Professional identity formation in contemporary higher education students

Associate Professor Michael Tomlinson* University of Southampton, Southampton Education School, University Road Southampton, Hampshire SO17 1BJ United Kingdom M.B.Tomlinson@soton.ac.uk

Associate Professor Denise Jackson School of Business and Law, Edith Cowan University 270 Joondalup Drive Joondalup WA 6027 Australia d.jackson@ecu.edu.au Tel: +61 (0) 6304 2794 ORCID: 0000-0002-7821-3394

* Corresponding author

Abstract

The study examines the prevalence of emergent professional identity (PI) among different groups of higher education students as well as the determining factors in the formation of PI. Drawing on evidence from a survey among Australian and UK students (*N*=433), from two institutions and across a range of disciplines, empirical and conceptual insights are developed on the formation and impacts of students' professional identity. The article shows the significance of identity formation as a crucial bridge between higher education and future employment and its mediation by other key resources - in particular social and cultural capital - that students acquire before entering the labour market. The relative strength of identity formations can impact on students' sense of familiarity, proximity, and confidence around targeted employment areas. The article finally discusses the implications this has for individuals and institutions.

Introduction

An extensive body of literature has examined recent trends in graduates' employment outcomes, often from a variety of conceptual approaches. This interest has partly emerged as the result of policy levers aimed at assessing how successful higher education institutions (HEIs) are in meeting wider economic demands. HEIs are seeking efficacious formulas by which to enhance graduates' post-university returns (Department for Business, Innovation and Skills 2016), compounded by a largely performative agenda that seeks to measure institutions' success in the form of graduates' employment outcomes. Also apparent is increasing global discussion on how HEI funding could be partially determined by its graduates' employment outcomes (Australian Government 2017; Myklebust 2017), the overarching principle being that institutions can play a pivotal role in preparing graduates for working life and achieving sustainable careers. This policy discourse is principally supply-driven and adopts largely a technicist approach to employability, namely the up-skilling of graduates to meet to a range of person-job demands, and with little regard to the importance of external labour market forces.

A notable feature of more recent research on employability has been a gradual reframing of the problem less as the acquisition of employability skills and more as a relational and socially constructed process that entails graduates developing meaningful relationship with the labour market and its key social actors. Within this perspective, employability is conceptualised as an active process operating over time and context. Correspondingly, employability is less about the acquisition and deployment of employability skills and more about personal and sociocultural resources which are acquired through multiple contexts and which enhance the value of a graduate's emerging profile. It is now recognised that forms of capitals, in particular social and cultural, are a crucial component in facilitating how successfully graduates are able to

negotiate access to the labour market and its opportunity structures (for example, Tomlinson 2017; Clarke 2017; Fugate et al. 2004).

An important dimension to employability enhancement is therefore the development of specific professional identities (PIs), or indeed more generic sets of identities towards working life. The impact of these is two-fold: firstly, students engage in early forms of occupational socialisation which can equip them for a given profession and its various modes of practice; and secondly, this may help them navigate choices and pathways and form more dynamics relationships to working life. In viewing employability more as a processual dimension that operates across multiple context and time, there is a greater focus on how this is formed through significant educational and work-related experiences and then played out in the initial stages of labour market participation. Whilst identity has not been previously related to self-perceived employability, the evidence indicates that the development of stronger PIs can strengthen both students' internal and external perceptions of their labour market scope (Bennett 2011; Tan et al. 2017).

The present research has three dominant aims: first, to examine how prevalent is the manifestation of emergent PI among HE students. Second, to examine determining factors of emerging PI among HE students. Finally, to explore student ability to manage the reconciliation of their personal and professional values. Such analysis should generate further insight on the relationship between identity formation and students' approaches to their future employment, including how they perceive negotiating a variety of work-related challenges, demands and practices. The article first provides a conceptual overview of the problem of graduate identity based on a variety of research strands which have sought to conceptualise this problem beyond conventional policy narratives. After an outline of the methodological approach, it presents

analysis on students' perceptions of their emerging PIs and how they understand the role of capitals in shaping future outcomes.

Conceptualisation of professional identity

PI is defined by Chin Pei Tan et al. (2017) as 'the self that has been developed with the commitment to perform competently and legitimately in the context of the profession, and its development can continue over the course of the individuals' careers' (1505). Such an individual can find meaning in their work and understands and is connected to their profession's guiding beliefs and values. This emphasises *professional socialisation*, the "social construction and internalisation of norms and values by the profession" (Ajjawi and Higgs 2008, 135), which occurs over time and requires a commitment to learning. This developed understanding of the values, attitudes, beliefs and responsibilities of a profession will enact commitment to a professional career (Richardson 1999) and PI (Higgs 1993).

Classic literature in this area has conceptualised PI as entailing a process of self-positioning in relation to the social environment, and related set of practices, of individuals' current or future working life (Dubar 1991). Within working contexts, individuals seek to enact these identities through meaningful encounters with other actors in order for these identities to be adequately confirmed or validated (Marsico 2012). As part of a narrative trajectory, professional identity entails a set of schematic ideas about a desired future self and how this connects more broadly to individuals' sense of who they are in relation to work. As a relational issue, professional identity also has an emotional component which relates to socio-affective properties of a given professional environment, including challenging intra- and inter-professional relations (Meijers and Wardekker 2003). With respect to the conceptualisation of PI, Trede, Macklin and Bridges

(2012) note the "remarkably disparate range of theoretical frameworks, indicating an underdeveloped field where there is little agreement amongst scholars" (375).

