

PERCEIVED EMPLOYABILITY AND CAREER SELF-MANAGEMENT AMONG BUSINESS UNDERGRADUATES

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The careers discourse over the last two decades has emphasised that modern employment and is increasingly turbulent (AGR, 2013), characterised by greater complexity of career progression and development, within and across organisations, (Sok *et al.*, 2013), combining to spell the end of the traditional linear career (Baruch, 2004). While the ultimate ‘death of the career’ has been extensively challenged, there is relative consensus that changes to the nature of both internal and external labour markets have meant that, in order to negotiate an increasingly complex career terrain, individuals require skills in effectively managing their own careers (Clarke, 2009) and must be sufficiently adaptable to remain competitive in volatile work environments (Berntson *et al.*, 2006). As such, in lieu of organisationally provided job security, workers need to derive ‘employment security’ from their own perceived employability (see Berntson and Marklund, 2007) and sharpened skills in career self-management. Workers believing in their possession of high levels of employability aids in coping with job insecurity, as they are more likely to perceive that there are alternative opportunities available to them (Fugate *et al.*, 2004).

For graduates, particularly at the outset of career, self-assurance that they will both survive and thrive in an increasingly competitive job market requires elevated levels of perceived employability (PE). This is a significant expectation given rising competition for fewer places on traditional graduate programs (AAGE, 2013), shifts in employer recruitment activity to identifying talent during studies – through internships and vacation programs – rather than at graduate level (Isherwood, 2014) and growing expectations among graduate employers of the required repertoire of skills, attributes and evidenced capabilities to be held by new recruits (GCA, 2012). Berntson *et al.* (2006) found PE tends to be lower during difficult economic and labour market conditions, yet, during such times, the confidence and resilience associated with PE are even more critical.

The benefits of nurturing individuals to possess high levels of PE and, therefore, a greater sense of security in a turbulent professional environment include improved health and well-being (Berntson and Marklund, 2007); heightened self-determination (Parker *et al.*, 2010); and better job performance (Kinnunen *et al.*, 2011). Benefits extend beyond the individual (Rothwell and Arnold, 2007) and, collectively, enhance organisational effectiveness. Ultimately, producing graduates who are appropriately skilled, technically proficient and sufficiently confident to function effectively in the workplace will minimise skill gaps and enhance national productivity. Up-skilling human capital, and therefore producing graduates who are perceived by themselves and others as employable, is now a national strategic research priority in Australia (Department of Industry, 2013) and the UK (Department of Business, Innovation and Skills, 2009).

Alongside PE, the development of strong career self-management skills is considered critical to graduate employability and, ultimately, labour market achievement (Potgieter, 2012). These skills enable an individual to have a clear understanding of one self and to make informed decisions about how their own attributes, capabilities and experiences map to available labour market opportunities. Therefore, career self-management encompasses labour market awareness, job search capabilities, self-awareness and professional networking (Bridgstock, 2009). The focus of career management provision in higher education (HE) has slowly shifted from centralised, individual counselling to interactive workshops and modules, some of which are core and embedded at a discipline level (see Watts, 2006). Despite these advances, there remains evidence of a lack of engagement with career management among undergraduates and inadequate development of career management competencies (McKeown and Lindorff, 2011).

While both structural and individual dimensions influence PE (Reeskens and van Orschot, 2012; Vanhercke *et al.*, 2014), this study focuses on the latter and aims to explore perceptions of employability among undergraduates and the associated influence of career management competencies, while controlling for background characteristics. By focusing on the individual perspective on employability (see Rothwell *et al.*, 2009), the paper acknowledges but does not explore

antecedents relating to contextual characteristics, such as labour market conditions (see Berntson *et al.*, 2006; Sok *et al.*, 2014). More specifically, the research objectives were to: (i) gauge PE among undergraduates; (ii) evaluate the relative importance of career management competencies on PE; and (iii) assess the influence of certain background characteristics on PE. Data from 480 Business undergraduates at a UK and Australian university was used to address the research objectives. The paper is structured to first provide a background review of literature relating to PE and the predictor variables, followed by a presentation of the adopted methodology and results. Finally, the findings are discussed with implications for relevant stakeholders.

BACKGROUND

At the individual level, employability concerns both an individual's actual and perceived job prospects (Forrier and Sels, 2003). In relation to the latter, an individual who believes they are highly employable will think it relatively easy to acquire new employment (Berntson and Marklund, 2007). Considerable research has focused on the personal traits, skills and values new graduates must possess to enhance their propensity to obtain employment (Jackson and Chapman, 2010) with employment outcomes (for example, entry salary and time taken to attain a job) typically used as objective measures of a graduate's employability (Coates and Edwards, 2011). Equating employment and employability is, however, problematic. The focus on 'objective employability' (see Berntson *et al.*, 2006) has been criticised for failing to acknowledge that the alignment between one's employability and employment outcomes is not always perfect (Wilton, 2012). For a range of reasons, such as labour market status (Harvey, 2001); prestige associated with the degree-awarding institution (Wilton, *ibid*); study mode and attendance status (Jackson, 2014), one might be highly employable but either under-employed or unemployed. Instead, Harvey claims the focus of employability should not be on whether a job is secured but instead "the propensity of the individual student to get employment" (p. 97).

The discursive shift to a 'subjective' view of employability (Berntson *et al.*, 2006) is supported by others (Holmes, 2001; Yorke, 2006). As Harvey (2003) notes, the emphasis here is less on 'employ'

and more on ‘ability’ and the need for HE providers to empower students in the production of capable, critical and reflective practitioners. The interpretation and treatment of employability in both education and labour market policy and discourse now firmly places the individual at the core of determining their own destiny (see Boden and Nedeva, 2010) and the demonstrable acquisition of non-technical skills and attributes, such as the ability to work effectively with others, solve problems, think critically, self-manage and demonstrate self-awareness (Confederation of British Industry, 2011), are now widely accepted as central to graduate employability. Consequently, encouraging extra-curricular activities (McKeown and Lindorff, 2011), engagement with the local community through volunteering programs or civic duties (Bourner and Millican, 2011), participation in social and sports clubs (Stuart *et al.*, 2011), gaining relevant work experience through Work-Integrated Learning (WIL) (Billet, 2011), increasingly tend to be the focus of career development activities in HE.

