



Center for  
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# Excellence in higher education

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## Educational preferences of honours students in the Netherlands

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## **Abstract**

This paper researches excellence in higher education by looking into honours programmes (HPs) in Dutch higher education. HPs are selective and aimed at the brightest students, offering them a more challenging – often extra-curricular – study experience. Based on a survey (n=259) at Dutch universities, our study identifies three types of honours students: task-committed, above-average ability, and creative. We asked each group how their ideal HP looks like. Task-committed students are interested in disciplinary HPs that have a student-centred approach. The above-average ability students demand a highly selective and small-scale HP that admits only the brightest students. Moreover, they prefer a HP that is isolated from regular study programmes. Creative students are interested in a variety of disciplinary subjects, not offered in regular curricula, often requiring substantial amounts of extra time and effort. The differences in preferred configurations of HPs have policy implications for universities interested in introducing excellence education.

**Key words:** excellence, higher education, honours students, honours programmes

## **Introduction**

Excellence has become an often mentioned objective of higher education across the world, particularly related to research, but also increasingly to education. As such excellence appears to have become a common objective of universities (Krücken & Meier, 2006; Ramirez & Tiplic, 2014). There are some recent insights in excellence in teaching and learning practices in Europe (Wolfensberger, 2015; ITS, ROA, CHEPS, 2015). However, overall there little is known about how European higher education institutions strive to introduce excellence into their education. After discussing related developments, this introduction focusses on the Netherlands to see how institutions strive for excellence through honours colleges and programmes.

It is assumed that a highly heterogeneous student population requires a diversified higher education system, where all students are confronted with a varied set of stimuli in order for them to successfully complete their studies (Van Vught, 2008; Schuetze, & Slowey, 2002; Read, et al., 2003). This should be the case for the average-ability students as well for the brightest, above-average ability students. If the brightest students within a university do not feel challenged sufficiently by the programmes followed, the university may risk losing them – either to another university or to higher education altogether. The risk of losing unchallenged bright students to universities abroad is particularly high in countries like the Netherlands that have an egalitarian, open, non-selective higher education system. Offering programmes that are more selective and target primarily the brightest students is a way of addressing the risk.

Utrecht University was one of the first to divert from the egalitarian paradigm in Dutch higher education by offering honours programmes and excellence tracks. In 1997, the University College Utrecht (UCU) started a small-scale international college, modelled after American and British colleges and offering a programme in liberal arts and sciences to students who were of above-average ability and showed sufficient motivation. UCU gained increasing recognition as an example and source of inspiration on how to address the demands of high-ability students by offering them a challenging and demanding learning experience. The model of UCU was copied by other universities and another six liberal arts colleges have opened their doors in the Netherlands since (Sirius Programma, 2015). For their education, the colleges recruit their teachers from the universities' best scientists and teachers.

Following the diffusion of the liberal arts colleges in Dutch higher education, a subsidy programme (SIRIUS) was started by the ministry of Education in 2008. This programme allowed Dutch higher education institutions – both research universities and universities of applied sciences – to apply for subsidies on the basis of a plan for the introduction of honours programmes within their institutions. The honours programmes thus initiated were expected to serve as a testbed for educational innovations elsewhere in higher education institutions and so contribute to learning about new didactical approaches, which would help increase overall quality and study success (i.e. excellence) in Dutch higher education. Still, first and foremost the honours

programmes were expected to contribute to “providing extra opportunities to talented students” (Wolfensberger, 2015; p. 4). The Sirius programme ran from 2008 to 2014 and had a budget of 60 million euro, with which institutions that were awarded subsidies could develop honours education on bachelor and master level (Sirius Programma, n.d.). The programme has been a stimuli that lead to the expansion of honours education in all research universities and most universities of applied sciences (Wolfensberger, 2015).

From an international perspective, the Netherlands is certainly not the first country to introduce honours education in higher education. In the United States, honours programmes were introduced in the 1920s and honours colleges in the 1990s (Van Eijl, et al., 2007; Humphrey, 2008). The spread of honours education across the American higher education system may be interpreted as a reaction to the massification of higher education (Carnicom, 2011). In Europe, however, the Netherlands is one of the first countries to introduce, or rather experiment with, elements of honours education in higher education (Wolfensberger, 2015; ITS, ROA, CHEPS, 2015). Other European countries are following, though at a slower pace. For example, in Northern Europe so far no country has introduced a comparable (financial) policy initiative to have institutions developed honours education (Wolfensberger, 2015).

