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Underemployment Among Recent Graduates: A review of the literature

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Underemployment Among Recent Graduates: A review of the literature

Structured Abstract

Purpose

The purpose of this article is to offer a systematic review of the literature which explores underemployment among recent graduates. Literature from a range of disciplines is reviewed in an attempt to further our theoretical understanding. In doing this, the secondary aim is to identify avenues for future research.

Design/methodology/approach

We adopt a systematic literature review methodology to answer the question ‘*what is graduate underemployment?*’..

Findings

The review highlights significant issues around conceptualisation and measurement of graduate underemployment. It argues that individual volition and meaning making are important issues which to date remain under researched in relation to graduate underemployment. We argue that the most appropriate basis for developing our theoretical understanding of graduate underemployment is to draw upon relevant theoretical frameworks from career studies – specifically those on the objective-subjective duality of career, career indecision, and career success. This approach provides a greater focus on the dynamics of the individual’s experiences.

Originality/Value

In the context of policy debates surrounding the purpose and value of higher education this review brings together the highly fragmented perspectives on a phenomenon which encapsulates many of the issues being debated.

Practical Implications

This review has implications for a range of stakeholders including students, graduates, teachers and careers advisers, parents, universities, employers, HR professionals and policy makers.

Paper Type – Literature Review

Key Words – Underemployment, Graduate, Subjective Career, Over-education, Career Success

Introduction

In recent years the proportion of young people graduating from higher education has increased rapidly. This reflects a shift from elite to mass higher education systems, the latter being defined as a system in which more than 15% of young people participate in higher education (Trow, 2005). As participation figures of close to 50% are increasingly common in a range of countries, it is unsurprising that this dramatic shift has resulted in increased attention to the potential discrepancy between supply and demand. Numerous commentators have questioned the capability of the labour market to absorb this volume of graduates (Brint, 2001; Brown and Hesketh, 2004; Livingstone, 1998; Sutherland, 2008), notwithstanding the demographic changes which mean that the actual number of young people is reducing in most industrialised nations. There is mounting concern regarding the nature of employment which graduates enter and the increased potential for them to find themselves in situations of underemployment (McGuinness, 2006; Walker and Zhu, 2005).

These concerns are not new (see for example Political and Economic Planning, 1954; DE, 1974; O'Toole, 1975; Butler, 1978; Sullivan, 1978) and a substantial body of academic work has examined graduate underemployment in a range of countries including Australia, China, the United Kingdom, and the United States (Batenberg and De Witte, 2001; Fleming and Kler, 2008; Jensen and Slack, 2003; Li *et al.*, 2008). Research demonstrates, underemployment is not uniquely experienced by recent graduates, for example individuals nearing retirement age, young adults and ethnic minorities have all been identified as groups who experience underemployment (Feldman, 1996; Ruiz-Quintanilla and Claes, 1996). We however argue that recent graduates are of particular interest and potential concern due to the high levels of investment made by individuals, organisations and societies in this group.

The phenomenon of underemployment, and its consequences for individuals, organisations and societies, has been explored in various disciplines such as sociology, economics and psychology. A plethora of definitions and conceptualisations have been developed, with a lack of consistency in the terminology used. As a result terms such as overeducation, overqualification, underutilisation and underemployment are used variably and interchangeably. To date the research has tended to remain within disciplinary boundaries, and there have been few attempts to bring together different perspectives and conceptualisations from across the full range of disciplines in which this phenomenon has

been studied. We see that a consolidation and synthesis of existing research could therefore be of considerable value in developing an integrated approach to definition and measurement, in order to further our understanding of this phenomenon in relation to recent graduates. We acknowledge that such integration may not be possible, as different disciplines have different interests in the phenomenon. However, we think it is valuable to collate and review the breadth of graduate underemployment research in one location as a basis for encouraging cross-fertilization of ideas and inter-disciplinary research, which is likely to be particularly timely in the light of current economic and demographic trends. That is the principal aim of this review article, with the suggestion of new directions for research being a secondary aim.

This article therefore reviews the literature on underemployment, with a specific focus on recent graduates, in an attempt to evaluate and explore the range of definitions and conceptualisations within the different literatures. Our methodology is informed by the growing literature on systematic literature reviews within the management field (for a discussion see Rousseau *et al.*, 2008). This approach represents an effective method for coalescing and integrating knowledge on a subject which has been researched from a range of disciplines and perspectives. Denyer and Tranfield (2008) recommend that a systematic review should aim to answer a clearly specified question, rather than simply present an overview of work on a particular topic. We follow this recommendation in the present article, focusing our review on answering the question '*what is graduate underemployment?*'. This is a more complicated task than would seem likely at first glance, due to the disciplinary fragmentation and definitional debates, but the attempt to answer it will provide a genuinely multi-disciplinary orientation to the phenomenon.

