



**Wang, Z. and Crawford, I. (2018) 'Who are gaining the highly paid elite placements in UK higher education?' *Studies in Higher Education*. doi: 10.1080/03075079.2018.1476482.**

This is an Accepted Manuscript of an article published by Taylor & Francis Group in *Studies in Higher Education* on 21/5/18 available online: <https://doi.org/10.1080/03075079.2018.1476482>

## ResearchSPAce

<http://researchspace.bathspa.ac.uk/>

This pre-published version is made available in accordance with publisher policies.

Please cite only the published version using the reference above.

Your access and use of this document is based on your acceptance of the ResearchSPAce Metadata and Data Policies, as well as applicable law:-

<https://researchspace.bathspa.ac.uk/policies.html>

Unless you accept the terms of these Policies in full, you do not have permission to download this document.

This cover sheet may not be removed from the document.

Please scroll down to view the document.

# Who are gaining the highly paid elite placements in UK higher education?

Zhiqi Wang<sup>a</sup>, Ian Crawford<sup>b1\*</sup>

<sup>a</sup> Bath Business School, University of Bath Spa, Newton Park, Newton St Loe, Bath, BA2 9BN,

UK Email: [z.wang@bathspa.ac.uk](mailto:z.wang@bathspa.ac.uk)

<sup>b</sup> School of Management, University of Bath, Claverton Down, Bath, BA2 7AY, UK Email:

[mnsipc@bath.ac.uk](mailto:mnsipc@bath.ac.uk) Work phone number: +44 (012) 2538 4399

## **Abstract**

This study analyses longitudinal student data to determine the influence of social class, academic performance and other individual factors such as gender, ethnicity and age on entry on the possibility of obtaining highly paid placements in elite professions. Focusing on subject-relevant placements, the findings here strongly support the meritocratic recruitment and rewarding process for such work experience schemes. Prestigious and highly paid placements in elite professional firms are not filled by socially privileged upper middle class students but the academically "brightest" students from a wide range of social and individual backgrounds. Excellent academic performance has been interpreted by elite firms as equivalent to high levels of employability skills and productivity. Finally, there is evidence to suggest that well-paid placements can facilitate socio-economic mobility of working class

---

\*Corresponding author, Ian Crawford, School of Management, University of Bath, Claverton Down, Bath, BA2 7AY, UK Phone: (+) 44 01225384399; Fax: (+) 44 01225386473; Email: [mnsipc@bath.ac.uk](mailto:mnsipc@bath.ac.uk).

students who are academically driven and aspire to gain work experience with elite professional firms despite limited economic resources at their disposal.

**Keywords:** placements; elite professions; salaries; social class; academic ability; gender

## **Introduction**

The extant empirical literature on placement participation in UK higher education paints a convincing picture, that is, academically gifted students have a significantly better chance to obtain a placement than academically less able students by using student data from a wide range of academic disciplines and universities (Crawford & Wang, 2016; Duignan, 2003; Gomez, Lush, & Clements, 2004; Jones, Green, & Higson, 2015; Mandilaras, 2004; Reddy & Moores, 2006, 2012). This phenomenon is termed the self-selection issue, indicating that the placement market favours high achievers probably due to good placement interviews and/or high academic requirements by firms (Duignan, 2003; Mansfield, 2011). On the other hand, a small body of literature explores the impact of social class on voluntary work experience such as internships among British university students through interviews and suggests that upper middle class students are more likely to take internships in university than working class students due to their familial social connections and/or abundant economic resources (Allen, Quinn, Hollingworth, & Rose, 2013; Bathmaker, Ingram, & Waller, 2013; Tholen, Brown, Power, & Allouch, 2013). These contrasting results motivate this study to further investigate these issues by combining these two perspectives together using paid yearlong work experience.

This study examines the combined effects of social class, academic ability, gender, ethnicity and age on placement outcomes such as participation and salary. The differences of placement outcomes between traditional and non-traditional students in terms of social class, ethnicity, gender, age and prior academic achievement need to be investigated because they

are important for two reasons. First, they are at the heart of the long lasting debates about the effects of widening participation on educational and employment outcomes (Boliver, 2013; Rafferty, 2012; J. T. E. Richardson, 2008, 2012; J. T. E. Richardson & Woodley, 2003; ST, 2009). Placements are now a substantial and vital element of UK higher education curricula, driven by the pressure from successive governments, employers and students (Little & Harvey, 2006; Naidoo & Jamieson, 2006; Wilton, 2011, 2012). If market-led placements have been used to mainly advance students from privileged backgrounds and perform a socially-selective role, the widening participation policies and placement system in UK higher education will be at the odds with each other and lead to an increasing level of "over-education" among non-traditional students (Rafferty, 2012; Tsang & Levin, 1985).

Second, although undertaking optional placements is strongly associated with desirable labour market outcomes such as higher employment rates and/or better salaries (Blackwell & Harvey, 1999; Bowes & Harvey, 1999; Brooks & Youngson, 2014; Mason, Williams, & Cranmer, 2009; Weiss, Klein, & Grauenhorst, 2014), the number of students participating in placements fell from 9.6% of the full-time cohort in 1999 to 7.2% in 2009 (E4E, 2011; Little & Harvey, 2006). Barriers such as perceived relevance, lack of flexibility, finance and family connections are cited by students from non-traditional backgrounds such as mature<sup>2</sup>, working class, female or minority as reasons for opting out of placement participation (Allen et al., 2013; Bathmaker et al., 2013; Bullock, Gould, Hejmadi, & Lock, 2009; E4E, 2011; Tibby, 2012). If non-traditional students are aware of the financial benefit of paid placements and the subsequent opportunities to build up social networks with elite professionals which will go beyond their social backgrounds and family connections, more might be enticed to take up

---

<sup>2</sup> Mature students are classified as aged 20 or over when entering in UK higher education (Smith, 2008) and not commonly seen in UK institutions before the 1980's (J.T.E. Richardson, 1994).

the placement option. Social networking with professionals via placements is perceived to be far more important for working class students than upper middle class students (Klein & Weiss, 2011).

To understand placement outcomes among undergraduates, researchers must note that institutions in UK higher education are differentiated in a hierarchy which results in non-traditional students being underrepresented in elite and prestigious universities (Croxford & Raffe, 2015; Dunne, King, & Ahrens, 2014; Reay, 2006; Reay, Crozier, & Clayton, 2010). The institutional reputation is vital in the job market since graduates from elite institutions in industrialised countries have always enjoyed better labour market returns and higher social positions (Boliver, 2013; Morley & Aynsley, 2007; Rivera, 2011; ST, 2009; Tholen et al., 2013; Wakeling & Savage, 2015). Additionally, placement participation does not have the same impact on employment outcomes among graduates from different degree programmes in the same university (Bowes & Harvey, 1999; Brooks & Youngson, 2014; Mason et al., 2009; Wilton, 2012). To mitigate the statistical and significant disparities caused by institutional and degree reputation and resources, the current research centres on students from the same accounting and finance degree with or without an optional placement module in a UK university.

