

## Differences between Students' Perception on Education:

### Comparing Honour and Regular Students at a Dutch University of Applied Sciences

*Amsterdam University of Applied Sciences (UAS) is a teaching-intensive university, which trains future high level professionals in diverse fields. This study evaluates the added value for students of honour programs as offered to high potential students since 2010. The added value is considered by comparing the perceptions of honour students and regular students on their own potential for excellence, their feeling of being challenged by their education, and their feeling of satisfaction with the educational program followed. Data is gathered through an online survey, resulting in N=924, of which on third honour students. Comparing the perceptions of both groups of students is done through a GLM procedure (in SPSS22). The results show that honour students differ from regular students in their self-perceived potential for excellence. However, no differences are found on students' perception of feeling challenged, or on satisfaction with the educational programs.*

Amsterdam University of Applied Sciences (UAS) is a teaching-intensive university that provides education for future high level professionals in diverse fields, such as teaching, physical therapy, and, and applied economics. In 2010 the governmental Sirius Funding (Sirius Expertcommissie, 2013) provided the means for Amsterdam UAS to start offering additional educational programs to students with higher potential and higher motivation, called 'honour programs'. The different honour programs have their own shape and form, but mostly consist of an additional extracurricular program of 30 ECTS. With the received funding Amsterdam UAS agreed to evaluate the added value of these programs for the students. This study considers this added value of honour programs in Amsterdam UAS in hindsight, by considering the difference in perception of honour students and regular students on three aspects: a) their potential for excellence, b) their feeling of being positively challenged by their education, and c) their feeling of satisfaction with their educational program.

#### *A – Students' Potential for Excellence*

In many universities honour programs are created based on the notion that some students have a higher potential for excellence than most students, and that these students require more or different education in more homogeneous groups (Wolfensberger, 2012). Renzulli (2011) defined this potential based on his three-ring-model on cognitive ability, creative ability and perseverance. Previous work by Scager (2013) has shown that students in Dutch research-intensive universities score higher on these self-perception scales than regular students. Additionally, it is often presumed that students with a higher potential also have a different learning motivation (Scager, 2013; Wolfensberger, 2012), although several studies show that this relation is more complex than often expected (Pullen, Griffioen, Schoonenboom, de Koning, & Beishuizen, submitted). Based on this earlier research, it is hypothesized that honour students show a higher self-perceived potential for excellence than regular students.

#### *B – Students' Feeling of being Challenged*

With the offering of honour programs in Amsterdam UAS, the presumption is that these additional programs will offer students with a higher potential for excellence a bigger feeling of being challenged. This perception of the learning environment is important in evaluating the added value of honour programs, since the extent to which students engage in excellent behaviour, also depends on how

students perceive their learning environment (Lizzio & Wilson, 2005). Within this study it is therefore hypothesized that students in honour programs will feel more challenged than regular students.

*C – General Appreciation of the Study*

The educational programs in Amsterdam UAS result in being qualified as professional in a certain field, such as teaching or nursing. The last presumption in this study is that students who follow an additional program will feel more satisfied with their educational program in general, and will also feel more prepared to function as a professional in their field.

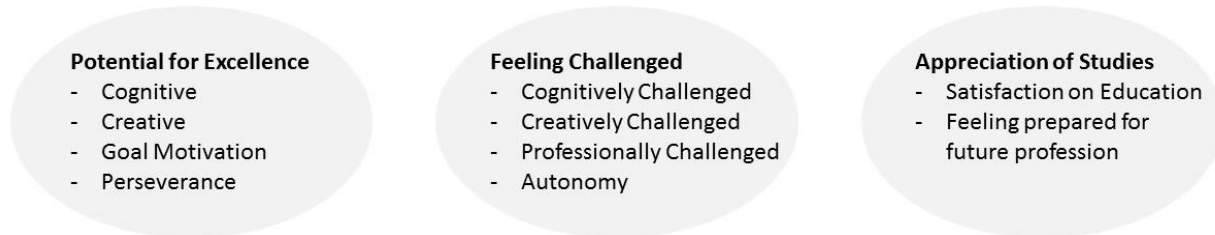


Figure 1: Overview of variables.