Methodology

Informed by the systematic reviews literature, we developed a review strategy which involved a number of stages. The first stage required us to identify keywords for the initial search. Three key reviews on mismatch between education and employment outcomes (Feldman, 1996; Hartog, 2000; Sloane, 2002), which draw variously upon psychology, sociology, economics, management and education, were used to inform the selection of keywords for the literature search. The keywords were identified as underemployment, underutilisation, over-education, over-qualification, unemployment and employability.

The second stage involved entering the search terms into the following databases – Web of Knowledge, SCOPUS, EBSCO, CSA ILLUMINA, PsycINFO, Emerald and Ingenta – which together cover the full range of social science disciplines. Although we acknowledge overlap between the databases, we entered the keyword searches into all databases in attempt to access a range of sources from across different disciplines. This initial search yielded a vast amount of research from a range of disciplines and perspectives. Searching within these results, using the word graduate as a filter, produced a much smaller and more manageable set of results.

The term graduate has slightly different uses in different settings, but in this article it refers to individuals who have completed a university or college degree, typically of three or four year's duration, generally termed a Bachelors degree. In addition, we focus on relatively recent graduates, broadly speaking those within five years of graduating, as the prime concern of policy makers and researchers has been on the impact of the expansion of higher education on the labour market outcomes for graduates. Our exploration of graduate underemployment therefore excludes those individuals in mid-career who find themselves having to accept a lower position in preference to being unemployed following redundancy or organisational restructuring (Leana and Feldman, 1992).

In the third stage we applied three selection criteria to the articles identified in stage 2. First, we excluded papers which focused on unemployment alone, as this is distinct from underemployment, although some of the potential effects may be similar. Papers including unemployment in conceptualisations of underemployment were not excluded. Second, we included papers which explored at least one of the dimensions of underemployment proposed by Feldman (1996), described below. Finally, we selected from the remaining papers based on a qualitative assessment of their relevance to answering our question.

For the final stage of the process, the publications cited by the selected sources were examined to evaluate the search strategy. These were reviewed following the criteria above, and whilst most were either not relevant or had already been located in the original search, this final step helped to ensure that works such as working and conference papers, referred to as grey literature, were included in the review. The results demonstrate that research from a range of disciplines had been identified through the search stage.

Findings

Defining graduate underemployment

Within the literature it is suggested that there are two main perspectives on underemployment, the objective and the subjective (Khan and Morrow, 1991). The objective perspective defines underemployment in terms of the level of utilisation of individuals' human capital, in comparison to an accepted standard for their referent group, for example other graduates (Feldman, 1996). This is evaluated in terms of individuals being in a lower level of occupation, measured for example by level of income, educational requirements or hours worked. Measures of objective underemployment traditionally draw upon 'accepted standards' to establish the extent to which an individual is underemployed. In contrast, a subjective perspective on underemployment would acknowledge and explore the individual's interpretations of their employment situation, focusing on their perceptions of the use of their skills and abilities (Khan and Morrow, 1991; Jones Johnson and Johnson, 1995). The distinction between objective and subjective perspectives is invaluable, for now however we will bracket the subjective, and focus on the objective. This reflects the approach taken in the bulk of the literature, and also allows us to deal in a logical sequence with the considerable complexity involved in defining and measuring underemployment, before finally adding the additional complexity of the subjective perspective.

Our review of the literature indicated that the most comprehensive approach to defining underemployment is offered by Feldman (1996), who proposed five dimensions which are used to judge whether an individual is underemployed. Applying these to the specific case of recent graduates, we suggest they could be described as underemployed if any of the following statements are true:

1. They possess more formal education than their current job requires;
2. They are involuntarily employed in a different field to that in which they received their formal education;
3. They possess higher-level skills than the job requires;
4. They are involuntarily engaged in part-time, temporary or intermittent employment;
5. They are earning 20% less than the average earnings of their graduating cohort in the same major or occupation track.

(Adapted from Feldman, 1996: 388)

Underpinning these dimensions is an assumption that graduates will always strive to avoid underemployment. The notion that an individual may voluntarily enter a position of underemployment is somewhat neglected, and the bulk of the literature adopts an ‘involuntary’ perspective on underemployment (Glyde, 1977). A range of factors are proposed as possible antecedents to underemployment, including gender (Büchel and Battu, 2003), age (Ruiz-Quintanilla and Claes, 1996), race (Feldman, 1996) and economic pressures resulting in reorganisation and downsizing (Feldman *et al.*, 2002). All are factors outside of the individual’s control, so the subsequent underemployment is deemed to be involuntary. Yet many individuals, for a variety of reasons, actually make a choice not to utilise fully their education (Brynin, 2002).

