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Applying academic selection criterion to Work-Integrated Learning programs: Risk management or perpetuating inequality?

Abstract

This study explores whether academic selection criterion should be imposed on students wishing to participate in work-integrated learning (WIL) during their degree studies. Its conceptual framework addresses the limitations of human capital theory and draws on theories about social and cultural capital to understand the role of WIL in developing individual employability. It explores whether WIL should be open to all students, particularly given those who perform less well academically may be of lower socio-economic status with fewer networks and less developed cultural capital. The relationship between academic course average and workplace performance during WIL was examined, rated by 2012 undergraduates and their workplace supervisors. The more academically successful students displayed greater confidence in their workplace performance yet there was no relationship between academic achievement and workplace performance from the supervisor perspective. The removal of academic selection criterion is recommended and more equitable strategies for recruiting suitable students are discussed.

Key words

Graduate employability; GPA; Work-Integrated Learning; work-based learning.

Introduction

Work-Integrated Learning (WIL), also referred to as experiential learning, cooperative education and work-based learning in regions beyond Australia, is considered pivotal to preparing graduates for future career success (Jackson and Wilton 2016; Smith, Ferns, and Russell 2014). It comprises ‘placement WIL’ – such as internships, placements or practicums – or where a student is not fully immersed in the workplace yet undertakes and is assessed in an authentic learning experience with an industry partner. This may include simulations, project-based learning requiring analysis, reasoning, identifying solutions and the packaging of appropriate strategies for a particular scenario or the provision of consultancy services under the guidance of appropriate industry mentors.

Higher education (HE) providers are particularly keen to engage in WIL as a means of enhancing employability (Cooper, Orrell, and Bowden 2010) and widely assume it will improve graduate employment outcomes (Silva et al. 2016). HE sector policy and practice is rooted in human capital theory (Becker 1964) which purports that developing an individual’s skills repertoire through education will augment their employability. While it is acknowledged that WIL is a valuable tool for facilitating the application of theoretical knowledge and fine-tuning of non-technical skills (Freudenberg, Brimble, and Cameron 2015), the limitations of human capital theory are recognised. There is little account for the influence of labour market factors on the relationship between human capital and career success and its vocationalist focus may be devaluing academic creativity (see Kalfa and Taksa 2015).

This study draws on the critical role of social capital in enhancing individual employability, referred to as the ‘position’ aspect by Holmes (2013). Social capital encompasses an individual’s socio-economic status and networks (Clarke 2017), defined by ‘the size of the

network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected' (Bourdieu 2002, 286). Abrahams (2016) rightly surmises that it is not just about who a student knows but also the social standing of their connections. WIL can enhance a student's social capital, whomever they are, given its important role in extending student networks. These are instrumental for future career success (Bridgstock 2016), particularly important for those of lower socio-economic status who's relatively limited professional networks (Macmillan, Tyler and Vignoles 2015) may impact on their access to the hidden job market.

Students' cultural capital, defined by Lamont and Lareau (1988) as 'widely shared, high status cultural signals (attitudes, preferences, formal knowledge, behaviours, goods and credentials)' (156), is also important. WIL provides a situational learning experience which will develop student's cultural capital with the 'purpose of social inclusion in the workplace' (Kalfa and Taksa 2015, 591). It enables students to develop their understanding of cultural signals in the professional setting, which is highly valuable for those who lack familiarity with professional ideology. Improved understanding of cues encountered in the workplace will better position students in their search for graduate employment through greater confidence, an enhanced understanding of targeted positions and a clearer vision of profile-role alignment (Tomlinson 2017a).

Student demand for WIL opportunities far outweighs the supply of employers willing to participate in such activities (Department of Industry 2014). To manage this, HE providers often limit student enrolments into elective WIL using prerequisite criteria. This includes completion of a minimum number of course units or modules and measures relating to academic quality, typically in the form of students achieving a course credit or distinction

average (Dunn et al. 2016). The practice of applying academic criterion in such recruitment raises equity concerns as those achieving lower grades often include students of low socio-economic status, ethnic minority groups, the disabled, and those with learning difficulties (see Peach et al. 2016), perpetuating further disadvantage (Orrell 2011). Indeed, lower performing students may have relatively less access to professional networks and poorly developed cultural capital which means they experience greater disparity with the language and behaviours of graduate recruiters (Tomlinson 2017b). These students could therefore benefit significantly from interventions, such as WIL, which expose them to professional communities and allow them to experiment with their own professional identity in a safe and nurturing environment (Ibarra 1999).

Increasing access and participation in WIL among all student groups is a key action area in the National Strategy for WIL (Universities Australia et al. 2015) and there is lack of consideration to the evidenced-based use of applying academic eligibility criterion in WIL (Dunn et al. 2016). The study's research objective is, therefore, to examine the influence of academic ability on student workplace performance during the WIL experience from the perspective of both students and their industry supervisors. This is addressed using data gathered from 212 business undergraduates, and their supervisors, over a two-year period in an Australian university. The article is hereafter structured to provide an overview of relevant literature, followed by an outline of the methodology deployed. Results are then presented and the implications for relevant stakeholders discussed, followed by concluding remarks.

Background

Academic success and workplace performance

Human capital theory asserts the more highly educated an individual is, the better they are perceived to perform in the workplace and the better their labour market outcomes. Job market signalling theory (Arrow 1973) may also be used to predict graduate workplace performance. Here, 'educational credentials become a kind of surrogate measure of quality or ability' (Cai 2013, 459) and form a 'signal' to recruiters of an ability to perform to a particular level in the workplace, thus influencing labour market outcomes. Many believe that strong academic performance infers elevated cognitive abilities and personality characteristics – particularly relating to motivation - which will enhance workplace performance (Cole et al. 2007). Academic grade becomes a salient indicator of past performance and is then used as a predictor of future graduate performance, particularly when there is often little else upon which to base a selection decision (Sulastri, Handoko, and Janssens 2015).