Alongside skills acquisition, such initiatives are also critical in developing both resilience among undergraduates and graduates and belief in their ability to successfully navigate complex and competitive labour markets. Stronger perceptions of one’s own employability are reported to result in a more positive outlook at work (Berntson and Marklund, 2007) and lead individuals to appraise insecurity or flexibility in the labour market as less threatening than those with lower levels of PE (see Kinnunen *et al.*, 2011). Further, it is positively linked with life satisfaction, work engagement, job satisfaction, organisational commitment (De Cuyper *et al.*, 2008) and career success (de Vos *et al.*, 2011). Kinnunen *et al.* also found that workers with higher levels of PE experience lower levels of job exhaustion and perform better in the workplace.

Influences on perceived employability

Reflecting human capital theory (Reeskens and Orschot, 2012), evidence suggests more educated individuals with stronger job-related skills have higher levels of PE (Berntson *et al.*, 2006; Wittekind *et al.*, 2010). Other important antecedents include job security (Mäkikangas *et al.*, 2013); labour market experience and ‘type’ of employment (Berntson *et al.*, *ibid*; Kirves *et al.*, 2014) employment

mobility (Wittekind *et al.*, *ibid*) and perceived mobility (Kirves *et al.*, *ibid*); the condition of the psychological contract (Sok *et al.*, 2013) and personality (Eby *et al.*, 2003).

Career management competencies

Career management competencies are deemed critical to individual employability and typically feature in more recent graduate employability models (Pegg *et al.*, 2012). Drawing on the widely used DOTS model (see Watts, 2006), there are four dimensions of career management competencies: self-awareness, opportunity awareness, development of decision making skills (decision-making learning) and transition learning. In combination, possession of these capabilities will enable an individual to self-reflect and identify their personal strengths and vocational interests; identify suitable graduate opportunities in their chosen field; conduct effective job searches and present well in selection processes; and, ultimately, successfully develop a satisfying career. Similarly, Jain and Jain (2013) identified four aspects of career management: career-task involvement (engaging with career success); career-goal sensitivity; career-purpose social networking; and career-linked self-efficacy (belief in one's capabilities); which influenced employability among Indian technology graduates. Further, Clarke's (2009) study reported that "those who perceived they had a high level of employability had also demonstrated a willingness to engage in some form of career planning, either long term strategic or shorter term" (p. 22). There is also evidence to suggest career management capabilities enhance adaptability to different work environments, further raising employability through one's capacity to respond to a broader range of opportunities (Fugate *et al.*, 2004). Defillippi and Arthur (1994) conceptualised the required strategies and competencies for 'success' as: *Knowing-why* (one's sense of personal identity and motives); *knowing-how* (career-relevant skills); and, *knowing-whom* (career-related networks). Later, Eby *et al.* (2003) found these three areas influenced 'perceived internal and external marketability', aligning with PE, among graduates.

When linking effective career self-management and employment outcomes, career management competencies are considered to enhance the likelihood of both achieving initial desired employment (Purcell *et al.*, 2013; Pegg *et al.*, 2012) and long-term career success (Whitelaw, 2010). Furthermore,

access to a social network can give practical and useful careers advice on improving job prospects (Purcell *et al.*, 2013), as can strategic professional networking (Eby *et al.*, 2003). Pegg *et al.* (2013) argue “the ability to research appropriate job opportunities, make a successful job application and succeed at interview requires technical skills – often referred to as career management skills – that many universities recognise can lead to rapid improvements in graduate employment rates” (p. 44). Purcell *et al.*'s (2013) study of UK graduates did not reveal an empirical link between take-up of university careers advice and employment outcomes although there was evidence of a positive relationship between perceived quality of advice and job attainment. Extant literature suggests career management competencies will positively predict PE.

H1: Decision making skills will positively predict PE among undergraduates.

H2: Opportunity awareness will positively predict PE among undergraduates.

H3: Transition learning will positively predict PE among undergraduates.

H4: Self-awareness will positively predict PE among undergraduates.

Background, employment and study characteristics

A number of studies have sought to explore the individual factors that act to influence PE. Taken together, these studies are by no means conclusive on the demographic and educational characteristics that act as antecedents of employability. For instance, there are mixed findings regarding a gender effect on PE. Qenani *et al.* (2014) found that, among a sample of students at two large undergraduate colleges in the US, female students were 50 per cent less likely to consider themselves as highly employable compared to males. In contrast, both Rothwell *et al.* (2009) and Sok *et al.* (2014) found little difference in PE between males and females. Wittekind *et al.* (2010) report that age had a strong effect on PE: the older workers were, the less employable they perceived themselves to be. Similarly, among a sample of well-qualified hospitality workers, Sok *et al.* (2013) similarly found that older respondents were less confident in their employability than younger counterparts. Van der Heijden (2002) found that, overall, the degree of employability decreases with the age of the employee and Rothwell *et al.* (2008) also reported older students as having the lowest levels of PE. Qenani *et al.*

(2014) found a negative relationship between PE and length of time in university, with a significant decrease in PE comparing senior students with sophomores. Choice of major was not, however, found to be significant in student's perception of employability.

H5: Age will negatively predict PE among undergraduates

H6: Major of study will not predict PE among undergraduates

H7: Stage of study will negatively predict PE among undergraduates

WIL interventions, such as internships and placements, are considered to enhance PE (see Rothwell *et al.*, 2009). For instance, Qenani *et al.* (2014) report that the students who gained work experience through an internship during their studies were more likely to feel highly confident of their employability. Relatedly, Vos *et al.* (2011) found that employee participation in competency development initiatives, as well as perceived support for competency development, are associated with increased levels of self-PE. Given the developmental dimension of placements and internships – and the integral support of both HE providers and employers - then we can presume an association between WIL and PE.

H8: WIL will positively predict PE among undergraduates.

Employment status has produced varied effects on PE (see Berntson *et al.*, 2006). Kirves *et al.* (2014) found that contract 'type' (whether employed on a permanent or temporary basis) had little influence on PE, although they found determinants of high PE to be different for each group. They did find, however, some difference in PE according to individual perceptions of employment mobility. Again following de Vos *et al.* (2011), we cannot presume that employment *per se* will be a predictor of PE, given this has been found to be predicated both on access to opportunities for competency development and support for such development. Given that the employment of most undergraduate students is likely to be part-time and not career-related, then opportunities for development are likely to be limited.

