Do diligent students perform better? Complex relations between student and course characteristics, study time, and academic performance in higher education
Supplementary material

MASUI, Chris; BROECKMANS, Jan; DOUMEN, Sarah; GROENEN, Anne \& MOLENBERGHS, Geert (2014) Do diligent students perform better? Complex relations between student and course characteristics, study time, and academic performance in higher education. In: STUDIES IN HIGHER EDUCATION, 39 (4), p. 621-643.

DOI: 10.1080/03075079.2012.721350
Handle: http://hdl.handle.net/1942/13747

Table 2
Relationships between Student Characteristics, Study Time, and Course Grade

| Term | Course Grade |  | Student Characteristics |  |  |  |  |  |  |  |  |  |  |  | Model Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | y time | $\begin{gathered} \text { Gender } \\ (0=\mathrm{M}, \\ 1=\mathrm{F}) \end{gathered}$ | Prior study delay | $\begin{array}{r} \mathrm{Pr} \\ \text { know } \\ \text { econ } \\ (0= \\ 1= \\ \hline \end{array}$ | rior wledge omics $=$ no, yes) |  | or ledge heics | Intel | igence |  | $\begin{aligned} & \text { ading } \\ & \text { kills } \end{aligned}$ |  |  |
| 1 | Financial Accounting 1 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 212 | $\begin{array}{r} 1.873 \\ .066 \end{array}$ |  | $\begin{array}{rr} \hline-.246 & -2.066 \\ .044 \end{array}$ |  |  | . 382 | $\begin{array}{r} \hline 3.224 \\ .002 \end{array}$ |  |  |  |  | $\begin{aligned} & \hline R^{2} .319 \\ & F 8.420 \end{aligned}$ | Adj. $R^{2} .281 \underset{\text { Sign. }}{ } \quad 000$ |
|  | Global Economics \& Economic History | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 275 | $\begin{array}{r} 2.350 \\ .023 \\ \hline \end{array}$ | $\begin{array}{r} \hline-306-630 \\ .011 \\ \hline \end{array}$ | $\begin{array}{rr} \hline-.289 & -2.462 \\ .017 \\ \hline \end{array}$ |  | $\begin{array}{r} -2.147 \\ \hline .036 \\ \hline \end{array}$ |  |  |  |  |  |  | $\begin{array}{ll} \hline R^{2} .292 \\ F & 5.472 \\ \hline \end{array}$ | Adj. $R^{2} .239$ df 4/53 Sign. 001 |
|  | Macro-economics 1 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 383 | $\begin{array}{r} 3.183 \\ .002 \end{array}$ |  |  |  |  |  |  | . 243 | $\begin{array}{r} \hline 2.016 \\ .049 \end{array}$ |  |  | $\begin{aligned} & R^{2} .203 \\ & F 6.997 \end{aligned}$ | $\begin{gathered} \text { Adj. } R^{2} .174 \quad \text { df } 2 / 55 \\ \text { Sign. } 002 \\ \hline \end{gathered}$ |
|  | Mathematics 1 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 278 | $\begin{array}{r} 2.866 \\ .006 \\ \hline \end{array}$ |  |  |  | $\begin{array}{r} -2.949 \\ .005 \\ \hline \end{array}$ | . 486 | $\begin{array}{r} 4.919 \\ .000 \\ \hline \end{array}$ | . 170 | $\begin{array}{r} 1.681 \\ .099 \\ \hline \end{array}$ |  |  | $\begin{aligned} & \hline R^{2} .520 \\ & F 14.066 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Adj. } R^{2} .483 \text { df } 4 / 52 \\ & 6 \quad \text { Sign. } .000 \\ & \hline \end{aligned}$ |
|  | Sociology \& Demography | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 397 | $\begin{array}{r} 3.721 \\ .000 \\ \hline \end{array}$ |  |  |  | $\begin{array}{r} -3.029 \\ .004 \\ \hline \end{array}$ | . 210 | $\begin{array}{r} 1.934 \\ .058 \\ \hline \end{array}$ |  |  | . 346 | $\begin{array}{r} 3.200 \\ .002 \\ \hline \end{array}$ | $\begin{aligned} & \hline R^{2} .417 \\ & F \\ & F \\ & \hline \end{aligned}$ | Adj. $R^{2} .373 \quad d f 4 / 53$ Sign. 000 |
| 2 | Macro-economics 2 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ |  |  |  |  |  |  | . 314 | $\begin{array}{r} 2.144 \\ .038 \\ \hline \end{array}$ |  |  |  |  | $\begin{aligned} & \hline R^{2} .099 \\ & F \\ & F \\ & \hline \end{aligned}$ | Adj. $R^{2} .077$ df $1 / 42$ Sign. 038 |