**Method**

*Research Question:* What are the differences between honour students and regular students on: a) the students’ self-perceived potential for excellence, b) the students’ perception of being challenged by their educational programs, and c) the amount in which the students appreciate their studies?

*Sample:* Regular students and honour students have been found to participate in an online survey. The total sample was 924, of which about 1/3 students who additionally follow an additional honours program.

*Measurement Instruments*

The following scales were part of the questionnaire (all Likert 1=not applicable at all to 5=fully applicable):

| <u>Scale</u>                          | <u>Items</u> | <u>Cronb.</u><br><u>alpha</u> | <u>Based on</u>                           |
|---------------------------------------|--------------|-------------------------------|---|
| <b>Potential for Excellence</b>       |              |                               |   |
| Cognitive Ability                     | 7            | .66                           | Scager (2013)                             |
| Creative Ability - perspective        | 5            | .70                           | Scager (2013); QCA, (2004)                |
| Creative Ability – originality        | 3            | .70                           |   |
| Goal Motivation - intrinsic           | 5            | .85                           | AGO-Q door Elliot and Murayama (2008);    |
| Goal Motivation - extrinsic           | 4            | .78                           | Furtwengler (2013)                        |
| Perseverance                          | 3            | .68                           | Scager (2013)                             |
| <b>Feeling of being Challenged</b>    |              |                               |   |
| Cognitively Challenged                | 7            | .86                           | Scale cognitive ability                   |
| Creatively Challenged                 | 7            | .89                           | Scales creative ability                   |
| Professionally Challenged             | 9            | .92                           | Epstein and Hundert (2002); Austin (2002) |
| Autonomy                              | 4            | .72                           | Koerhuis and Oostdam (2014)               |
| <b>Satisfaction</b>                   |              |                               |   |
| Satisfaction with educational program | 7            | .81                           | Douglas, Douglas, and Barnes (2005)       |

|   |    |     |   |
|---|----|-----|---|
| Satisfaction with lecturers                     | 5  | .82 |   |
| Feeling of being prepared for future profession | 10 | .93 | Epstein and Hundert (2002); Austin (2002) |

### Analysis

The different scales have been constructed in SPSS based on a principal component analysis, combined with a reliability analysis. The difference between honour students and regular students on the separate scales is analysed by a GLM procedure, with gender, prior educational level and discipline included as covariates (SPSS22).

### Findings

The results show that students in general provide relatively high scores on all scales. The average scores vary between 3.1 on the autonomy scale to 4.0 for the intrinsic goal motivation scale (Likert-5). Previous research in the same sector also provides high scoring and therefore significant but small average differences (Griffioen & De Jong, 2014).

The results show a difference between honour students and regular students on self-perceived cognition with  $F(1)=12.426$ ;  $p=.000$ . Also a difference is found on the factor creativity-perspective with  $F(1)=7.673$ ;  $p=.006$ . Based on a less conservative  $p$ -value, differences have been found on the factor goal motivation-external with  $F(1)=4.478$ ;  $p=.035$ , and perseverance with  $F(1)=5.959$ ;  $p=.015$ . On all these scales honor students score higher than regular students. The results do not show differences in the feeling of being challenged or how students appreciate their studies.

### Discussion

In this study the first results of an evaluative research on the added value of honours programs in Amsterdam UAS have been presented. The results show how honour students differ from regular students on their self-perceived potential for excellence, but not in how they perceive their educational program. With the lack of possibility to create a pre-post-design, this leaves the question open if this more positive self-perception ... this leaves the question open whether a more positive self-perception of students can be attributed to participation in a honour program, or that especially students with a more positive self-perception are attracted to participate in these programs. Aspects like these will be discussed with the audience.

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