

# A new course in Psychological Assessment: From student feedback to course redesign

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Summary: The mandatory Psychology MA-course in Psychological Assessment calls for a redesign for two reasons: First, student evaluations have pointed to course non-alignment and structural challenges, and second, it has to go down from the current 10 ECTS to 7.5 ECTS. The current project combines student evaluations from the last three years to identify gaps and misalignments and propose how to adress those in a new course design.

### **Background**

At the MA in Psychology at the University of Copenhagen, the course "Psychological Testing" is a mandatory course worth 10 ECTS placed in the first semester of the MA education. The course is broad, covering basic psychometrics as well as specific instances of psychological tests and hands-on experience in administering, interpreting and communicating tests and test results within three different domains of testing: clinical and cognitive assessment of children, clinical and cognitive assessment of adults, and assessments of adults in the work and organizational (W&O) domain. Currently, the course runs as a lecture series with 14 lectures, and as a series of work-shop based classes (9 x 3 hours), where each of the three assessment domains are covered in three workshops. To use teacher resources best, the workshops (which are typically conducted by ph.d.-students or early career researchers that are based in the clinic or in the work and organizational "real world") are run in cycles, where students circulate (see Table 1).

### MATERIAL AND METHODS

Course evaluations from the fall of 2021 and 2022 will be used. Both quantitative data and qualitative comments will be analyzed.

### Evaluations, fall 2021 and fall 2022

In total, 57 students filled out the course evaluations in the fall of 2021, corresponding to a response rate of 24%. In total, 148 students filled out the course evaluations in the fall of 2022, corresponding to a response rate of 64%. Between these two years, a new student evaluation system was implemented, hence, the overlap in specific questions for the two years is low. Three questions are particularly relevant for evaluating course alignment: "Hvordan hænger indholdet i forelæsningerne sammen med indholdet i holdundervisningen?" (E2021), "I hvilket omfang opfylder kurset målbeskrivelsen?" and "Oplever du en god eller dårlig sammenhæng mellem kursets forskellige elementer (fx lektionsplanen, undervisningen, øvelser)?" (E2022).

WEEK	LECTURE - content	Classroom teaching
1	Introduction	
	THEME 1: Test theory and psychometrics	
2	Psychological tests, test scores, interpretation of test	
	results	
3	Validity and reliability	
4	Introduction to classroom teaching	Children/Adults/W&O
5	Factor analysis: dimensionality and structure of a test	Children/Adults/W&O
6	Item response theory	Children/Adults/W&O
	THEME 2: Specific populations – specific tests	
7	Testing and assessment of children	Adults/W&O/Children
8	Dynamic testing and testing of individuals with disabilities	Adults/W&O/Children
9	Cross-cultural neuropsycholgical testing	Adults/W&O/Children
10	Projective tests	W&O/Children/Adults
11	Personality assessment and situational judgement in	
	personnel selection	
	THEME 3: The bigger picture	W&O/Children/Adults
12	Test development from a Danish perspective	W&O/Children/Adults
13	Ethics in psychological testing; malingering and cheating	
14 Challenge	Recap and exam FAQ	

While the structure outlined above enables good use of teacher resources, it poses a challenge for course alignment: since students will do the practical workshops in different order, content of the practical workshops cannot be aligned with the lecture series. As a result, some students describe the course as confusing and find it difficult to bridge the gap between theoretical and psychometric knowledge presented in the lectures, and practical hands-on knowledge they are trained in during the workshops. A second (and pressing) challenge for the course is that with a coming MA-reform, is has to be reduced from the current 10 ECTS point to 7,5 ECTS to align with the overall ECTS-formats across SAMF.

# AIM OF THE CURRENT PROJECT

As an answer to the challenges mentioned above, the current project has one overall aim: to lay the groundwork for a course description and format of a new course in Psychological Testing that increases alignment and fits within a 7,5 ECTS framework. To identify areas in the course where alignment can be increased, student evaluations from the last two runthroughs will be analyzed.

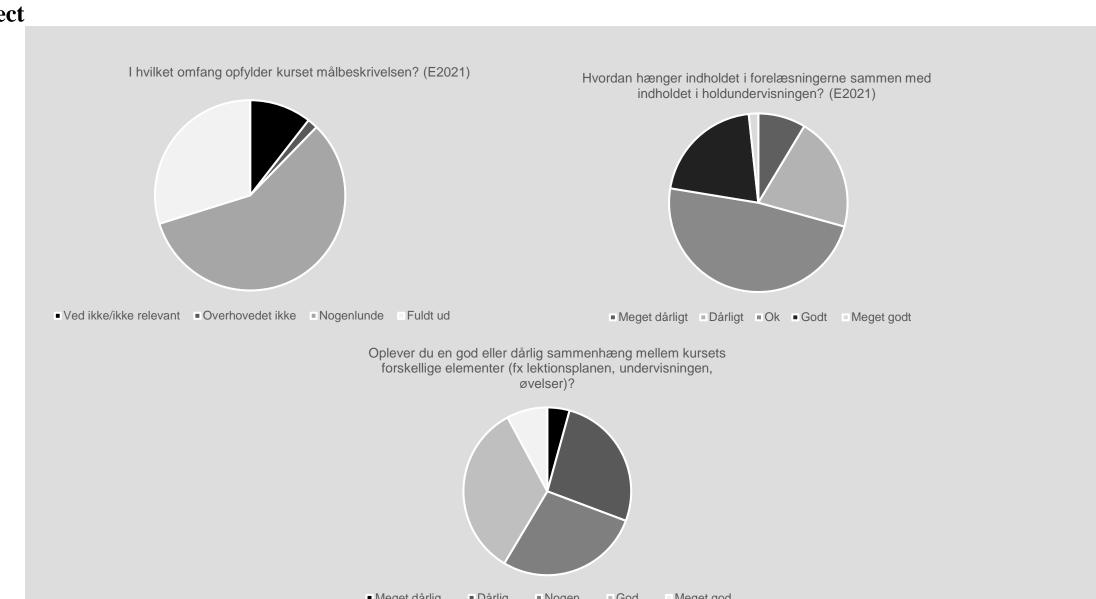
Focus on the analysis will therefore be on these three items. Further, free-text comments from students will be selected based on their focus on issues related to alignment. As such, the quantitative data are used to identify the scope of potential alignment problems, whereas the qualitative comments are used to get an impression of the nature of these problems, and what it might take to solve them.