Two main explanations are offered within the literature. First, that underemployment can be a temporary transitional period for acquiring additional skills and experience, a stepping stone or bridge into more desirable situations, or a ‘stop gap’ before career decisions are made (Alpin *et al.*, 1998; Batenburg and DeWitte, 2001). Second, that voluntary underemployment can be a means to avoid unemployment, seen as the ‘lesser of two evils’ (Borgen *et al.*, 1988; Feldman, 1996; Leana and Feldman, 1992). Note that both explanations describe situations which may be underpinned by a sense of involuntariness if the individual perceives there is no alternative (Verhaest and Omney, 2009). A third, less explored notion is that some graduates enter non-graduate occupations as part of a lifestyle choice (Elias and Purcell, 2004). This represents an important gap within the literature as little research explores whether individuals perceive their underemployment, in terms of the utilisation of their education and skills, as voluntary or involuntary, and how this influences the manner in which they experience that underemployment (Blenkinsopp *et al.*, 2011).

Measuring graduate underemployment

Our review has highlighted that a central issue for research on underemployment is its measurement. If an individual is said to be underemployed, what are they seen to be ‘under’ – what feature of their employment is seen to be deficient? Although discrepancy between educational attainment and employment outcomes seems an appealingly straightforward way to define underemployment, numerous definitions and measures have been used to establish this discrepancy. It is helpful to clarify the variables involved in these relationships. We start

by assuming *educational attainment* will generally lead to an *employment outcome*. There will be an *expected employment outcome* and an *actual employment outcome*.

The first point of debate is how one might measure educational attainment. Our review of the literature identifies three approaches – years of education, level of education and field of education – with many studies combining these approaches. For recent graduates it is arguable that we might simplify this by focusing specifically on qualification, for several reasons. First, the group of interest (graduates) is explicitly defined in terms of possession of a qualification - a college or university Bachelors degree. Second, the concern with graduate underemployment stems largely from policy concerns about the benefits, to the individual and society, of this kind of investment in education (Keep and Mayhew, 2004). Third, recent graduates are likely to have developed relatively little in the way of additional knowledge and skills which might differentiate them in the labour market from other graduates, in marked contrast to graduates in mid-career whose marketable knowledge and skills may have been garnered almost entirely after graduation.

Following this logic, for graduates we can treat educational attainment as a fixed variable (i.e. in all cases the individual possesses a Bachelors degree), which is expected to lead to an employment outcome which is seen as commensurate with being a graduate. If it does not, the graduate is deemed to be underemployed. This highlights the variables required to be able to ascertain whether an individual is underemployed – educational attainment, actual employment outcome, and expected employment outcome (for a graduate). Whilst there may be practical difficulties in gaining access to data on educational attainment and actual employment outcomes, they are nevertheless both potentially measurable in relatively simple terms. By contrast, the notional variable of ‘expected employment outcome for a graduate’ is much more complex since its definition and measurement are matters over which there is considerable debate - what *is* a graduate employment outcome? Our review identifies three distinct approaches to its measurement; a) the educational requirements of an occupation, b) earnings, and c) contract status.

Measuring discrepancy in terms of educational requirements

A recurring theme in the graduate underemployment literature is the notion that certain kinds of employment are appropriate for graduates, yet deciding what these kinds of employment might be is not straightforward. Three main approaches are apparent in the literature (Hartog,

2000; Sloane, 2002) – systematic job analysis/evaluation, use of mean or modal reference points (individuals are deemed to be underemployed if their employment level is one standard deviation below the mean or mode for comparably qualified individuals) and worker self assessment (see Table1).

TABLE 1

The debates related to the establishment of a match between education and employment stem from an increasing diversity in the labour market outcomes of graduates, and a subsequent blurring of the boundaries between ‘graduate’ and ‘non-graduate’ employment (Elias and Purcell, 2004). Traditional views of graduate occupations were associated with entering a ‘profession’: doctors, lawyers, teachers or high level management are typical examples (Elias *et al.*, 1999). It has however been argued that the skills and knowledge required in some occupations, previously considered ‘non-graduate’, have changed such that these occupations should now be regarded as new forms of graduate employment (Elias and Purcell, 2004; Purcell *et al.*, 1999).