H9: Employment status will not predict PE among undergraduates

METHOD

Participants

The sample comprises Business undergraduates from ‘new’, vocationally-focused universities based in the UK ($N=136$) and Australia ($N=344$). Those participating in the study were required to have worked – paid or unpaid – in the previous 12 months or have undertaken a work placement as part of their undergraduate studies. Participant characteristics are summarised in Table 1. There are a relatively high proportion of females and mature-age students in the Australian university. The latter is most likely attributed to the range of different entry pathways into the university. The smaller UK sample may be due less students meeting the work experience requirement for completing the survey, the majority being of school-leaving age with less time spent in the workforce. There are variations in the distribution of students by degree specialisation across the two universities and a considerably greater proportion of participants in their final year of study in the UK university. There were slightly more Australian students currently working than their UK counterparts although the distribution across full and part-time status was fairly similar with, as expected, more students working on a part-time basis. A greater proportion of UK students completed work placements as part of their studies.

Table 1 Summary of participant characteristics

Variable	Sub-group	Australia (N=344)		UK (N=136)		Total (N=480)	
		N	Valid %	N	Valid %	N	Valid %
Age group	Less than 20 years	53	15.4	13	9.6	66	13.8
	20 to 24 years	138	40.1	111	81.6	249	51.9
	25 to 29 years	56	16.3	5	3.7	61	12.7
	30 years and over	97	28.2	7	5.1	104	21.7
Gender	Male	102	29.7	62	45.6	164	34.2
	Female (0)	242	70.3	74	54.4	316	65.8
Specialisation	Generalist (0)	32	9.3	21	15.4	53	11.0
	Tourism, Hospitality, Recreation and Events	48	14.0	0	0.0	48	10.0
	Marketing, Public Relations and Advertising	42	12.2	29	21.3	71	14.8
	Human Resource Management	58	16.9	7	5.1	65	13.5
	Finance/Accounting Management	104	30.2	12	8.8	116	24.2
	Other	43	12.5	33	24.3	76	15.8
	Other	17	4.9	34	25.0	51	10.6
Stage of degree	First year (0)	73	21.2	13	9.6	86	17.9
	Second year	168	48.8	26	19.1	194	40.4
	Third year	103	29.9	97	71.3	200	41.7
WIL	Work placement (0)	58	16.9	52	38.2	110	22.9
	No work placement	286	83.1	84	61.8	370	77.1
Employment status	Not currently working (0)	47	13.7	39	28.7	86	17.9
	Working part-time	189	54.9	60	44.1	249	51.9
	Working full-time	108	31.4	37	27.2	145	30.2
Months with current employer	Less than 6 months	42	14.1	25	25.8	67	17.0
	Between 6 and 12 months	42	14.1	28	28.9	70	17.8
	Between 1 and 2 years	64	21.5	28	28.9	92	23.4
	More than 2 years	149	50.2	16	16.5	165	41.9
Current pay status	Paid	287	96.6	96	99.0	383	97.2
	Voluntary	10	3.4	1	1.0	11	2.8
Size of current organisation	1 - 49 (small)	123	41.4	32	33.0	155	39.3
	50 - 149 (medium)	54	18.2	14	14.4	68	17.3
	150+ (large)	120	40.4	51	52.6	171	43.4
Current sector	Public sector	106	35.7	30	30.9	136	34.5
	Private sector	168	56.6	67	69.1	235	59.6
	Not-for-profit	23	7.7	0	0.0	23	5.8

The two universities covered by this study are similarly oriented towards delivering an applied HE experience and explicit focus on the development of employability skills and attributes. They differ, however, in important ways, most notably, in the extent to which WIL constitutes an embedded and compulsory element of the curriculum; The Australian university provides a period of work experience as part of its provision, whereas at the UK university, WIL is encouraged but largely enacted through students proactively securing work placements or internships. Clearly the universities are also situated in different labour market contexts. The Australian and UK labour market bear similar characteristics not least in the relationship between education, employers and the state in contributing to economic prosperity – with each stakeholder expected to take some of the weight in ensuring an appropriately-equipped graduate labour supply, and an explicit policy focus on individual responsibility for employability. Labour market conditions at the time of the survey, however, created different contexts within which the results needed to be understood. In 2014, in the UK youth and graduate employment was at historically high rates and economic conditions variable. Such uncertainty may well have contributed to a sense of unease about students soon to enter the labour market. In Australia... Given the focus of the paper is perceived employability, and such perception needs to be understood within broader contexts, the cross-national focus of the research, therefore, sought to understand student attitudes within these variable contexts.

Procedures

Participants reported on their background, study and employment characteristics, PE and career management competencies in an online survey. Information on and invitations to complete the survey were emailed out via relevant Unit Coordinators and posted on each university's virtual learning environment. Data was gathered between May and September 2014.

Measures

Five items, derived from Bernston and Marklund's (2007) study, were used to measure PE. The use of subjective measures for assessing PE is common to other studies (Gerber *et al.*, 2011; Rothwell and Arnold, 2007). Respondents were asked to consider how employable they think they are by rating their level of agreement with five items: 'My competence is sought-after in the labour market'; 'I have a contact network that I can use to get a new (equivalent or better) job'; 'I know of other organizations/companies where I could get work'; 'my personal qualities make it easy for me to get a new (equivalent or better) job in a different company/organisation'; and 'my experience is in demand in the labour market'. The five point agreement scale, ranging from strongly disagree to strongly agree, achieved a Cronbach alpha score of .77.

The DOTs model was selected due to its wide acceptance and successful use among undergraduates (see Reddan and Rauchle, 2012; Smith *et al.*, 2009). Twenty one items were used to measure the four dimensions of self-awareness, opportunity awareness, decision-making learning and transition learning in alignment with McIlveen *et al.*'s (2013) study of Australian university students. A five point scale, ranging from 'very poor' to 'very good', was used by participants to rate their capabilities in each item. Cronbach alpha scores ranged from .81 to .84, providing assurance of internal consistency among the items and reliability of the four dimensions. Participants were also asked to provide responses on a number of background, study and work characteristics which were deemed relevant and were controlled for in the analysis. Age, gender, stage of study, degree specialisation, employment status and participation in WIL were included as control variables.

Analysis

Measurement and structural invariance was computed to ensure the measured variables operated comparably across the UK and Australian samples and therefore combining them was appropriate. Factor structures were confirmed for both individual samples and the combined sample with item-factor loadings ranging from .58 to .90. Zero-order correlations for all measured variables, included dummy coded, were computed. A descriptive analysis

was followed by hierarchical regression to measure the influence of predictor variables on PE for the combined sample. Analysis was conducted using SPSS 22.0.