In UK higher education, at the time of research, this university has been considered to have a good international and national reputation, albeit dwarfed by other older elite institutions. Due to its historical connections with science and technology education, the institution has committed to widen participation and employment engagement with leading organisations and businesses. The institution was one of the top five providers of placement students to the business community (E4E, 2011). The accounting and finance degree is specially chosen

because placements in this subject area are traditionally paid and, in some cases, where elite professions are involved, very well remunerated. Elite accounting firms and financial institutions are known for offering the most generous salaries in the UK graduate market (HFR, 2013, 2018). That is hardly a surprise since elite occupations in the UK are located in professions such as law, medicine, accounting and finance (Friedman, Laurison, & Miles, 2015; ST, 2009; Tholen et al., 2013). Additionally, students on the accounting and finance degree have been supported by three dedicated placement officers in the following fashion: first, the relevance and importance of taking a yearlong placement is emphasised to all first year accounting and finance students in a compulsory placement module by placement officers together with past graduates, current placement students and recruiters from elite professional firms; second they help students develop a professional résumé and identify the potential placement positions and organisations; and finally they actively communicate with recruiters in professions who would deliver presentations about how to perform well in interviews and arrange mock interviews with interested students on campus. Although placement officers mainly work with top professional firms, students are given freedom to find placements in alternative firms. Such flexibility is likely to benefit upper middle class students more due to their family connections to the upper echelon of British society.

The remainder of the paper is organized into five sections. It starts with a review of the relationship between work experience, academic performance and social class. Based on the literature review, the research gap is identified. It is followed by a research design in Section 3 which explains data selection, variable construction and methodologies used while the results of the study are presented in Section 4. Finally, Section 5 discusses the findings and conclusions are drawn from the implications of the results and areas for further research identified.

## **Literature review**

Work experience sandwiched in a degree is described in two ways in the literature, namely, internship and placement or work placement. In the US, internship can take various forms although the type of internship which has become a staple in business schools involves a term-length placement of enrolled students in an organisation, sometimes paid and sometimes unpaid, with a faculty supervisor, a company supervisor and some academic credit earned toward the degree (Narayanan, Olk, & Fukami, 2010). Within the UK, ad-hoc, unstructured and self-arranged work experience is called internship which lasts for a short period from a few weeks to months, is obtained by students through their family and/or university connections, involves no formal university and faculty supervision and does not earn any academic credit toward the degree (Allen et al., 2013; Bathmaker et al., 2013; Bullock et al., 2009; Tholen et al., 2013). On the other hand, work experience schemes in UK higher education which are akin to the US style of business internship are termed placement or work placement.

UK universities have responsibility for the establishment, regulation and certification of work experience schemes which result in a variety of placement programmes with various credits, durations and arrangements (Little & Harvey, 2006; Wilton, 2011). There are three main variations of placements in UK higher education: compulsory short (6-weeks) placements, compulsory thin (2x6 months) sandwich placements and compulsory or optional year-long sandwich placements (Little & Harvey, 2006). The placement format discussed here is optional, paid and yearlong sandwiched between the second and final year and forms part of the final degree credits. Not all yearlong placements are paid, depending on subjects, but formal contracts are always stipulated between students and employers to provide training, supervision and assistance to student participants (Auburn, 2007; Bullock et al., 2009; Little & Harvey, 2006; Reddy & Moores, 2006). Similar to the Canadian system (Lehmann &

Taylor, 2015), the UK placement scheme is market based, voluntary and highly competitive which partly explains the perception that social connections of students and their families are important in obtaining subject-relevant work experience in prestigious organisations.

Although consecutive UK governments have pressurised universities to integrate placements into first degree courses (Dearing, 1997; Wilson, 2012) through funding cuts (Marginson, 2008; Naidoo, 2004; Naidoo & Williams, 2014), old and elite institutions have done very little in employer engagement (Bennett & Kane, 2009) and mainly rely on their students to secure non-academically credited internships in elite firms through the "old boys' network" (Tholen et al., 2013). The recent statistics show that nearly 70% of placements from 2003 to 2009 in the UK were filled by students from twenty universities (E4E, 2011), six of which acquired university status before 1992 whilst the rest were former polytechnics and gained university status after 1992 (Crawford & Wang, 2015a). Old and elite institutions have rarely featured in the placement market because they do not provide professional and occupational education programmes such as accounting although their graduates with non-accounting majors are often recruited by top accounting firms (Annisette & Kirkham, 2007; Gammie & Kirkham, 2008; Paisey & Paisey, 2006).

The uniqueness of the placement system in the UK can benefit students from non-elite universities who vie for places in high status and highly paid elite professions. Traditionally, elite professions and firms exclusively recruit from elite institutions and offer highly paid graduate jobs to those who have possessed the right sort of manners, interests and cultural capital (Bourdieu, 1998; Rivera, 2011; Tholen et al., 2013). This recruitment practice is evident in accounting professions as extant studies show that graduates from upper middle class families are preferred to working class graduates (Blackmore, Gribble, & Rahimi, 2015;

Jacobs, 2003). However, if educational elites are not competing for yearlong placements, elite firms would have to adopt an alternative recruitment method for placement candidates instead of traditional selection criteria for graduate trainees.

Much of the literature investigating the implications of internships in the US pays very little attention to the recruitment criteria by employers, in particular, whether employers use academic performance to select potential internship candidates. A theoretical and integrative model which identifies determinants of internship effectiveness proposes academic preparedness as an antecedent variable though the authors confirm that they have yet to locate any studies that have examined the relationship (Narayanan et al., 2010). Neither do the authors suggest academic benefits of internships as student outcomes (Binder, Baguley, Crook, & Miller, 2015; Narayanan et al., 2010). Until now, only two studies by American internship scholars have considered the academic value of internships and suggest that business internships are likely to be offered to bright students with higher grade point averages (Knouse & Fontenot, 2008; Knouse, Tanner, & Harris, 1999), although neither of the studies compare the academic performance of students before internships.

Instead, the yearlong placement literature in the UK methodically investigates academic preparedness and academic benefits surrounding placements. Their results suggest that placement students have consistently and significantly outperformed full-time students from the first and/or second year to graduation on the same accounting or business degree programmes (Crawford & Wang, 2015a, 2016; Duignan, 2003; Gomez et al., 2004; Jones et al., 2015) while the large scale university data further confirms this phenomenon across a wide range of subjects (Reddy & Moores, 2012). Students with poor academic ability are less likely to be selected for a placement, perhaps because of poorer interview performance or

because employers preferentially select students who have achieved higher marks (Duignan, 2003; Mansfield, 2011).

The prominence of academic results in placement studies indicates that firms including elite professions have corresponded excellent academic results to productivity, consistent with human capital theory which sees education as producing skills that are rewarded by employers (Becker, 1964; Bills, 2003; van de Werfhorst, 2011). If placements are offered to academically able students, disadvantaged groups of students, namely, mature, ethnic minority and females, in higher education could be excluded from placements because of their poor academic achievement. A lower academic attainment is observed among ethnic minority groups (Heath & Brinbaum, 2007; J. T. E. Richardson, 2008, 2012) while age and gender have varied impacts from positive to negative on academic performance across different subjects in UK higher education (J. T. E. Richardson & Woodley, 2003). Thus, prior academic achievement and individual factors such as age, ethnicity and gender are routinely controlled by placement scholars (Binder et al., 2015; Crawford & Wang, 2015a, 2016; Crawford, Wang, & Andrews, 2016; Jones et al., 2015; Mansfield, 2011; Reddy & Moores, 2012; Surridge, 2009).

