

# 10<sup>th</sup> Dutch-Flemish Research Meeting on Personnel Recruitment & Selection

Erasmus University Rotterdam

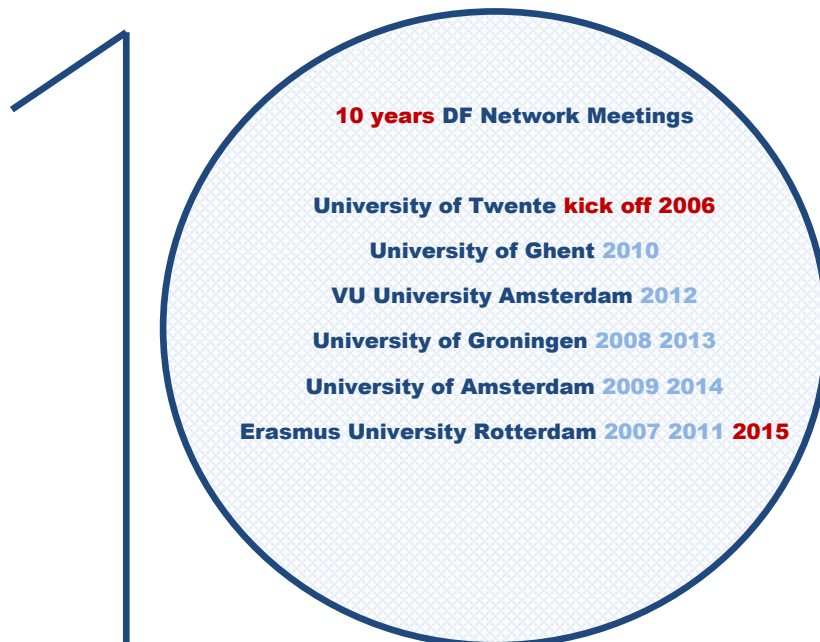


## Happy 10<sup>th</sup> Anniversary

### Dutch-Flemish Network for Recruitment & Selection Research!

The Dutch-Flemish Network for Recruitment & Selection Research was founded in 2006 by prof.dr. Marise Born (Erasmus University Rotterdam) and prof.dr. Rob Meijer (University of Groningen). Since 2006 promising research has been presented at the yearly meetings, inspiring thoughts and ideas have been shared, and lively and critical discussions have been held. All with the aim of strengthening the quality of Dutch and Flemish research on recruitment and selection and to show and stimulate that, in this field, research and practice go hand in hand.

The 10th meeting explicitly focused on the practicality of selection and recruitment research. Keynotes and guest speakers were Claudine Camilleri and Markus Nussbaum from the European Personnel Selection Office (EPSO). The main theme running through most presentations was how to get the right people in the right place, either in the context of personnel selection or student selection. Subjects dealt with were the selection instruments that are being used in practice, the quality of particular instruments and how this may be improved, factors determining work performance which might be worth selecting for, context factors that determine the pay-off of selection instruments, and last but not least, applicant perceptions of these instruments.



## Speakers & Discussants



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## **Claudine Camilleri**

Head of Unit, Communication & Attractiveness  
Former Deputy Head of Unit, E-Selection & Test Development  
European Personnel Selection Office (EPSO)



### **What determines your drive to work in the field of recruitment and selection?**

I have always had an avid interest in occupational psychology, notably training, coaching, personal development and well-being, talent management and definitely personnel selection and assessment. Following my academic studies, I was keen to put my knowledge into practice. Indeed, together with my colleagues, we strive to identify the best methods to select the most suitable public servants for the EU institutions, while ensuring fairness and equity. This is something I believe in very strongly and which I feel passionate about.

### **How, in your opinion, does research in this field add value to practice?**

Kurt Lewin once said that nothing is as practical as a good theory. Research is fundamental, because it is always trying something new, always pushing forward. We need research so that as practitioners, we can look at things in a challenging way and receive the push we require to be brave enough to attempt novel things in practice. Practice and research always go hand in hand, as that is how they are both the most effective.