RESULTS/DISCUSSION

Perceived employability among undergraduates

Dummy variables were created for institution, gender, degree specialisation, stage of study, participation in WIL and employment status. The Australian university was assigned the base variable for institution, others are denoted by (0) in Table 1. The means, standard deviations and zero-order correlations for all variables are presented in Table 2. As expected, the four DOTs dimensions were significantly correlated with each other. Of note, certain specialisations and employment status were significantly correlated with PE, justifying their use as control variables.

Table 2 Means, standard deviations and zero-order correlations for measured variables (N=480)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Age	25.19	7.35	1.00																		
2. Gender			-.02	1.00																	
3. Institution			-.29**	.15**	1.00																
4. Specialisation: Tourism			.06	.05	.21**	1.00															
5. Specialisation: Marketing			.17**	.12*	-.12*	-.14**	1.00														
6. Specialisation: HRM			-.03	.11*	.15**	-.13**	-.17**	1.00													
7. Specialisation: Finance			-.20**	0.01	.23**	-.19**	-.24**	-.22**	1.00												
8. Specialisation: Management			.03	-.08	-.15**	-.15**	-.18**	-.17**	-.25**	1.00											
9. Specialisation: Other			.00	-	-.29**	-.12*	-.14**	-.14**	-.20**	-.15**	1.00										
				.19**																	
10. Stage of study: Second year			-.02	.05	.27**	.14**	.00	.05	.08	-.11*	-.02	1.00									
11. Stage of study: Third year			.07	-.10*	-.38**	-.14**	.02	-.04	-.09*	.07	.07	-.70**	1.00								
12. Employment status: Part-time working			.19**	.05	.10*	.04	.05	-.02	.07	-.08	-.06	.14**	-.09*	1.00							
13. Employment status: Full-time working			-.22**	-.01	.04	-.07	-.04	.11*	-.04	.09	-.04	-.12*	.01	-.68**	1.00						
14. WIL: Completed work placement			.17**	-.04	-.23**	.05	.05	-.04	-.02	-.05	-.01	-.21**	.31**	-.06	.06	1.00					
15. Self-awareness	4.01	.51	.07	-.06	-.04	.00	-.01	-.16**	.01	.08	.02	-.03	.03	-.06	-.02	.18**	1.00				
16. Opportunity awareness	3.54	.80	-.06	.03	-.03	-.06	.07	-.11*	.01	.07	.00	-.04	-.03	-.14**	.09	-.01	.48**	1.00			
17. Decision making learning	3.80	.63	.09*	.01	-.15**	.01	.07	-.10*	-.03	-.03	.08	-.07	.07	-.03	.01	.17**	.65**	.56**	1.00		

18. Transition learning	3.77	.63	.03	-.04	-.08	-.02	.06	-.18**	.07	.02	.07	-.02	.07	-.06	-.02	.12**	.61**	.59**	.72**	1.00	
19. Perceived employability	3.70	.66	.05	.08	.06	.03	-.03	-.04	.09*	-.04	.01	.07	-.03	.03	-.19**	-.08	.29**	.23**	.31**	.33**	1.00

Notes: * $p < 0.05$ (two-tailed); ** $p < 0.01$ (two-tailed)

The average rating of 3.70 indicates that, overall, the students demonstrated fairly high levels of PE. The mean ratings for the five individual items for PE ranged from 3.47 to 3.91. The lowest rating was for accessing a contact network to assist individuals with securing a job (3.47), followed by demand for their experience in the labour market (3.51). Only marginally higher was the average rating for knowing of other organisations/companies for seeking employment (3.62). These results align with conventional wisdom given most students have yet to embark on their career and are less likely to have established a professional network given their study commitments. The two highest mean ratings, 3.93 and 3.97 respectively, were for having the personal qualities and competence to be successful in the labour market. This suggests that students appear to have developed confidence in their own abilities and traits and are therefore prepared, in that sense, for their entry into the labour market. However, it may also reflect an internalisation of the dominant employability discourse surrounding HE that investment in one's human capital is the route to career success. As such, this high level of association may reflect an artificially inflated sense of one's own value in the labour market, rather than a clear reflection of possession of this value, and a lack of humility or understanding of labour market realities. It may also reflect the skewed profile of the sample in respect of age and, in accordance with other studies, the greater PE among younger people. Kirves *et al.* (2014) found a positive association between optimism and performance employability and we may, therefore, be seeing evidence of the 'optimism of youth'.

Determinants of PE

Hierarchical regression analysis was used to test the specified hypotheses. The variance in PE is explained at three stages: institution, followed by background, study and employment characteristics then, finally, career management competencies. Table 3 summarises the three generated models. There was no evidence of multicollinearity with no inflated standard errors for predictor variables; tolerance ranging from .36 to .93 and Variance Inflation Factor (VIF) ranging between 1.08 and 2.78 and therefore within the recommended threshold (Hair *et al.*, 2010). The Durbin–Watson test statistic is $d=1.921$ and sits close to the critical value of two, indicating there is no first order linear auto-

correlation in the data (Norusis, 2012). Results therefore suggest the estimated β s are well established in the three generated regression models.

Table 3 Hierarchical regression analysis for perceived employability

Variables	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
<i>Step 1: Control variable</i>									
Institution	.09	.07	.06	.12	.08	.08	.13	.08	.09
<i>Step 2: Study and employment characteristics</i>									
Age				.01	.00	.08	.01	.00	.06
Gender				.13	.06	.09*	.12	.06	.09*
Tourism				.06	.13	.03	.07	.13	.03
Marketing				.00	.12	.00	-.03	.11	-.02
HRM				.02	.12	.01	.11	.11	.06
Finance				.17	.11	.11	.16	.10	.10
Management				.06	.12	.03	.04	.11	.02
Other				.12	.13	.06	.08	.12	.04
Stage of study: Second year				.05	.08	.04	.06	.08	.04
Stage of study: Third year				.05	.09	.04	.06	.08	.05
Employment status: PT				-.28	.08	-.21**	-.24	.08	-.18**
Employment status: FT				-.44	.09	-.31**	-.41	.09	-.28**
WIL: Work placement				-.11	.08	-.07	-.20	.07	-.13**
<i>Step 3: Career management competencies</i>									
Self-awareness							.12	.08	.09
Opportunity awareness							.02	.05	.02
Decision-making learning							.18	.07	.17*
Transition learning							.15	.07	.14*
F-value		1.883			3.055**			7.009**	
R ²		.004			.084			.315	
Adjusted R ²		.002			.057			.184	
ΔR^2					.080			.231	

Notes: * $p < .05$; ** $p < .01$

Background, study and employment characteristics

There were no variations in PE by institution. In alignment with certain studies, findings indicate that male students have higher levels of PE than females. This may be attributed to heightened female awareness of the enduring gender pay gap in both the UK and Australia and of evidence of higher rates of under-employment and unemployment and lower average salaries among females graduates

compared to their male counterparts (for example, Purcell *et al.*, 2013; Wilton, 2011). Contrary to a number of previous studies, there was no evidence to support a negative association between increased age and PE. Hypothesis five is therefore not supported. Mature graduates have often been shown to experience a difficult transition from HE into the labour market, with a lowered likelihood of entering graduate-level employment post-graduation, despite being more likely to be able to demonstrate the possession of the capabilities demanded by graduate employers (for instance, Purcell *et al.*, 2007). This finding may, therefore, be a product of a heightened sense of one's worth in the labour market among older students tempered by greater awareness of labour market challenges.