Applying these theories to WIL, one might surmise that superior academic achievement during a student's degree may imply - or signal - elevated skills, abilities and motivation and a greater likelihood of them 'doing well' in the workplace. As WIL is often used to raise the institutional profile through 'showcasing' highly capable students to local industry, HE coordinators may favour assigning only those who have demonstrated academic excellence to WIL opportunities.

While there lacks empirical analysis of the relationship between academic success and student performance during WIL, there is some exploration of academic achievement and workplace performance among new graduates. This has produced mixed results with early studies reporting no relationship and those later detecting a correlation between degree course average and job performance (see Imose and Barber 2015). Kaufman and Kaufman (2015) provide insight into the relationship between intelligence and workplace performance yet highlight the dangers of considering this in solitude, asserting that 'grades do not reveal the whole picture'

(177). It must be noted that the direct relationship between educational achievement and job performance, underpinned by human capital theory, assumes selection decisions among graduate recruiters are based solely on an accurate assessment of applicants' skill base. We know, however, that recruitment is influenced by other factors such as social and cultural fit (Tomlinson 2017b) and the education institution they attended (Karmel and Carroll 2016), with documented bias by race, gender and class (Horverak et al. 2013).

Interestingly, we have seen a demise in recent years in the importance assigned to academic success during recruitment and selection processes with non-technical skills and cultural fit now considered more important among new graduates (AAGE 2017). This would suggest that the 'middle layer' of graduating students, in regard to academic grades, may be just as attractive to recruiters if they can demonstrate leadership skills, show initiative, communicate well, and work effectively with others. This has indeed prompted considerable attention to how graduates can develop 'positional advantage' in the graduate labour market through 'softer' currencies such as skills initiatives and extra-curricular activities (Greenbank 2015; Tomlinson 2008).

While the measure for academic success is typically course average (York, Gibson, and Rankin 2015), it is not as straightforward for gauging workplace performance. Host employer feedback is fundamental to any quality WIL experience (Smith 2012) and assessment is considered critical for indicating where students can improve and motivating them during the learning process (Boud and Falchikov 2007). Supervisor evaluation of their student's performance is therefore commonly featured in WIL assessment and typically focuses on their demonstration of work capabilities, similar to those considered important in new graduate hires (see, for example, Ferns and Zegwaard 2014; Gault, Leach, and Duey 2010; Smayling and Miller 2012). There are, however, concerns regarding the halo effect, 'an inability to separate evaluations of

attributes from global evaluations’ (Nisbett and Wilson 1977, 256). There are also concerns for poor reliability and quality assurance due to subjectivity (McNamara 2013); and the inherent difficulties in applying a standardised grading system into an environment shaped by personal context (Yorke and Vidovich 2014).

Student workplace performance, in this study, is gauged by the extent to which students demonstrate the 17 capabilities summarised in Table 1. These broadly reflect the attributes and skills which employers consider highly important in new graduates (for example, AAGE 2017; GCA 2016) and encompass technical expertise as it remains important in graduate recruitment (Pinto and Ramalheiro 2017). Given the extensive literature on what constitutes graduate employability (see, for example, Dacre-Pool and Sewell 2007; Guilbert et al. 2016), the capabilities are not exhaustive yet focus on capabilities which enable a student to have ‘the sense of being a professional’ (Paterson et al. 2002, 6) during WIL. They allow students to develop an understanding of professional ideology and appropriate behaviour, augmenting workplace success (see Jackson 2016).

[Table 1 near here]

Rationale for imposing academic selection criterion in WIL

Academic quality – such as achieved grade - is used in long-standing selection practices for recruiting school students to competitive HE programs and graduates into employment (see Dunn et al. 2016). While there is some discussion on the need to prepare students for their WIL experience - such as familiarisation with placement settings, guidance on resumes and interview techniques and practical and logistical considerations – Dunn et al. (2016) note a dearth in the examination of evidence-based use of eligibility criteria for elective WIL programs and the effectiveness of using academic measures as a means of determining

participation. There may be a number of reasons for an HE provider to impose an academic criterion, typically course average, for accessing their WIL program.

First, high performing students may offer greater assurance to HE providers that they will perform well in the workplace and reduce the risk of harming institutional profile (see Patrick et al. 2008, 23) which is critical, given high levels of competition and the ongoing focus on league tables (Altbach 2015). Here, a course average threshold in WIL is considered by stakeholders as ‘representative of a certain level of academic competence deemed to be required for the workplace’ (Dunn et al. 2016, 299). Second, imposing an academic criterion may be considered a motivator to encourage students in the earlier stages of their degree to raise their weighted course average to the required level in order to be able to participate in WIL. Third, students with a lower course average are considered more difficult to place into WIL opportunities (Mackaway et al. 2013) and thus may be discouraged from participating.

Fourth, academic criterion may be a direct response to industry partner ‘push back’ (Mackaway, Winchester-Seeto, and Rowe 2013) where potential hosts have imposed certain criteria for any prospective students, including their academic performance. Employers use WIL to identify future talent (Oreill 2011; Patrick et al. 2008) and may therefore prefer to recruit WIL students who are deemed an appropriate ‘fit’ for their organisation. This may include academic performance yet there is evidence to suggest they have a preference for domestic students (Jackson 2017) and inadvertently favour those from higher socio-economic groups who experience superior social capital and cultural capital which enables them to operationalize professional networks and better connect with host employers (Allen et al. 2013). Allen et al. posit that these student groups also have the economic capital which allows

them to engage in unpaid work experience, making it easier for them to secure WIL opportunities.