For the adoption of honours education across Europe, lessons can be learned from countries that already have gained some experience with the concept. Particularly important for the introduction of honours programmes is to know the specific characteristics of honours students and the type of honours education they are interested in. However, empirical insights into these characteristics and demands are scarce (Achterberg, 2005; Scager, et al., 2012a; Scager, et al., 2012b, Wolfensberger, 2015). Having these insights would allow institutions to match the (potential) honours students to particular types of honours programmes, thus making the introduction of honours education more effective.

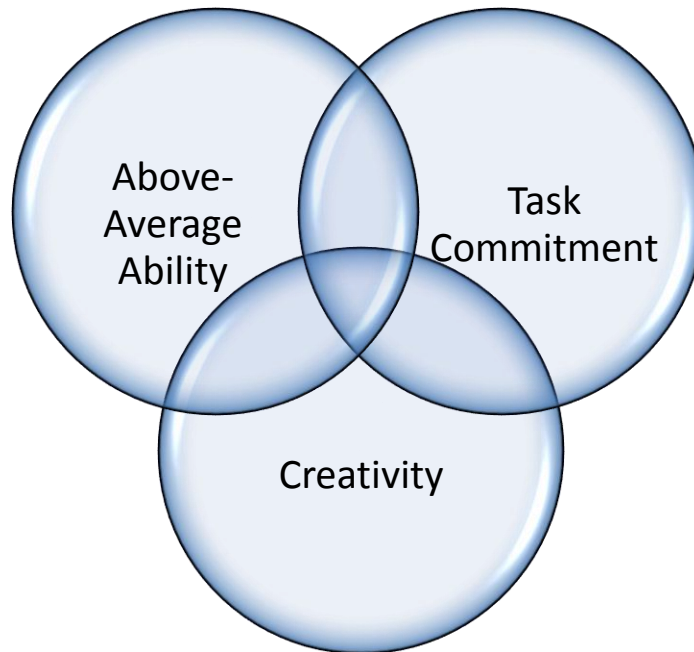
Using the experiences of the Netherlands as an early adopter of honours education in Europe, we can investigate the characteristics of honours students and their preference for particular types of honours education. Therefore, the research question addressed in this paper is: Which type of honours students prefers which configuration of honours programmes?

## **Conceptual framework**

In order to answer the research question we developed a conceptual framework covering (1) the characteristics of honours students, (2) their expected education demands and (3) the configurations of honours programmes.

### Characteristics of honours students

To cluster the characteristics of honours students we use Renzulli's (1978, p. 185) three-ring conception of giftedness (Figure 1): "Giftedness consists of an interaction among three basic clusters of human traits — these clusters being above-average general abilities, high levels of task commitment, and high levels of creativity."



**Figure 1: Three-Ring Conception of Giftedness (Renzulli, 1978)**

Above-average ability includes analytical and critical thinking skills and academic achievement. Creativity focuses on the originality of thinking and inventiveness of approaches to tasks. Task the overview of characteristics of honours students per giftedness cluster shown in Table 1. commitment is the ability to engage fully in a subject or area for an extended period of time and persevere despite obstacles, difficulties and setbacks. To fill the three clusters with related elements we used existing literature on characteristics of honours students, focussing on those in an academic research oriented setting (Achterberg, 2005; Scager, et al., 2012a; Freeman, 2010; Freyman, 2005; Hébert & McBee, 2007; Kaczvinsky, 2007; Otero, 2005; Renzulli, 2012; Shore & Kanevsky, 1993; Wiegant, et al., 2012; Wolfensberger & Offringa, 2012). To further operationalise the elements for the questionnaire (see methodology section), we combined the elements in statements. This resulted in in the overview of characteristics of honours students per giftedness cluster shown in Table 1.

