a better prediction of children’s mental health. This study aims to analyze the discrepancy patterns between mothers, fathers and children about perceived acceptance-rejection as predictor of children’s externalized and internalized problems. The sample was composed of 681 participants (227 children, 227 fathers and 227 mothers); children's ages (39% males) range from 9 to 17 years old (M=12,52, SD= 1.81). The informants filled in the Parental Acceptance-Rejection Questionnaire (PARQ; Ronher & Khaleque, 2008) and the Child Behavior Checklist (CBCL)/Youth Self-Report (YSR)(ASEBA; Achenbach & Rescorla, 2007) in their specific versions. The polynomial regression analysis showed four different patterns between the informants. The stronger relations between informant’s convergence and children’s psychological adjustment were found when informants showed lower discrepancies on the perceived parental rejection. On the other hand, when the perceived acceptance informed by children was higher than the one informed by parents the children’s psychological adjustment levels significantly decreased. Nevertheless when the parental acceptance informed by parents was higher than the children’s one the adjustment increased. Differences between age groups and mother/father results are discussed.
Screening of self-harm and suicide in a large sample of Spanish adolescents: preliminary results


1 Miguel Hernandez University of Elche (Spain)
2 Catholic University of Murcia (Spain)
3 University of Alicante (Spain)
4 Emory University (USA)
5 VU University Amsterdam (The Nederlands)
6 University of California-Santa Barbara (USA)

Suicidal behavior is a public health problem. Suicide is currently the second leading cause of death among 15-29 year olds. The risk of the first appearance of suicidal behaviour tends to arise around the age of 12 and increases considerably during adolescence. The presence of mental disorders and self-injury behaviors are associated with suicidal behavior. Therefore, the aim of this study is to determine the frequency of suicidal behaviour (ideas, plans and attempts to commit suicide) and self-harm without suicidal intention in a large Spanish adolescent population. The sample of this study was composed of 1942 adolescents (% of females = 47%; Secondary Education -12-16 years old- = 86%). The instruments administered were a scale adapted from Columbia and Self-Injurious Suicidal Thoughts and Behaviors Interview-SITBI. Life and 12 month prevalence rates was provided by sex, age and course. The results indicated that the prevalence rates of ideation, plans, suicide attempts and self-harm were 9.7%, 13.3%, 4% and 9.1 for lifetime period, and 8.1%, 7.4, 2.6% and 5% for the last 12 months, respectively. The data are consistent with previous studies and are of great interest for the prevention of suicide in adolescence and draw attention to the need for early detection of suicidal ideation and behaviour and self-harm.

Web-based assessment and classification of complete mental health in Spanish adolescents: preliminary results


1 Miguel Hernandez University of Elche (Spain)
2 Catholic University of Murcia (Spain)
3 University of Alicante (Spain)
4 Emory University (USA)
5 VU University Amsterdam (The Nederlands)
6 University of California-Santa Barbara (USA)
Traditionally, mental health has been understood as the absence of psychopathology or distress. As early as 1946, in its constitution, the World Health Organization stated that (mental) “health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity”. This is the reason why the bidimensional mental health model (BMHM) is a more appropriate, understanding a complete state of mental health as a conjunction of absence of distress and presence of psychological well-being. The evaluation of mental health is a priority in all stages of life, especially in childhood and adolescence, since it is a vital period of extreme vulnerability to the onset of mental health problems. This paper presents first data from a new approach in the assessment of mental health in adolescence, consisting of a Web-based self-informed assessment protocol in an educational setting to assess the presence of distress, well-being and personal resources or psychological strengths. The sample consisted of 1942 adolescents (% of females = 47%; Secondary Education -12-16 years old - = 86%). We used the Mental Health Continuum-Short Form for wellbeing and the Youth Pediatric Checklist-17 for psychopathology/distress. Our main findings indicate four mental health subtypes—complete mental health, moderately mentally healthy (neither well-being or distress), symptomatic but content (well-being and distress), and troubled: 3.6%, 90.3%, 0%, and 6.1%, respectively. This approach makes it possible to identify all students, not only those with psychological problems; and the great advantage of making it possible to design prevention and mental health promotion strategies that are specific and personalized for each center, class, group and/or person, attending not only to present weaknesses or problems but also focusing on the promotion of personal strengths within the educational setting.

Symposium paper

**Emotional instability and depressive symptomatology in adolescents: its relationship with coping and emotional self-efficacy**

Malonda, E.; Llorca, A.; Samper, P. & Mestre, M. V.
Dpt. Basic Psychology. University of Valencia, Valencia (Spain)

Children and adolescents can experience emotional disorders such as depression (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Kertz, Belden, Tillman, & Luby, 2016). Positive coping and perceived emotional self-efficacy can act as a protection factor of maladaptive behaviours (Gunzenhauser et al., 2013; Johnson, Gooding, Wood, & Tarrier, 2010). Likewise, some studies conclude the relationship between depressive symptomatology and uncontrolled conducts like emotional instability (Llorca, Malonda, & Samper, 2016). The current study examined associations between early adolescence affects: depression and emotional instability, and positive coping and emotional self-efficacy over two years in a Spanish sample. 390 Spanish adolescents of secondary school completed all two surveys in a longitudinal study. The mean age was 12. Participants completed measures of depressive symptomatology (Radloff, 1991), emotional instability (Caprara & Pastorelli, 1993; Del Barrio, Moreno, & López, 2001), emotional self-efficacy (Caprara et al., 2008), and positive coping (Johnson et al., 2010). SPSS 24 and Mplus 6.1 were used to calculate the analysis. A positive relationship was reached between depressive symptomatology and emotional instability, and a negative association with positive coping (emotion and situation coping, and social support) and perceived emotional self-efficacy in managing distress and self-efficacy in expressing positive emotions. The results show the positive role of coping or resilience and emotional self-efficacy to reduce depressive symptomatology in early adolescence. Therefore, the children’s psychological assessment of these constructs will be basic to be able to help them to reach adapted behaviour in the future.
Student characteristics affecting the recognition of high cognitive ability