One may be pragmatic about the use of achieved academic grades as an initial screening tool in graduate selection processes. The academic criterion can indeed serve as a ‘practical mechanism to manage high number of students competing for limited placements’ (Dunn et al. 2016, 300). This is perhaps inevitable given the need for employers to differentiate among significant numbers of applicants arising from the widening participation agenda (Heyes, Tomlinson, and Whitworth 2016; Karmel and Carroll 2016). Indeed, this practice is more objective and defensible than using discriminatory means such as gender, ethnicity or the school or HE institution attended by the individual. Employer imposition of such criteria in WIL, however, means they are creating a barrier to certain students’ access to a practical learning experience. This seems unacceptable given the emphasis employers themselves place on relevant work experience in graduating students (Burdett et al. 2017; GCA 2016).

The need for inclusivity

There is increasing attention to making WIL more inclusive in respect to easing barriers to participation among certain groups (see, for example, Peach et al. 2015). These include international students (Blackmore et al. 2014); the disabled (Leon 2010); those with mental illness (McAuliffe et al. 2012) and those of lower socio-economic status, single parents or mature students who often experience barriers to WIL due to the costs of travel, clothing and childcare (Brough et al. 2014). Patrick et al. (2008) posit ‘selecting students for placements and projects solely on the basis of academic achievement is inequitable: it limits opportunities for students with the potential to succeed and to gain from the experience in ways that can change their lives’ (23).

Indeed, imposing academic eligibility criterion may exacerbate inequality as students from lower socio-economic groups often find it more difficult to succeed academically (Devlin 2013) and may therefore be over-represented in the cohort who do not meet the imposed grade threshold. Denying access to those less academically successful may propagate greater barriers to employment for groups who already find it more difficult to secure graduate-level roles (Wilton 2011). Further, as Dunn et al. (2016) rightfully note, some organisations may participate in WIL for philanthropic reasons which does not align well with certain student groups being prohibited access to WIL programs. For example, Patrick et al. (2008) note that some employers feel ‘investing in helping students (both international and Australian) to improve language skills and awareness of workplace culture is a way to attract and retain quality students’ (25).

It is important to acknowledge that not all students are engaged with the value of undertaking WIL, particularly unpaid ‘placement WIL’, considering it exploitive and unimportant relative to disciplinary-based units (O’Connor and Bodicoat 2017). O’Connor and Bodicoat acknowledge that these ‘disengagers’ may be students from disadvantaged backgrounds who could benefit the most from the networking opportunities offered by work experience. Similarly, students who are relatively disadvantaged in relation to cultural and social capital are often less willing to mobilise the networks they do have access to, considering this ‘corrupt’ and preferring to ‘make it themselves’ (Abrahams 2016, 6).

Method

Participants

The study was focused on 212 business students, over four academic semesters, who completed a work placement as an elective component of their undergraduate program. Their

characteristics are summarised in Table 2, indicating a higher proportion of female and domestic students and the majority aged under 25 years old. Participating students were at least halfway through their degree program and undertook 100-150 hours of relevant work experience, in combination with on-campus sessions, as part of a dedicated academic WIL unit. A credit course average, equating to a course average of 60, formed an 'in principle' prerequisite yet students below the threshold were encouraged to apply. They were asked to include an explanation of why they should be considered for the program in their personal statement, an element of the application process.

[Table 2 near here]

Across the four semesters, a total of 18 students were unsuccessful in their applications to participate in the WIL program. Ten of these were due to a lack of experience in their chosen major – their application being rolled over to the following semester – and the remaining eight due to concerns with their likely performance in the workplace. These concerns arose during the application process, either flagged by the interviewing panel, the academic referee or by the student demonstrating a lack of commitment such as not arriving at their scheduled interview with no reasonable follow-up explanation. Of these eight students, five had a course average of below the credit threshold. Successful students were assigned by the university to a suitable placement opportunity other than for a very small proportion who sourced their own WIL experience. Table 2 summarises the weighted average course mark (WAM) scores for the sample.

Procedures

Data were gathered over four academic semesters between April 2015 and October 2016. As part of their formal assessment and at the conclusion of their placement, students were asked to rate themselves on 17 different capabilities associated with effective workplace

performance. Their workplace supervisors were also required to assign ratings on the same capabilities, forming part of their evaluation report which contributed to the student's overall grade. The 221 students, and their associated workplace supervisors, were invited by email to share their ratings for research purposes. Three students and six supervisors declined and were removed from the analysis, reducing the sample to 212 undergraduates.

Measures

The measure used for academic achievement was WAM, recorded at the time the student applied for the WIL program. The students' measure of their success in the workplace (equating to workplace performance) were the quantitative ratings assigned to the 17 capabilities summarised in Table 1. These capabilities are associated with graduate employability, more specifically the dimension of professional identity. They were developed from extant literature on the development of professional identity (see, for example, Baxter Magolda 1998; Jackson 2016; Nadelson et al. 2017) and it was considered realistic that students would be provided with the opportunity to develop each of the capabilities during their work placement. An average rating for the 17 capabilities was also computed. Workplace performance from the industry perspective was measured in two ways. First, the quantitative ratings assigned to the same 17 capabilities and their computed average and, second, their assignment of an overall percentage rating of student's workplace performance during the placement with 100% being the benchmark expectation of a new, entry-level graduate. It was not considered appropriate to explore the relationship between WAM and awarded academic grade for the WIL unit as the latter was not entirely focused on workplace performance and incorporated components of reflective assessment and career action planning.

Analysis

First, a mean rating for the 17 capabilities and attributes was computed for both the student and their workplace supervisor. To address the research objective of exploring the relationship between student and supervisor perceptions of workplace performance and academic success, a bivariate correlation was conducted for each of these mean ratings and the overall percentage score (out of 100) against the student's WAM. Trends were then explored between the WAM and the individual capability ratings assigned by students and supervisors respectively, using a series of MANOVAs. Given the exploratory nature of the study, a Bonferroni correction was not applied.