**Table 1: Characteristics of honours students**

| Giftedness cluster   | Element   | Operationalisation  |
|--|---|---|
| Above-average ability  | Analytical and critical thinking skills                                   | I am better at thinking and reasoning in an analytical and critical way   |
|  | Ability to reason   |   |
|  | Ability to think abstractly   |   |
|  | Ability to guide own thinking   | I am more able to understand complex topics and I prefer to tackle difficult and challenging topics               |
|  | Ability to comprehend complex ideas                                       |   |
|  | Preference for complexity and challenge                                   | I think and learn faster  |
|  | Ability to think/learn quickly  |   |
|  | Ability to learn from experience  |   |
|  | Memorisation  | I am better at solving problems   |
|  | Problem-solving skills  |   |
|  | General intelligence  |   |
|  | Capacity to process information   |   |
|  | Language proficiency  |   |
| Spatial visualisation ability  |   |   |
| Academic achievement   |   |   |
| Creativity   | Creativity  | My ideas and solutions are more original, creative and inventive  |
|  | Originality   |   |
|  | Inventiveness to approaches   |   |
|  | Active imagination  |   |
|  | Ingenuity   | I am more prepared to put aside structured methods and standard procedures in order to follow a flexible approach |
|  | Willingness to challenge or set aside convention, procedure and tradition |   |
|  | Less need for structure   |   |
|  | Flexible in strategies/approaches   | I prefer diversity in subjects and my curiosity is aroused by a broader range of topic                            |
| Curiosity: need for diversity/broad interest   |   |   |
| Task commitment  | Task commitment; ability to fully engage in a subject                     | I am more willing to devote time and effort to a subject to which I am fully committed                            |
|  | Willingness to devote time and effort                                     |   |
|  | Persistence despite obstacles, difficulties, setbacks                     | I am more persistent in case of difficulties or setbacks  |
|  | Intrinsic motivation  |   |
|  | Desire to learn   | Learning in itself motivates me more and gives me a lot of satisfaction   |
|  | Extrinsic motivation: academic achievement                                |   |
|  | Desire to succeed/ need for achievement                                   |   |
|  | Need for achievement  | I am more motivated to succeed in a course and get a higher grade   |
|  | Need for competitiveness  |   |
|  | Extrinsic motivation: strong focus on post-education career               |   |
| Ambition   |   |   |
|  |   | I am more ambitious regarding my future post-education career   |
| * not operationalisation for reasons of being too broad / abstract, overlap with other element, or (in Dutch context) not honours specific |   |   |

### Educational demands of honours students

The characteristics described in Table 1 suggest that honours students “require a different, more challenging curriculum and other learning opportunities to satisfy [their] drive to learn, know and do” (Achterberg, 2005, p. 81). The literature suggests several educational demands of honours students (Achterberg, 2005; Van Gorp, et al., 2012; Wolfensberger & Offringa, 2012; Scager, et al., 2012b; Wiegant, et al., 2012; Gerrity, et al., 1993; Coppoolse, et al., 2013; Van Eijl, et al., 2007). These can be clustered in:

freedom / independence, focus on competence and high expectations, and learning environment (see Table 2 and Table 5 for operationalisation).

**Table 2: Demands of honours students**

| Cluster                                   | Element  | Statement |
|---|--|-----------|
| Freedom / independence                    | Freedom to discover and explore own fields of interest               | 15        |
|   | Freedom to take initiative and responsibility                        | 16        |
|   | Student-centred approach   | 16        |
|   | Teacher to coach and facilitate                                      | 21        |
|   | Students are not restricted by guidelines or obligatory requirements | 17        |
|   | Balance between structure and freedom                                | -         |
| Focus on competence and high expectations | More demanding in content: difficulty, complexity, challenge         | 10, 11    |
|   | More demanding in quantity: time and effort                          | 12        |
|   | Focus on personal development: competences and skills                | 18        |
|   | Focus on academic thinking, instead of only practical applications   | 20        |
| Learning environment                      | Small-scale learning environment                                     | 4         |
|   | Like-minded peers  | 2         |

### Honours programmes in higher education

Dutch higher education institutions developed honours education in a wide variety of ways, but always with the goal to provide extra educational opportunities to talented students. After reviewing the literature (Coppoolse, et al., 2013; Van Eijl, et al., 2007; Wolfensberger, et al., 2012; Wolfensberger, 2015; ITS, ROA, CHEPS, 2015), we found, broadly speaking, four configurations by which honours programmes differ: student composition, programme organisation, programme content, and incentives for participation (see Table 3 and Table 5 for operationalisation).