Lavrijsen, Jeroen
Verschueren, Karine
KU Leuven

Accurate teacher judgments of student ability constitute a crucial part of effective instruction. In this presentation, we consider whether teachers are able to identify the most intelligent students in their class and which student characteristics explain discrepancies between nomination and measured ability. Drawing on data from a large Flemish study (1,976 students from 115 classes in Grade 7), we modelled the probability that a student was selected as highly able on the basis of measured ability (measured by the CoVaT-CHC-test) and a variety of student characteristics. Our results show that, although we explicitly urged teachers to select on potential instead of performance, nominations primarily reflected everyday achievement (GPA) and engagement, not cognitive ability. Moreover, all other things being equal, girls were less likely to be nominated by their teacher as highly able than boys. While students with low-educated parents were also less likely to be nominated, this was explained by their lower everyday achievement. Personality dimensions were not found to be related to nomination probability. When measured ability was differentiated into its Gf and Gc components, only Gf had a unique effect (beyond GPA) on nomination probability. Finally, we asked the students themselves to nominate classmates whom they believed to be very smart. This yielded results comparable to the results from the teacher nomination analysis.

How to apply quality criteria in the development of a Dutch Cognitive Ability Test: an illustration

Van Parijs, Katrijn¹; Tierens, Marlies¹; Joris, Steven¹ & Magez, Walter²

¹ Thomas More University College, Applied Psychology, Antwerp, Belgium
² Coordination team Antwerp for Psychological Assessment (Cap vzw), Brasschaat, Belgium

Professional associations, e.g. the International Test Commission (ITC) or the Board of assessment of the European Federations of Psychological Associations (BOA of EFPA), published guidelines for the development of assessment tools. As test developers, we apply these guidelines in our Dutch Cognitive Ability Test (CoVaT–CHC), a new CHC – based intelligence battery for children and adolescents (range: 9 years, 6 months to 17 years, 11 months). To develop a representative instrument for Flanders, more than 5000 children and adolescents completed the assessment at school in groups of 5-25 during four sequential lessons. In the recruitment of the participants, domicile, field of study and age were considered. This study shows the CoVaT-CHC is a representative, reliable and valid assessment instrument. For example, concerning the reliability of the basic version of the test, results show a good (.84) to very good (.96) reliability of the assessed Broad Cognitive Abilities, and a very good (.97) reliability of the total IQ. This presentation gives the opportunity to gain more insight into the translation of the theoretical guidelines of test development into practice. It confirms the importance of broad cognitive abilities in the intelligence profile of Flemish children and adolescents.
Quality issues (psychometrical and theoretical) in developing and adapting measures for assessment of cognitive abilities.

Schittekatte, Mark
Ghent University (UGent)

The quality of tests, due to developing or adaptation projects, is worldwide a concern of professional associations. The International Test Commission (ITC) published recently e.g. Guidelines for Translating and Adapting Tests (Second edition, 2017, see https://www.intestcom.org/files/guideline_test_adaptation_2ed.pdf). Standards are also put forward e.g. by the Board of Assessment of the European Federation of Psychological Associations (BOA of EFPA) e.g. via a Test Review Model (see http://www.efpa.eu/professional-development/assessment). But even on local level the Belgian Test Commission and the "Flemish governmental Quality centre of Assessment" is attentive for the quality of instruments. In Flanders, activity in developing assessment instruments for intelligence is published recently. A mean feature is the importance of the theoretical issues in particular the inclusion of the CHC model. An overview of the worldwide quality issues is projected to assessment developments in Flanders.

Translating cognitive profiles into advice: establishing principles for interpretation

Tierens, Marlies¹; Magez, Walter² & Van Parijs, Katrijn¹

1 Thomas More University College, Applied Psychology, Antwerp, Belgium
2 Coordination team Antwerp for Psychological Assessment (Cap vzw), Brasschaat, Belgium

This presentation addresses the development of decision rules for the interpretation of the CoVaT-CHC results. Recent tests for cognitive abilities are often based on the Cattell – Horn – Carroll taxonomy, which is widely accepted as the most empirically supported model of cognitive abilities. In addition to the theoretical advantages, it is relatively easy to translate results of tests based on the CHC-model into practical advice. This because knowledge of the cognitive profile provides the opportunity to establish strengths and weaknesses in cognitive abilities of a client. However, decision rules are needed to standardize interpretations made from the cognitive profile. In the CoVaT-CHC, for example, scores of the different cognitive abilities are compared with the mean score of these abilities instead of the Total IQ-score. This presentation gives more insight in the development of this and other decisions rules while considering theoretical and practical issues.
Symposium paper

**Positive emotions' ecological assessment with multiple devices in a diary study**

Brondino, Margherita; Raccanello, Daniela; Burro, Roberto & Pasini, Margherita

Department of Human Sciences, University of Verona (Italy)

Nowadays, given the growth in technological developments, psychological constructs can be assessed using many different devices (personal computers, laptops, tablets, smartphones). Many advantages can be related with this possibility, however there is a lack of scientific literature concerning the uses and the real effectiveness of these applications to increase collected data quality and consequently psychological research quality.

The present study aims to address this gap presenting the results of a daily measurement of positive emotions connected with the amount of time a person spends in a natural setting, considering the paradigm of restorative environments in particular the “Attention Restoration Theory” and the “Stress Recovery Theory”. On the basis of these theoretical approaches, many research studies report that the exposure to natural environments arouses positive emotions.