# RESULTS

See figures for an overview of the quantitative data.

# 2021 course evaluations

For the 2021 course, 58% says that the course "approximately" fullfils the the goal description of the course. Simultaneously, 2% says that it does "not at all" while 30 % says that it does so "completely". Also for the 2021 course, when asked about the alignment between lectures and classroom teaching, 48 % says that it is "OK", while 21% finds it "bad" and 9 % finds it "very bad". On the ther end of the spectrum, 21 % finds it "good" and 2% finds it "very good".



### 2022 course evaluations

For the 2022 course, 28% finds the course to have "Some" alignment, while 26% finds it to be "bad" and 4% finds it "very bad". In contrast, 34% finds it "good" while 8% finds it "very good".

The numbers reported above suggests that for course coherence, a large proportion (30% for both years) finds it "bad" or "very bad". Hence, there seems to be room for improvement.

# Qualitative comments

For both years, there are about 10 comments about coherence and alignment in the course. Most of them just states that there is or is not (more often) coherence between course elements. A few comments are more direct in how this missing coherence is present in the course:

"I think the classroom teaching was very relevant, but it didn't fit well with the lectures. There was no overlap between the two".

"The structure of the course with a division between practical classes and lectures made sense, but it was also confusing in that I did not know what was expected from me regarding exam or the learning goals"

"I've asked all classroom teachers if they could expand on the concrete link between test theory (classical vs. IRT) and the concrete test we are doing. In my experience, the answers did not elevate above the very theoretical level. I miss a connection between test theory and the tests we are trying out"

Looking at these three comments, a few things become clear:

- They confirm that the alignment between lectures and classroom teaching could be improved
- They illustrate that alignment is a problem not only for classes and lectures, but also in relation to the exam, where it is unclear (at least to this student) which learning goals are tested and how.
- The final comment illustrates a possible way ahead to increase alignment: to integrate some of the technical psychometric teachings from the lectures into the actual hands-on work with the tests in the classroom.

# TENTATIVE CONCLUSIONS – WAY AHEAD

Based on the quantitative evaluation data and the qualitative comments, it seems clear that alignment across course elements poses a problem for the students' learning outcomes.

From a coordinator perspective, it is clear that there are some structural barriers hindering this alignment. Hence, and in combination with the need to reduced the course from 10 ECTS to 7 ECTS, the following changes are suggested:

- 1. Number of lectures are reduced from 14 to 12.
- 2. Classroom teaching is reduced from 9 x 3 to 6 x 3 hours.
- 3. Classroom teaching will follow the same order for everyone, and it will match the topics of the lectures
- 4. For each classroom teaching, there will be one test, and there will be one specific psychometric concept in focus, that will be related to that test.

1 and 2 will achieve the ECTS reduction. 3 will increase the structural and content-based alignment between lectures and classrooms, whereas 4 will increase the integration of psychometrics in the application and understanding of specific tests.

WEEK	LECTURE - content	Classroom teaching
1	Introduction	
	THEME 1: Test theory and psychometrics	
2	Psychological tests, test scores, interpretation of test results	
3	Validity and reliability	
4	Factor analysis and item response theory	
5	Introduction to classroom teaching	
	THEME 2: Specific populations – specific tests	
6	Testing and assessment of children	TESTS OF CHILDREN Psychometric focus: domains of functioning and total score Test: WISC-V
7	Dynamic testing and testing of individuals with disabilities	TESTS OF CHILDREN Psychometric focus: interrater- reliability Test: ADOS
8	Cross-cultural neuropsychological testing	TESTS OF ADULTS – clinical and neuropsychology Psychometric focus: cross-cultural validity Test: WAIS
9	Projective tests	TESTS OF ADULTS – clinical and neuropsychology Psychometric focus: norms and standardization Test: TBA; a neuropsychological test
10	Personality assessment and situational judgement in personnel selection	TESTS OF ADULTS – W&O Psychometric focus: factor analyses Test: NEO-PI
	THEME 3: The bigger picture	TESTS OF ADULTS – W&O Psychometric focus: Computer-adaptive tests TEST: ACE
11	Test development from a Danish perspective	
12	Ethics in Psychological testing; recap and exam FAQ	

<sup>1</sup>Biggs J, Tang C. Teaching for Quality Learning at University. McGraw-Hill Education; 2011. Accessed October 26, 2023. http://ebookcentral.proquest.com/lib/kbdk/detail.action?docID =798265