**Table 3: Configurations of honours programmes**

| Cluster                      | Element   | Statement  |
|------------------------------|---|------------|
| Student composition          | Selectivity (target group), selection criteria and admission procedures (1)   | 1, 2       |
|                              | Bachelor or master phase (2)  | -          |
| Programme organisation       | Educational methods / didactical considerations: seminars, lectures, assignments, group work, individual work, active participation, peer interaction, community formation, small-scale educational methods (3) | 3, 4, 5, 6 |
|                              | Duration, program size and associated credits (4)   | 7          |
|                              | (Partly) intra- or extracurricular (5)  | 8          |
|                              | Honours programme is embedded into the university (6)   | 9          |
| Programme content            | Disciplinary, interdisciplinary, multidisciplinary (7)  | 13, 14     |
|                              | Content and subjects; including extent of freedom for students (8)  | 15, 16, 17 |
|                              | Intended learning outcomes and competences (9)  | 18, 19     |
|                              | Feedback and assessment procedures (10)   | 21         |
| Incentives for participation | Financial issues: additional tuition fees or scholarships (11)  | 22         |
|                              | Rewards for the completion of the programme: ECTS / formal acknowledgement (12)   | 23, 24     |
|                              | Value of participation and completion for higher education sector and labour market (13)  | 25, 26     |

The configuration elements presented in Table 3 are used to tailor-make honours programmes. For example, an honours programme could (1) only select students performing in the top 10%, (2) design a programme on bachelor level, (3) using mainly small-scale education methods and group work, (4) that has a course load comparable to



30 ECTS, (5) which students earn on top of their regular required study points (i.e. extracurricular). The programmes can be (6) taught by a single department, (7) thus having a disciplinary focus, (8) but still with enough freedom for the students to pursue their own interest in that discipline. The programme is meant to encourage (9) students' critical thinking skills, which is assessed by (10) an oral exam. To encourage students to complete the programme, the institution offers (11) a small scholarship upon completion and will indicate (12) the distinction 'With Honours' on the students' bachelor diploma. Particularly, the latter is meant to (13) allow the student to pursue more advanced education opportunities (e.g. a selective master at the world's best universities).

## **Methodology**

Primary data for this study was collected in May 2015 using an online survey. The survey formed part of a bachelor thesis study (HIDDEN, 2015). The unit of analysis were bachelor students at Dutch research universities who were at the time of the survey taking part in honours education (i.e. honours students), thus excluding students studying at liberal-arts colleges. The choice to focus on research universities was made due to the fact that they are more comparable at the European level, given that the professional education offered by Dutch universities of applied sciences does not have a comparable equivalent in all European countries. We included only honours programmes at the bachelor level because these are most common in Dutch higher education. Inclusion of students of universities of applied sciences and students in the master phase would have required the inclusion of additional, other, and different characteristics of honours students and configurations of honours programmes. Respondents for the survey were found with the help of honours associations and administrators of the universities approached.

As shown in Table 1, the characteristics of honours students were translated into statements. The respondents were asked to judge, on a 7-point Likert scale, the extent to which the statements reflected their own characteristics, by comparing themselves to regular students (i.e. students in their study programme that do not qualify for participation in honours education, e.g. due to their grades and/or motivation). For example, if a respondent indicated a '4' on the statement 'I am better at thinking and reasoning in an analytical and critical way' the interpretation is that the honours student sees no difference between him and a regular student. A '7' indicates a very positive difference (i.e. likely a typical honours characteristic), and a '1' a very negative difference (i.e. likely a typical regular students' characteristic).

Similarly, the demands of honours students and preferred configurations of honours programmes have been translated into statements (see Table 5). The respondents were asked to reflect, using a 7-point Likert scale, on the extent to which they would like to

see the topic of the statement in their ideal honours programme. For example, if a respondent indicates a '4' (neutral) on statement one: 'my ideal-type of honours programme includes only well-performing students (that received high grades in our study programme)', the interpretation is that the honours student is indifferent with respect to the inclusion of the topic of the statement in his ideal honours programme. A '7' indicates a very strong preference (i.e. must be included in an honours programme), and a '1' a very strong disfavour (i.e. should not be included in an honours programme). Two elements in Table 2 and 3 were not covered by the statements. First, 'Balance between structure and freedom' was left out because certain preference for a balance can be assumed by definition. Second, the 'Bachelor or master phase' configuration was not translated into a statement because the focus of this study is on the bachelor phase.