The study involved 100 Italian first- and second-year undergraduate students enrolled on a degree course in Psychology. During the study week, the participants received an e-mail message every day reminding them to answer to an online questionnaire at the end of the day. Positive emotions were assessed considering positive activating emotions (enjoyment, hope and satisfaction) and positive deactivating emotions (relief and relaxation).

The quality of the measurements was tested in term of construct validity using Confirmatory Factor Analysis respectively on the daily measurement of positive emotions, and checking for the invariance of the measure across days. The criterion related validity was assessed analysing for each day the correlation between positive deactivating emotions and the daily exposure to natural environments.

Symposium paper

**Influence of usability of Virtual Reality device on mood after exposure to natural virtual environment**

Menardo, Elisa; Brondino, Margherita; Pasini, Margherita

Department of Human Science, University of Verona

Nature is nowadays considered the most restorative environment. A brief exposure to a (real or virtual) nature environment help people to restore affective resources. However, testing the possibility that a virtual reality (VR) device can evoke similar outcomes as real nature, the usability of such devices become an important factor to consider in the research. In this study we hypothesize a moderation effect of usability of device on the relationship between perceived restorative potential (PRP) of the environment and mood after nature exposure.

114 Italian students (83% female, mean (ds) age = 22.38 (6.50)) were immersed into a virtual nature environment using a virtual reality head-set (Oculus Rift). Before and after exposure positive and negative emotions were measured. After exposure participants were also asked to report PRP and usability of VR device experienced.
Results showed that higher level of positive emotions and lower level of negative emotions (except anger) reported after exposure were predicted by PRP. Usability of VR device moderate the influence of PRP on all positive emotions (enjoyment, relief, hope), except Relaxation, and on deactivating negative emotions (Sadness, Boredom). Only people that experienced high usability reported better emotional state when higher PRP was perceived. At the other side, when participants experienced low usability, they did not report emotional state difference in respect of level of restorativeness perceived. For activating negative emotions (Anger, Anxiety) and Relaxation interaction was not significant. High level of PRP predicted more Relaxation and less activating negative emotions independently of usability experienced.

Symposium paper

Social Desirable Responding – A tale of how many cities exactly?

Ziegler, Matthias¹ ; Buck, Lilly¹ & Paulhus, Delroy L.²

1 Humboldt-Universität zu Berlin, Berlin, Germany
2 University of British Columbia, Vancouver, Canada

Research on socially desirable responding (SDR) seems as old as research on questionnaires. One at least implicit general assumption is that SDR is a unidimensional construct. This implicit assumption contradicts theoretical SDR models like the one by Paulhus (2002). Such misconceptions can potentially lead to failed replications or severe misunderstandings in practice, though. The current project was undertaken in order to provide empirical support for the notion of a multifaceted SDR construct. To this end three studies were conducted. In Study 1 data from N = 971 participants in three groups were collected using a Big Five adjective list. Participants either rated themselves or a person they find highly likable or impressive. Using CFA based measurement invariance tests it could be shown that all data contain a SDR factor achieving weak factorial invariance only. Studies 2 and 3 specifically focused on faking as one theoretically assumed facet of SDR. Study 2 used data from the German NEO PI R norm sample as well as data from applicants (N > 15,000). Again, CFA based invariance testing was used. The data also show that a necessary SDR factor differs across groups. Finally, in Study 3, an experimental within person approach was used to evoke a faking good, a faking bad factor, or a self-deceptive enhancement factor (N = 400). The resulting SDR factors were not invariant across conditions and correlated with Narcissism and Machiavellianism. In summary, the empirical evidence strongly supports the notion of a situation dependent and thus varying SDR.

Symposium paper

Modelling faking behaviour in high-stakes personality assessments: A pragmatic approach

Brown, Anna

University of Kent

Impression management (aka faking) is a threat to validity and fairness of psychological assessments, because it distorts the true ordering of respondents on measured traits. Various methods of statistical control for faking have been proposed, with the recent ‘Retrieve-Edit-Select’ model (Böckenholt,
2014) offering the greatest potential in capturing item-level response processes and tendencies. However, the model is computationally heavy and is limited to few items measuring one trait.

OBJECTIVES
This research aimed to propose a statistical model capturing fundamental features of faking behavior (e.g. subpopulations of respondents with distinct cognitions), but be applicable in real-world assessments with large numbers of traits and items.

METHOD
Two distinct types of behavior at the item level – reporting either ‘retrieved’ or ‘edited’ response (Böckenholt, 2014) – were verified in 10 qualitative interviews and 2 focus groups. Item response behaviours were shown consistent in presenting either the true or ‘edited’ picture of self at the trait level. However, these presentations can be trait specific – the same individual can report true standing on one trait but fake another. A model is proposed where observed trait scores are mixtures of two types of behavior, each underpinned by its own latent factors. The model is akin to factor mixture analysis (FMA) with varying Grade of Membership (Asparouhov & Muthen, 2006), allowing for partial membership in the honest or faking class.

RESULTS
The approach is illustrated with two empirical examples: (1) an experimental study (N=156) in which stakes are manipulated; and (2) operational recruitment data (N=2,567) with some validation variables.