Related research has conceptualised the university-to-work as a dynamic process whereby students move between different modalities of identity (Hinchliffe and Jolly 2011; Holmes 2013; 2015) and this entails some level of active negotiation on the part of a graduate. The identities a graduate develops on the point of graduation are notional and only emergent in the sense that they contain facets that meet an employer's demands of the type of person they wish to recruit (including purported skill sets and behavioural competences). They may also vary in terms of how well-formed, actual or ideational, they are. The more congruent these emergent identities are with the actual identities they will need to operationalise in the labour market, the more successful a graduate may be in negotiating entry and convincing employers that they are the appropriate person for a given role. As significant gatekeepers, employers affirm the claimed identities graduate bring forward. This does not just operate in recruitment but also in the early career phase.

The development of PI is also important for HE students to 'achieve good learning, to feel confident, and to stay motivated' (Jensen and Jetten 2016, 1034). They found students needed to develop their PI to grasp what their intended profession entailed, visualise themselves in the field and understand who they are and what they are aspiring to. Without identifying self with the chosen profession, they observed students becoming disengaged and lacking motivation, negatively impacting on self-confidence, goal setting and academic success. In alignment with the first research aim to gauge emerging PI among HE students, we pose the following broad research question:

RQ₁: How prevalent is the manifestation of emergent PI among HE students?

Professional identity formation in higher education

The formulated research questions and hypotheses in this section relate to the second research aim of exploring influential factors on HE students' emerging PI.

Professional socialisation

Other research has examined the formation of graduate identities within and through the wider HE experiences. One of these has been to locate identity as a form of professional development and a mode of occupational socialisation which enhances a student's relationship to working life and is potentially empowering. Tan and colleagues (2017) affirmed the importance of professional practice knowledge and how to enact it, including codes of conduct. One effect of PI formation is that individuals potentially develop a more cohesive relationship to their working lives often through engaging in forms of professional socialisation, either directly or indirectly, which enables both the internalisation and reproduction of salient norms and values associated with professional life (Dubar 1991). The nurturing of norms and values are especially pertinent as they provide a framework for both meaning and action within working contexts that help individuals gain control of new environments and also to operate from a dominant (sometimes tacit) organisational-cultural script. Related to this is a person's adjustment to their working life and how much of a sense of autonomy and self-authorship they are able to acquire in the process.

Acculturation into one's profession may be augmented by communities of practice (Lave and Wenger, 1991), such as professional associations, where members learn about shared goals, beliefs, values and behaviours. A significant element here is the formation of pre-professional identities and their potential development through the formal and informal opportunities

student are able to access. Jackson's (2016; 2017) research introduced the concept of *pre-professional identity* and has shown this to be a significant component in how students enhance their future professional orientations and practices, and their career goals. Jackson asserts that communities of practice and work-related and wider experiences - such as structured work placements – are instrumental in shaping identity. They enable students to develop familiarity with professional norms, values and standards, added value to their professional disposition and emerging identity (see Tan et al. 2017), leading to the following hypothesis:

H₁: Familiarity with professional culture and practices will enhance PI formation.

The role of self-authorship

Baxter-Magolda's (1998) work on self-authorship is apposite as it conceives identity formation in terms of movement from more tentative or fragmentary novice starting positions towards more confident terrain. Self-authorship means having trust in one's internal voice, not being bounded by the values and interest of others and thus contributing to the professional community through new perspectives and knowledge. The notion of self-authorship broadly aligns with Tan et al.'s (2017) PI dimension of *professional self-efficacy*, a confidence in being able to perform at work. A trajectory towards stronger self-authorship may prompt career exploration, moving from the starting point of experimenting with a career area, through to gaining better insight into the job to a stronger and more grounded sense-of-oneself as a professional. This enables a student to develop a firmer narrative map of what is possible and achievable within a given occupational context.

Baxter Magolda posited that there are four stages of self-authorship: *following formulas* where individuals rely on external cues and lack awareness of their own values and identity. Professional socialisation and self-reflection will lead to the *crossroads* and increasing

recognition of one's own values and a shift in accepting to evaluating presented knowledge and information. *Self-authorship* is defined by listening but not being bounded by others and the ability to interpret knowledge, experience and choice. The final stage of *internal foundations* is characterised by new perspectives and contributions to the profession and where actions are defined by internal beliefs and a sense-of-self. The following hypothesis has therefore been formed:

H₂: Stronger self-authorship will lead to higher levels of PI.

The role of resources: forms of capital and identity formation

The extent to which graduates are able to negotiate access to employment opportunities has been shown to entail more than the development of the 'skills' they have acquired during university (Clarke 2017; Holmes 2013). Instead wider resources come into play which provide additional layers of valued experience, insight, cultural knowledge, behavioural dispositions and attitudes that take individuals closer to the labour market and its opportunity structures. Accordingly, human capital in the form of specialised or generic knowledge that is valued by employers often needs to be overlain with additional set of capitals which are not only recognised and rewarded in a given field but help broker access to wider opportunities structures. Whilst traditional markers of human capital such as formal qualifications are significant in their own right, they do not necessarily translate into guaranteed labour market success.