The data was analysed in four steps. First, descriptive statistics were used to provide information on the sample and the characteristics the respondents ascribe to themselves in comparison to regular students. Second, a principal components analysis was used to determine whether the data corresponds to the conceptually anticipated clusters: above-average ability, creativity and task commitment. Furthermore, to see whether it made sense to include all inquired items in the computation of the new variables identified by the principal components analysis, Cronbach's Alpha's were used. Third, descriptive statistics and analysis of variance (ANOVA) were used to determine whether there is a difference between the score the respondents attach to the characteristics of honours students in relation to preferred configuration of honours programmes. Fourth, an analysis of covariance (ANCOVA) was performed to statistically control for confounding variables adversely affecting the relationships. The following confounding variables were checked: gender, age and year of study.

## Results

### The sample

Data was collected of 259 respondents. Close to 70% of the respondents are female and 59% of the respondents were 20 or 21 years old. Students from ten universities filled out the questionnaire: 36% studies at the Radboud University Nijmegen, 20% at Utrecht University and 12% at Tilburg University. Most respondents studied Psychology (49), followed by Medicine (25), Law (21), Biomedical Sciences (16), International Business Administration (11) and Economics and Business Economics (10). Only 7% of the respondents were first year students, 46% were in their second year and 47% in their third year of their bachelor programme.

### Characteristics of honours students

As shown in Table 4 (mean column), the honours students in our sample gave themselves higher scores on all items as compared to regular students. The highest scoring characteristics are: (1) 'More willing to devote time and effort to subject to which the student is fully committed', (2) 'More motivated to succeed in a course and get

a higher grade', (3) 'More ambitious regarding future post-education career', (4) 'Prefer diversity in subjects and curiosity aroused by broader range of topics', and (5) 'More able to understand complex topics and preference difficult and challenging topics'.

The factor analyses supports the conceptual clusters, suggesting that there are above-average ability, creative, and task committed honours students (see Table 4). The eigenvalues of the components are all above the required 1.0. The Cronbach's Alpha's of 'Task commitment' and 'Above-average ability' are above the required 0.7. The Cronbach's Alpha of Creativity is 0.59, which is lower than the usually acceptable reliability coefficient. However, for a smaller number of statements, the requirements should be interpreted less strictly, also because the inter-item correlations are sufficiently high ( $r > 0.31$ ).

**Table 4: Rotated Component Matrix and descriptive statistics of honours students' characteristics (n=259)**

| Item / component  | 1 Task commitment |      | 2 Above-average ability |      | 3 Creativity |      | Mean | SD   |
|---|-------------------|------|-------------------------|------|--------------|------|------|------|
| More motivated to succeed in a course and get higher grade  | 0.750             |      |                         |      |              |      | 5.78 | 1.13 |
| Learning in itself motivates more and gives satisfaction  | 0.709             |      |                         |      |              |      | 5.43 | 1.15 |
| More willing to devote time and effort to subject to which fully committed  | 0.702             |      |                         |      |              |      | 5.86 | 1.07 |
| More persistent in case of difficulties or setbacks   | 0.687             |      |                         |      |              |      | 5.20 | 1.14 |
| More ambitious regarding future post-education career   | 0.630             |      |                         |      |              |      | 5.55 | 1.19 |
| Think and learn faster  |                   |      | 0.760                   |      |              |      | 5.41 | 1.07 |
| Better at thinking and reasoning in an analytical and critical way  |                   |      | 0.729                   |      |              |      | 5.45 | 0.94 |
| Better at solving problems  |                   |      | 0.709                   |      |              |      | 5.05 | 0.98 |
| More able to understand complex topics and preference difficult and challenging topics  |                   |      | 0.655                   |      |              |      | 5.46 | 0.93 |
| Prefer diversity in subjects and curiosity aroused by broader range of topics   |                   |      |                         |      | 0.726        |      | 5.53 | 1.20 |
| More prepared to put aside structured methods and standard procedures (flexible approach)   |                   |      |                         |      | 0.713        |      | 4.76 | 1.13 |
| More original, creative and inventive ideas and solutions   |                   |      |                         |      | 0.665        |      | 4.51 | 1.07 |
| Overall mean and SD   | 5.56              | 0.82 | 5.34                    | 0.75 | 4.93         | 0.84 |      |      |
| Rotation converged in five iterations.<br>Eigen values for the components 1, 2, and 3 are: 4.206, 1.430, and 1.165 respectively.<br>Cronbach's Alpha's for the components 1, 2, and 3 are: 0.78, 0.76, 0.59<br>Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. |                   |      |                         |      |              |      |      |      |