Evidence suggests that ethnicity plays a role in obtaining a business internship among American students, given that whites are more likely to take an internship than African Americans (Knouse et al., 1999). Among British students, there is an association between age and academic outcomes with youngest and mature students gaining most from work experience while males are more likely to benefit more than females (Mansfield, 2011). The gender effect in Mansfield (2011) should be interpreted with caution due to a very small female sample size of eight. A recent large scale study based in one British university sheds

further light on the relationship between placements, ethnicity and gender (Binder et al., 2015). They find that being male and minority did not drastically reduce the likelihood of undertaking a placement and females rather than males appear to benefit more from placements, which is in line with the results reported by another study using accounting and finance students (Crawford et al., 2016).

So far, extant studies documenting academic preparedness and benefits of placements fail to reflect the impacts of socio-economic status on study participants. This is indeed surprising as anecdotal evidence strongly suggests that unpaid work experience would lead to a social exclusion of students who could not afford to work for free (Curiale, 2010; E4E, 2011; Reddy & Moores, 2006, 2012; Siebert & Wilson, 2013; Tibby, 2012). Extant interview and survey studies add credibility to this proposition. The inclination to take extra-curricular activities such as internships is highly correlated to social class, partly because students from upper middle class families highly value additional cultural and symbolic capitals generated from work experience and partly because of their ample supply of economic resources and social connections with the ruling class and elite organisations (Allen et al., 2013; Bathmaker et al., 2013; Dall'Alba & Sidhu, 2015). Although unpaid work experience disadvantages students from poor socio-economic backgrounds with limited financial means, the implications of paid work experience on such students remains unclear and very much under researched in the literature.

Most empirical studies examining internship outcomes do not even mention whether students are paid or not (McHugh, 2017; Narayanan et al., 2010). Two studies respectively show that unpaid interns feel being exploited (Siebert & Wilson, 2013) and have lower satisfaction levels with the internship arrangements than their paid counterparts (McHugh, 2017). No

study has been conducted to investigate the role of paid work experience in social equality and mobility. Paid work experience has a potential to offer a level-playing field for students by removing the gaps between upper middle and low class in terms of financial resources and social connections. It is possible that highly paid placement positions in elite firms can be obtained by the "most talented" students regardless of their socio-economic status. This knowledge gap needs to be examined by a quantitative approach due to its ability to statistically control for all known and relevant factors such as social class, age, gender and ethnicity.

Qualitative research such as interviews and surveys suffer from self-reporting bias (Sitzmann, Ely, Brown, & Bauer, 2010), relying on small self-selected samples of students (Dall'Alba & Sidhu, 2015; Varela & Gatlin-Watts, 2014) and are unable to control for age, gender and ethnicity which can influence the possibility of participating in work experience (Binder et al., 2015; Browne, 2010; Crawford et al., 2016; Knouse et al., 1999; Mansfield, 2011).

Individual factors such as social class, age, gender and ethnicity are extremely important in the recruitment and promotion processes in elite and professional firms (Duff, Ferguson, & Gilmore, 2007; Kim, 2004a, 2004b, 2008; Kornberger, Carter, & Ross-Smith, 2010). Since internships and placements are treated as an extended recruiting and selection process by employers (HFR, 2018; Zhao & Liden, 2010), these individual factors together with academic results are likely to be influential in gaining paid work experience.

### **The Study**

To examine placement outcomes of students from a wide range of social origins and academic ability, this research uses a single case study approach which can be used to develop and test theory (Eisenhardt, 1989). The current study excludes international students from the analyses due to two reasons. First, linguistic skills are unevenly distributed in

society due to social class (Bourdieu, 1991; Watson, 2013). An individual's understanding and use of language reflects their family upbringing and past and current educational experiences (Bourdieu, 1986, 1991; Watson, 2013). It is possible to compare linguistic skills of domestic students by statistically controlling their social backgrounds. Regarding international students, it is impossible to know and control all factors which can influence their linguistic skills in English which is often not their native tongue. Second, international students significantly underperform domestic students across a number of subjects including accounting (Crawford & Wang, 2015b; Iannelli & Huang, 2013; Morrison, Merrick, Higgs, & Metais, 2005) and are far less likely to engage with placements than domestic students (Crawford & Wang, 2015a, 2016; Lucas & Tan, 2013).

#### *Data and sample*

The personal information of British accounting and finance students enrolled between 2005 and 2012 was collected from the central database managed by the registry. The set of data included the enrolment year, the average yearly and final marks, ethnic background, gender, age and social class upon entry. Those who dropped out before graduation were excluded from this study. Information about placement outcomes such as participation and salary was gathered by the placement office based on the written contracts signed by the university, placement student and placement organisation.

The population of British students graduating between 2005 and 2013 numbered 235. Among 235 UK students, 66% or 157 of them took placements while 34% or 78 did not take a placement. The placement participation rate, 66%, was the same as the one reported by Jones et al. (2015) using British students from Ulster University. Individual factors such as socioeconomic status, age, ethnicity and gender among placement and non-placement students were reported in Table 1. Ethnicity was recorded based on information provided by

students when applying to UCAS (University and College Admission Service). Following prior studies (Croxford & Raffe, 2015; Wakeling & Savage, 2015), socioeconomic status was based on student self-reported information and then classified by UCAS using the 2001 National Statistics Socio-economic Classification (NS-SEC) developed by the UK Office for National Statistics from 2004 onwards (ONS, 2005).

Socioeconomic status (shortened to NS-SEC thereafter) is an occupationally grounded classification by differentiating the whole adult population in the UK depending on work situation such as positions in systems of authority and control at work, although degree of autonomy at work is a secondary aspect, and labour market situation such as income, economic security and prospects of economic advancement (ONS, 2005). Socioeconomic status has eight categories from the highest socioeconomic status NS-SEC 1 to the lowest socioeconomic status NS-SEC 8: NS-SEC 1: higher managerial and professional (large employers and higher managerial and profession occupations); NS-SEC 2: lower managerial and professional occupations; NS-SEC 3: intermediate occupations; NS-SEC 4: small employers and own account workers; NS-SEC 5: lower supervisory and technical occupations; NS-SEC 6: semi-routine occupations; NS-SEC 7: routine occupations and NS-SEC 8: never worked and long-term unemployed (ONS, 2005, 2010).

### **Insert Table 1**

Students reserved the right to omit information regarding socioeconomic and ethnicity backgrounds. 17% (39) of 235 students did not report their socioeconomic backgrounds while 6% (13) refused to disclose their ethnicity, which reduced the number of students with all data points to 194. The most frequent socioeconomic class (33%) recorded was of NS-SEC 1: higher managerial and professional occupations, followed by NS-SEC 2: lower managerial and professional occupations (27%). 33% was much higher than the average of 18.94%

reported by Croxford and Raffe (2015) using all UK domiciled university applicants. The difference was likely to be influenced by high university and degree ranking in national and international league tables which was considered to be an important cultural capital for middle class families to possess (Dunne et al., 2014; Reay, 2006; Reay et al., 2010; Sin, 2009). 74% of students were white and 20% non-white (minority). 90% of students were young aged 18 (38%) and 19 (52%) while 57% of them were male and 43% were female, these percentages were in line with business school student data in Ulster (Jones et al., 2015).