In relation to disciplinary differences in PE, hypothesis six – that major of study will not be associated PE – is supported by the data. It is important to remember that this study focuses on the PE of business undergraduates so variations are limited to different specialisations within the field of business. The lack of association between PE and stage of study fails to support hypothesis seven. This is perhaps counter-intuitive as one might expect a student in the latter stages to demonstrate greater confidence in their attributes and their application in the labour market on the basis of sustained development of these capabilities and more assuredness of their intended career path. Our data may indicate, therefore, a level of insecurity in one's own value in the well-publicised 'war for talent', despite having developed a greater sense of their own ambitions and capabilities.

A positive effect for participating in a work placement is only evident in the second model. It is possible that one or both of the significant DOTs dimensions – namely decision-making learning and transition learning - are acting as suppressors, meaning it is increasing the predictive validity of the work placement on PE. This notion is further supported by the work placement variable being positively correlated with both transition and decision-making learning, and not PE (see Ludlow and Klein, 2014). The absence of a definitive influence of work placements on PE highlights an area requiring further research. Future studies may benefit from a control group approach with clear differences between groups in relation to their participation in WIL, participation in career

development learning at university – particularly for provision focused on decision-making and transition learning - and also their employment history.

The influence of employment status on PE is perhaps surprising and contravenes hypothesis nine which posited no association between employment status and PE. In contrast, and counter-intuitively, those working on either a part- or full-time basis achieved lower ratings for PE. If a positive association had been recorded, one might expect that - through their work - they are likely to be more aware of those capabilities and personal qualities which are considered important for successfully securing employment, as well as being more practised at demonstrating and articulating them. They would also have a clearer understanding of which experiences are relevant, and why, and have built up a larger network of employer contacts. The apparent negative effect, however, implies their current work is making them less confident in their personal qualities and competence for attaining suitable employment. It appears, therefore, to be highlighting ‘what they do not know’ and providing little means by which to close this ‘employability gap’. They may also be more acutely aware of the volume and standard of competition for graduate-level positions and of industry’s increasingly high, and potentially unrealistic (Cornford, 2005), expectations of new starters.

Career management competencies

Interestingly, neither opportunity awareness nor self-awareness significantly influenced PE. This means hypotheses two and four are not supported. This follows prior research (Wittekind et al. 2010) but is also counter-intuitive given the extensive literature positing a clear linkage between individuals possessing a ‘healthy self-concept’ (Stewart and Knowles, 1999) and an appreciation of labour market context as antecedents of career success. This anomaly may be explained by competing sets of assumptions among students. Among those with low levels of self- or opportunity awareness there may exist a greater sense of their own worth to employers, whilst among those who are more reflective about their attributes and more knowledgeable about the labour market, there may exist greater tentativeness about their comparative marketability.

The influence of decision-making learning on PE means that hypothesis one is supported, and attests to the importance of adequate development of critical career planning and decision-making capabilities among students; relating self-awareness to actual opportunities; evaluating their personal priorities and devising and reviewing short and long-term career plans. The conscious development and application of decision-making skills whilst a student might well develop greater confidence in their ability to negotiate both rigorous selection processes and, subsequently, complex career pathways. Such confidence is likely to be underpinned by a greater sense of career direction and focus and awareness of the educational and personal attributes required to achieve ambition.

The positive association between transition learning and PE concerns the development of effective strategies for pursuing opportunities. Transition learning encompasses an appreciation of effective opportunity-search strategies and recruitment and selection methods; being able to use vacancy information and understand the challenges involved in pursuing them; and, being able to vary their self-presentation in a range of selection scenarios and for different opportunities. As with decision-making skills, the possession of such skills is likely to bolster confidence in being able to move into the graduate labour market more seamlessly. Overall, that both decision-making and transition learning were found to be associated with PE, and self- and opportunity awareness not, suggests two propositions: first, that it is faith in one's ability in key areas associated with labour market success that are more important than understanding one's strengths and weaknesses; second, that awareness of the nature of the graduate labour market is less significant than faith in one's ability to navigate it.

IMPLICATIONS

Levels of perceived employability

The lowest PE rating was related to accessing a contact network for getting a job. Awareness of other suitable organisations for employment also rated as relatively low. Taken together, these two findings suggest a critical collaborative role for both universities and employers. In particular, it stresses the importance of universities actively supporting students in the development of both networks and

networking capabilities, not least through bringing work organisations ‘into the classroom’ and providing opportunities to establish and engage in dialogue with potential employers. For employers, such involvement may include employer fairs, alumni events, or WIL. This collaboration will not only develop curricula directly informed by the needs of employers, but also enable students to begin to develop networks beyond the confines of the university.

The second lowest rating for employability related to the statement that ‘my experience is in demand in the labour market’. This may reflect a lack of experience in which to have confidence or a lack of certainty about its value. In addressing both interpretations, universities need to work to establish varied opportunities for gaining relevant work experience. It is only through such exposure to the workplace that students will gain experience, engage in competency development and cultivate an appreciation of how and where such competency can be applied. This again requires engagement with employers and also early interventions to stress the importance of work experience. Moreover, both for the development of networks and labour market value’, students should be expected to engage with institutional opportunities and actively seek opportunities of their own.