## **Markus Nussbaum**

Psychometrician  
European Personnel Selection Office (EPSO)

### **What determines your drive to work in the field of recruitment and selection?**

Already as a student I was most interested in psychological measurement, in particular in using IT to improve psychometric quality of testing. Ever since, I have been working in public administration trying to improve selection decisions by providing objective measurement. Wrong decisions can be quite costly ('job for life') and poisonous for an organisation.

### **How, in your opinion, does research in this field add value to practice?**

In practice we cannot try different parameters to optimise testing. Questions like how to tweak power/speed to optimise impact on different subgroups or what extent of validity to expect for certain types of tests are very hard to answer in practice since every testing is linked to a decision to be taken. Variations would spoil equal treatment in the selection process.

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## **Highlights presentation Claudine Camilleri & Markus Nussbaum**

*Personnel selection in an EU context: challenges, strategies and solutions*

Keynotes and guest speakers Claudine Camilleri and Markus Nussbaum both work for the European Personnel Selection Office (EPSO), which selects personnel for the agencies and institutions of the European Union. In their presentation, Claudine Camilleri and Markus Nussbaum broadly explained EPSO's selection process and the challenges faced herein. For more information about EPSO, see their website.

## **Djurre Holtrop**

Psychologist / Consultant at NOA & PhD student at VU University Amsterdam



### **What determines your drive to work and conduct research in the field of recruitment and selection?**

When I look around me, at my friends and family, I can see how much joy or sadness they can experience from having a job that they are (not) happy with. Being able to address this on a larger scale and get more people in a position where they can go to work with a smile on their face is a privilege. In my opinion, proper selection is a two-way street in which employer and employee can find each other and together achieve an optimal match.

### **How, in your opinion, does (your) research in this field add value to practice?**

I believe that strong ties with the field will allow our findings faster access to practice. I am in the fortunate position to work as a researcher and a professional in the field. As such, I have an easy ear for all my findings and they are often applied to psychological tests. For example, we have studied the effects of adding a situation to a personality inventory. After this research the consultancy started distributing the inventory we had developed for our study. Now, more than 15.000 students per year are coached or selected (partially) on the basis of this inventory.

## Highlights presentation Djurre Holtrop

*Predicting work performance with new technology: automatic recognition of conscientiousness in spoken text versus self-rated conscientiousness*



Djurre Holtrop and his colleagues\* search for innovative and potentially better ways to measure personality. In their research they contrasted a traditional self-reported conscientiousness test (the HEXACO-60) with text-based conscientiousness. The latter was measured by having a sample of participants respond to questions about conscientious behavior at work, using as many adjectives as they could. An example question - given by Holtrop in his presentation - is: "You are approaching a project deadline and the results are not yet as desired. How would you handle this?"

Participants' responses were analyzed by means of text mining software. This software identifies and weighs the adjectives in the responses which are related to conscientiousness, also taking into account any adjacent adverbs that strengthen or weaken the meaning of the adjective. A possible response to the aforementioned example question might be "I am not very diligent in working on projects". In this case, the software assigns a positive value to the adjective "diligent", amplifies this value on the basis of the adverb "very" and, subsequently, reverses the sign due to the presence of the word "not".

Holtrop and his colleagues found that both self-reported conscientiousness ( $r = .37^{**}$ ) and text-based conscientiousness ( $r = .26^*$ ) predicted supervisory rated work performance (measured by seven items about quality and quantity of work). However, text-based conscientiousness had no predictive value over and above self-reported conscientiousness. Although the reliability of text-based conscientiousness warrants further attention (the internal consistency reliability was .34 and thus low), this search for new ways to measure personality seems promising for both theory and practice.