To identify the common features of students who participated in highly paid placements, 22 of 157 placement students (Table 1) with missing data points were excluded in Table 2. The remaining 135 placement students with all data points were summarised in Table 2 by salary levels ranging from £6,700 to £36,000 a year and four categories were constructed: over £30,000, between 25,000 and £30,000, between £20,000 and £24,999 and below £20,000. By focusing on the two highest salary categories, it was found that more students from NS-SEC 1 or lower social classes (NS-SEC 3- 8), minorities, male, youngest students (18 years on entry) were in high paid placements than those from NS-SEC 2, white, female and older students.

### **Insert Table 2**

#### *Research methods and variable construct*

A binary regression was deployed to investigate the relationship among social class, academic ability and the placement participation, with a dependent variable taking the value 1 if a student undertook placements and zero otherwise while a regression was employed to examine the types of students who obtained highly paid placements with a dependent variable of salary. Independent variables included ethnicity, gender, age, social class and academic ability. Gender was equal to 1 if the student was male and zero otherwise while ethnicity took

1 if a student was white and zero otherwise. In this institution, formal arrangements for placements commenced at the start of the second year or even during the preceding summer (Bullock et al., 2009). Thus, it was conjectured that placement organisations assessed academic ability of placement applicants by first year average marks based on this timeline. Academic ability in this study was represented by average academic marks such as 45 out of 100 obtained by students in their first year study.

Variables such as age and social class were constructed based on the dominant groups presented in Tables 1 and 2. Age (18 or 19) on entry had two big groups (Tables 1 and 2) so was constructed into two dummy variables: Age 1 (age 18=1, others=0), age 2 (age 19=1, others=0). NS-SEC represented social class, consistent with prior studies (Croxford & Raffe, 2015; Reay, 2006; Reay et al., 2010; Wakeling & Savage, 2015). NS-SEC 1 was used here to resemble the ruling upper middle class and equalled 1 if a student was classified as NS-SEC 1 by UCAS and zero otherwise. The second biggest social class was NS-SEC 2 representing middle class and took 1 if a student was grouped into NS-SEC 2 by UCAS and zero otherwise. That left working class students who were from the remaining NS-SEC categories between 3 and 8, following previous research (Croxford & Raffe, 2015; Reay et al., 2010). The first year average was used here to represent academic ability, similar to prior studies (Jones et al., 2015; Mansfield, 2011; Surridge, 2009).

## **Results**

### *Binary regression results*

The binary regression results were reported in Table 3 using 194 placement and non-placement students with all relevant data points and revealed that the regression was significant at 1% level, explaining 17% of the variability in the chance of undertaking a placement. To interpret the results, it was essential to use the  $\exp(B)$  value, which represented the odds of a student undertaking a placement after the predictor variable changes by one unit

(Field, 2005). Except for the year 1 average, all other independent variables were not statistically significant so had no influence in placement participation. Academic ability was statistically significantly related to placement participation at 1% level. 1.10 in Table 3 indicated that if student A scored 10% higher on year 1 average than student B, it made student A 11 times more likely to undertake a placement than student B.

### **Insert Table 3**

#### *Regression results*

Regression results were reported in Table 4 using 135 placement students without missing data points and revealing independent variables which were closely associated with salaries earned on placements. The regression was significant at a 5% level and able to explain 7% of the variability in the dependent variable, salary. It seemed that the only significant factor in deciding the chance of a high salary was again the year 1 average. The relation between salary and academic ability was £229.34 to 1%. For instance, if student A scored 10% higher on year 1 average than student B, student A would obtain a salary which was £2,293.4 higher than student B.

### **Insert Table 4**

#### **Discussion and conclusions**

As the findings show, individual factors such as age, gender and ethnicity as well as social class are not the determinants of placement outcomes such as participation and salary.

Academic ability is the only factor deciding who can obtain paid and subject-relevant work experience in the form of accounting or finance yearlong placements in multinational and professional firms. Evidence strongly suggests a positive link between academic results and one's chance to secure a paid placement. In addition, academic ability is also the only variable highly associated with economic outcomes of yearlong placements, salary.

We are not aware of previous studies of the relationship between the work experience participation and social class while controlling for academic results, age, gender and ethnicity and of the association between academic results and financial rewards of work experience while controlling for social class, age, gender and ethnicity. The positive correlation between academic results and the placement participation is consistent with prior studies which show the importance of good academic performance in securing placements (Crawford & Wang, 2015a, 2016; Duignan, 2003; Gomez et al., 2004; Jones et al., 2015) and interview studies investigating the recruitment process for graduate jobs in leading accounting practices (Annisette & Kirkham, 2007; Blackmore et al., 2015; Cheng, Kang, Roebuck, & Simnett, 2009; Duff, 2017). Similarly, the strong link between academic results and placement salary supports the human capital theory of equating academic results to individual productivity (Becker, 1964; Bills, 2003; Schultz, 1961) and in line with prior studies which identify a positive correlation between earnings and/or salary after graduation and grades (Kittelsen Røberg & Helland, 2017; Roth & Clarke, 1998).

Our results show that the paid placement market is a level-playing field for students since working class students, similar to upper middle class students, are able to secure highly paid placements in professional and elite accounting and financial firms. Their success in the paid placement market suggests that working class students are academically on a par with upper middle class students. It is therefore necessary to examine the relationship between social class and academic success measured by the first, second, final year and degree averages while controlling age, ethnicity, gender and prior academic achievement. It is found that academic success at all stages of degree study is statistically unrelated to social class. This result is unusual since the university sector is traditionally a stronghold of white upper middle class people (Reay, 2006; Reay et al., 2010) and students from low socio-economic status

perform less well than upper middle class students (Thiele, Singleton, Pope, & Stanistreet, 2016). The possible explanation is that this study does not separate students into the NS-SEC 1 group and the lower socio-economic groups (NS-SEC 4-7) as in their study because our sample students are largely from the first two NS-SEC categories. So, the academic performance of three NS-SEC groups, NS-SEC 1, NS-SEC 2 and NS-SEC 3-7 is investigated here.

The meritocratic nature of allocating paid yearlong placements may contradict some interview studies exploring the recruitment and promotion process in elite accounting firms by interviews (Blackmore et al., 2015; Duff et al., 2007; Jacobs, 2003; Kim, 2004a, 2004b, 2008; Kornberger et al., 2010), but can be explained by other interview studies revealing a class change in elite accounting and banking industries in recent decades (Ashley & Empson, 2016; Carter & Spence, 2014; Riach & Cutcher, 2014; Spence & Carter, 2014; Spence, Dambrin, Carter, Husillos, & Archel, 2015). Traders in financial firms and partners in the leading four accounting firms are often the product of state schools and provincial universities and of working or low middle class. It is likely that these professionals are now the gatekeepers for elite professions and it would be natural for them to recruit bright working class students for highly paid yearlong placements given that such work experience offers employers flexibility with no expectation of a long-term employment commitment (McHugh, 2017) while education elites are not competing in the placement market in the UK (Bennett & Kane, 2009; E4E, 2011).