The fact that students achieved higher average ratings for their understanding of the personal qualities and skills needed to succeed in the labour market suggests that employers – in collaboration with universities, professional associations and government bodies – are doing well at disseminating their expectations of new graduates. Providing benchmarks through, for example, national skills frameworks and detailed descriptors for outcomes by qualification level, enable students to better evaluate their personal strengths and weaknesses in order to enhance their PE. Similarly, universities would appear to be doing a better job at developing self-awareness in students and an appreciation of the relevance of certain personal qualities and skills in succeeding in their intended profession. This may be attributed to recent developments in pedagogy to underpin the development of employability (Pegg *et al.*, 2012), such as the incorporation of skill audits, self-reflection and explicit transferable skills training that increasingly form elements of the curriculum across the disciplinary spectrum, as well as the development of extra-curricular ‘employability awards’ as part of the HE provision

Influences on perceived employability

The findings for demographic and educational influences on PE have implications for both employers and universities. The influence of gender and age on employability would suggest an organisational imperative to ensure approaches to recruitment and selection techniques are inclusive and clearly promote diversity. It also suggests a need for organisations – if they wish to recruit from across the graduate talent pool – to provide opportunities for relevant work experience to enable all groups of students to develop both competencies and networks, along with awareness of and confidence in their value to prospective employers. As such, targeted recruitment strategies and employer branding are crucial to ensuring that organisations do not miss out on recruiting capable graduates and, once recruited, efforts made to develop PE given its association with ability to cope with change (Wittekind, 2010) and heightened engagement and wellbeing (Berntson and Marklund, 2007). That PE was most clearly associated with decision-making learning and transition learning provides support for direct employer involvement in developing student employability through, for instance, curriculum co-design, to develop these capabilities, not least by providing some exposure to the demands of the workplace. Moreover, it bolsters the view that PE is developed most effectively where employers provide opportunities and support for competency development through work experience and non-placement WIL, in conjunction with universities (see Wittekind, 2010).

The lack of age effect implies that education practitioners responsible for career management provision at university – whether from centralised careers service personnel or disciplinary academics – should be focusing their efforts in developing confidence, self-awareness and networks equally for both young and older students. Evidence of lower PE among females is unsurprising, given continued evidence of gender inequality in both graduate pay and access to graduate employment opportunities (Purcell *et al.*, 2013). Specific initiatives – such as workshops, networking opportunities and individual counselling - involving female students may assist to heighten their awareness of the skills expected by industry and their capabilities in these areas, through skill audits and skill portfolios, to boost their confidence in recruitment and selection scenarios. Moreover, providing access to

opportunities for development in an organisational context, through client-based projects, placements, volunteering, internships and service learning units, would seem critical in developing both perceptions of employability and raising ambitions. Both mature and female graduates have been found to report greater levels of possession of transferable skills (Wilton, 2011) so their lower PE found in this study is perhaps anomalous. One explanation may lie in the finding here that self-awareness does not appear associated with PE and the finding of Wittekind *et al.* (2010) that ‘a person’s belief in their capability to present oneself and one’s skills positively’ did not positively predict PE. This suggests recognition among such graduates of the social context of employability and structural barriers to achieving desired-for employment, irrespective of a positive appreciation of their own human capital. This supports the conclusion of Berntson (2006) that labour market ‘conditions’ – both transient and continuous - are crucial in shaping PE.

The fact that there is no variation in PE by stage of study does little to alleviate concerns for the effectiveness of career management provision in HE. It might be presumed that those approaching the end of their studies would feel more confident in their preparedness for entering the labour market than those in the initial stages of study. Of course, it may equally be argued that as career ambitions crystallise for students as they progress through their studies and develop a greater understanding of labour market realities, it is unsurprising that students become more aware of the challenges that they face. Either way, the finding urges HE providers to review and reconsider their strategies for developing career management competencies to ensure the effective provision of opportunities for professional networking, skill auditing and self-reflection to facilitate an understanding of acquired personal qualities and competencies for their intended profession. Not only should access to such opportunities be provided, HE providers must also work to ensure students are aware of their value in developing required attributes. Perhaps more importantly, alongside developing the ‘hard’ capabilities associated with effective career transition, HE providers must not neglect to develop among students the self-belief, resilience and assuredness to counter an overwhelmingly negative portrayal of the graduate labour market as labyrinthine and overcrowded. This presents a further imperative for HE

providers to ensure that education regarding the nature of the graduate labour market does not diminish students' self-belief in their ability to successfully navigate through such competitive terrain.

That the data demonstrated a lack of effect of degree specialisation on PE might lead us to conclude that, the developmental needs of business undergraduates are consistent across disciplinary areas and, therefore, students can be subject to the same initiatives – both within and ex-curricular - for enhancing PE. This is despite evidence that shows the differential impact of degree discipline on employment outcomes (Wilton, 2011).

CONCLUSION

Overall, students demonstrated reasonably high levels of PE. They achieved relatively lower ratings for access to professional networks and perceptions of the demand for their experience in the labour market. Their ratings for having the personal qualities and competence to be successful in the labour market were proportionately higher, demonstrating a level of confidence in their preparedness for entering the labour market. There was no evidence of institution, age, degree specialisation or stage of study predicting PE. There was, however, a gender effect with males recording higher levels of PE than female students. Employment status also appears to be important with those working on either a part- or full-time basis achieving less favourable perceptions of their PE. Two of the four dimensions from the DOTs framework of career management competencies, namely decision-making learning and transition learning, recorded a positive association with PE.

This paper contributes to a developing understanding of the factors that appear to actively contribute to the development of PE among undergraduate students. Given a number of dominant trends in the graduate labour markets of developed capitalist economies – including the ongoing ‘war for talent’, continued growth in the supply of graduates and seemingly perpetual instability – then this body of research is important as it underpins two critical aspects of the interface between HE and employers. First, for universities, it should be used to formulate appropriate strategies to develop the dynamic capabilities, confidence and resilience required for both successful integration and sustained success

in the labour market, mindful of individual and collective difference in levels of PE. For instance, it stresses the importance of developing decision-making and ‘transition’ capabilities during undergraduate study. Second, for employers, given the association between PE and desirable employee behaviours and competencies, an appreciation of variation in and the determinants of PE is crucial in developing appropriate strategies for recruitment, retention and performance management. Of course, the proper functioning of employers and universities in respect of addressing the mutual concern of graduate employability has wider implications for prosperous and sustainable national economic development.

This study provides further support for the view that the development of inclusive approaches to supporting students in acquiring the attitudes and capabilities associated with successful labour market ‘performance’ requires collaboration between employers, universities and individuals themselves. This collaboration should be focused on developing opportunities and support structures that enable exposure to the world of work and develop both the hard and soft attributes associated with employability. Most importantly, the findings stress that a one-size-fits-all approach to employability development is unlikely to meet the needs of all stakeholders, given demographic and educational variation, as well as evidence of the influence of specific competencies that shape PE.