In developing the concept of employability capital, Peeters et al. (2019) differentiate between human capital, understood as a body of knowledge, skills and attitudes, and social capital in the form of strength and quality of social relations. Both these forms of capital operate across multiple dimensions that are specific (applicable to a given job are), generic (applicable to

broader aspects of career development and developmental (temporally developed over the course of working life). Social capital is effectively a socialised form of the knowledge and skills contained within human capital as it mobilised through the social ties and networks which further enrich its value. Additional forms of valuable employment-related knowledge are generated through the social networks, interactions and relationships individuals form with significant others in a given employment field. Overall, enhanced levels of social capital can lead to PI formation through providing greater career insight and awareness and reinforcing the "public acknowledgement of one's claim to certain resources" (Lin 2001, p.20)

Another crucial form of capital is the cultural capital that individuals may acquire in terms of culturally-relevant knowledge, dispositions and attitudes that are desired within an organisation. Much of the value of cultural capital is contingent on the employment field in which it is recognised and validated. The challenge for graduating students is to be able to harness forms of cultural capital, embodied and symbolic, that make themselves attractive to potential employers and which signal their distinct value to a given workplace. Studies have revealed continued inequities amongst well-qualified graduates in terms of the cultivation and deployment of cultural capital (Ashley and Empson 2017; Bathmaker et al. 2013). Yet within a diverse labour market, cultural capital is relative to a broad range of fields and not just confined to elite field which valorise traditional forms of embodied capital acquired by middle class students.

In the case of HE graduates, there are number of relevant issues in the development and deployment of social and cultural capital. One of these is the extent to which broader experiences, often external to formal learning, can facilitate the enrichment of cultural capital including the acquisition of culturally values modes of practice and knowledge. Exposure to

work experience and work-related learning has both potential to leverage significant cultural knowledge and insight, in the same way that it can enable a student to open up significant sets of social relations with significant others in their targeted field. First, access to significant employment actors, organisations and workplace sites can first enhance the visibility of a graduate to employers. They effectively become more visible, immediate and potentially trusted. Second, it transfers significant employment-related knowledge which they can draw upon not just in the workplace but also in negotiating recruitment where they have to signal work readiness. Such knowledge may not be easily formally acquired in the HE context alone. Third, this can help strengthen individual's relationship to working life including their subjective and reflexive awareness of their values: in essence, the emergence of their professional selves. The following hypotheses were thus formulated:

H₃: Greater social capital will predict stronger PI formation

H₄: Greater cultural capital will be positively associated with PI formation.

Demographic and background factors

Variation in PI formation among student groups is empirically underexplored (Nadelson et al. 2015). Regarding discipline, one might anticipate that courses with a clear occupational pathway (for example, Education, Nursing, Allied Health Sciences) may more easily facilitate professional socialisation as students are sub-consciously and physically immersed into the work context from the outset through extensive use of practicums, simulated learning and integration of practice and code (such as uniforms) in the classroom. Level of study may also be important with postgraduate students potentially having better formed PI through career development learning and professional enculturation during their university years. Given the lack of empirical exploration of these influences, directional hypotheses were not formulated and rather a broad research question was posed:

Reconciling multiple identities

This section aligns with the third research aim on how students manage the reconciliation of their personal and professional values. As Hinchliffe and Jolly (2011) illustrated, graduates' identities are gleaned by employers through a wider constellation of values, behavioural dispositions, ethical outlooks and performance potential. The important task for graduates is being able to warrant the identities valued by an employer and articulate these into practices that have potential organisational value. Overall, a graduate will be advantaged if there is a good fit between their existing value sets, behavioural dispositions and overall identity manifestations and the cultural and interpersonal constitution of a workplace. The key, therefore, is honing this in such a way as to persuade employers that their identity capital is fully congruent with the dominant identities of an employer organisation. This, however, may be problematic for those in the early stages of PI formation whom are still trying to reconcile their own, sometimes conflicting, identities, such as parent, student, worker, carer, friend (Fellenz 2016). Indeed, Mishler (1999) asserts we have not one single identity but many subidentities acting 'as a chorus of voices' (8) and Trede et al. (2012) emphasise the importance of students confidently operating within and across roles through better-aligned personal interests with professional values and social norms. Given the infancy of exploring PI among HE students, we posed a broad research question:

RQ₃: To what extent do students manage to reconcile their personal and professional values?

Methodology

Participants

The sample comprised of undergraduate and postgraduate students (N=433) from two universities: one in Australia (N=307), the other in the UK (N=126). Both countries have witnessed similar structural pattern in their HE systems and labour market and this, together with the research team's shared interest in this area, prompted this international dimension. A summary of participant characteristics is presented in Table 1. The sample broadly reflected each institutions' population characteristics with the majority aged under 30 years, approximately one-quarter being international students and featuring a greater proportion of female students. The sample was drawn from a broad range of disciplines, with notably more from the Social Sciences, and both undergraduate and postgraduate students. Institutional differences include relatively more females, international, postgraduate and younger students in the UK university.

[Table 1 near here]

Procedures

Data were collected using an online survey. The sampling strategy combined strategic and opportunistic approaches. In Australia, the researcher circulated the electronic survey link and project details to known unit coordinators from a broad range of disciplines to ensure representation. Prospective participants then followed a link on an email announcement via the university's learning management system if they wished to participate. In the UK University, the survey link and information was posted on career forum websites and social media platforms, as well as undergraduate and postgraduate intranet sites often used to recruit students for research projects. Separate ethics approval was granted in each university and data were collected between March and August 2018.

Measures

To address the first research aim, and research question one, students were first asked to indicate their stage of professional development on a six-point spectrum, ranging from 'novice student' to 'established professional', informed by Nadelson et al.'s (2015) study of STEM students' PI. Second, students rated their agreement with eight items to gauge their emergent PI. These items (see Table 2) were adapted from Bennett's (2011) scale of PI among marketing graduates and are cognisant with PI meaning a close connection with values, ties, and characteristics and where the individual positively identifies with the profession and aspires to be part of it. The eight items produced a Cronbach α of .83.