Symposium paper

Inferring personality traits from natural music listening on smartphones

Larissa Sust¹, Theresa Ullmann², Daniel Buschek³, Markus Bühner¹, Clemens Stachl¹

¹Ludwig-Maximilians-Universität München, Department of Psychology, Psychological Methods and Assessment
²Ludwig-Maximilians-Universität München, Department of Statistics, Working Group Computational Statistics
³Ludwig-Maximilians-Universität München, Media Informatics Group

Traditionally, personality assessment in psychology relies strongly on self-reports. These are subject to many biases (e.g. memory loss) and do not necessarily reflect actual behavior. At the same time, observation of real-life behaviors has so far been cumbersome and is, therefore, missing in psychological research. However, recent digitalization efforts open up new opportunities for a more behavior-focused approach to personality assessment. Digital traces of individual differences can now be used to make inferences on personality traits. Smartphones, in particular, have become a valuable tool for collecting behavioral data in an ecologically valid manner. One behavior that has become assessable via smartphone-sensing is music listening naturally occurring on smartphones. This talk will present a smartphone-sensing study (N = 320) investigating individual differences in more than 230 variables describing music consumption. Musical preferences are thereby represented by objectively computed audio features retrieved from Spotify. I will demonstrate how these data can be used to predict demographics, as well as self-reported personality scores, using a machine learning
Recent technological advancements, specifically the ubiquity of smartphones, allow researchers to more easily assess personality states in daily life. However, as our literature review indicates, most self-rating scales that were used for the assessment of personality states were generated ad-hoc and without any prior testing or systematic validation. As there are no common guidelines for the assessment of personality states in daily life, this makes an interpretation of reliability and validity estimates of personality state scores difficult. In our current study, we therefore seek to develop such recommendations and suggest best practices for the development, application, and validation of state measures for the assessment of self-reported behavior in daily life. Similar to the construction of personality trait measures, we suggest that authors of state measures must first clearly define the nature of the state that is assessed. We conclude with evaluating previously published measures of personality states from 13 different studies and highlight future challenges for the development and validation of personality state measures.
vocational interests vary intra-individually. However, intraclass correlation in interest states are larger compared to other measures at state-level (e.g., personality, affect) - which indicates less fluctuations of interests within persons. Further, data indicates that interest states vary mainly below their corresponding trait levels, suggesting that interest traits are somewhat hindered to express themselves in situ. The usage of partial planned missingness did not alter the interpretability of the findings. These and further results contribute both to methodological literature on experience sampling and to a deeper understanding of the nomological network of vocational interests.

Symposium paper

Faking ≠ Successful Faking: Distinguishing Motivation to Fake from Ability to Fake

Duerr, Daniel

Justus-Liebig University, Giessen

Several models try to explain the occurrence of faking in personnel selection. Many of them claim that faking is predicted by applicants’ motivation and ability to fake. However, results from studies investigating the relationship between faking and performance outcomes attest that faking quantity (how much an applicant fakes) does not necessarily equate faking quality (how much the performance increases through faking). In other words, faking does not, per se, increase applicants’ performance in personnel selection. However, the existing faking models do not consistently specify which characteristics predict faking and which ones influence the success of faking. Accordingly, this study aims to distinguish between motivation to fake constructs that should predict the occurrence of faking and ability to fake constructs that should influence whether faking is successful. Data from a mock selection procedure including a structured interview (n = 109) and a role play (n = 226) suggest that personal characteristics, such as Machiavellianism (r = .21 – .23), psychopathy (r = .28 - .29), honesty (−.26 - −.27), agreeableness (−.14 - −.22), and self-verification (−.18 - −.19) were significantly related to the occurrence of faking. Furthermore, the ability to identify criteria significantly moderated the relationship between faking and performance while political skills did not. Overall, the results suggest that motivation to fake and ability to fake characteristics are related to different steps of the faking process and should thus be carefully distinguished.

Symposium paper

Assessment of Parental Acceptance, Interpersonal Power and Prestige and Children’s Psychological Adjustment

Delgado, B. ; Holgado-Tello, F.P. & Carrasco, M.A.

UNED

The differential contribution of maternal and paternal acceptance-rejection to children’s psychological adjustment has been explained by differences in interpersonal power and prestige but is not yet enough empirical researches that explore this explanation. In this communication we examine the moderating effects of interpersonal power and prestige on the relationship between perceived parental acceptance-rejection and psychological adjustment across children’s sex and age.
The sample was composed of 913 children ranging in age from 9 to 16 years. Multiple hierarchical regression analyses in the total sample showed a significant and independent contribution of parental acceptance-rejection and parental power and prestige. No moderating effects of interpersonal power and prestige were found for the total sample. However, when different age groups were considered, maternal acceptance had a higher contribution to psychological adjustment in children from nine to ten years old. Interestingly, the moderating effects of interpersonal prestige were also significant in younger participants. Furthermore, the moderating effects of prestige on maternal acceptance-rejection were different in late childhood than in early adolescence. These results suggest how parental prestige may explain the higher contribution of maternal acceptance to younger children’s psychological adjustment.

Symposium paper

Psixport: a Mobile app for a daily assessment of psychological dimensions related to sport injury rehabilitation

Rubio, V.J.¹ ; González-Barato, L.²

1 Dpto. Biological and Health Psychology. University Autonoma Madrid (Spain)
2 CPAd. University Autonoma Madrid (Spain)

Sustaining a severe sports injury (SI) is one of the biggest concerns an athlete has to cope with. SI involves physical concerns but also have psychological consequences. Wiese-Bjornstal et al.’s Integrated Model of Psychological Response to Sports Injury and Rehabilitation process (1998) has shown that injured athletes exhibit a range of cognitive, emotional and behavioral responses during the rehabilitation that may contribute to or compromise that process’s outcomes. The main goal of this study was to design an ecological momentary assessment-based tool (Mobile App PSIXPORT®) for assessing severe injured athletes’ cognitive appraisals, emotional responses, perceived pain, and behavioral adherence to the rehab process as a measure of the extension to which the athlete complies with therapy prescriptions (attending the sessions, tackling with in-session and out-session exercises).