It would be beneficial to extend research in this area to explore both levels and predictors of PE in other fields beyond business to better understand the impact of discipline. Further, there are other determinants of PE, such as personality (Berntson *et al.*, 2006; Sok *et al.*, 2013), which can be explored. Following Berntson (2006), developing an understanding of the interaction between individual and structural determinants of PE is also critical. Given the volatility of the labour market future graduates are likely to enter, understanding how perceptions of context shape PE and their interaction with perceptions of individual capability would provide significant insight into how students could best be supported.

As with any study, there are limitations. First, causality cannot be explained due to cross-sectional design (see Sok *et al.*, 2013). Second, the study is focused on the antecedents of PE with no consideration of the outcome for undergraduates. This may be particularly important for new graduates who are unique in their transition from education to work (see Berntson *et al.*, 2006). Third, only a single method (online survey) is used, raising concerns with bias (see Eby *et al.*, 2003). Clarke (2009) raises concerns with the level of subjectivity associated with self-perceptions of employability, arguing this may vary with previous labour market experiences and an individual's degree of adaptability and flexibility. Finally, there is no consideration of contextual factors which may play an important role in individual perceptions of employability.

REFERENCES

- AGR (2013), *AGR graduate recruitment survey 2013 (Winter Review)*, Association of Graduate Recruiters, London.
- Australian Association of Graduate Employers [AAGE] (2013), *2013 AAGE employer survey*, AAGE, Sydney, Australia.
- Baruch, Y. (2004), “Transforming careers: from linear to multidirectional career paths: organizational and individual perspectives”, *Career Development International*, Vol. 9 No. 1, pp. 58-73.
- Berntson, E. and Marklund, S. (2007), “The relationship between perceived employability and subsequent health”, *Work and Stress: An International Journal of Work, Health and Organisations*, Vol. 21 No. 3, pp. 279-292.
- Berntson, E., Sverke, M. and Marklund, S. (2006), “Predicting perceived employability, human capital or labour market opportunities”. *Economic and Industrial Democracy*, Vol. 27 No. 2, pp. 223-244.
- Billet, S. (2011), *Curriculum and pedagogical bases for effectively integrating practice-based experiences—Final report*. ALTC, Strawberry Hills, Australia.
- Boden, R. and Nedeava, M. (2010), “Employing discourse: universities and graduate ‘employability’”, *Journal of Education Policy*, Vol. 25 No. 1, pp. 37-54.
- Bourner, T. and Millican, J. (2011), “Student-community engagement and graduate employability”, *Widening Participation and Lifelong Learning*, Vol. 13 No. 2, pp. 68–85.
- Bridgstock, R. (2009), “The graduate attributes we’ve overlooked: Enhancing graduate employability through career management skills”, *Higher Education Research and Development*, Vol. 28 No. 1, pp. 31-44.
- Clarke, M. (2009), “Plodders, pragmatists, visionaries and opportunists: career patterns and employability”, *Career Development International*, Vol. 14 No. 1, pp. 8-28.
- Coates, H. and Edwards, D. (2011), “The Graduate Pathways Survey: New insights on education and employment outcomes five years after Bachelor degree completion”, *Higher Education Quarterly*, Vol. 65 No. 1, pp. 74–93.
- Cornford, I. (2005), “Challenging current policies and policy makers’ thinking on generic skills”, *Journal of Vocational Education and Training*, Vol. 57 No.1, 25–46.
- De Cuyper, N., Bernhard-Oettel, C., Berntson, E., DeWitte, H. and Alarco, B. (2008), “Employability and employees’ well-being: Mediation by job insecurity”, *Applied Psychology: An International Review*, Vol. 57 No. 3, pp. 488–509.
- Defillippi, R. and Arthur, M. (1994), “The boundaryless career: A competency- based Perspective”, *Journal of Organizational Behavior*, Vol. 15 No. 4, pp. 307–324.
- Department of Industry (2013), *Strategic Research Priorities*. Department of Industry, Canberra, Australia.
- Department of Business, Innovation and Skills (BIS) (2009a), *Higher Education at Work – High Skills: High Value*, Department of Business, Innovation and Skills, London, UK.
- De Vos, A., De Hauw, S. and Van der Heijden, B. (2011), “Competency development and career success: The mediating role of employability”, *Journal of Vocational Behavior*, Vol. 79 No. 2, pp. 438-447.
- Eby, L., Butts, M. and Lockwood, A. (2003), “Predictors of Success in the era of the boundaryless career”, *Journal of Organizational Behavior*, Vol. 24 No. 6, pp. 689–708.
- Forrier, A. and Sels, L. (2003), “The concept employability: A complex mosaic”, *International*

