

## **GRADUATES' EARNINGS POTENTIAL: New evidence of the importance of non-cognitive skills**

The 'soft' skills and personality traits formed before and during adolescence, but which are difficult to improve thereafter, have a significant impact on the earnings potential of UK graduates. That is the central finding of a new study by **Gerda Buchmueller** and Professor **Ian Walker** of Lancaster University, to be presented at the annual congress of the European Economic Association (EEA) in Manchester in August 2019.

Their research examines how earnings are affected by higher education and by 'non-cognitive skills' such as conscientiousness, self-esteem (feeling good about oneself) and *internal* locus of control (a belief that *you* control the things that matter for *your* life).

Gerda Buchmeller, who will present the findings at the EEA congress, said:

'Non-cognitive skills are known to have a positive **causal** impact on **educational** outcomes. Indeed, young children today have been rightly encouraged by their schools to develop "mindfulness", "grit" and a "positive mindset".'

'But until now, little has been known about the contribution of such non-cognitive skills to **later life financial success**, and nothing is known for UK graduates compared with non-graduates.'

It is well known that, *on average*, graduates earn considerably more across their lifetimes than do non-graduates. Indeed, the graduate earnings 'premium' has changed little, *on average*, for decades – despite the rapid expansion of the sector.

Meanwhile, higher education finance has been under review: for higher education to be (financially) worthwhile, it is important to know whether graduates are paid more because of the skills *acquired at university* or for the *skills that they already had*.

The new study finds that:

- The **average earnings premium for graduates is about 10%** at age 25, which is when they are last observed in the data used in this research. The return of 10% is much smaller, but consistent with, the average *lifetime* earnings premium of around 30% typically found in previous UK research. This is because, on average, graduate earnings grow quickly as careers develop; but non-graduate earnings rise relatively slowly.
- **Locus of control (LoC) matters most for earnings.** A change in LoC by one standard deviation (a modest difference on the LoC scale) would raise earnings, on average, by about 5% (a big effect).
- **The 10% graduate premium is hardly affected by taking account of the impact of non-cognitive skills.** In other words, on average, LoC raises earnings for non-graduates by about as much as for graduates. This holds, on average, for elite institutions graduates versus the rest – and across degree subjects.
- The new evidence reinforces existing work about the importance of the university curriculum followed: STEM subjects seem to add more value (in terms of earnings),

at least) than do Arts subjects. Moreover, graduates from elite institutions, on average, earn more than those from the less prestigious ones. So, **what you learn matters**.

- But even *within* any given *course*, the variance in earnings is still large – despite prior ability, as measured by cognitive tests such as A-levels, not varying much across students *within* a course. What varies across students *within* courses are their non-cognitive skills: it is mostly the differences in such skills that drive degree class – and give rise to their large pay differentials.
- So, **how well you master what you learn matters too**. Indeed, earnings differentials by degree class (in the Labour Force Survey) are as large today, when a quarter of graduates get firsts, as they were 20 years ago when it was a quarter of this. This suggests that more students have good non-cognitive skills and this is likely to have driven the growth in the proportion of first-class degrees awarded.

The analysis points to the importance of university students' *own* skills as inputs into their *own* further intellectual development – non-cognitive skills *complement* cognitive ability, as well as complementing good quality teaching.

There are some important lessons for young people here:

- Understand that **YOUR** choices matter for your future. Choose to do as well as you can in school. Be mindful of your non-cognitive skills.
- Choose university *if* you think it's the right way for you to develop your skills; but otherwise choose to develop your skills elsewhere. Choosing a dead-end job will end badly.
- Choose the best institution you can get into. Choose a subject that you will be enthusiastic about – one where you will want to choose to put in the effort to be successful. And be sure to choose any opportunity to improve your skills, especially if your chosen subject is, on average, not a high return one.
- Analytical skills are particularly highly valued in the labour market – ask at Open Days precisely **HOW** your course of interest will fill any gaps in your skill set.

Co-author Ian Walker (Professor of Economics at Lancaster) summed up by saying:

'Employers remunerate skills, not qualifications. Students who choose to treat university as consumption will take away only memories – and unfortunately for taxpayers, the loan system makes **THEM** pick up much of the resulting debt.

'But students who choose to engage in university as an investment opportunity will, on average, go on to develop improved skills – and the taxpayer will be forever in their debt'.

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**CONTACT DETAILS:**

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