Twenty-five athletes from different sports modalities participated in the pilot study. All of them were over 18 years old and sustained a severe SI which was supposed to prevent them to practice sport during, at least, 3 months. Subjects were recruited from the medical services of Madrid’s regional football association and the Andalucía Sports Medicine Centre (Spain). Athletes completed Psixport, at least, for 15 days. 399 total recordings were registered from 639 possible assessments resulting on a 63% response ratio. Total average participation was 70.46% and evaluations per athlete average were 19. Results showed that scores discriminated among individuals and through time in each individual. Therefore, it seems Psixport is a useful tool for assessing the psychological variables involved in severe sports injury rehab.
Does clustering PID-5 domains reflect DSM-5 Levels of Impairment in Self and Interpersonal Functioning?

Bastiaens, Tim
UPC KU-Leuven, Kortenberg, Belgium

In the DSM-5 Alternative Model for Personality Disorders (AMPD), the severity of personality pathology (expressed in criterion A) is assessed independently from the presence of pathological personality domains/traits (expressed in criterion B). Recent studies have challenged this assumption of independence but the interplay between criterion A and criterion B is unknown. Using Latent Profile Analysis, Bayesian model-based cluster analysis and Multivariate Analyses of Covariance, we investigated PID-5 domain level personality clusters at subsequent levels of complexity and their relation with prominent criterion A severity measures as well as separate measures of Identity in 197 non-clinical participants. The two- and three-cluster solution were defined respectively by (1) overall low and (2) overall high, and by (1) overall low, (2) overall middle and (3) overall high scores on all five of the PID-5 domains. The four-cluster solution added (4) a high Anxiety / low Antagonism cluster, and the six-cluster solution (5) a low Anxiety / high Antagonism cluster (6) and a high Anxiety / very high Detachment cluster. After controlling for age, criterion A severity measures as well as separate identity measures generally followed levels of criterion B pathology at the LPA subsequent levels of complexity. At the Bayesian model-based six cluster level, the low Anxiety / high Antagonism cluster converged with the overall low-low and the overall low cluster regarding criterion A measures. The general concurrence of criterion A and criterion B pathology at subsequent levels of analysis suggests a level of interchangeability relevant for future conceptualizations of the AMPD.

How should we combine personality data with other information in individual decision-making: Some practical suggestions

Meijer, Rob R.
Niessen, A. Susan M.
Neumann, Marvin

University of Groningen, psychometrics and statistics, the Netherlands

In individual assessment in personnel and educational selection, there has been much attention to the quality of data obtained from individual personality measures. For example, much research has recently been devoted to forced-choice item format that may diminish impression management. However, there is less attention to how we can best combine information from personality measures with other sources of information (such as interviews, or cognitive measures). Often experts (e.g., selection psychologists) use information from personality measures without specifying how they combine different sources of information. Since the seminal work by Meehl (1954) we know that a mechanical combination of data matches or outperform expert decision-making. However, a major challenge is that suboptimal expert decision-making is perceived as “human” and valid, whereas mechanical decisions are perceived as “cold”, impersonal, and invalid. As a result in many practical settings, there is an unwillingness to use mechanical ways of data combination resulting in less valid prediction than when mechanical data combination is used. In this presentation, we discuss recent
research that shows why this leads to suboptimal validity of personality measures and we sketch strategies on how to improve the use of mechanical ways of data combination in practice.

**Symposium paper**

**Acquiescence across cultural borders: An investigation using the BFI-2**

Rouco, Victor¹; Gallardo-Pujol, David²; Soto, Christopher³ & John, Oliver⁴

1 Ghent University  
2 University Barcelona  
3 Colby College  
4 Berkeley University

The tendency to agree with positively keyed items and disagree with negatively keyed items regardless of their respective content is a common and well-known response style named acquiescence. Acquiescence can distort construct validity, scale reliability, and the predictive validity of inventory scores. One of the many alternatives to control the effect of acquiescence is to include it as a method factor in the measurement model of an inventory. One such example is the Big Five Inventory 2 (BFI-2; Soto & John, 2016). Recent adaptations of the BFI-2 to other languages allowed to examine the BFI-2 factorial structure across cultures. Here, we present a study which compares the BFI-2 in samples drawn from the United States, Germany, and Spain (Gallardo-Pujol et al., in preparation). Results show that the method factor is not influencing the items equivalently, albeit the general bi-factor structure was invariant across samples. This finding, alongside a nomological network of acquiescence on external criteria, may foster discussion on the interpretation of this general factor (whether it is or is not acquiescence), on the cultural differences, and on the general understanding of acquiescence.

**Symposium paper**

**Personality Self-ratings in High Stake Situations: The case of neutralized items**

Bäckström, Martin  
Björklund, Fredrik

Lund University, Department of psychology

Personality self-ratings may be compromised by both faking and socially desirable responding, particularly if items are evaluative and make it easy for the applicant to identify normative response alternatives. Applicants can be expected to be aware of both job norms and the job-stereotype, implying that some traits should more vulnerable to faking and socially desirable responding in a given job-context. Even if general norms apply to job demands, many jobs are associated with specific personality traits, making some traits more relevant than others. In addition, the selection situation often puts a high demand on applicants to engage in impression management and almost forces them to respond in a favorable way to evaluatively loaded items. Are evaluatively neutral personality items less influenced by the selection context? A number of studies are presented that support the usefulness of neutralized personality items in high stake situations.
Is the PID-5 a reliable and valid instrument to assess Criterion B of the Alternative Model for Personality Disorders?

Claes, Laurence1,2 & Bastiaens, Tim3 et al.