The study's second research aim, encompassing research question two and hypotheses one to four, drew on a range of constructs considered to predict PI formation. Each construct was measured using multiple items that were informed by extant literature. First, students' familiarity with their profession was gauged using five items (Cronbach α =.87), drawn from literature relating to early stages of PI formation where individuals learn to internalise values, norms, governing codes of practice and standards of performance. In particular, the items were informed by the Tan's et al.'s (2017) 'knowledge about professional practices' factor in their PI scale.

Self-authorship was measured by the extent to which students' had developed self-confidence and the ability to assume responsibility. In the absence of an established empirical scale, four items (Cronbach α =.76) were developed, informed by the research of Tomlinson (2017) and Nadelson et al. (2017). These were, 'I would feel comfortable with asking questions of workplace supervisors and peers', 'I would be able to take responsibility for the work tasks

allocated to me', 'I would feel confident in putting my views forward', and 'I would feel confident in putting my views forward, even if they conflicted with others'.

Students' social capital was captured with seven items (Cronbach α =.75) spanning their networking capabilities and established informal and formal networks. Sample items are, 'I have good networking skills', 'I have developed strong relations with employers', and 'I have good levels of information about jobs and job opportunities'. These items were adapted from Bridgstock's (2016) study of students' social connectedness. Cultural capital is often gauged using educational attainment (for example, Cincinnato et al. 2016). Instead, four items were developed, informed by the work of Tomlinson (2017) and Clarke (2017), producing a Cronbach α of .80. Items included, 'I feel I can speak the language of graduate employers', and 'I feel comfortable in my interactions with graduate employers'. To gauge variations among student groups, participants were asked to provide detail on a range of background characteristics (see Table 1). All items were measured by five-point Likert scales with a neutral point of 'neither agree nor disagree'.

[Insert Table 2]

The third research aim, encompassing research question three, focused on alignment between students' professional and personal/general self and was examined using six items (Cronbach α =.75). These items were focused on similarity between inside and outside of work for clothing and physical image, social media image, language, personal beliefs and values, how they come across to others, and sense of humour. Further, students were asked to assess the regularity they experienced clashes between how they presented themselves in the workplace and four other identities (parent, carer, social, student) (Cronbach α =.84). Open response questions asked

students to elaborate on issues around the interplay between personal and professional values, including how they might respond to situations which they do not agree.

Analysis

Given the study adopted a cross-sectional design using self-report data, common method variance was examined using Harman's single factor test (Podsakoff, Mackenzie, and Podsakoff 2003). Bias was not evident given 11 factors emerged, accounting for 69.799% of variance. When constrained to a one-factor solution, only 23.230% of variance was explained. Both outcome and predictor variables were examined for normality and all were within the 'accepted' limits of 7 and 2 for kurtosis and skewness respectively (Curran, West, & Finch, 1996). To address the research questions, descriptive techniques were used to examine the extent to which PI was evident among the student sample. Multiple linear regression was then used to explore the predictive value of the different forms of capital, background characteristics (gender, age, level of study, residency, discipline, and employment status) and self-authorship on identity formation.

Examination of self-authorship and students' reconciliation of multiple identities was explored through a combination of both descriptive techniques and thematic analysis. Thematic analysis was developed via both deductive extrapolation of open coded themes to prior conceptualisation around graduate identity and more inductive thematisation which added novel concept-development scope within this framework. Quantitative data analysis was conducted using SPSS version 25.0 and thematic analysis using Excel. The thematic analysis was conducted at individual response level for each of the open response questions. The open responses were further refined into discreet analytical categories which allowed the researchers to discern continuities, interactions and potential contrasts between thematic areas (e.g. professional socialisation, self-authorship, emerging career efficacy), as well as with the

overarching questionnaire data. Relatedly, the surface meaning of the responses was examined for subtler latent meanings in terms of the potential connection between respondents' viewpoint and identity position (Patton, 1990).

Results

Emergent professional identity

Students rating of their own stage of professional development resulted in 13.3% perceiving themselves as a novice student; 43.2% as a student with some skill gaps and requiring further development before entering their desired field; 21.5% an informed student ready to enter their desired field; 11.5% an early career professional; 8.5% a mid-career professional; and 2% an established professional in the field (expert). Taking the mid-point of the spectrum as feeling sufficiently developed and prepared for graduation and transition to the workforce, more than half were towards the novice end of the spectrum, to be expected given the student sample.

Table 2 presents the mean and standard deviations for all items relating to students' emergent PI. Mean ratings (see Table 2) indicated positive direction around the importance students ascribed to becoming part of a recognised professional field which is also related to positive motivation towards succeeding in a target profession. This confirms the significance of personal investment and goal-direction as a component of identity capital building which enables a future graduate to conceptualise a future self and begin the process of self-authorship. Mean ratings were also strong overall for other significant dimensions of PI formation in relation to professional proximity. Students identified positively with their profession in terms of its characteristics, values and an understanding of work practices. Responses indicated, however, a lack of strong ties and, to some extent, confidence in entering upon graduation. Further, the students' collectively did not identify as positively as one might hope with their

profession. As emergent professionals still engaging in early occupational socialisation, this indicates that their sense of self-authorship is yet to be sufficiently formed.