Results

Student ratings and course average

A scatter plot was produced for the computed mean capability rating assigned by students and their WAM (see Figure 1). Mean ratings were transformed to z-scores. Given the sample size (see Cousineau and Chartier 2015), a threshold of 3.5 was used to identify outliers and two cases were removed, having scores of less than -3.5. A Pearson product-moment correlation coefficient was computed for the remaining sample to assess the relationship between the computed mean capability rating assigned by students and their WAM. There was a positive correlation between the two variables, $r(210) = .176, p = .011$. Increases in WAM were, therefore, correlated with an increased mean capability rating by students. A MANOVA was then conducted to explore variations in individual capabilities ratings by WAM. A MANOVA interaction which approached significance ($\alpha=.05$) was reported, $\lambda = .610, F(68, 657.674)=1.297, p=.062$, partial $\eta^2=.116$.

[Figure 1 near here]

Significant results for univariate analysis are presented in Table 3. Post-hoc analysis indicated that for 'pursues tasks and responsibilities with commitment and interest', those with a WAM

of 80 and above had a significantly higher mean rating than those with a WAM lower than 60 ($p=.062$); between 65 and 70 ($p=.053$) and between 70 and 80 ($p=.013$). Again, significant results were recorded for those with a WAM of 80 and above for ‘accepts responsibility and accountability for own tasks and actions’ but only for those with a WAM of between 65 and 70 ($p=.072$) and 70 and 80 ($p=.025$). For ‘shows resilience’, there were no significant results recorded at the post-hoc level. For ‘upholds professional conduct, including following protocols, processes and dress codes’, those with a WAM of below 60 reported a significantly lower mean rating than those between 70 and 80 ($p=.039$) and 80 and above ($p=.006$).

[Table 3 near here]

Those with a WAM of 80 and above recorded significantly higher mean ratings than students with a WAM of below 60 ($p=.017$) and between 60 and 65 ($p=.031$) for ‘exhibits professional judgement and reasoning ability’. For ‘able to apply their skills and knowledge in the work context’, students with a WAM of 80 and above reported significantly higher means than those in the 60 to 65 WAM range ($p=.019$) and between 65 and 70 ($p=.025$). Finally, for ‘shows interest in and commitment to professional development and future learning’, those in the highest WAM range assigned a significantly higher mean rating than those between 65 and 70 ($p=.049$) and 70 and 80 ($p=.033$).

Supervisor ratings and course average

A scatter plot was produced for the computed mean capabilities rating assigned by supervisors and their student’s WAM (see Figure 2). Two outliers were removed, their z-score for mean rating both less than -3.5. The scatter plot indicated no association between the two variables, confirmed by the Pearson product-moment correlation coefficient, $r(208) = .082$, $p = .243$. A MANOVA was conducted to explore any variations in the individual capability ratings assigned by supervisors by their student’s WAM. No interaction was detected ($\alpha=.05$), $\lambda=.682$,

$F(68, 661.598) = .996$, $p = .490$, partial $\eta^2 = .091$. A similar analysis was conducted for the supervisor's percentage rating of their student's performance during the placement against their WAM. The Pearson product-moment correlation coefficient indicated no relationship between the two variables, $r(208) = .098$, $p = .166$.

[Figure 2 near here]

Discussion

Findings suggest that students with lower course average marks are inclined to rate themselves as performing relatively weakly in comparison with students who achieved greater academic success prior to entering the WIL program. The differences among groups were particularly noticeable for those with a higher distinction course average (80 and above). This group recorded relatively elevated mean ratings in seven of the 17 capabilities compared with those with lower course averages. One may interpret the lower performance ratings among the less academically successful students as evidence to support institutional decisions to impose academic selection criterion on WIL programs. Here, students with lower course averages consider themselves as performing relatively weakly in the workplace, in comparison to their peers with a stronger record of academic achievement. It is important to note, however, that the trends between groups were not entirely consistent for the seven capabilities which recorded significant differences. The group of students who had a course average of less than 60, for example, were significantly lower than those in the 80 plus band for only three of the capabilities.

More importantly, however, is that these variations in self-perceptions of workplace performance by academic success were not corroborated by the ratings assigned by workplace supervisors. Indeed, there were no relationships recorded between their individual capability ratings or total percentage rating and their student's course average. This means that the

academic success of their assigned student prior to their entering the WIL program, had no bearing (in the eyes of the supervisor) on how they performed in the workplace. It appears, therefore, that those who were more academically successful before the WIL program were more confident in their perceptions of their own workplace performance than those in the lower academic groupings but prior academic achievement bore no tangible influence on their actual performance in the workplace. Given self-confidence is a known predictor of academic success (Stankov et al. 2012), the higher, self-assigned capability ratings among the high academic achievers could simply be interpreted as greater confidence in assigning high ratings to their own ability, rather than actual differences in performance. Therefore, the findings overall suggest no alignment between academic success prior to WIL, defined by course average, and student performance in the workplace.

Implications

Implications from the findings are considerable. For those responsible for coordinating WIL programs, there appears to be little to substantiate the argument for implementing academic selection criterion for participating in WIL. Imposing such criteria in order to ‘risk manage’ against poor student performance, and as a means of showcasing only the ‘best’ students to local industry, could be unfounded. All this may do is perpetuate further inequalities among those with lower academic grades, often overrepresented by students from ethnic minority groups, the disabled, and of lower socioeconomic status (Universities Australia 2013). As the discourse of employability promotes granting individuals the opportunity for enhancing their future success, it seems the practice of applying WIL entry criteria may be considered another example of HE reinforcing inequality (Harvey et al. 2017; Savage 2015).

Although there is some question over whether WIL always means an easier route to employment post-graduation (see Wilton 2012), there is evidence to suggest it can improve job prospects (Knouse, Tanner, and Harris, 1999; Silva et al. 2016), work-readiness (Smith and Worsfold 2015) and final degree classification (Arum and Roksa 2014). That means denying students with lower grades could inhibit their opportunity to not only enhance employability through developed cultural and social capital but also impact on their chances of employment. WIL, and other employability initiatives, should enhance the student's learning experience and their future success and not marginalise disadvantaged students (Harvey and Reyes 2015).