Interview studies can be limited by the number and type of professionals interviewed and the lack of control for relevant individual factors such as age, gender and ethnicity. The current research utilises the majority of the student population after eliminating 16.5% of the 235

student population and 12.7% of the 157 placement population with missing data points for socio-economic status and ethnicity. In the study of higher education, nearly all quantitative analyses draw from incomplete datasets and missing data can have a dramatic influence on the statistical results (Cox, McIntosh, Reason, & Terenzini, 2014) although full-case analysis using only students with complete data is universally used in prior studies investigating the impact of higher education policies such as expansion and widening participation on academic performance of disadvantaged students (Hoare & Johnston, 2011; J. T. E. Richardson, 2008, 2012; J. T. E. Richardson & Woodley, 2003; Thiele et al., 2016). It is possible that the lack of explanatory power of social class is related to the percentages of individuals who refused to report their ethnicity and socio-economic status though our result is partly supported by a recent quantitative study in the UK which suggests that although traditional professions are still dominated by upper middle class people, there is evidence of the upwardly mobile in eight elite occupations, located largely in the business sector (Friedman et al., 2015).

This study is an initial attempt to explore the influence of financial compensations of work experience on the social mobility of student participants. Social mobility studies in the UK are exclusively focused on graduates (Friedman et al., 2015; Wakeling & Savage, 2015). Work experience such as highly paid placements offered by elite accounting and finance professions is a transitional and crucial field between university and workplace which can facilitate social mobility of working class students. This study supports the claims made by consecutive UK governments when promoting social integration through widening participation and expansion in higher education (Reay et al., 2010; Wilton, 2011) since bright working class students are treated in the same way as talented upper middle class students. Future studies should be carried out to identify the journey of successful working class

students who break the 'class ceiling' to obtain highly paid placements in elite professions which would encourage other working class students to participate in paid yearlong placements.

It is also found that white and minority students may not similarly benefit from placements as white students are twice more likely to secure a paid placement than minorities, albeit statistically insignificant at a 5% level. This finding highlights the necessity of considering ethnicity in studies which aim to understand social inequality in placement participation as well as the potential benefits of undertaking placements. The data constraints such as the sample size of 35 minority students and only four minority female students taking placements are too pronounced to identify statistically significant differences between minority and white placement and non-placement students in binary regression. The differences between white and minority as well as between female and male minority indicate a direction for further studies which need to collect a large sample for minority students to reduce the possibility of the Type II error in statistical analysis (Field, 2005).

Finally, as demonstrated by this research, universities which are not in the 'golden triangle' (Wakeling & Savage, 2015) can use paid placements and academically gifted students to boost their relations with elite professional firms. However, this means that paid placements are seen as elite support by ignoring disadvantaged groups of students with low academic attainment (Binder et al., 2015). In this sense, further research is required to explore whether academically weak students can be financially supported by higher education and government to undertake unpaid and/or non-subject relevant placements. Researchers have called for universities to provide financial aids to students undertaking unpaid placements or internships in small and medium sized firms which cannot afford to pay for interns (Helyer &

Lee, 2014; Reddy & Moores, 2006, 2012). Likewise, because the yearlong placement has to be undertaken between the penultimate and final year of study, the lack of flexibility evidently lowers the placement participation among students (Bullock et al., 2009). It is thus necessary to explore the possibility of disadvantaged groups of students to achieve social mobility through other work experience options such as summer placements or part-time jobs. Such a call is not only relevant to academically weak students from disadvantaged backgrounds but is a question that must be asked by governments and businesses which have firmly put widening participation and employer engagement on the agendas of higher education.

### References:

- Allen, K., Quinn, J., Hollingworth, S., & Rose, A. (2013). Becoming employable students and 'ideal' creative workers: exclusion and inequality in higher education work placements. *British Journal of Sociology of Education*, 34(3), 431-452.
- Annisette, M., & Kirkham, L. M. (2007). The advantages of separateness explaining the unusual profession-university link in English chartered accountancy. *Critical Perspectives on Accounting*, 18(1), 1-30.
- Ashley, L., & Empson, L. (2016). Convenient fictions and inconvenient truths: the role of paradox in understanding female career progression within leading UK accountancy firms. *Critical Perspectives on Accounting*, DOI: 10.1016/j.cpa.2015.05.002.
- Auburn, T. (2007). Identity and placement learning: Student accounts for the transition back to university following a placement year. *Studies in Higher Education*, 32(1), 117-133.
- Bathmaker, A.-M., Ingram, N., & Waller, R. (2013). Higher education, social class and the mobilisation of capitals: recognising and playing the game. *British Journal of Sociology of Education*, 34(5-6), 723-743.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis*. New York: Columbia University Press.
- Bennett, R., & Kane, S. (2009). Employer engagement practices of UK business schools and departments: an empirical investigation. *Journal of Vocational Education and Training*, 61(4), 495-516.
- Bills, B. D. (2003). Credentials, Signals, and Screens: Explaining the Relationship between Schooling and Job Assignment *Review of Educational Research*, 73(4), 441-469.
- Binder, J. F., Baguley, T., Crook, C., & Miller, F. (2015). The academic value of internships: Benefits across disciplines and student backgrounds. *Contemporary Educational Psychology*, 41, 73-82. doi:https://doi.org/10.1016/j.cedpsych.2014.12.001
- Blackmore, J., Gribble, C., & Rahimi, M. (2015). International education, the formation of capital and graduate employment: Chinese accounting graduates' experiences of the Australian labour market. *Critical Studies in Education*, Forthcoming, DOI:10.1080/17508487.2015.1117505.