[Insert Table 2]

Predictors of professional identity formation

First, the chi-square test of association was used to detect any variations in students' perceptions of their positioning on the PI spectrum for level of study, discipline and working status (α =.05). A significant result reported for study level, χ (5)=48.080, p<.000; working status; χ (20)=75.151, p<.000; and discipline, χ (15)=26.108, p=.037. Cross-tabulations indicated the most striking differences among the discipline groups being, first, the high proportion of Arts and Humanities students who considered themselves novice students and, second, the relatively greater number of STEM and Health and Social Care students who believed they were 'informed students ready to enter desired field'. As expected, postgraduates rated themselves higher on the spectrum than undergraduates. Again, in line with conventional wisdom, those who were not employed or working in roles (part-time or full-time) unrelated to their targeted career, considered themselves more as novices or students requiring further development compared with those working in relevant employment who were more confident in their stage of professional development.

Second, multiple linear regression was conducted on the composite average rating for PI. Dummy variables were collapsed into binomial format and base variables are indicated by * in Table 1. Parental occupation classification was condensed to them either not being a manager/professional (base) or being one (coded one). Students' working status was collapsed to being 'not employed' (base) or employed in a role either relevant or not to their career. The Durbin-Watson test statistic was 1.773, indicating that first order linear auto-correlation was not present (Norusis, 2008). Multicollinearity was not evident given the Variance Inflation

Factor (VIF) was less than five (Allen, Bennett, & Heritage, 2014), there were no inflated standard errors among the regression coefficients, and the bivariate correlations among continuous predictors did not exceed the problematic threshold of .6 (Grewal et al. 2004).

Regression analysis results are summarised in Table 3 with regression coefficients indicating the expected change in PI formation, keeping other variables constant. The model was significant, F(15, 316) = 17.484, p<.000, and the adjusted R^2 of .428 indicates good model fit. Results indicate that demographic characteristics were not predictors of PI formation. Those students in Health and Social Care, however, demonstrated greater PI formation than those in Arts and Humanities although this was not the case for students in the STEM and Social Sciences disciplines. Interestingly, findings indicated that neither students' current working status nor study level predicted PI formation

[Insert Table 3]

The more familiar students were with the beliefs, values, practices, norms, responsibilities and performance standards of their targeted profession, the stronger their PI. Students who demonstrated higher levels of self-authorship also achieved higher ratings in their identity formation, although to a lesser extent. Both social and cultural capital were positive predictors of identity formation, higher levels in each meaning stronger levels of PI. All four hypotheses were therefore supported. This is significant in the formation of identity and show the factors might mediate its development.

Forming professional identity and reconciling with other identities

Students were asked to consider the similarity between who they are outside of and at work.

The data further indicated the connections between undergraduates' sense of identity around

working life and other areas of their personal lives were significant components of PI formation. The formation of a self-image around work, including symbolic markers such as clothing and physical image and social media image, was reasonably high (M=3.19, SD=1.123 and M=3.28, SD=1.161 respectively). Likewise the kinds of language and communicative codes adopted by students outside of working life had salience to those they anticipated using in workplace contexts (M=3.38, SD=1.107). The most significant connection was between personal beliefs and values and those constitutive of a professional field (M=4.08, SD=.807) indicating the importance of anticipatory shared values in undergraduates' investment in identity capital.

Concerning the potential 'clashes' between students' personal and professional selves, the low mean scores indicated perceived congruence between their professional identities and those of being a parent (M=2.05, SD=1.018), carer (M=1.93, SD=1.003), student (M=2.35, SD=.967), and social (M=2.40, SD=.971) respectively. Given that students are at the stage of emerging pre-PI, rather than fully formed, this indicates a high confidence in being able to reconcile different facets of their identity. However, being at an aspirational stage means that such perceptions at this stage are less likely to be offset by specific challenges and realities of working life which bring higher challenges in reconciling personal and professional domains.

Students' open responses towards professional behavioural codes sought to unpack their engagement with future workplace contexts and situations, including sets of behavioural reactions to workplace situations. The open responses to scenarios revealed some significant sub-themes in terms of professional values, behaviours and ethics. They showed an awareness of the cultural codes and nuances of a given workplace culture and the need to adapt ones' responses accordingly and in many cases revealing some alignment between the personal image or identity they needed to present and the cultural script of a given workplace. For

example, one Business undergraduate stated, "it depends on the wider acceptability of the behaviour.... If the behaviour is widely accepted in the workplace, such as swearing, it is almost impossible to gather support and causes harm to your personal brand. If the behaviour is offensive or personally targeted, such as sexist comments, I have said so in the past".

A notable feature to some of the responses was the relative sense of ownership and autonomy around a given workplace context, including the ability to challenge other staff and proactively shape workplace situations. A clear sub-text emerged on experience, positionality and legitimacy to make decisions and how well a student is able to emanate an appropriate professional persona. A sub-theme here was the role of experience in enhancing professional identities and providing a legitimate framework for action. This revealed a sense of trajectory that moved from move novice early stage and novice positon towards more affirmative one that enable them to exercise agency. An Accounting/Finance undergraduate in their final year observed, "depends on if I am eligible and feel secure to intervene (e.g. if the person who I disagree with is above me, if I worked there long enough, if it will affect my position in the company, etc)" while a Sociology student finishing their postgraduate degree commented, "it depends on who does it and how secure I am about my own role and status in the group at that time". Finally, a Chemistry postgraduate in their final year stated, "I would like to speak out, but it depends if the people I disagree with are peers or above me in the job".

The theme of emerging PI was related to the existence of professional values around a given professional workplace. One of these was based service dedication and this was very evident amongst some of the respondents who had studied a specialist professional field and engaged in forms of professional socialisation through a work-integrated component of their studies. As part of this process, such students had inculcated a set of values that accorded to a dominate

set of field practices. For example, service dedication within allied health professional or customer diligence in hospitality are career values which guide a professional's behavioural responses in a given work situation and it was notable that a large number of students in these fields had internalised these as appropriate way of enacting their professional selves.