It is important to note that the selection process for this particular WIL program was fairly rigorous and perhaps influenced the presented results. Each student was required to attend a panel interview comprising a member of the WIL team and the university's careers service; supply a personal statement and details of an academic referee to support their capabilities and work ethic; and an interview with their potential host employer. There was very much a 'nurturing' focus during the selection process with students being given feedback at each stage and advice on how to improve (from both internal stakeholders and host employers). Once selected, each student attended an on-campus induction, or virtual equivalent if based in a regional area, to prepare them for their WIL experience. This focused on employer expectations, professional etiquette and equipped them with strategies to manage issues arising during their WIL experience. While there was not complete assurance that all students who entered the workplace were entirely committed to doing well, the results may have been different if the program simply accepted all applicants, irrespective of any assurance of sound work ethic, with little coaching on what is expected in the workplace.

It is recommended, therefore, that removing academic selection criterion from WIL programs is implemented in the context of developmental recruitment and preparation processes. While course average is correlated with the personality trait of conscientiousness (Noftle and Robins 2007), there may be techniques HE coordinators can adopt for predicting student demonstration of diligence, reliability and self-discipline in the workplace. Additional resourcing is required if recruitment will shift from simply culling students who do not reach a defined academic threshold to identifying ‘unsuitable’ students using a more considered process for the demonstration of sound work ethic and motivation to succeed in the workplace. Calling for input from academics – in particular those who have been exposed to the applicant’s performance and conduct in team projects and interactive seminars - is one way of establishing suitability. Further, aligning with trends in graduate recruitment, gauging non-technical skills, attributes and attitudes complicit with solid practical performance – through workshops and assessment centre style activities - could form part of the application process.

In addition to ensuring WIL programs adequately prepare students for their experience, HE coordinators must devise strategies for managing ‘partner’ push back. It is well documented that employers participating in WIL use it as a means of identifying future talent (Department of Employment 2014), thus their WIL recruitment criteria may reflect those applied in their graduate recruitment and selection processes. Educating hosts on the program’s efforts to prepare students for future employment, the importance of equitable access and the development of practical capabilities in all students – not just those in the highest academic tiers - is critical. Shared stakeholder understanding of and commitment to enhancing relatively low confidence among students of weaker academic ability is also important. Perceptions of inadequacy could impact on student willingness to apply for graduate roles and their ability to

clearly articulate their capabilities and strengths relative to other graduate recruits in a highly competitive labour market.

To remove the restriction of academic prerequisites, HE providers need to collaborate with employers to increase the number of available WIL opportunities. Employer reluctance to engage in WIL is attributed to poor buy-in among managers, perceptions of a significant administrative load associated with the experience and a lack of capacity for adequate mentoring and supervision (see Jackson 2016). Australia lags behind other regions in their participation in WIL, notably North America where employers support a large-scale cooperative education system and the UK which operates the well-established sandwich degree program. Involvement of professional associations and local chambers of commerce to canvass WIL opportunities can prove useful (see Jackson et al. 2016). Developing and implementing innovative models, including multi-disciplinary offerings and engaging with industry virtually or on-campus, will allow the scaling up of WIL and cater to diverse stakeholder needs. Indeed, innovative WIL models are of significant interest to students who experience barriers to participating in immersed models due to child care, travel and other logistical considerations (Jackson et al. 2016). Exploration of what Oliver (2015) terms as ‘moderate’ and ‘low’ level WIL, in her quadrant of WIL types defined by authenticity (similarity of tasks to those of the profession) and proximity (similarity of the WIL context to the professional environment), would be useful.

Resourcing WIL is problematic given the time required to establish meaningful partnerships between HE providers and industry (Atkinson 2016). It is, however, flagged as an area which the government, HE leadership and industry need to collectively address in the interests of equity and national prosperity. Economically, it is also important to meet the high demand for

WIL among international students who seek to gain relevant work experience in their host country (IEEA 2012). If employers are not sufficiently motivated by the task of social inclusion, economic incentives may be required to achieve the targeted growth in the National Strategy for WIL (Universities Australia et al. 2015). Financial support and tax rebates for employers engaged in WIL and initiatives which target increased access for disadvantaged groups, such as the UK's recently introduced 'Degree Apprenticeship' system, could be considered.

Concluding remarks

This study draws on social capital and cultural capital theory to highlight the role of WIL in developing individual employability. It explores whether the imposition of academic criterion for accessing HE WIL programs is justified. Such prerequisite criterion could perpetuate further disadvantage given those who perform less well academically typically do not display the types of cultural and social capital recognised and valued in HE, in addition to achieving inferior employment prospects (Brennan and Shah 2003). The study examined the relationship between the course average of 212 business undergraduates and their performance in the workplace during WIL, from the perspective of the student and their workplace supervisor. There is no evidence of supervisors rating students with a higher course average as performing more strongly in the workplace. There is, however, a correlation between student self-ratings and their course average. Those students with a higher course average consider themselves more proficient in a number of capabilities associated with employability and workplace performance, indicative of greater confidence among those that excel academically.

The findings support the belief (Dunn et al. 2016; Sachs and Rowe 2016) that WIL should not to be confined to the academic elite but enjoyed by all students. Removing academic thresholds

will not necessarily result in poorer workplace performance which could threaten local industry partnerships and institutional profile. It would, however, enable all student groups to benefit from this valuable employability intervention. Enhancing the kinds of social and cultural capital valued in HE may better prepare them for recruitment and selection processes and increase their chances of securing graduate-level employment. Also important is enhancing employers' recognition of the value of other forms of cultural capital.