- Blackwell, A., & Harvey, L. (1999). *Destinations and reflections: Careers of art, craft and design graduates*. Retrieved from Birmingham:
- Boliver, V. (2013). How Fair is Access to More Prestigious Universities. *British Journal of Sociology*, 64(2), 34-364.
- Bourdieu, P. (1986). *The forms of capital*. New York: Greenwood.
- Bourdieu, P. (1991). *Language and symbolic power*. Cambridge: Polity Press.
- Bourdieu, P. (1998). *The State Nobility: Elite Schools in the Field of Power*. Oxford: Polity Press.
- Bowes, L., & Harvey, L. (1999). *The impact of sandwich education on the activities of graduates six months past-graduation*. Retrieved from London:
- Brooks, R., & Youngson, L. P. (2014). Undergraduate work placements: an analysis of the effects on career progression. *Studies in Higher Education*, 41(9), 1563-1578.
- Browne, L. (2010). As UK policy strives to make access to higher education easier for all, is discrimination in employment practice still apparent? *Journal of Vocational Education & Training*, 62(3), 313-326. doi:10.1080/13636820.2010.509549
- Bullock, K., Gould, V., Hejmadi, M., & Lock, G. (2009). Work placement experience: should I stay or should I go? *Higher Education Research and Development*, 28(5), 481-494.
- Carter, C., & Spence, C. (2014). Being a successful professional: an exploration of who makes partner in the Big 4. *Contemporary Accounting Research*, 31(4), 949-981.
- Cheng, M., Kang, H., Roebuck, P., & Simnett, R. (2009). The Employment Landscape for Accounting Graduates and Work Experience Relevance. *Australian Accounting Review*, 19(4), 342-351.
- Cox, B. E., McIntosh, K., Reason, R. D., & Terenzini, P. T. (2014). Working with missing data in higher education research: A primer and real-world example. *The Review of Higher Education*, 37(3), 377-402.
- Crawford, I., & Wang, Z. (2015a). The effect of work placements on the academic performance of Chinese students in UK higher education. *Teaching in Higher Education*, 20(6), 569-586.
- Crawford, I., & Wang, Z. (2015b). The impact of individual factors on the academic attainment of Chinese and UK students in higher education *Studies in Higher Education*, 40(5), 902-920.
- Crawford, I., & Wang, Z. (2016). The impact of placements on the academic performance of UK and international students in higher education. *Studies in Higher Education*, 41(4), 712-733.
- Crawford, I., Wang, Z., & Andrews, G. (2016). Exploring the influence of individual and academic differences on the placement participation rate among international students. *Education + Training*, 58(4), 342-357.
- Croxford, L., & Raffe, D. (2015). The iron law of hierarchy? Institutional differentiation in UK higher education. *Studies in Higher Education*, 40(9), 1625-1640.
- Curiale, J. (2010). America's New Glass Ceiling: Unpaid Internships, the Fair Labor Standards Act, and the Urgent Need for Change. *Hastings Law Journal*, 61, 1531-1560.
- Dall'Alba, G., & Sidhu, R. (2015). Australian undergraduate students on the move: experiencing outbound mobility. *Studies in Higher Education*, 40(4), 721-744.
- Dearing, R. (1997). *Higher education in the learning society*. Retrieved from London:
- Duff, A. (2017). Social mobility and Fair Access to the accountancy profession in the UK: Evidence from Big Four and mid-tier firms. *Accounting, Auditing & Accountability Journal*, 30(5), 1082-1110. doi:doi:10.1108/AAAJ-10-2012-1133
- Duff, A., Ferguson, J., & Gilmore, K. (2007). Issues concerning the employment and employability of disabled people in UK accounting firms: An analysis of the views of

- human resource managers as employment gatekeepers. *British Accounting Review*, 39(1), 15-38.
- Duignan, J. (2003). Placement and adding value to the academic performance of undergraduates: Reconfiguring the architecture-An empirical investigation. *Journal of Vocational Education and Training*, 55(3), 335-350.
- Dunne, M., King, R., & Ahrens, J. (2014). Applying to higher education: comparisons of independent and state schools. *Studies in Higher Education*, 39(9), 1649-1667.
- Education for Engineering. E4E. (2011). *Sandwich courses in higher education: a report on current provision and analysis of barriers to increasing participation*. London: The Royal Academy of Engineering.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Field, A. (2005). *Discovering statistics using SPSS* (Second ed.). London: SAGE Publications.
- Friedman, S., Laurison, S., & Miles, A. (2015). Breaking the 'class ceiling'? Social mobility into Britain's elite occupations. *The Sociological Review*, 63(2), 259-289.
- Gammie, E., & Kirkham, L. M. (2008). Breaking the link with a university education in the creation of a chartered accountant: the ICAS story. *British Accounting Review*, 40(4), 356-375.
- Gomez, S., Lush, D., & Clements, M. (2004). Work placements enhance the academic performance of bioscience undergraduates. *Journal of Vocational Education and Training*, 56(3), 373-386.
- Heath, A., & Brinbaum, Y. (2007). Explaining ethnic inequalities in educational attainment. *Ethnicities*, 7(2), 133-144.
- Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly*, 68(3), 348-372.
- High Fliers Research. HFR. (2013). *The Graduate Market in 2013*. London: High Fliers Research Limited.
- High Fliers Research. HFR. (2018). *The graduate market in 2018*. London: High Fliers Research Limited.
- Hoare, A., & Johnston, R. (2011). Widening participation through admissions policy – a British case study of school and university performance. *Studies in Higher Education*, 36(1), 21-41. doi:10.1080/03075070903414297
- Iannelli, C., & Huang, J. (2013). Trends in participation and attainment of Chinese students in UK higher education. *Studies in Higher Education*, 39(5), 805-822.
- Jacobs, K. (2003). Class reproduction in professional recruitment: Examining the accounting profession. *Critical Perspectives on Accounting*, 14(5), 569-596.
- Jones, C. M., Green, J. P., & Higson, H. E. (2015). Do work placements improve final year academic performance or do high calibre students choose to do work placements? *Studies in Higher Education*, 42(6), 976-992.
- Kim, S. (2004a). Imperialism without empire: silence in contemporary accounting research on race/ethnicity. *Critical Perspectives on Accounting*, 15(1), 95-133.
- Kim, S. (2004b). Racialized gendering of the accounting profession: toward an understanding of Chinese women's experiences in accountancy in New Zealand. *Critical Perspectives on Accounting*, 15(3), 400-427.
- Kim, S. (2008). Whose voice is it anyway? Rethinking the oral history method in accounting research on race, ethnicity and gender. *Critical Perspectives on Accounting*, 19(8), 1346-1369.
- Kittelsen Røberg, K. I., & Helland, H. (2017). Do grades in higher education matter for labour market rewards? A multilevel analysis of all Norwegian graduates in the period

- 1990–2006. *Journal of Education and Work*, 30(4), 383-402.  
doi:10.1080/13639080.2016.1187265
- Klein, M., & Weiss, F. (2011). Is forcing them worth the effort? Benefits of mandatory internships for graduates from diverse family backgrounds at labour market entry *Studies in Higher Education*, 36(8), 969-987.
- Knouse, S. B., & Fontenot, G. (2008). benefits of the business college internship: a research review. *Journal of Employment Counseling*, 45(2), 61-66. doi:10.1002/j.2161-1920.2008.tb00045.x
- Knouse, S. B., Tanner, J. R., & Harris, E. W. (1999). The Relation of College Internships, College Performance, and Subsequent Job Opportunity. *Journal of Employment Counseling*, 36(1), 35-43. doi:10.1002/j.2161-1920.1999.tb01007.x
- Kornberger, M., Carter, C., & Ross-Smith, A. (2010). Changing gender domination in a Big Four accounting firm: flexibility, performance and client service in practice *Accounting, Organizations and Society*, 35(8), 775-791.
- Lehmann, W., & Taylor, A. (2015). On the role of habitus and field in apprenticeships. *Work, Employment and Society*, 29(4), 607-623.
- Little, B., & Harvey, L. (2006). *Learning through work placements and beyond*. Retrieved from York:
- Lucas, U., & Tan, L. P. (2013). Developing a capacity to engage in critical reflection: students' 'ways of knowing' within an undergraduate business and accounting programme. *Studies in Higher Education*, 38(1), 104-123.
- Mandilaras, A. (2004). Industrial placement and degree performance: evidence from a British higher institution. *International Review of Economics Education*, 3(1), 39-51.
- Mansfield, R. (2011). The effect of placement experience upon final-year results for surveying degree programmes. *Studies in Higher Education*, 36(8), 939-952.
- Marginson, S. (2008). Global field and global imaging: Bourdieu and worldwide higher education. *British Journal of Sociology of Education*, 29(3), 303-315.
- Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiative in higher education: what effects do they have on graduate labour market outcomes? *Education Economics*, 17(1), 1-30.
- McHugh, P. P. (2017). The impact of compensation, supervision and work design on internship efficacy: implications for educators, employers and prospective interns. *Journal of Education and Work*, 30(3), 367-382.
- Morley, L., & Aynsley, S. (2007). Employers, quality and standards in higher education: shared values and vocabularies or elitism and inequalities? . *Higher Education Quarterly*, 61(3), 229-249.
- Morrison, J., Merrick, B., Higgs, S., & Metais, J. L. (2005). Researching the performance of international students in the UK. *Studies in Higher Education*, 30(3), 327-339.
- Naidoo, R. (2004). Fields and institutional strategy: Bourdieu on the relationship between higher education, inequality and society. *British Journal of Sociology of Education*, 25(4), 457-471.
- Naidoo, R., & Jamieson, I. M. (2006). Empowering participants or corroding learning? Towards a research agenda on the impact of consumerism in higher education. *Journal of Educational Policy*, 20(3), 267-281.
- Naidoo, R., & Williams, J. (2014). The neoliberal regime in English higher education: charters, consumers and the erosion of the public good. *Critical Studies in Education*, *Forthcoming*, DOI: 10.1080/17508487.17502014.17939098.
- Narayanan, K. V., Olk, M. P., & Fukami, V. C. (2010). Determinants of internship effectiveness: An exploratory model. *Academy of Management Learning & Education*, 9(1), 61-80.