1 KU Leuven, Faculty of Psychology and Educational Sciences
2 University Antwerp, Faculty of Medicine and Health Sciences, Belgium
3 University Psychiatric Center KU Leuven, Kortenberg, Belgium

Aim. According to the Alternative Model for Personality Disorders (AMPD) of DSM-5, we need to assess the severity of personality pathology (criterion A) as well as the presence of pathological personality traits (criterion B). The Personality Inventory for DSM-5 (PID-5) was designed to assess criterion B of the AMPD. Method. In this presentation, we present the findings of the examination of the factor structure and the reliability of the PID-5 in a Flemish community sample (N=509) and a clinical inpatient sample (N=240) by means of exploratory structural equation modeling and alpha coefficients. Additionally, we investigate the predictive ability of the PID-5 scales in relation to section II personality disorders in the community sample. In the patient sample, we explore differences in PID-5 scales in function of gender, age and educational level, and investigate the validity by relating the PID-5 with the DAPP-BQ in the patient sample. Results. Results revealed a five factor solution for the PID-5, with adequate reliability and validity of the PID-5 scales in both, the community and clinical samples. In the patient sample, females scored significantly higher than males on Negative Affectivity and Disinhibition, whereas the opposite holds for Antagonism. Age was negatively associated with Antagonism, Disinhibition, and Psychoticism. The PID-5 scales significantly correlated with the related DAPP-BQ scales. In the community sample, the variance in Section II personality disorders could be predicted by their theoretically comprising PID-5 scales. Discussion. The scientific and clinical implications of these findings will be discussed (Bastiaens, Claes et al., 2016a,b).

The associations between Criterion B of the Alternative Model of DSM-5 and the Young Schema Theory.

Pauwels, Els
Alexianen Zorggroep Tienen, Psychiatric Hospital Tienen

Aim. Section III of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, APA, 2013) suggests an alternative model for personality disorders (AMPD), which assesses both level of personality functioning (Criterion A) and pathological personality traits (criterion B). The construction of criterion B is based on the pathological Big Five model. An alternative model to investigate maladaptive personality traits is the Young Schema Questionnaire (YSQ) based on the Young Schema Therapy. Method. In this presentation, we will compare the Big Five personality traits with the personality schemas based on the YSQ in a Flemish community sample (N=672). Data will be analyzed by means of multiple stepwise linear regression analyses using SPSS 24. Results. Results revealed significant associations between the Big Five personality traits and maladaptive schemas of the YSQ. Discussion. In the presentation we will discuss the relations between the Big Five Personality traits
and maladaptive schemas in function of gender and age differences as well as the clinical implications of these findings.

Symposium paper

A componential emotion approach to the assessment of Moral Distress

Céline Baele
Johnny R. J. Fontaine
Ghent University, Belgium

Purpose. Many health carers suffer from ‘moral distress’ (MD). Most studies on MD are conducted using the Moral Distress Scale (MDS, Corley et al., 2001). A major limitation of the MDS is that it is context-dependent. Furthermore, there is an ongoing debate on the conceptual clarity of the construct. Our purpose is to empirically determine the core features of MD using the componential emotion approach (CEA).

Methodology. In an open-ended survey, 45 health carers were asked to describe an episode of MD in terms of emotion components (appraisals, action tendencies, bodily reactions, expressions and subjective feelings). Based on these results, a modified version of the GRID-instrument (Fontaine et al., 2013) was constructed. Furthermore, a first version of an appraisal scale for MD (MD-APPS) was constructed and tested for reliability and validity in three different samples (n = 79, n = 135, n = 245).

Results. The first study showed that the underlying structure of an emotion process is present in episodic experiences of MD. Up to date, the data-collection with the modified GRID-instrument is still running. The results of this study will be presented at the conference. Preliminary results with the MD-APPS already show a clear internal structure and promising correlations with burnout.

Implications. This project is the first to apply the CEA to the concept of MD. This will provide input for a context-independent assessment instrument for moral distress that could also be deployed in other work contexts (outside of health care).

Symposium paper

Assessing emotional experiences of cyberattack victims.

Budimir, Sanja¹ ; Fontaine, Johnny, R. J.¹ & Roesch, Etienne²

1 Ghent University, Belgium
2 University of Reading, UK

We aimed to identify interindividual differences in the emotion processes that people experience when they become victim of cyberattacks. In total 145 victims from United Kingdom were recruited through the Qualtrics panel. They were asked to describe their experience and fill in the Cybersecurity GRID about their negative emotional reactions due to the cyberattack. The Cybersecurity GRID is an adapted version of the GRID instrument (Fontaine, Scherer, Soriano, 2013) for the cyber context. It is based on Component Process Model (Scherer, 2001) and entails the assessment of all five emotion components (appraisals, action tendencies, bodily reactions, expressions and subjective feelings) as well as emotion regulation processes. The adaptation of the GRID instrument was based on a prior
qualitative study about emotional reactions to cyberattacks. An exploratory factor analysis on the emotion items of the Cybersecurity GRID revealed two clear factors. On the first factor proactive action tendencies were opposed to both withdrawal and attack action tendencies. On the second factor cognitive and motivational features were opposed to expressive, bodily and affective features. People who experienced a cyberattack of an account reported more proactive action tendencies, while people who experienced a cyberattack of a device reported more withdrawal and attack tendencies. For men the cognitive-motivational features were slightly more salient, while for women the expressive, bodily and affective features were slightly more salient. The most important finding of the current study is that interindividual differences in this domain are the largest with respect to action tendencies, an emotion component that is seldom included in emotion research.

Symposium paper

Emotional intelligence as a buffer to stressful police work.