The questionnaire included an open question for respondents to state characteristics of honours students that were not included in the statements. Around half (47%) of the respondents used the open questions to provided more detailed characteristics, though they partly overlap with the characteristics included in the survey. Summarising, the

respondents stressed that honours students are more inquisitive, enthusiastic, dedicated, disciplined, competitive, independent, perfectionist/precise, assertive, and self-confident than regular students. The drive to improve yourself, getting the best out of yourself, personal development, intellectual growth and seeing studying as a passion were also highlighted as typical characteristics. Respondents stated that honours students know what they want to achieve, work hard to get there and aim to distinguish themselves from other students. Discussing and thinking about complex topics and philosophical questions were by some indicated as typical attitudes. Moreover, the typical honours student shows initiative, has interests besides studying (e.g. involved in extra-curricular activities), is good at planning / time management and has developed more advanced social skills.

### Preferred configurations and demands of honours programmes

The 26 statements measuring the demands of honours students (Table 2) and the configurations of honours programmes (Table 3), are shown in Table 5. The top five most important aspects of an honours programme feature predominantly incentives for participation. An honours programme should provide a (1) 'formal acknowledgements for completion' and should be provided at (2) 'no additional costs'. Ideally the honours programmes also have a high return in terms of: (3) 'allows to pursue more advanced educational alternatives' and (4) 'allows to acquire a better job position in the labour market'. Lastly, honours students like the honours programme to be organised as a (5) 'small-scale learning environment, with a limited amount of students and close and personal student-student and student-teacher relationships'. As indicated in the table, overall honours students' ideal honours programmes differs significantly on 11 items as compared to respondents who indicated to be similar to regular students (i.e. mean scores around 4). Particularly, these items are to be taken into account when designing honours programmes.

**Table 5: Descriptive statistics: preferred configurations and demands of honours programmes**

| Category               | Statement   | Mean | SD   | Sig. |
|------------------------|---|------|------|------|
| Student composition    | 1 Only well-performing students (high grades)   | 5.04 | 1.62 |      |
|                        | 2 Highly selective and exclusive (only best x% students invited)                                | 4.92 | 1.67 | *    |
|                        | 3 Creation of a close community through active participation and student-student interaction    | 5.44 | 1.39 |      |
| Programme organisation | 4 Small-scale learning environment (limited amount students + close and personal relationships) | 6.07 | 1.00 | *    |
|                        | 5 Great deal of group work as opposed to individual work  | 4.13 | 1.56 |      |
|                        | 6 Lectures and seminars as the primary educational method as opposed to assignments             | 4.42 | 1.51 |      |
|                        | 7 During the full bachelor phase, instead of in a limited period                                | 5.31 | 1.59 | *    |
|                        | 8 Extracurricular, not (partially) intracurricular  | 5.76 | 1.36 |      |
|                        | 9 Organised apart from the regular study programmes at the university                           | 4.02 | 1.73 |      |
| Programme content      | 10 Totally different from the regular programme in terms of content                             | 4.23 | 1.71 |      |
|                        | 11 Challenging and demanding content: subjects are difficult                                    | 5.53 | 1.02 | *    |
|                        | 12 Requires students to devote a substantial amount of time and effort                          | 4.96 | 1.19 | *    |

|  |    |   |      |      |   |
|--|----|---|------|------|---|
|  | 13 | Focuses on broadening the knowledge/skills: perspectives from variety of fields/disciplines (multi- or interdisciplinary) | 5.50 | 1.53 |   |
|  | 14 | Focuses on deepening the knowledge/skills in field of regular study programme (disciplinary)                              | 5.46 | 1.49 |   |
|  | 15 | Great deal of freedom to discover and explore own field of interest   | 5.86 | 1.11 | * |
|  | 16 | Focuses on the initiative and responsibility of the student   | 5.53 | 1.16 |   |
|  | 17 | Little or no guidelines and obligatory requirements (limited structure)   | 4.02 | 1.71 |   |
|  | 18 | Focuses on personal development of competences and skills   | 5.87 | 1.13 | * |
|  | 19 | Focuses on academic thinking  | 5.92 | 1.11 | * |
|  | 20 | Focuses on practical applications of knowledge  | 5.48 | 1.31 |   |
|  | 21 | Teachers coach students, not supervise the entire learning experience   | 5.84 | 1.09 |   |
| Incentives for participation             | 22 | No additional costs (no fee on top of the regular tuition fee)  | 6.49 | 1.15 |   |
|  | 23 | Provides participants with extra ECTS   | 5.66 | 1.58 |   |
|  | 24 | Provides participants with formal acknowledgement for completion  | 6.66 | 0.70 | * |
|  | 25 | Allows to pursue more advanced educational alternatives   | 6.19 | 1.01 | * |
|  | 26 | Allows to acquire a better job position in the labour market  | 6.13 | 1.17 | * |
| * Significant at $\alpha < 0.05$ (ANOVA) |    |   |      |      |   |