This study addressed an area which lacks empirical research. Limitations, however, may inhibit generalisation of the findings. These include a relatively small proportion of the sample having a course average of less than 60 marks. Second, the study gathers data from only one institution and only one WIL program, albeit at different time points. There is also no differentiation of the subject population on the basis of business discipline, industry or sector. In line with literature (see, for example, Terry, Gonsalvez, and Deane 2016), there are concerns for the accuracy and reliability of supervisor ratings which underpin the findings and recommendations of the study, in addition to documented concerns for student self-assessment (Leach 2012). Future research could focus on a broader range of WIL programs from different disciplines and across multiple institutions. Trialling and evaluating different approaches to selecting WIL students, beyond the use of academic thresholds, would also be useful and, finally, a deeper understanding of the relationship between academic achievement and workplace performance may be possible by investigating the mediating influences of different discipline groupings.

References

- AAGE 2017. *2017 AAGE employer survey*. Camberwell, VIC: Australian Association of Australian Employers.
- Abrahams, J. 2016. “Honourable mobility or shameless entitlement? Habitus and graduate employment”. *British Journal of Sociology of Education*, DOI: 10.1080/01425692.2015.1131145.
- Allen, K., J. Quinn, S. Hollingworth, and A. Rose. 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.
- Altbach, P. 2015. “Rankings season is here”. *International Higher Education* 62: 2-5.
- Arrow, K. 1973. “Higher education as a filter”. *Journal of Public Economics* 2 (3): 193–216.
- Arum, R. and J. Roksa. 2014. *Aspiring Adults Adrift: Tentative Transitions of College Graduates*. Chicago: University of Chicago Press.
- Atkinson, G. 2016. *Work-based learning and work-integrated learning: Fostering engagement with employers*. Adelaide, SA: NCVER.
- Baxter Magolda, M. 1998. “Developing self-authorship in young adult life”. *Journal of College Student Development* 39 (2): 143-56.
- Becker, G. 1964. *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press.
- Blackmore, J., C. Gribble, L. Farrell, M. Rahimi, R. Arber, and M. Devlin. 2014. *Australian International Graduates and the Transition to Employment: Final Report*. Melbourne, VIC: Deakin University.
- Boud, D. and N. Falchikov. 2007. “Introduction: assessment for the long term”. In *Rethinking assessment in higher education: Learning for the longer term*, edited by D. Boud, and N. Falchikov, , 14-26. London: Routledge.

- Brennan, J. and T. Shah. 2003. *Access to what? Converting education opportunity into employment opportunity*. London, UK: Centre for Higher Education Research and Information.
- Bridgstock, R. 2016. *Graduate employability 2.0: Social networks for learning, career development and innovation in the digital age*. <http://www.graduateemployability2-0.com/resources/articles>.
- Brough, M., I. Correa-Velez, P. Crane, E. Johnstone, and G. Marston. 2014. *Work-integrated learning in social work and human services. Assessment of financial stress associated with student placements*. Springvale, VIC: ACEN.
- Burdett, J., J. Burdett, S. Barker, and S. Barker. 2017. "University students in the workplace strategies for successful industry placement experiences". *Development and Learning in Organizations: An International Journal* 31 (1): 15-18.
- Cai, Y. 2013. "Graduate employability: A conceptual framework for understanding employers' perceptions". *Higher Education* 65 (4): 457-469.
- Clarke, M. 2017. "Rethinking graduate employability: the role of capital, individual attributes and context". *Studies in Higher Education* DOI: 10.1080/03075079.2017.1294152
- Cole, M., S. Rubin, S. Feild, and W. Giles. 2007. "Recruiters' perceptions and use of applicant resume information: Screening the recent graduate". *Applied Psychology: An International Review* 56 (2): 319–343.
- Cooper, L., J. Orrell, and M. Bowden. 2010. *Work integrated learning: A guide to effective practice*. New York: Taylor and Francis.
- Dacre-Pool, L. and P. Sewell. 2007. "The key to employability: Developing a practical model of graduate employability". *Education + Training* 49 (4): 277–289.
- Department of Industry. 2014. *Engaging employers in work integrated learning: Current state and future priorities*. Richmond: PhillipsKPA.

- Devlin, M. 2013. "Bridging socio-cultural incongruity: Conceptualising the success of students from low socio-economic status backgrounds in Australian higher education". *Studies in Higher Education* 38 (6): 939-949.
- Dunn, L., M. Schier, E. Hiller, and L. Harding. 2016. "Eligibility requirements for work-integrated learning programs: Exploring the implications of using grade point averages for student participation". *Asia-Pacific Journal of Cooperative Education* 17 (3): 295-308.
- Ferns, S., and K. Zegwaard. 2014. Critical assessment issues in work-integrated learning. *Asia-Pacific Journal of Cooperative Education* 15 (3): 179-188.
- Freudenberg, B., M. Brimble, and C. Cameron. 2011. "WIL and generic skill development: The development of business students' generic skills through work-integrated learning". *Asia-Pacific Journal of Cooperative Education* 12: 79-93.
- Gault, J., E. Leach, and M. Duey. 2010. "Effects of Business Internships on Job Marketability: The Employers' Perspective". *Education + Training* 52 (1): 76-88.
- GCA. 2016. *The report of the 2015 Graduate Outlook Survey*. Melbourne, VIC: Graduate Careers Australia.
- Greenbank, P. 2015. "Still focusing on the 'essential 2:1': Exploring student attitudes to extra-curricular activities". *Education + Training* 57 (2): 184-203.
- Guilbert, L., J. Bernaud, B. Gouvernet, and J. Rossier. 2016. "Employability: review and research prospects". *International Journal for Educational and Vocational Guidance* 16 (1): 69-89.
- Harvey, A. and K. Reyes. 2015. "Employability and equity: A comparative international analysis". In *Research and Development in Higher Education: Learning for Life and Work in a Complex World*, 200-211. Melbourne: HERDSA.