Sekwena, Eva¹ ² & Fontaine, Johnny, R. J. ²

1 North West University, South Africa
2 Ghent University, Belgium

Police work is known to be highly stressful. Typical for police officers is that they are likely to be exposed to threatening situations themselves or deal with people that have experienced life threatening situations (e.g., Dussich, 2003). Such situations can elicit strong emotional reactions. Therefore, it can be expected that emotional intelligence functions as a buffer between these threatening experiences and negative long-term mental and work-related outcomes. In the current study 246 black South African police officers and police recruits took shortened versions of the Situational Test of Emotion Understanding (STEU) and the Situational Test of Emotion Management (STEM) (MacCann & Roberts, 2008), two ability EI instruments that respectively assess understanding of emotion appraisals and understanding the effectiveness of different emotion management strategies. Moreover, the participants took a number of questionnaires about well-being and work-related outcomes. The instruments were administered in English and Setswana, an official Black African language. It was observed that the STEU and STEM scores were highly correlated (r > .59) justifying a single EI ability score. EI was found to be positively related to general positive affectivity, self-esteem, pleasure at work, and involvement in the organisation; and was found to be negatively related to somatic complaints, general negative affectivity, turn-over intentions, and need for recovery. The results were very comparable between experienced police officers and police recruits, as well as between participants who took the instruments in English and in Setswana. The present study contributes to the validity and usefulness of the STEU and the STEM in non-western and professional contexts.
The Components of Emotion Understanding Test (CEUT, Sekwena & Fontaine, 2018) is the first ability emotional intelligence test that is based on the componential emotion approach. According to the componential emotion approach, an emotion is a process that consists of an interplay between five components (appraisals, action tendencies, bodily reactions, expressions, subjective experiences) in reaction to the experience of goal-relevant events. The CEUT consists of 10 prototypically emotion eliciting scenarios and emotional reactions representing each of the five emotion components. Participants are asked to evaluate the likelihood of each of the emotion reactions for the main character in the scenario. The original CEUT consists of 300 items. In the current study we investigate the internal structure, concurrent validity and criterion validity of a strongly shortened version of the CEUT (24 items). The instrument was applied to a late adolescent, young adult sample ($N = 211$, mean age 19.40, 52% women) together with short versions of the Geneva Emotion Recognition Test (GERT), Geneva EMOtion Knowledge test – Blends (GEMOK), a scale about adverse life experiences and mental health instruments. The CEUT-S was unidimensional and was highly correlated with both the GEMOK and the GERT ($r > .48$). No correlation was observed with the Warwick-Edinburgh Mental Well-Being Scale, a positive correlation was observed with the Work and Social Adjustment Scale, and a negative correlation was observed with the Patient Health Questionnaire. The latter two correlations became more salient when adverse life experiences were controlled for. The present study shows that also the short CEUT can validly assess EI.
## Author Index