\*Ward van Breda, Janneke Oostrom, Reinout de Vries and Jasper Stoker

**dr. Stefan Mol**

University of Amsterdam



**What determines your drive to conduct research in the field of Work & Organisational Psychology?**

Whether we like it or not, most of us spend most of our waking hours at work. I suppose my ultimate interest in conducting research in the field of work & organisational psychology is to improve the quality of the working life of individual employees. Personnel selection is somewhat at odds with this interest since as a field it aims to contribute mostly to meeting the organisations' as opposed to the applicants' interest.

**How, in your opinion, does (your) research in this field add value to practice?**

Research can only have an impact if it is disseminated and many of the scientific dissemination outlets are inaccessible to practitioners. I try as much as possible to disseminate my research, also outside of academia, through my teaching (today's students are tomorrow's managers) and collaborations with the corporate world (see <http://jobknowledge.eu/projects/> for some projects I am currently involved in).



## Highlights presentation Stefan Mol

*The proactive employee: champion and rebel?*



Stefan Mol and his colleagues shed light on the potential downside of proactive behavior at work. At the DF meeting Mol presented an article of which he is the second author\*.

Proactive employees are self-starters, showing initiative and acting determinedly upon identified opportunities and goals (Crant, 1995). One might expect that supervisors will fully welcome and appreciate proactive behavior (at least in Western countries). In practice, however, employees seem to face the two contradicting expectations of showing their independence and initiative, while also acting in line with the thoughts and behaviors of their supervisors, which is called the 'initiative paradox' (Campbell, 2000). Thus, proactive behavior is not appreciated under all circumstances. Mol and his colleagues set up two studies to investigate when the benefits of proactive behavior may start to decline. On the positive side, their studies show that more proactive employees are rated higher by their supervisors on general performance, task performance and organisational citizenship behavior and lower on counterproductive work behavior. These are all linear effects (the more proactive, the higher or lower the supervisor rating).

As it turns out across the two studies, the relationship is somewhat more complex in that proactive behavior, both at *excessively low* and *high* levels, appears to incite conflict and counterproductive work behavior in the eyes of the supervisor, indicating a U-shaped curvilinear effect for these outcomes. More proactive employees *who are disliked* by their supervisors seem to be at a special disadvantage. Supervisors report that they experience more conflict with these employees and report observing more counterproductive work behavior. This result was not found for more proactive employees *who are liked* by their supervisors. With these findings, and the curvilinear effects in particular, Mol and his colleagues contribute to uncovering the 'initiative paradox'.

\*Hella Sylva (first author), Stefan Mol, Deanne den Hartog and Corine Boon

**Susan Niessen**

PhD student at the University of Groningen



**What determines your drive to conduct research in the field of recruitment and selection?**

I enjoy studying ways to predict future performance of people in different contexts, such as work and educational contexts. I hope to contribute to selection practices that serve both organisations and applicants.

**How, in your opinion, does (your) research in this field add value to practice?**

I think our research shows practical possibilities for different selection methods that can be used in higher education, but that it also shows different specific context factors that can be taken into account to improve the selection process, such as applicant perceptions of selection procedures.

## Highlights presentation Susan Niessen

### *Applicant perceptions of selection methods in higher education*



In their selection practices, organisations and educational institutions would be wise to pay attention to the applicant's perspective. How favorably do applicants perceive, experience and judge the selection process and methods used? Ignoring this perspective might do more harm than good. For instance, suitable candidates might refrain from applying to or accepting a position due to doubts or second thoughts about the selection procedure (for instance, Cook, 2009).

Susan Niessen and her co-authors\* investigated applicant perceptions of selection methods in higher education. Their sample consisted of 220 applicants to an academic psychology program, who were asked to evaluate the general favorability of a range of selection methods.