### Characteristics of honours students and their preferred configuration of honours programmes

Now that we have identified the three broad types of honours students (Table 4) and know the overall ideal configurations of honours programmes (Table 5), we can look at the group specific preferred configurations. We do so by looking at the configurations and demand items on which respondents belonging to the three groups score significantly higher ( $\alpha < 0.05$ ) as compared to respondents who indicated to be similar to regular students (i.e. mean scores around 4) in that specific cluster. The results are shown in Table 6.

**Table 6: Characteristics of honours students and their preferred configuration of honours programmes**

| Statement  | Task commitment | Above-average ability | Creativity |
|--|-----------------|-----------------------|------------|
| 25 Allows to pursue more advanced educational alternatives   | X               | X                     | X          |
| 1 Only well-performing students  | X               | X                     |            |
| 2 Highly selective and exclusive   | X               | X                     |            |
| 11 Challenging and demanding content: subjects are difficult   | X               | X                     |            |
| 12 Requires students to devote a substantial amount of time and effort   | X               |                       | X          |
| 16 Focuses on the initiative and responsibility of the student   | X               |                       | X          |
| 14 Focuses on deepening the knowledge/skills in field of regular study programme (disciplinary)                              | X               |                       |            |
| 20 Focuses on practical applications of knowledge  | X               |                       |            |
| 24 Provides participants with formal acknowledgement for completion  | X               |                       |            |
| 26 Allows to acquire a better job position in the labour market  | X               |                       |            |
| 4 Small-scale learning environment   |                 | X                     |            |
| 9 Organised apart from the regular study programmes at the university  |                 | X                     |            |
| 8 Extracurricular, not (partially) intracurricular   |                 |                       | X          |
| 10 Totally different from the regular programme in terms of content  |                 |                       | X          |
| 13 Focuses on broadening the knowledge/skills: perspectives from variety of fields/disciplines (multi- or interdisciplinary) |                 |                       | X          |

|    |   |  |  |   |
|----|---|--|--|---|
| 18 | Focuses on personal development of competences and skills |  |  | X |
| 19 | Focuses on academic thinking                              |  |  | X |

### Confounding variables

From the significant preferences of different types of honours students discussed above, seven items suffer from the influence of a confounding variable, namely gender. The other tested confounding variables, age and year of study, have no significant influence on any preference described above. The significant differences ( $\alpha < 0.05$ ) related to gender are:

1. Female honours students of all types indicate a significant preference for a focus on academic thinking, while male honours students do not.
2. Female above-average ability respondents attach a higher score to whether an ideal honours programme should result in the opportunity to acquire a better job position in the labour market than male above-average ability respondents.
3. Both male and female task committed honours students indicate a significant preference for a challenging and demanding content. Nevertheless, as expressed by a higher mean, the male students attach more importance to this aspect than the female students.
4. Female task committed honours students express a significant preference for a focus on practical applications of knowledge, while male task committed honours students do not.
5. Female task committed honours students indicate a significant preference for an honours programme that – after completion – allows them to acquire a better position in the labour market, while male task committed honours students do not.

### Conclusion and discussion

The study confirmed the existence of three types of honours students: task committed honours students, above-average ability honours students, and creative honours students. The groups are not mutually exclusive, e.g. a student can belong to the task committed as well as the creative group. Furthermore, the groups differ with respect to their demands and preferred configuration of honours programmes. The outcomes underline the necessity to tailor-make honours programmes to fit particular type of honours students. The findings suggest the following:

- All honours students want the honours programme to be designed so that it enables them to continue their education at world-class institutions.
- Tasks committed and above-average ability honours students want challenging and demanding honours programmes that are highly selective and exclusive, only including well performing students.