<table>
<thead>
<tr>
<th>Author</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alves, Diana</td>
<td>69</td>
</tr>
<tr>
<td>Arenas, Alicia</td>
<td>53</td>
</tr>
<tr>
<td>August, Justin</td>
<td>70</td>
</tr>
<tr>
<td>Ayan, Cansu</td>
<td>63</td>
</tr>
<tr>
<td>Babić Čikeš, Ana</td>
<td>55</td>
</tr>
<tr>
<td>Bäckström, Martin</td>
<td>24</td>
</tr>
<tr>
<td>Baele, Céline</td>
<td>22, 102</td>
</tr>
<tr>
<td>Barbosa, Ana</td>
<td>69</td>
</tr>
<tr>
<td>Bastiaens, Tim</td>
<td>18, 70, 99, 101</td>
</tr>
<tr>
<td>Becker, Nicolas</td>
<td>46, 59</td>
</tr>
<tr>
<td>Bélanger, Marie-Pierre</td>
<td>32</td>
</tr>
<tr>
<td>Belova, Sofya</td>
<td>80</td>
</tr>
<tr>
<td>Bicego, Amina</td>
<td>41</td>
</tr>
<tr>
<td>Björklund, Frederik</td>
<td>24</td>
</tr>
<tr>
<td>Björkman, T.</td>
<td>77</td>
</tr>
<tr>
<td>Bliem, Wolfgang</td>
<td>77</td>
</tr>
<tr>
<td>Bluemke, Matthias</td>
<td>50, 61</td>
</tr>
<tr>
<td>Boeckmans, Ivan</td>
<td>46</td>
</tr>
<tr>
<td>Bogaerts, Annabel</td>
<td>18, 70</td>
</tr>
<tr>
<td>Bovet-Boone Françoise</td>
<td>35</td>
</tr>
<tr>
<td>Bragard, Isabelle</td>
<td>41</td>
</tr>
<tr>
<td>Brauer, Kay</td>
<td>57, 72</td>
</tr>
<tr>
<td>Braunstein-Bercovitz, Hedva</td>
<td>33</td>
</tr>
<tr>
<td>Brondino, Margherita</td>
<td>21, 22, 93</td>
</tr>
<tr>
<td>Brown, Anna</td>
<td>20, 94</td>
</tr>
<tr>
<td>Buck, Lilly</td>
<td>20, 94</td>
</tr>
<tr>
<td>Budimir, Sanja</td>
<td>22, 102</td>
</tr>
<tr>
<td>Bühner, Markus</td>
<td>19, 95</td>
</tr>
<tr>
<td>Burro, Roberto</td>
<td>21, 93</td>
</tr>
<tr>
<td>Burt, Christopher</td>
<td>67</td>
</tr>
<tr>
<td>Buschek, Daniel</td>
<td>19, 95</td>
</tr>
<tr>
<td>Buško, Vesna</td>
<td>55</td>
</tr>
<tr>
<td>Butkienė, Dovilė</td>
<td>55, 62, 63</td>
</tr>
<tr>
<td>Camacho, Antonio</td>
<td>73</td>
</tr>
<tr>
<td>Canário, Ana</td>
<td>69</td>
</tr>
<tr>
<td>Carrasco, Miguel A</td>
<td>18, 19, 78, 88, 97</td>
</tr>
<tr>
<td>Carstensen, Claus</td>
<td>49</td>
</tr>
<tr>
<td>Cassol, Helena</td>
<td>41</td>
</tr>
<tr>
<td>Castillo Mayén, Rosario</td>
<td>53</td>
</tr>
<tr>
<td>Chen, Wei-Ying</td>
<td>80</td>
</tr>
<tr>
<td>Chen, Yi-Chao</td>
<td>80</td>
</tr>
<tr>
<td>Cheng-Hsien, Li</td>
<td>76</td>
</tr>
<tr>
<td>Chernov, Yury</td>
<td>37, 67</td>
</tr>
<tr>
<td>Chien, Chin-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Çikrıkçı, Nükhet</td>
<td>63</td>
</tr>
<tr>
<td>Claes, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claes, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Chien, Chia-Lung</td>
<td>80</td>
</tr>
<tr>
<td>Claudia, Laurence</td>
<td>17, 70, 101</td>
</tr>
<tr>
<td>Colom, Roberto</td>
<td>15</td>
</tr>
<tr>
<td>Correia, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Crişan, Daniela</td>
<td>48</td>
</tr>
<tr>
<td>Cuadrado, Anabela</td>
<td>81</td>
</tr>
<tr>
<td>Cuijpers, Pim</td>
<td>53</td>
</tr>
</tbody>
</table>
Gempp, René · 69
Gintliene, Gražina · 55, 62, 63
Girdzijauskienė, Sigitas · 55, 62, 63
Gnambs, Timo · 49
Goma Frixanet, Montserrat · 54
Gomes, Flávia · 69
Gómez-Ortiz, Olga · 73
González-Barato, Luis · 21, 98
Grégoire, Charlotte · 41
Groskurth, Katharina · 50
Güngördü, Mehmet · 45
Gutierrez Domingo, Tamara · 53
Gulikova, Alena · 43, 47
H
Halama, Peter · 82
Hofmans, Joeri · 40
Holgado-Tello, Francisco P. · 19, 78, 88, 97
Horstmann, Kai T · 19, 20, 96
Hovasapian, Arpine · 22, 104
Hsu, Shih-Chi · 80
Huang, Chung-Ping · 80
Huang, Shih-Chen · 80
Hunt, Jason · 67
Huyghe, Veerle · 104
Hyojin, Kim · 38
Hyesenaj, Arben · 54
I
Izquierdo-Sotorrio, E. · 88
J
Jansson, Billy · 68
Jérusalem, Guy · 41
John, Oliver · 24, 100
Joris, Steven · 35
Junttila, Niina Johanna · 43
K
Kajonius, Petri · 49, 50, 77
Kanonire, Tatjana · 43
Kashkoush, Shada · 33
Kaufman, Erin · 70
Kemper, C. J. · 79
Keyses, Corey · 89
Kinnunen, Ritta · 65
Kiss, Eniko Csilla · 60
Kkeli, Natalie · 82
Knopf, Thomas · 34
Koch, Marco · 46, 59
Kohut, Michal · 82
Kolacek, Nikita · 66
Kolb, Christoph · 32, 74
Koutsogiorgi, Chrystalla · 47
Kreemers, Bea · 64
Kulikova, Alena · 43, 47
L
Laakkonen, Eero · 65
Laher, Sumaya · 70
Lang, J. W. B. · 79
Larsson, Agneta · 59
Laureys, Steven · 41
Lavrijsen, Jeroen · 23, 91
Le Donnée, Noémie · 17
Lecerf Thierry · 35
Lechner, Clemens · 34, 61, 78
Leiner, Julia · 75
Lemardelet, Laura · 84, 85
Lempinen, Lotta · 43
Levacher, Julie · 46, 59
Levin, Nimrod · 33
Lin, Tzu-Hsiang · 80
Linares Gutiérrez, Damisela · 83
Lipshits-Braziler, Yuliya · 33
Liu Pei Yun · 83
Llorca, A · 19, 90
Lohaus, Arnold · 58
Lopes, Sara · 75
Luque, Bárbara · 53
Luque-González, Rocío · 73
Luyckx, Koen · 70
M
Mac Giolla, Erik · 49
Macià, Diego · 89
Maes, Bea · 64
Magez, Walter · 35, 56, 92
Maljaars Jarymke · 64
Malonda, E · 19, 90
Martin Bäckström · 100
Martinez-González, Agustín · 89
Martins, Sara · 81
Marzo-Campos, Juan · 89
Maydeu-Olivares, Alberto · 14
Meijer, Rob · 24, 48, 99
Menardo, Elisa · 22, 93
Merwin, Rhonda M. · 82
Mestre, M. V. · 19, 90
Michaelides, Michalis · 47, 82
Mira-López, Francisco · 89
Miyamoto, Ai · 34
Modesto, João · 65
Moreno-Amador, Beatriz · 89
Münscher, Johann-Christoph · 77
Murnikovas, Alexas · 84
N
Nagy, Laszlo · 60
Naswytenė, Dalia · 55, 62, 63
Neumann, Marvin · 24, 99
Vauras, Marja · 65
Velicho, Fetvadjiev · 17
Verbeke Lize · 71
Verschueren, Karine · 91
Volet, Simone · 65

Wittmann, Marc · 83
Wroclawska-Warchala, Emilia · 18, 87

Z

Zakrisson, Ingrid · 68
Zeller, Florian · 36
Ziegler, Matthias · 19, 23, 94, 96
Zolotareva, Alena · 42

Wang, Qichen · 58
Sponsors

CEBIR
Center for Basic Interactive Research in Assessment & Automated Testing
Leuvensesteenweg 320 • B-3070 Kortenberg
tel: 02/759 80 82 • fax: 02/759 22 72
email: info@cebir.be • web: www.cebir.be

hogrefe