Results showed that the selection interview and trial studying (such as following a lecture) were perceived most favorably. Selection based on a lottery and on high school grades were least appreciated. General cognitive ability tests and subject tests (for instance, a math test or biology test) finished in third position, followed by biodata, motivation questionnaires and personality questionnaires. Looking at specific dimensions that influence ratings of general favorability, the dimensions of study-relatedness and face validity were uniformly important for all methods. It is notable that the method that is often strongly criticised in terms of predictive validity (the interview, see, e.g., Schmidt & Hunter, 1998), was most appreciated by this sample of applicants. The reverse was the case for high school grades.

\*Rob Meijer and Jorge Tendeiro

## **Wendy de Leng**

PhD student at the Institute of Medical Education Research Rotterdam (iMERR), Erasmus MC



### **What determines your drive to conduct research in the field of recruitment and selection?**

I entered the field of selection through my statistical background. My drive to conduct research in the field of educational selection emanates from the eagerness and passion I noticed among the medical school applicants, the need for good selection instruments for essential non-cognitive competencies, and the opportunity to use statistical methods in an applied setting.

### **How, in your opinion, does (your) research in this field add value to practice?**

The need for selection of students on non-cognitive competencies is highly important in the medical field. My research on the usefulness of a Situational Judgement Test will hopefully result in a reliable and valid selection tool that will be of value in practice.

## Highlights presentation Wendy de Leng

*Situational judgement test for the selection into medical school:  
scoring methods and hybrid development*



What would or should you do in a given (work- or study-related) situation? In a nutshell, that is what situational judgement tests (SJT's) are all about. Applicants read a description of a situation or see it on video and get a list of possible responses to that situation which they have to rate, rank or choose from (Lievens, Peeters & Schollaert, 2008). To obtain a final test result, the applicants' answers need to be scored and this may be done in a number of ways. Within a sample of 521 applicants to medical school, Wendy de Leng and her co-authors\* investigated which scoring methods are superior in terms of reliability and fairness. They translated a written Scottish SJT\*\* into the Dutch language - with a rating response format - to assess the non-cognitive competency of integrity.

The reliability of the existing scoring method proved to be inadequate in the Dutch situation. Therefore, an impressive number of 28 alternative scoring methods were tested. The reliability of these methods appeared to vary from low to fairly acceptable, but was more often insufficient than sufficient. Reliability increased when raw data were used (instead of standardized or dichotomized scores), when the group was used as a reference (instead of subject matter experts), and when the mean was used as the central tendency statistic (instead of the median or mode). In terms of fairness, all scoring methods showed differences between ethnic subgroups. The differences declined somewhat when the group was used as a reference. However, overall, the levels of reliability and fairness were disappointing for basically all scoring methods.

Therefore, De Leng and her colleagues embarked on the exciting project of developing their own SJT, using the so-called hybrid method. This method integrates empirically gathered critical incidents into a framework of existing theories. Although this is a labor-intensive process, the efforts of De Leng and her colleagues will result in a tailor-made SJT with great potential for selection practices at Dutch medical schools.

\*Karen Stegers-Jager, Adrian Husbands, Marise Born and Axel Themmen

\*\* This SJT was developed by Adrian Husbands

**prof.dr. Rob Meijer**

University of Groningen  
Co-Founder of the Dutch-Flemish Network for Recruitment and Selection Research



**What determines your drive to conduct research in the field of recruitment and selection?**

I do research in psychometrics and personnel and educational selection because I greatly enjoy the combination of doing something practical and something quantitative (working with numbers).

**How, in your opinion, does (your) research in this field add value to practice?**

Currently we are studying how to best select students. This is an inherently practical question with immediate practical value. I particularly appreciate the psychology behind this question. For example, how are intelligence, motivation and self-regulation related? What makes a good student and what are the determining factor(s) in student performance? For instance, is motivation the most important or do several factors equally influence how well students will perform in their course?

**prof.dr.ir. Axel Themmen**

Erasmus MC Rotterdam  
Institute of Medical Education Research Rotterdam (iMERR)  
Responsible for the Erasmus MC Medical School selection procedure



**What determines your drive to conduct research in the field of recruitment and selection?**

My main reason to conduct research in this field is because I think it is essential to develop fair and validated methods to select students for the various programmes of our university.