- Office for National Statistics. ONS. (2005). *The National Statistics Socio-economic Classification-User Manual*. Basingstoke, Hampshire: Palgrave MacMillan.
- Office for National Statistics. ONS. (2010). Standard Occupational Classification (SOC) Hierarchy. London: Office for National Statistics.  
[http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dev3/ONS\\_SOC\\_hierarchy\\_view.html](http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dev3/ONS_SOC_hierarchy_view.html). Accessed May 16, 2016.
- Paisey, C., & Paisey, J. N. (2006). Cutting to the core? A reflection upon recent education policy debates within the Institute of Chartered Accountants in England and Wales. *British Accounting Review*, 38(1), 31-61.
- Rafferty, A. (2012). Ethnic penalties in graduate level over-education, unemployment and wages: evidence from Britain. *Work, Employment and Society*, 26(6), 987-1006.
- Reay, D. (2006). The zombie stalking English Schools: social calss and educational inequality. *British Journal of Educational Studies*, 54(3), 288-307.
- Reay, D., Crozier, G., & Clayton, J. (2010). Fitting in or standing out: working-class students in UK higher education. *British Educational Research Journal*, 36(1), 107-124.
- Reddy, P., & Moores, E. (2006). Measuring the benefits of a psychology placement year. *Assessment and Evaluation in Higher Education*, 31(5), 551-567.
- Reddy, P., & Moores, E. (2012). Placement year academic benefit revisited: effects of demographics, prior achievement and degree programme. *Teaching in Higher Education*, 17(2), 153-165.
- Riach, K., & Cutcher, L. (2014). Built to last: ageing, class and the masculine body in a UK hedge fund. *Work, Employment and Society*, 28(5), 771-787.
- Richardson, J. T. E. (1994). Mature students in higher education: I - a literature survey on approaches to studying. *Studies in Higher Education*, 19(3), 309-325.
- Richardson, J. T. E. (2008). The attainment of ethnic minority students in UK higher education. *Studies in Higher Education*, 33(1), 33-48.
- Richardson, J. T. E. (2012). The attainment of White and ethnic minority students in distance education. *Assessment and Evaluation in Higher Education*, 37(4), 393-408.
- Richardson, J. T. E., & Woodley, A. (2003). Another look at the role of age, gender and subject as predictors of academic attainment in higher education. *Studies in Higher Education*, 28(4), 475-493.
- Rivera, A. L. (2011). Ivies, extracurricular, and exclusion: elite employers' use of educational credentials. *Research in Social Stratification and Mobility*, 29(1), 71-90.
- Roth, P. L., & Clarke, R. L. (1998). Meta-Analyzing the Relation between Grades and Salary. *Journal of Vocational Behavior*, 53(3), 386-400.  
 doi:<https://doi.org/10.1006/jvbe.1997.1621>
- Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51(1), 1-17.
- Siebert, S., & Wilson, F. (2013). All work and no pay: consequences of unpaid work in the creative industries. *Work, Employment and Society*, 27(4), 711-721.  
 doi:10.1177/0950017012474708
- Sin, I. L. (2009). The aspiration for social distinction: Malaysian students in a British university. *Studies in Higher Education*, 34(3), 285-299.
- Sitzmann, T., Ely, K., Brown, K. G., & Bauer, K. N. (2010). Self-assessment of knowledge: a cognitive learning or affective measure? *Academy of Management Learning and Education*, 9(2), 169-191.
- Smith, J. (2008). *Mature learners: a synthesis of research*. Higher Education Academy Retrieved from [www.heacademy.ac.uk/evidencenet](http://www.heacademy.ac.uk/evidencenet).
- Spence, C., & Carter, C. (2014). An exploration of the professional habitus in the Big 4 accounting firms. *Work, Employment and Society*, 28(6), 949-962.

- Spence, C., Dambrin, C., Carter, C., Husillos, J., & Archel, P. (2015). Global ends, local means: cross-national homogeneity in professional service firms. *Human Relations*, 68(2), 1-24.
- Sutton Trust. ST. (2009). *The Educational Backgrounds of Leading Lawyers, Journalists, Vice Chancellors, Politicians, Medics and Chief Executives*. London: The Sutton Trust.
- Surridge, I. (2009). Accounting and finance degrees: Is the academic performance of placement students better? . *Accounting Education*, 18(4-5), 471-485.
- Thiele, T., Singleton, A., Pope, D., & Stanistreet, D. (2016). Predicting students' academic performance based on school and socio-demographic characteristics. *Studies in Higher Education*, 41(8), 1424-1446. doi:10.1080/03075079.2014.974528
- Tholen, G., Brown, P., Power, S., & Allouch, A. (2013). The role of networks and connections in educational elites' labour market entrance. *Research in Social Stratification and Mobility*, 34, 142-154.
- Tibby, M. (2012). *Employer and student perspective of employability* Retrieved from York:
- Tsang, M. C., & Levin, H. M. (1985). The economics of overeducation. *Economics of Education Review*, 4(2), 93-104.
- van de Werfhorst, H. G. (2011). Skill and education effects on earnings in 18 Countries: The role of national educational institutions. *Social Science Research*, 40(4), 1078-1090. doi:<https://doi.org/10.1016/j.ssresearch.2011.03.004>
- Varela, E. O., & Gatlin-Watts, R. (2014). The development of the global manager: an empirical study on the role of academic international sojourns. *Academy of Management Learning & Education*, 13(2), 187-207.
- Wakeling, P., & Savage, M. (2015). Entry to elite positions and the stratification of higher education in Britain. *The Sociological Review*, 63(2), 293-320.
- Watson, J. (2013). Profitable portfolios: capital that counts in higher education. *British Journal of Sociology of Education*, 34(3), 412-430.
- Weiss, F., Klein, M., & Grauenhorst, T. (2014). The effects of work experience during higher education on labour market entry: learning by doing or an entry ticket? *Work, Employment and Society*, 28(5), 788-807.
- Wilson, T. (2012). *A review of business–university Collaboration*. Retrieved from London:
- Wilton, N. (2011). Do employability skills really matter in the UK graduate labour market? The case of business and management graduates. *Work, Employment and Society*, 25(1), 85-100.
- Wilton, N. (2012). The impact of work placements on skills development and labour market outcomes for business and management graduates. *Studies in Higher Education*, 37(5), 603-620.
- Zhao, H., & Liden, C. R. (2010). Internship: a recruitment and selection perspective. *Journal of Applied Psychology*, 96(1), 221-229.