A strong subtext to many students' responses was the early formation of a professional-facing self which was derived from initial acculturating within a professional environment. This conveyed an awareness of the need to enact this through actions and interactions with significant others, in this case the users of the service. A nursing undergraduate at the midpoint of study stated, "I'd voice my concern if there was a need to do so immediately, if there was a risk to patients I would deal with the situation there and then. I would always voice my concerns to my senior too (escalation). However, if it is an opinion where there is no risk to patients, I'd accept that people have different views from you, and you need to work with each other and embrace differences". Further, an Education undergraduate in their final year commented, "refer to the Code of Conduct and professionalism of our career choice. I also feel is it better to voice your concern face to face and in a professional discussion rather than talking to a colleague / gossip in the work place".

A related matter concerned the perceived need to position oneself appropriately within an organisation context and to find an appropriate balance between personal assertiveness and adherence to wider power relations. Key here was being able to decode the dominant cultural script and expectations of a given workplace and find a balance in how they played out their professional role and identity. A mid-point Law undergraduate observed, "confrontation can negatively impact career progression. Whether it is directed at someone in a higher position

than yourself or other people around the workplace. In my experience, management will opt not to promote people who display over-confrontational behaviour".

Overall, the theme of professional behaviour provides insight on how well students identified with workplace cultures and the expected cultural mores. The data revealed variance between students who may have a less formed identity which is manifest in attitudinal responses (e.g. reluctance to speak up, letting others decide) and more fully formed ones (e.g. reading workplace dynamics). This further suggests a continuum from a more novice status indicative of partially-formed identities to more fully-formed identities whereby students think and act more confidently about themselves as a prospective employee.

Discussion and implications

Findings indicated variance in identity formation among students and the ways in which they anticipate future working life and roles within workplace, mediating how much they make linkages between their HE experiences and work activities. Evidence revealed that students, particularly those from occupation-focused degrees, have started to develop a specialist PI, building up stronger levels of identity capital in the form of a stronger sense of professional self and self-authorship over the direction of their future working life. This further entailed stronger levels of professional insight, including the modes of behaviour, knowledge and insight which are specific to particular jobs areas and organisational fields. This will also enhance the kinds of cultural knowledge and embodied practices and dispositions that employers' value and use as signalling information in the recruitment process.

The study's finding more broadly unpack a number of key influences on emerging professional identities. First, *familiarity* with a given working context is significant as it entails some degree of salience and relatedness in terms of how much people have 'invested' some element of their

future self in an occupational area. A better appreciation of professional ideology and expected responsibilities and performance standards clearly augmented identity formation. Second, proximity between a graduate's extant identities and practices and those of a targeted workplace will enable them to form stronger connections between different, yet related, facets of their educational and work-related experiences. The acquisition of specialised and generic knowledge and skills (human capital) denote a broader skill set that enables employers to identify graduateness and adds signalling value to their profiles. It also develops cultural insight (cultural capital) that enables graduates to better decode an organisation's field dynamics and dominant socio-cultural practices. Employers are more likely to draw upon prospective applicants who have motivational sets and dispositions similar to theirs, highlighting the importance of closer connections between students' existing identities within HE and their future identities as employees.

Third, *networks* which can mobilise interactions within the profession, enhancing knowledge of the field and relationships which may leverage further identity formation and possibly labour opportunities. The study also revealed the significance of social capital formation in how students understood the additional value of forging closer connections with significant others in the wider field of practice. The development of their social capital effectively becomes 'a social asset by virtue of actors' connections and access to resources in the network or group of which they are members" (Lin 2001, 19). The role of social capital works two-ways between graduates and employers and can be explained by number of social mechanisms. At the job applicant side, bonding and bridging activities through engagement with employers provides valuable and rich knowledge of how to navigate the labour market field. Finally, stronger *confidence* will promote a self-authored and more grounded sense-of-self within the work setting, enhancing professional self-efficacy and enabling a graduate to better position

themselves in the workplace. The influence of study level and working status appears nebulous. Both were positively associated with students' positioning on the PI spectrum yet influence was not evident in the regression analysis, highlighting the need for further research.

The study confirmed the significant role that capitals play in shaping emergent PIs and anticipated relationships to the labour market, raising some significant implications for HEIs and career practitioners in facilitating more successful student trajectories through HE into the labour market. It confirms the need for HEIs to work from a more resources-based approach rather than a generic skills-orientated approach in order to enhance the relationship graduates can form with the labour market. In conceiving employability trajectories in terms of identity and capital formation based on relational interactions and exchanges between graduates and significant other market actors, HEIs can help enable students to enhance the efficacy of these interactions.

Linking these data together, this study has shown that professional identity formation is strongly influenced by the level to which students have engaged in meaningful forms of pre-professional socialisation and which has a number of significant impacts. This is principally around the development of their pre-professional identity which enables students to pursue a trajectory towards self-authorship. Related is the formation of aligned sets of values and norms which also enables the reconciliation of their personal and professional selves, as well as boosting employability capitals that provide significant resources to better access and navigate different professional fields. The study has demonstrated the potentially strong connection between PI formation and future employability, at least in the sense that it is actively constructed by students soon entering the labour market. Furthermore, this study supports a related body of research (Adams et al. 2006; Nadelson et al. 2015; Sommerland 2007) showing

that a strong part of professional socialisation for neophytes and prospective professionals is negotiating synergies, or discordances, between personal and professional lives. This is particularly apposite for graduates entering more bounded professional communities with specialised areas (e.g. Health, Law, STEM) where the formation of professional knowledge is central to how they navigate professional field demands, rules and protocols. Work experience in direct or closely allied occupational areas clearly mediates the strength of PI formation.