- Task committed and creative honours students are willing to put in a substantial amount of time and effort, for which the initiative and responsibility should lay with the student.
- Task committed honours students prefer honours programmes with a disciplinary focus, which focus on the practical application of knowledge. Only for the task committed honours students it is highly important that an honours programme enables them to acquire a better job position in the labour market. The importance of the honours programme providing a formal acknowledgement can be related to this.
- Above-average ability honours students prefer honours programmes that are organised in a small-scale learning environment and apart from the regular study programme. Thus being isolated from their regular programme and regular students, and solely surrounded by like-minded peers.
- As compared to the two other types, creative honours students are more interested in honours programmes that are extra-curricular, different from their regular programme, include multi- or interdisciplinary perspectives, with which they aim to enhance their competences, skills and academic thinking. Consequently, these students want honours programmes that fulfil their broad interest, includes a diverse group of students (i.e. not only the well-performing students), and provides freedom to take their own creative initiatives.

On a more general level, the honours students have not expressed preferences for a specific educational method. In other words, honours students are neutral whether their excellence programme makes use of lectures and seminars instead of assignments, or whether it concentrates on group work as opposed to individual work. However, the honours students prefer a programme that is offered during the full bachelor phase. This implies that the educational demands of these students are not satisfied by the regular curriculum. Moreover, honours students' ideal excellence programme is extra-curricular instead of (partially) replacing courses from the regular curriculum.

Important to note is also that honours students on average demonstrate more extrinsic motivation than intrinsic motivation, since they attach a lower score to 'learning in itself motivates more and gives satisfaction' ( $m=5.43$ ) as compared to 'more ambitious regarding future post-education career' ( $m=5.55$ ). Consequently, honours students see many gains from them following honours programmes, particularly in relation to them continuing their education at world-class institutions. They highly value that completion is awarded with a formal acknowledgement. Despite these benefits, the respondents are not keen on them compensating the higher costs of their extra and more intense education by paying additional fees.

The outcomes of this study have clear policy implications, particularly for higher education institutions and study programmes across Europe. First, it shows that

challenging high-potential students beyond the standard curriculum is a worthwhile undertaking. Consequently, in addition to offering extra education options to students in need of more help, e.g. remedial courses, offering honours education to high potential students can have an important effect on study satisfaction and success. Second, institutions considering introducing honours education can use the study's outcomes to develop honours education tailor-made for particular type of honours students (i.e. task committed, above-average ability and creative honours students). A logical goal can be to ensure that all types have their own honours programmes. Third, introducing honours education requires the development of a culture of excellence. The latter is needed to find the essential support for honours programmes amongst staff and students. This indeed means that the egalitarian ideals, embedded in many European higher education systems, would be challenged. Fourth, to interest students in participating in honours education, institutions can appeal to students' intrinsic motivation to gain additional knowledge and skills, but should certainly not forget to also appeal to students' extrinsic motivation, particularly related to the opportunities to continue their education at world-class institutions and/or the future benefits on the labour market of having graduated with a honours distinction. Lastly, the honours students' willingness to financially contribute to honours education is very low. Therefore, institutions are to carefully consider the effectiveness and sustainability of the resources allocated to honours education.

The study design has a number of limitations, with consequences for validity. First, the respondents have not been randomly selected which is why we cannot claim to have a representative sample. Second, to answer the research question the study relies solely on students' own perceptions, which are by definition subjective. A more balanced view, albeit still subjective and beyond the scope of our study, could have been gathered by including insights from experienced administrators of honours programmes. They could be asked to provide more detailed suggestions for the development of honours education to particular type of honours students. Lastly, in the operationalisation we combined different elements in single statements. Uncertain is the extent to which the operationalisation measures all elements equally.

With this paper we aimed to broaden our understanding of how excellence can be introduced in education through honours programmes, which are in line with students' characteristics and demands. Given the increasing focus on excellence in teaching and learning throughout Europe, further research is recommendable for both practical and academic motivations. With respect to the former, we suggest to further explore the topic by using a larger and representative sample in which additional dimensions can be included, such as gender, programmes on master level, and universities of applied sciences. Further attention can also be given to the operationalisation of students' characteristics. A more academic direction for further research would be to demonstrate how promoting excellence has become an important way for higher education institutions to signal their high status, and whether honours programmes could be employed to this end.



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