Table 1

Descriptive statistics of sample students by placement experience, socioeconomic status, gender, age and ethnicity

<b>NS-SEC categories</b>	<b>Placement</b>	<b>Percent</b>	<b>Non-placement</b>	<b>Percent</b>	<b>Total</b>	<b>Percent</b>
NS-SEC1: Higher managerial and professional occupations	57	74%	20	26%	77	33%
NS-SEC2: Lower managerial and professional occupations	46	73%	17	27%	63	27%
NS-SEC3: Intermediate occupations	9	56%	7	44%	16	7%
NS-SEC4: Small employers and own account workers	10	67%	5	33%	15	6%
NS-SEC5: Lower supervisory and technical occupations	6	86%	1	14%	7	3%
NS-SEC6: Semi-routine occupations	8	57%	6	43%	14	6%
NS-SEC7: Routine occupations	1	25%	3	75%	4	1%
NS-SEC8: Never worked and long-term unemployed	0	0%	0	0%	0	0%
9: Not reported	20	51%	19	49%	39	17%
<b>Ethnicity</b>						
White	126	72%	49	28%	175	74%
Non-white	25	53%	22	47%	47	20%
Not reported	6	46%	7	54%	13	6%
<b>Entry age</b>						
18	65	74%	23	26%	88	38%
19	78	63%	45	37%	123	52%
20	12	67%	6	33%	18	8%
21	1	33%	2	67%	3	1%
22	1	33%	2	67%	3	1%
<b>Gender</b>						
Females	67	66%	34	34%	101	43%
Males	90	67%	44	33%	134	57%
<b>Total</b>	<b>157</b>	<b>66%</b>	<b>78</b>	<b>34%</b>	<b>235</b>	<b>100%</b>

Notes: Percent for placement and non-placement is computed by using the total number of students for each category. The percent in the final column is based on the total number of 235 students.

Table 2

Descriptive statistics of placement students by salary, socioeconomic status, gender, age and ethnicity

SEC	Placement salaries								Total	Percent
	Over £30K	Percent	25-30K	Percent	20-24,999K	Percent	below 20K	Percent		
NS-SEC1	8	44%	6	55%	20	53%	22	32%	56	41%
NS-SEC2	5	28%	2	18%	11	29%	27	40%	45	33%
NS-SEC3, 4, 5, 6 and 7	5	28%	3	27%	7	18%	19	28%	34	25%
<b>Ethnicity</b>										
White	15	83%	9	82%	36	95%	56	82%	116	86%
Non-white	3	17%	2	18%	2	5%	12	18%	19	14%
<b>Entry age</b>										
18	11	61%	7	64%	16	42%	22	32%	56	41%
19	6	33%	3	27%	18	47%	41	60%	68	50%
Others (20, 21 and 22)	1	6%	1	9%	4	11%	5	7%	11	8%
<b>Gender</b>										
Females	4	22%	2	18%	20	53%	28	41%	54	40%
Males	14	78%	9	82%	18	47%	40	59%	81	60%
<b>Total</b>	18	100%	11	100%	38	100%	68	100%	135	100%

Notes: This table includes all placements students who do not have missing data points such as age, gender, social class and ethnicity. In total, 135 placement students having all relevant data points. NS-SEC 1: higher managerial and professional (large employers and higher managerial and profession occupations); NS-SEC 2: Lower managerial and professional occupations; NS-SEC 3: intermediate occupations; NS-SEC 4: small employers and own account workers; NS-SEC 5: lower supervisory and technical occupations; NS-SEC 6: semi-routine occupations and NS-SEC 7: routine occupations. Percent is computed by using the total number of placement students in each salary category.

Table 3  
Results of a binary regression

Dependent variable = PLAC	
Constant	
B	-6.80
Exp(B)	<b>0.00***</b>
<i>P value</i>	0.00
Age1	
B	0.40
Exp(B)	1.49
<i>P value</i>	0.52
Age2	
B	0.13
Exp(B)	1.14
<i>P value</i>	0.83
SEC1	
B	0.70
Exp(B)	2.02
<i>P value</i>	0.09
SEC2	
B	0.62
Exp(B)	1.86
<i>P value</i>	0.14
Gender	
B	0.49
Exp(B)	1.63
<i>P value</i>	0.16
White	
B	0.76
Exp(B)	2.13
Sig (p-value)	0.07
Y1 Ave	
B	0.10
Exp(B)	<b>1.10***</b>
<i>P value</i>	0.00
Nagelkerke R Square	0.17
Chi-Square	<b>25.33***</b>
<i>P value</i>	0.00
No. Students	194

Notes: This table includes all sample students who do not have missing data points such as age, gender, social class and ethnicity. In total, 194 placement and non-placement students having all relevant data points.

The dependent variable takes 1 if a student undertakes a placement and zero otherwise. Age1 is equal to 1 if a student is aged 18 on entry and zero otherwise. Age2 takes 1 if a student is

aged 19 on entry and zero otherwise. NS-SEC1 is equal to 1 if a student has a parent in higher managerial class and zero otherwise. NS-SEC2 takes 1 if a student has a parent in lower managerial class and zero otherwise. Y1 Ave represents the grade average gained in the first year in university.

\*\*\* and \*\* Significant at 1% and 5% levels, respectively.

Table 4  
Results of regression

	<b>Salary</b>
Constant	4,748.24
<i>P value</i>	0.39
Age1	421.56
<i>P value</i>	0.83
Age2	-1,996.75
<i>P value</i>	0.32
SEC1	658.19
<i>P value</i>	0.62
SEC2	-271.66
<i>P value</i>	0.84
Gender	1,265.03
<i>P value</i>	0.25
White	1,128.14
<i>P value</i>	0.46
Y1 Ave	<b>229.34***</b>
<i>P value</i>	0.00
Adjusted R Square	0.07
F	<b>2.40**</b>
No. Students	135.00

Notes: This table includes all placements students who do not have missing data points such as age, gender, social class and ethnicity. In total, 135 placement students having all relevant data points.

The dependent variable is salary paid for a placement. Age1 is equal to 1 if a student is aged 18 on entry and zero otherwise. Age2 takes 1 if a student is aged 19 on entry and zero otherwise. NS-SEC1 is equal to 1 if a student has a parent in higher managerial class and zero otherwise. NS-SEC2 takes 1 if a student has a parent in lower managerial class and zero otherwise. Y1 Ave represents the grade average gained in the first year in university.

\*\*\* and \*\* Significant at 1% and 5% levels, respectively.