HEIs have a role of play in further building the nascent identities and layers of career-related capital that student have acquired. Career counselling may be more efficacious when it works from a better understanding of students' emerging identities; for example engaging with students' self-awareness, career insight sand early enactments of desired future selves. At one level, this may be achieved through more immediate endeavours such as encouraging students to test their ideas through experience and judging their fit for roles and organisations. At another level, bespoke counselling may be most effective when it engages more meaningfully with students' self-concept and its related value and motivation sets. Relatedly is the importance of enabling students to articulate and present as compelling employability scripts the experiential and organisational value of their acquired skills and how they add organisational value.

Similarly, students will need to be aware of how to further identify and strengthen their existing employability capitals so that their value is not only tangible to themselves but also employers. Embedding strategies which enable students to explore the strength of their networks and social ties, as well as likely organisation fit and facilitating this development within and beyond their formal learning experiences, has potential to empower students' approaches to future working life. Practical measures here may include encouraging students to fine-tune their knowledge

targeted organisations/sector and what they demand from graduates – for example, dress codes, methods of presentation, what recruiters look for and why. It is also important that processes are in place to detect identity dislocation among students given this will present greater challenge when they transition into the workplace.

Findings further indicated that the strength of PI affects students' ability to reconcile different facets of their identity. Students with stronger levels of pre-professional identity are less likely to experience dissonance in the 'chorus of voices' constituting their overall identity. Instead, this can result in greater complementarity between different identity components; for instance, between those of student, club member, intern and future employee. The process of reconciliation, while uncomfortable for some students, is critical for further identity formation and transformational learning, leading to enhanced confidence and self-awareness (Inceoglu et al., 2018). It is therefore critical that educators encourage students to become aware of the purpose and process of reconciliation and who they are at work, compared with other facets of their life.

One potential approach for enhancing PI and augmenting effective reconciliation is through work-integrated learning (WIL). WIL is the infusing of industry and community engagement into formal learning and assessment through, for example, internships, placements, practicums industry-based projects, and consultancies. WIL has been shown to strongly develop students' pre-professional identity through enhancing student familiarity with and proximity to their intended profession, enriching a range of employability capitals and promoting self-authorship through exposure to critical incidents and scenarios requiring reconciliation among different identities (Jackson 2017; Nadelson et al. 2015; Tan et al.. 2017). It is particularly prevalent in occupation-specific courses (Health Sciences, Education) which typically interweave

practicums throughout the degree and enable students to develop PI from early stages of study. Given the relatively weak PI among Arts and Humanities students, and their lack of embedded practicums, it is important to provide access to generic (often centralised) WIL programs that can provide authentic learning experiences beyond the classroom that build personal awareness and acculturation into workplace ideology. One example is service learning where students engage in projects that address community needs, developing their sense of civic responsibility and personal insights (Yorio and Fe 2012). It is also important that alternatives to workplace-based WIL are embedded to develop networks and familiarity with different industries and settings, such as field trips, simulations, guest speakers and project-based learning.

Concluding remarks

Findings confirmed the significant role of identity formation in bridging the relationship between HE and future labour market outcomes. Emerging identities appear significant in framing how students conceptualise their future working lives, as well as how they anticipate responding to a range of work situations. The study contributes to the field of graduate employment and PI through examining student identity formation and the factors which mediate. We have shown how identity formation is a crucial bridge between HE and future employment and works as an enabling and potentially empowering force. Students' capacities to be able to acquire, present and recontextualise emerging identities within both specific and generic employment contexts, can serve to enhance students' agency around employment. We have shown that these are both significantly mediated by, and further enhanced through, wider sets of resources; mainly in the forms of social and cultural capital that enrich students' emerging employment profiles and level of confidence in negotiating immediate post-HE challenges.

The study's main empirical warrants are through quantitative analysis of a wider survey engaging student expectations around the future graduate labour market. Whilst this data showed significant patterns, there is also a need for further in-depth qualitative data that explores more inductively these perceptions and the wider bearing on their employability strategies and self-perception of suitable and meaningful employment. Narrative data that explored the process of identity development would complement data gathered in this study. Future research can also chart this over time, in terms of the recursive shaping of working identities during the early stages of careers as well as how this interact with their further building up of relevant career capitals. Developing our understanding of the role of working status is another area of interest as is exploring the reconciliation of multiple identities among graduates once in the workplace, producing richer findings on presented challenges and how these are managed. At the same time, there is need to acknowledge that the notion of 'profession' should not be treated to narrowly given wider debates about the fluid nature of future work.

References

Adams, K. S. Hean, P. Sturgess, and J. Macleod Clark. 2006. 'Investigating factors influencing professional identity of first-year health and social care students". *Learning in Health and Social Care* 5 (2): 55-68

Ajjawi, R., and J. Higgs. 2008. "Learning to reason: a journey of professional socialisation." Advances in Health Sciences Education 13 (2) 133-150.

Allen, P., K. Bennett, and B. Heritage. 2014. SPSS Statistics Version 22: A practical guide. Australia: Cengage Learning Australia.

Ashley, L., and E. Empson. 2017. "Understanding social exclusion in elite professional service firms: field level dynamics and the 'professional project". *Work, Employment and Society* 31 (2): 211-229.

Australian Government. 2017. The cost of delivery of higher education. Canberra, ACT: Australian Government.

Bathmaker, A.M., N. Ingram, and R. Waller. 2013. "Higher Education, Social Class and the Mobilisation of capitals: recognising and playing the game". *British Journal of Sociology of Education* 34 (5/6): 723-743.