**How, in your opinion, does (your) research in this field add value to practice?**

Our research translates theory into applied practice and our results produce a foundation of evidence on which further improvements in student selection can be developed.

**prof.dr. Rob Meijer & prof.dr.ir. Axel Themmen**

Do the benefits of complex selection procedures in higher education (such as using tests of (non)-cognitive skills) outweigh the effort? It depends, but in many situations it may not, claims prof.dr. Rob Meijer. It does, for the Erasmus MC Medical School, posits prof.dr.ir. Axel Themmen. Both vigorously defended their points of view at this year's DF meeting.

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**Highlights presentation Rob Meijer**

*Selection of future students: a Taylor and Russell perspective*



Taking a Taylor and Russell perspective (Taylor & Russell, 1939), Rob Meijer postulates that complex student selection procedures, in the Dutch situation as it is at this point in time, may not have much added value or utility. Added value, in this case, refers to the increase in number of ultimately successful students as compared to no selection or selection on the basis of simple predictors of student performance (such as high school grades). The Taylor and Russell perspective uses three factors – the validity of a selection test, the selection ratio and the base rate - to calculate the success ratio. The success ratio is the proportion of students that will finally succeed in the course of study given a particular selection procedure. The selection ratio refers to the proportion of students that will be selected. The base rate provides information about how many students would be successful without using selection instruments (Cascio, 1987).

One can easily retrieve the success ratio from the Taylor and Russell tables and calculate the added value of a selection instrument with a given validity by subtracting the base rate from the success ratio. Using realistic (partly inferred) numbers, Meijer gave the audience several 'Taylor Russell'-examples with respect to Law School, Psychology and Medical School in the Netherlands for selection tests with differing (hypothetical) validities (up to .50). In all examples the gain in number of successful students



from using extra selection instruments on top of those already involved, turned out to be minor. This was mainly due to either high selection ratios or relatively high base rates (most likely caused by pre-selection on the basis of high-school performance) or a combination of both. For this reason Meijer urges us to broaden our scope of the selection situation by taking into account the base rate and the selection ratio besides the validity coefficient. Additional discussion points introduced by Meijer are the role of other important determinants of student performance, such as training and the educational environment, and the need for diversity in criteria. What makes a good psychologist or doctor, for example, may be different for various specialties (for instance, clinical psychology or organisational psychology).

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### **Highlights presentation Axel Themmen**

*Selection for Med School – Erasmus MC*



Axel Themmen is responsible for the Erasmus MC Medical School selection procedure. In his talk, he focused on what the Erasmus MC Medical School needs in terms of students and how an extensive selection procedure helps to fulfill those needs. The ultimate goal is to select the best doctors, but what are the characteristics of these doctors?

Themmen refers to three important needs: 'CANMEDS'-potential, research potential and diversity. The CANMEDS framework (see, for instance, Frank, 2005) covers a broad set of competencies besides expertise of the human body and diseases, for example, soft skills such as collaborating and communicating. Although some of these soft skills can be trained, through selection, one may identify students with greater training potential than others. The Erasmus MC Medical School does not only aim to educate tomorrow's doctors but also to train clinical researchers who are capable of translating research findings into practice. The exact profile of the 'best doctor' will most likely differ for the various medical specialties, which is one of the reasons why the Erasmus MC Medical School strives for a diverse student pool. Moreover, diversity is important in the broadest sense since it is an inherent aspect of today's society.

In the selection procedure of the Erasmus MC Medical School, three aspects are taken into account: pre-university grades, extra-curricular activities and study skills measured through tests. Themmen showed the audience some research findings supporting their combined use. For students with an average pre-university grade above 7, there is a correlation between this grade and their grade in the first year of medical school, whereas for students with an average pre-university grade below 7, this relationship is absent (Baars, 2009). Therefore, as a predictor of student performance, pre-university grades alone are not sufficient, especially for the latter group. Additional predictors are needed, and extracurricular activities are a good candidate, claims Themmen.