- Harvey, A., L. Andrewartha, D. Edwards, J. Clarke, and K. Reyes. 2017. *Student equity and employability in higher education*. Melbourne: Centre for Higher Education Equity and Diversity Research, La Trobe University.
- Heyes, J., M. Tomlinson, and A. Whitworth. 2016. "Underemployment and well-being in the UK before and after the Great Recession". *Work, Employment & Society* 31 (1): 71-89.
- Holmes, L. 2013. "Competing Perspectives on Graduate Employability: Possession, Position or Process?" *Studies in Higher Education* 38 (4): 538–554.
- Horverak, J., G. Sandal, H. Bye, and S. Pallesen. 2013. "Managers' selection preferences: The role of prejudice and multicultural personality traits in the assessment of native and immigrant job candidates". *European Review of Applied Psychology* 63 (5): 267-275.
- Ibarra, H. 1999. "Provisional selves: Experimenting with image and identity in professional adaptation". *Administrative Science Quarterly* 44 (4): 764-791.
- Imose, R. and L. Barber. 2015. "Using undergraduate grade point average as a selection tool: A synthesis of the literature". *The Psychologist-Manager Journal* 18 (1): 1-11.
- IEAA 2012. *Internships and work placement opportunities for international students in Victoria*. Melbourne, VIC: International Education Association of Australia.
- Jackson, D. 2016. "Re-conceptualising graduate employability: the importance of pre-professional identity". *Higher Education Research & Development* 35 (5): 925-939.
- Jackson, D. 2017. "Exploring the challenges experienced by international students during work-integrated learning in Australia". *Asia Pacific Journal of Education* 37 (3): 344-359.
- Jackson, D. and N. Wilton. 2016. "Developing career management competencies among undergraduates and the role of work-integrated learning" *Teaching in Higher Education*, 21 (3): 266-286.

- Jackson, D., D. Rowbottom, S. Ferns, and D. McLaren. 2016. "Employer understanding of Work-Integrated Learning and the challenges of engaging in WIL opportunities". *Studies in Continuing Education* 39 (1): 35-51.
- Kalfa, S. and L. Taksa. 2015. "Cultural capital in business higher education: Reconsidering the graduate attributes movement and the focus on employability". *Studies in Higher Education* 40 (4): 580–595.
- Karmel, T. and D. Carroll. 2016. *Has the graduate labour market been swamped?* Adelaide: National Institute of Labour Studies, Flinders University.
- Kaufman, J. and Kaufman. 2015. "It can be very tempting to throw out the baby with the bathwater: A father-and-son commentary". *Applied Developmental Science* 19 (3): 176-181.
- Knouse, S., J. Tanner, and E. Harris. 1999. "The relation of college internships, college performance and subsequent job opportunity". *Journal of Employment Counseling* 36 (1): 35-43.
- Lamont, M. and A. Lareau. 1988. "Cultural capital: Allusions, gaps and glissandos in recent theoretical developments". *Sociological Theory* 6 (2): 153–68.
- Leach, L. 2012. "Optional self-assessment: some tensions and dilemmas". *Assessment & Evaluation in Higher Education* 37 (2): 137-147.
- Leon, L. 2010. "Achieving successful work-integrated learning (WIL) for students with disabilities". In *Work Integrated Learning – Responding to Challenges: Proceedings of the 2010 ACEN National Conference*, 251-261. Perth: ACEN.
- Mackaway, J., T. Winchester-Seeto, and R. Rowe. 2013. "Responding to student diversity: Strategies for placing work-integrated education students". In *New Zealand Association for Cooperative Education 2013 Conference Proceedings*. Manukau, Auckland: NZACE.

- Macmillan, L., C. Tyler, and A. Vignoles. 2015. "Who gets the top jobs? The role of family background and networks in recent graduates' access to high-status professions". *Journal of Social Policy* 44 (3): 487-515.
- McAuliffe, D., J. Boddy, V. McLennan, and V. Stewart. 2012. "Keeping the door open: Exploring experiences of, and responses to, university students who disclose mental illness". *Journal of Social Inclusion* 3 (1): 117-129.
- McNamara, J. 2013. "The challenge of assessing professional competence in work integrated learning". *Assessment & Evaluation in Higher Education* 38 (2): 183-197.
- Nadelson, L., S. McGuire, K. Davis, A. Farid, K. Hardy, Y. Hsu, and S. Wang. 2017. "Am I a STEM professional? Documenting STEM student professional identity development". *Studies in Higher Education* 42 (4): 701-720.
- Nisbett, R. and T. Wilson. 1977. "The halo effect: Evidence for unconscious alteration of judgments". *Journal of Personality and Social Psychology* 35 (4): 250-256.
- Noftle, E. and R. Robins. 2007. "Personality predictors of academic outcomes: big five correlates of GPA and SAT scores". *Journal of Personality and Social Psychology* 93 (1): 116-130.
- O'Connor, H., and M. Bodicoat. 2017. "Exploitation or opportunity? Student perceptions of internships in enhancing employability skills". *British Journal of Sociology of Education* 38 (4): 435-449.
- Oliver, B. 2015. "Redefining graduate employability and work-integrated learning: Proposals for effective higher education in disrupted economies". *Journal of Teaching and Learning for Graduate Employability* 6 (1): 56-65.
- Orrell, J. 2011. *Good practice report: Work Integrated Learning*. Canberra: ALTC.