|  | Management \& Management Accounting | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ |  |  |  |  |  |  | . 332 | $\begin{array}{r} \hline 2.370 \\ .022 \\ \hline \end{array}$ | . 301 | $\begin{array}{r} \hline 2.154 \\ .037 \\ \hline \end{array}$ |  |  | $\begin{aligned} & \hline R^{2} .267 \\ & F 7.641 \\ & \hline \end{aligned}$ | $\begin{array}{cc} \hline \text { Adj. } R^{2} .232 d f \\ \text { Sign. } .003 \\ \hline \end{array}$ |
|  | Mathematics 2 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ |  |  |  | $\begin{array}{r} \hline-.355-2.760 \\ .009 \\ \hline \end{array}$ |  |  | . 412 | $\begin{array}{r} \hline 3.196 \\ .003 \\ \hline \end{array}$ |  |  | $-.286$ | $\begin{array}{r} -2.218 \\ .032 \\ \hline \end{array}$ | $\begin{aligned} & \hline R^{2} .356 \\ & F 7.201 \\ & \hline \end{aligned}$ | $\begin{array}{cc} \hline \text { Adj. } R^{2} .307 d f \\ \text { Sign. } .001 \\ \hline \end{array}$ |
|  | Research Methods \& Psychology 1 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 343 | $\begin{array}{r} 2.707 \\ .010 \end{array}$ |  | $\begin{array}{r} \hline-.216-706 \\ .096 \end{array}$ |  |  | . 429 | $\begin{array}{r} 3.430 \\ .001 \end{array}$ |  |  |  |  | $\begin{aligned} & R^{2} .377 \\ & F 8.061 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { Adj. } R^{2} .330 \quad d f \quad 3 / 40 \\ \text { Sign. . } 000 \\ \hline \end{gathered}$ |
| 3 | Financial Accounting 2 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ |  |  | $\begin{array}{r} \hline .320 \\ 2.48727 \\ .01616 \\ \hline \end{array}$ |  | . 300 | $\begin{array}{r} \hline 2.366 \\ .022 \end{array}$ |  |  | . 335 | $\begin{array}{r} \hline 2.607 \\ .012 \end{array}$ |  |  | $\begin{aligned} & \hline R^{2} .257 \\ & F 5.537 \end{aligned}$ | Adj. $R^{2}$. $211 \quad d f$ 3/48 <br> Sign. . 002 |
|  | Management Information Systems | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ |  |  |  | $\begin{array}{rr} \hline-.280 & -2.217 \\ .031 \\ \hline \end{array}$ | $.227$ | $\begin{array}{r} 1.971 \\ .055 \\ \hline \end{array}$ |  |  | . 450 | $\begin{array}{r} \hline 3.609 \\ .001 \\ \hline \end{array}$ |  |  | $\begin{aligned} & \hline R^{2} .439 \\ & F 12.534 \\ & \hline \end{aligned}$ | Adj. $R^{2} .404 d f$ 3/48 Sign. 000 |
|  | Principles of Law | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 329 | $\begin{array}{r} 2.752 \\ .008 \\ \hline \end{array}$ |  | $\begin{array}{rr} \hline-.432 & -3.609 \\ .001 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & \hline R^{2} .298 \\ & F 10.387 \\ & \hline \end{aligned}$ | Adj. $R^{2} .269 d f 2 / 49$ Sign. 000 |
|  | Research Methods \& Psychology 2 | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 540 | $\begin{array}{r} 4.652 \\ .000 \\ \hline \end{array}$ |  | $\begin{array}{rr} \hline-.212 & -1.831 \\ .073 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & \hline R^{2} .361 \\ & F \\ & F \\ & \hline \end{aligned}$ | Adj. $R^{2} .335 ~ d f$ <br> Sign. $0 / 48$ |
|  | Statistics | $\begin{aligned} & \beta / t \\ & \text { Sign. } \end{aligned}$ | . 519 | $\begin{array}{r} 4.704 \\ .000 \\ \hline \end{array}$ |  |  |  |  |  |  | . 395 | $\begin{array}{r} 3.408 \\ \hline .001 \\ \hline \end{array}$ | -. 266 | $\begin{array}{r} -2.278 \\ .027 \end{array}$ | $\begin{aligned} & \hline R^{2} .430 \\ & F 12.052 \\ & \hline \end{aligned}$ | Adj. $R^{2} .394$$d f$ <br> Sign. .000 |

Note. Results are presented only for variables that appear in the selected regression model. Tolerance and variance inflation
factor are within the acceptable range for all analyses, indicating that there are no multicollinearity problems.