- Journal of Human Resources Development and Management*, Vol. 3 No. 2, pp. 102–124.
- Fugate, M., Kinicki, A. and Ashforth, B. (2004), “Employability: A psycho-social construct, its dimensions, and applications”, *Journal of Vocational Behavior*, Vol. 65 No. 1, pp. 14–38.
- Gerber, M., Wittekind, A., Grote, G. and Staffelbach, B. (2009), “Exploring types of career orientation: A latent class analysis approach”, *Journal of Vocational Behavior*, Vol. 75 No. 3, pp. 303-318.
- GCA (2012), *Graduate Outlook 2012: the report of the Graduate Outlook Survey*, Graduate Careers Australia, Parkville, Australia.
- Hair, J., Black, W., Babin, B. and Anderson, R. (2010), *Multivariate data analysis: A global perspective*, New Jersey, US, Pearson Prentice-Hall.
- Harvey, L. (2001), “Defining and measuring employability”, *Quality in Higher Education*, Vol. 7 No. 2, pp. 97-109.
- Harvey, L. (2003), *Transitions from Higher Education to Work: A briefing paper*. Centre for Research and Evaluation, Sheffield Hallam University Sheffield, UK.
- Holmes, L. (2001), “Reconsidering Graduate Employability: the ‘graduate identity’ approach”, *Quality in Higher Education*, Vol. 7 No. 2, pp. 111-119.
- Isherwood, S. (2014), *The Graduate Labour Market in 2014*, presentation at the Employability Summit, University of Leicester, December 18th 2013.
- Jackson, D. and Chapman, E. (2012), “Non-technical competencies in undergraduate Business degree programs: Australian and UK perspectives”, *Studies in Higher Education*, Vol. 37 No. 5, pp. 541-567.
- Jackson, D. (2014), “Factors influencing job attainment in recent Bachelor graduates: Evidence from Australia”, *Higher Education*, Vol. 68 No. 1, pp. 135-153.
- Jain, R. and Jain, S. (2013), “Conceptualization, Measure Development and Empirical Assessment of Career Oriented Attitudes and Employability of Technology Graduates”, *Vision: The Journal of Business Perspective*, Vol. 17 No. 2, pp. 143-157.
- Kinnunen, U., Mäkikangas, A., Mauno, S., Siponen, K. and Nätti, J. (2011), “Perceived employability: Investigating outcomes among involuntary and voluntary temporary employees compared to permanent employees”, *Career Development International*, Vol. 16 No. 2, pp.140-160.
- Kirves, K., Kinnunen, U. and De Cuyper, N. (2014) “Contract type, perceived mobility and optimism and antecedents of perceived employability”, *Economic and Industrial Democracy*, Vol. 35 no. 3, pp.435-453.
- Ludlow, L. and Klein, K. (2014), “Suppressor Variables: The Difference between ‘Is’ versus ‘Acting As’”, *Journal of Statistics Education*, Vol. 22 No. 2.
- Mäkikangas, A., de Cuyper, N., Mauno, S. and Kinnunen, U. (2013), “A longitudinal person-centred view on perceived employability: The role of job insecurity”, *European Journal of Work and Organizational Psychology*, Vol. 22 No. 4, pp. 490-503.
- McIlveen, P., Burton, L. and Beccaria, G. (2013), “A short form of the career futures inventory”, *Journal of Career Assessment*, Vol. 21 No. 1, 127-138.
- McKeown, T. and Lindorff, M. (2011), “The graduate job search process—a lesson in persistence rather than good career management?” *Education + Training*, Vol. 53 No. 4, pp. 310-320.
- Norusis, M. (2012), *IBM SPSS statistics 19 statistical procedures companion*, Prentice Hall.
- Özbilgin, M., Kusku, F. & Erdogmus, N. (2005). Explaining influences on career ‘choice’: The case of MBA students in comparative perspective. *International Journal of Human Resource Management* 16(11), 2000-28.

- Parker, S., Jimmieson, N. and Amiot, C. (2010), "Self-determination as a moderator of demands and control: Implications for employee strain and engagement", *Journal of Vocational Behavior*, Vol. 76 No. 1, pp. 52–67.
- Pegg, A., Waldoock, J., Hendy-Isaac, S. and Lawton, R. (2012), *Pedagogy for employability*. Higher Education Academy, York, UK.
- Potgieter, I. (2012), "The relationship between the self-esteem and employability attributes of post-graduate business management students", *SA Journal of Human Resource Management*, Vol. 10 No. 2, pp. 1–15.
- Purcell, K., Wilton, N & Elias, P. (2007) Hard Lessons for Lifelong Learners? Mature graduates and Mass Higher Education, *Higher Education Quarterly*, Vol. 61 No.1, pp. 57-82
- Purcell, K., Elias, P., Atfield, G., Behle, H., Ellison, R. and Luchinskaya, D. (2013), *Transitions into employment, further study and other outcomes*. Warwick Institute of Employment Research, Warwick, UK.
- Qenani, E., MacDougall, N. and Sexton, C. (2014) "An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment", *Active Learning in Higher Education*, Vol. 15 no. 3, 199-213
- Reddan, G. and Rauchle, M. (2012), "Student perceptions of the value of career development learning to a work-integrated learning course in exercise science", *Australian Journal of Career Development*, Vol. 21 No. 1, pp. 38-48.
- Reeskens, T. and van Orschot, W. (2012) "Those who are in the gutter look at the stars? Explaining perceptions of labour market opportunities among European young adults", *Work, Employment and society*, Vol. 26 No. 3, pp. 379-395
- Rothwell, A. and Arnold, J. (2007), "Self-perceived employability: development and validation of a scale", *Personnel Review*, Vol. 36 No. 1, pp. 23–41.
- Rothwell, A., Herbert, I. and Rothwell, F. (2008), "Self-perceived employability: Construction and initial validation of a scale for university students", *Journal of Vocational Behavior*, Vol. 73 No. 1, pp. 1-12.
- Rothwell, A., Jewell, S. and Hardie, M. (2009), "Self-perceived employability: Investigating the responses of post-graduate students", *Journal of Vocational Behavior*, Vol. 75 No. 2, pp. 152-161.
- Smith, M., Brooks, S., Lichtenberg, A., McIlveen, P., Torjul, P. and Tyler, J. (2009), *Career development learning: maximising the contribution of work-integrated learning to the student experience*, ALTC, Australia.
- Smith, E. and Kruger, J. (2008), "A critical assessment of the perceptions of potential graduates regarding their generic skill level: An exploratory study", *SAJEMS NS*, Vol. 11 No. 2, pp. 121-138.
- Sok, J., Blomme, R. and Tromp, D. (2013), "The use of the psychological contract to explain self-perceived employability", *International Journal of Hospitality Management*, Vol. 34, pp. 274-284.
- Stewart, J. and Knowles, V. (1999), "The changing nature of graduate careers", *Career Development International*, Vol.4 No. 7, pp. 370-383.
- Stuart, M., C. Lido, J. Morgan, L. Solomon and May, S. (2011), "The impact of engagement with extra-curricular activities on the student experience and graduate outcomes for widening participation populations", *Active Learning in Higher Education*, Vol. 12 No. 3, pp. 203–15.
- van der Heijden B. (2002), "Prerequisites to guarantee life-long employability", *Personnel Review*, Vol. 31 No. 1, pp. 44-61.
- Vanhercke, D., De Cuyper, N., Peeters, E. and De Witte, H. (2014), "Defining perceived employability: a psychological approach", *Personnel Review*, Vol. 43 No. 4, pp. 592-605.

- Watts, A. (2006), *Career development learning and employability*. Learning and Employability Series Two, ESECT and HEA, York, UK.
- Whitelaw, P. (2010), *Re-conceptualising hospitality management: Analysing and predicting career progression and success in hospitality*, PhD thesis, Victoria University, 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*, Vol. 25 (No. 1, pp. 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*, Vol. 37 No. 5, pp. 603–620.
- Wittekind, A., Raeder, S. and Grote, G. (2010), “A longitudinal study of determinants of perceived employability”, *Journal of Organizational Behavior*, Vol. 31, No. 4, pp. 566-586.
- Yorke, M. (2006), *Employability in higher education: What it is – What it is not, learning and employability series one*. Higher Education Academy, York, UK.