- Paterson, M., J. Higgs, S. Wilcox, and M. Villeneuve. 2002. "Clinical reasoning and self-directed learning: Key dimensions in professional education and professional socialisation". *Focus on Health Professional Education* 4 (2): 5–21.
- Patrick, C., D. Peach, C. Pocknee, F. Webb, M. Fletcher, and G. Pretto. 2008. *Work-integrated learning: A national scoping study*. Canberra, ACT: ALTC.
- Peach D, D. Moore, M. Campbell, T. Winchester-Seeto, S. Ferns, J. Mackaway, and L. Groundwater. 2016. *Building institutional capacity to enhance access participation and progression in Work integrated learning (WIL)*. Canberra, ACT: Learning and Teaching Support Unit.
- Pinto, L. and D. Ramalheira. 2017. "Perceived employability of business graduates: The effect of academic performance and extracurricular activities". *Journal of Vocational Behavior* 99: 165-178.
- Sachs, J. and A. Rowe. 2016. *2016 Good Practice Report – WIL*. Canberra, ACT: Department of Education and Training.
- Savage, M. 2015. *Social class in the 21st century*. London, UK: Penguin.
- Silva, P., B. Lopes, M. Costa, A. Melo, G. Dias, E. Brito, and D. Seabra. 2016. "The million-dollar question: can internships boost employment?" *Studies in Higher Education* 43 (1): 2-21.
- Smayling, M. and H. Miller. 2012. "Job satisfaction and job performance at the internship level". *Journal of Leadership, Accountability and Ethics* 9 (1): 27-33.
- Smith, C. 2012. "Evaluating the quality of work-integrated learning curricula: a comprehensive framework". *Higher Education Research & Development* 31 (2): 247-262.
- Smith, C., S. Ferns, and L. Russell. 2014. *The impact of work integrated learning on student work-readiness – Final report 2014*. Sydney, NSW: OLT.

- Smith, C. and K. Worsfold. 2015. "Unpacking the learning–work nexus: 'priming' as lever for high-quality learning outcomes in work-integrated learning curricula". *Studies in Higher Education* 40 (1): 22-42.
- Stankov, L., J. Lee, W. Luo, and D. Hogan. 2012. "Confidence: A better predictor of academic achievement than self-efficacy, self-concept and anxiety?" *Learning and Individual Differences* 22 (6): 747-758.
- Sulastri, A., M. Handoko, and J. Janssens. 2015. "Grade point average and biographical data in personal resumes: predictors of finding employment". *International Journal of Adolescence and Youth* 20(3): 306-316.
- Terry, J., C. Gonsalvez, and F. Deane. 2016. "Brief online training with standardised vignettes reduces inflated supervisor ratings of trainee practitioner competencies". *Australian Psychologist* 52 (2): 130-139.
- Tomlinson, M. 2008. "'The degree is not enough': Students' perceptions of the role of higher education credentials for graduate work and employability". *British Journal of Sociology of Education* 29 (1): 49-61.
- Tomlinson, M. 2017a. "Forms of graduate capital and their relationship to graduate employability". *Education + Training* 59 (4): 338-352.
- Tomlinson, M. 2017b. "Introduction: Graduate employability in context. Charting a complex, contested and multi-faceted policy and research field". In *Graduate Employability in Context*, edited by M. Tomlinson and L. Holmes, 1-40. London: Palgrave Macmillan.
- Universities Australia. 2013. *A smarter Australia: An agenda for Australian higher education 2013-2016*. Canberra, ACT: Universities Australia.
- Universities Australia, BCA, ACCI, AIG and ACEN. 2015. *National strategy on Work Integrated Learning in university education*. Canberra, ACT: Universities Australia.

- Wilton, N. 2011. "Do employability skills really matter in the UK graduate labour market? The case of business and management graduates". *Work Employment Society* 25 (1): 85–100.
- Wilton, N. 2012. "The impact of work placements on skill development and career outcomes for business and management graduates". *Studies in Higher Education* 37 (5): 603–620.
- York, T., C. Gibson, and S. Rankin. 2015. "Defining and measuring academic success". *Practical Assessment, Research & Evaluation* 20 (5): 2-21.
- Yorke, J. and L. Vidovich. 2014. "Quality policy and the role of assessment in Work-Integrated Learning". *Asia-Pacific Journal of Cooperative Education* 15 (3): 225-239.

Table 1. Capabilities assessed for workplace performance

Communicates effectively in a work environment
Works effectively with others
Pursues tasks and responsibilities with commitment and interest
Accepts and uses feedback in a constructive manner
Generates and suggests new ideas
Accepts responsibility and accountability for own tasks and actions
Shows initiative
Manages time effectively to achieve defined goals
Demonstrates self-awareness
Shows resilience
Upholds professional conduct, including following protocols, processes and dress codes
Exhibits technical expertise and knowledge at the expected level
Exhibits professional judgement and reasoning ability
Displays confidence in manner and approach
Demonstrates a sense of purpose and self-esteem
Able to apply their skills and knowledge in the work context
Shows interest in and commitment to professional development and future learning

Table 2. Summary of student participant characteristics ($N=212$)

Characteristic	Sub-group	<i>N</i>	%
Gender	Male	61	28.8
	Female	151	71.2
Age	0 - 24 years	132	62.2
	25 - 29 years	37	17.5
	30 - 39 years	28	13.2
	40 years plus	15	7.1
Residency status	Domestic	162	76.4
	International	50	23.6
Specialisation	Tourism, Hospitality, Recreation and Events Management	43	20.3
	Marketing, PR, advertising	33	15.6
	HRM	41	19.3
	Finance and accounting	63	29.7
	Management	5	2.4
	Other	27	12.7
Sector	Public	46	21.7
	Private	134	63.2
	Not-for-profit	32	15.1
WAM (weighted average course mark)	40 < 60	19	9.0
	60 < 65	42	19.8
	65 < 70	50	23.6
	70 < 80	78	36.8
	80 plus	23	10.8

Table 3. Variations in student capability ratings by course average ($N=210$)

Capability	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Pursues tasks and responsibilities with commitment and interest	4	1.093	2.838	.026	.058
Accepts responsibility and accountability for own tasks and actions	4	.835	2.572	.039	.053
Shows resilience	4	1.192	2.689	.033	.056
Upholds professional conduct, including following protocols, processes and dress codes	4	.795	3.560	.008	.072
Exhibits professional judgement and reasoning ability	4	1.145	3.571	.008	.072
Able to apply their skills and knowledge in the work context	4	1.220	3.577	.008	.073
Shows interest in and commitment to professional development and future learning	4	.930	2.406	.051	.050