Baxter Magolda, M. 1998. "Developing self-Authorship in young adult life". *Journal of College Student Development* 39 (2): 143–156.

Bennett, R. 2011. "What makes a marketer? Development of 'marketing professional identity' among marketing graduates during early career experiences". *Journal of Marketing Management* 27 (1): 8-27.

Bridgstock, R. 2016. *Graduate Employability 2.0: Enhancing the Connectedness of Learners, Teachers and Higher Education Institutions. Final Report of the National Senior Teaching Fellowship*. Department of Education and Training: Canberra.

Cincinnato, S., B. De Wever, H. Van Keer, and M. Valcke. 2016. "The influence of social background on participation in adult education: Applying the cultural capital framework". *Adult Education Quarterly* 66 (2): 143-168.

Clarke, M. 2017. "Rethinking Graduate Employability: the Role of Capital, Individual Attributes and Context". *Studies in Higher Education* 43 (11): 1923-1937.

Curran, P., S. West, and J. Finch. 1996. "The robustness of test statistics to non-normality and specification error in confirmatory factor analysis". *Psychological Methods* 1 (1): 16–29.

Department for Business, Innovation and Skills. 2016. Success as a Knowledge Economy: teaching excellence, social mobility and student choice. HMSO: London.

Dubar, C. 1991. *La socialisation: construction des identities sociales professionelles*. Paris: Armand Colin Editeur.

Fellenz, M. 2016. "Forming the professional self: Bildung and the ontological perspective on professional education and development". *Educational Philosophy and Theory* 48 (3): 267–283.

Grewal, R., J. Cote, and H. Baumgartner. 2004. "Multicollinearity and measurement error in structural equation models: Implications for theory testing". *Marketing Science* 23 (4): 519–529.

Higgs, J. 1993. "Physiotherapy, professionalism and self-directed learning". *Journal of Singapore Physio-therapy Association* 14 (1): 8–11.

Hinchliffe, G., and A. Jolly. 2011. "Graduate identity and employability". *British Educational Research Journal* 37 (4): 563–584.

Holmes, L. 2013. "Competing perspectives on graduate employability: possession, position or process?" *Studies in Higher Education* 38 (4): 538-554.

Holmes, L. 2015. "Becoming a graduate: The warranting of an emergent identity". *Education* + *Training* 57 (2): 219-238.

Inceoglu, I., F. Selenko., A. McDowall, and S. Schlachter. 2018. "(How) Do work placements work? Scrutinizing the quantitative evidence for a theory-driven future research agenda". *Journal of Vocational Behavior*.

Jackson, D. 2016. "Re-conceptualising graduate employability: The construction of preprofessional identity in the higher education landscape of practice". *Higher Education Research and Development* 35(5): 925-939.

Jackson, D. 2017. "Developing pre-professional identity in undergraduates through work-integrated learning". *Higher Education* 74(5): 833-853.

Jensen, D., and J. Jetten. 2016. "The importance of developing students' academic and professional identities in higher education". *Journal of College Student Development* 57 (8): 1027-1042.

Lave, J., and E. Wenger. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Lin, N. 2001. *Social Capital: theory and research*. New Bruswick: Transaction Publishers Marsico, G. 2012. "The double uncertainty: Trajectories and professional identity in changing contexts". *Culture & Psychology* 18 (1): 121-132.

Meijers, F., and W. Wardekker. 2003. "Career learning in a changing world: the role of emotions". *International Journal for the Advancement of Counseling* 24 (1): 149–167. Mishler, R. 1999. *Storylines: Craftartists' narratives of identity*. Cambridge, MA: Harvard University Press. Myklebust, J. (2017). *New employment outcomes in university funding criteria*. Retrieved from

https://www.universityworldnews.com/post.php?story=2017051119551516

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.

Norusis, M. 2008. SPSS statistics 17.0 statistical procedures companion. Upper Saddle River, NJ: Prentice-Hall.

Patton, M. 1990. Qualitative evaluation and research methods. Newbury Park, CA.

Peeters, E., J. Nelissen., N. Nele De Cuyper., A. Forrier., M. Verbruggen. and H. De Witte. 2019. "Employability Capital: a conceptual framework tested through expert analysis". *Journal of Career Development* 46 (2): 79-93.

Podsakoff, P., S. MacKenzie, L. Lee. and N Podsakoff, N. 2003. "Common method biases in behavioral research: A critical review of the literature and recommended remedies". *Journal of Applied Psychology*, 88 (5): 879–903.

Richardson, B. 1999. "Professional development: Professional socialisation and professionalization". *Physiotherapy* 85 (9): 461–467.

Sommerland, H. 2007. "Researching and theorizing the process of professional identity formation". *Journal of Law and Society* 34 (2): 190-217.

Tan, C. P., H.T. Van der Molen, and H.G. Schmidt. 2017. "A measure of professional identity development for professional education". *Studies in Higher Education*, 42 (8): 1504-1519.

Tomlinson, M. 2007. "Graduate employability and student attitudes and orientations to the labour market". *Journal of Education and Work* 20(4): 285-304.

Tomlinson, M. 2017. "Forms of Graduate Capital and Their Relationship to Graduate Employability." *Education + Training* 59 (4): 338–352.

Trede, F., R. Macklin., and D. Bridges. 2012. "Professional identity development: a review of the higher education literature". *Studies in Higher Education* 37 (3): 365–384.

Yorio, P., and F. Ye. 2012. "A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning." *Academy of Management Learning & Education* 11 (1): 9-27.