Students who are selected on the basis of extracurricular activities obtain higher mean grades in their clerkships than students who got admitted through lottery (Urlings-Strop, Themmen, Stijnen & Splinter, 2011). In addition, participation in medical school extra-curricular activities, such as student board memberships or enrolment in a second research master programme is much higher for students who are selected on extracurricular activities and their participation is not related to their pre-university grade, whereas for lottery admitted students it is (Urlings-Strop, Themmen & Stegers-Jager, in revision). Only those students with the highest grades who got admitted through lottery participate more extensively in medical school activities. Furthermore, for the selected group there is a relationship between participation in medical school activities and clerkship grade, whereas this relationship is absent for lottery admitted students (Urlings-Strop et al., in revision). According to Themmen, this implies that selected students have certain valuable qualities enabling them to combine their medical course with other activities. More broadly, these (and other) findings support the usefulness of the Erasmus MC Medical School selection procedure.

**prof.dr. Marise Born**

Erasmus University Rotterdam & VU University Amsterdam  
Co-Founder of the Dutch-Flemish Network for Recruitment and Selection Research



**What determines your drive to conduct research in the field of recruitment and selection?**

For me it is important to help enhancing the quality of research and practice in this field. From my past work for the International Test Commission, the working group of ISO 10667, and the COTAN (the Committee of Testing Affairs of the Dutch Institute of Psychologists) I know that many assessment devices have good psychometric properties, but that many still need good construct and predictive validation and a check on fairness. Given that tests perhaps affect the lives of more people than any other professional activity of psychologists does, to me an enhancement of the quality of the recruitment and selection domain is crucial.

**How, in your opinion, does (your) research in this field add value to practice?**

In my view, adding value to practice is synonymous to knowing more about all forms of validation of the use of tests and the circumstances in which improving validation is worth the effort, so that practice can act upon this knowledge. In particular, the generalizability of research findings on recruitment and selection across diverse populations in the Netherlands, and even broader across European populations is important. My research tries to provide answers to such questions.

## Claudine Camilleri & Marise Born

*How WEIRD are the research findings in the domain of recruitment and selection?*



WEIRD. Western, Educated, Industrialized, Rich, and Democratic. WEIRD is the acronym that was introduced to denote our psychological database (Heine, 2012). Marise Born wondered: how WEIRD are the research findings in the domain of recruitment and selection? And should our database not represent the world population? From a practitioner's point of view, Claudine Camilleri commented on the issues raised by Marise Born.

The publication of Schmidt and Hunter (1998) is often considered the 'validity bible', but is it justified to generalize their findings to the world population? Born points out that a great deal of our knowledge comes from laboratory experiments and represents a small sample of the world population. Mitchell (2012) offers some reassuring news to industrial and organisational psychologists by showing that findings within this subfield of psychology generalize from the lab to the field. Within the subfield of I-O psychology, the correlation between the lab and the field is the highest for recruitment and selection research.

Still, there are other, less reassuring, findings. Born refers to 1) publication bias or the file drawer problem (McDaniel, Rothstein & Whetzel, 2006). 2) Large studies showing poor reliabilities of intelligence and personality tests when applied in a South-African context (for instance, De Meijer & Born, 2006). 3) A study of instructional texts of role plays showing that, after correction for verbal intelligence differences, these texts function differently for majority and minority applicants, not only due to difficult words but also to differential interpretation of the case (Oostrom & Born, 2014). 4) A study showing differential acceptability of video cv's (Hiemstra, Derous & Born, 2015). These sorts of findings bring us back to the question: are we able to generalize? Or, should we 'reboot' and adopt a different approach in which the focus is taken away from predictors only? These questions gave rise to a lively discussion at the DF meeting. Born concluded her presentation with potential routes to an 'all-inclusive' instead of a WEIRD database.

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