In their development of the Standard Occupational Classification for Higher Education, Elias and Purcell (2004) provided a framework for classifying graduate employment which includes graduate occupations beyond the traditional, such as software professionals, journalists, marketing and sales managers, leisure and sports managers and midwives. These new classifications were developed as a response to changes in the labour market, new forms of specialist degrees, and the professionalization of occupations which in the past did not require a degree for entry e.g. nursing, physiotherapy. It is also argued that upgrading of employment occurs as employers substitute graduates for non-graduates, either through the employer permanently and formally ‘upgrading’ the requirements of the job in terms of the job description or through the individual’s initiative in ‘growing the job’ by assuming additional responsibilities, perhaps with a view to career development and progression (Mason, 2002; Harvey *et al.*, 1997). However some researchers question the extent to which a formal substantial upgrading of ‘non-graduate’ jobs has occurred (Battu *et al.*, 2000; Teichler, 2007) and how this can be captured in a meaningful way.

Numerous studies explore the discrepancy between an individual’s level of education and that required for entry into a job, often as stipulated by the employer during recruitment. Those

with a higher level of education than that required for entry are deemed to be overeducated or overqualified for their employment (Green and Zhu, 2007). However, for some jobs employers stipulate a degree as an entry requirement as there is a ready supply of graduates in the labour market, rather than the characteristics and demands of the job requiring a graduate (Brynin, 2002; Nove *et al.*, 1997; Blenkinsopp and Scurry, 2007). Research has highlighted that there are wage penalties for individuals – whom Scurry and Blenkinsopp (2009) describe as GINGOs (graduates in non-graduate occupations) – suggesting level of pay does not necessarily increase with the entry requirement (McGuinness, 2006). In short, many employers are opting to employ graduates (at non-graduate pay rates) in jobs which in a different labour market they would have filled with non-graduates.

One proposed solution is to use measures which capture the education required to *get* a job, and the education required to *do* a job (Chevalier, 2003; Chevalier and Lindley, 2007; Dolton and Silles, 2008). Following this approach, Green and Zhu (2007) distinguish between *formal* and *real* overqualification, based on self reports of skill utilisation and the qualifications required for their job. Those reporting a higher level of qualification than required to get the job but a high level of skill utilisation are seen as being in a position of ‘formal’ overqualification, whereas those who have a higher qualification but experience low skill utilisation are classified as being in a situation of ‘real’ overqualification.

Measuring discrepancy in terms of earnings

Glyde (1977) argued that underemployment could be measured in terms of wage dispersion, based on the assumption that lower levels of employment involve a less efficient utilisation of an individual’s human capital which is reflected in a lower level of remuneration, compared to others with the same level of ability or education (McGuinness and Sloane, 2009). This idea has been examined empirically (Glyde, 1977; Battu *et al.*, 1999; Hartog, 2000; Robst, 2007), but the main focus has been on whether underemployment leads to a penalty in terms of earnings in the long term (Dolton and Vignoles, 2000). This reflects a prevailing assumption that underemployment is a temporary, transitional phenomenon for graduates; a ‘stop gap job’, foot in the door or means to avoid unemployment (Cassidy and Wright, 2008; Connor and Pollard, 1996; Chevalier and Lindley, 2007; Pitcher and Purcell, 1998). From this temporary situation, individuals are assumed to make efforts to exit underemployment, either by obtaining another job or through using their competences to ‘grow’ their current job to utilise their skills, with the former being the commonest strategy (Mason, 2002).

Referring to earlier discussions regarding involuntary perspectives of underemployment, it is clear that the measurements above are based on conceptualisations of underemployment which envisages reasonably proactive career actors, and ignores the possibility that some individuals may enter positions of underemployment as a result of career indecision (Feldman, 2003) or a lack of engagement with job search (Saks and Ashforth, 1999). This is a key point for consideration as these individuals may remain underemployed for longer, with potential consequences for their future career trajectory and success, as extended periods of underemployment may be viewed negatively by future employers (Blenkinsopp *et al.*, 2011; Feldman and Whitcomb, 2005; Scurry and Blenkinsopp, 2009). There is little research which explores this aspect, perhaps because the overreliance on cross sectional data prevents exploration of the dynamic nature of underemployment, including the extent to which it is perceived by the graduate as a transitional or permanent state (McGuinness and Wooden, 2009).

Glyde's (1977) argument that underemployed individuals will earn less rather ignores the possibility that individual level variables – such as gender, age, social class and race – will also have an effect on the employment choices, options and earning potential of individuals (Büchel and Battu, 2003; Feldman, 1996; Leana and Feldman, 1995; McGuinness and Bennett, 2007; Purcell *et al.*, 2007; Ruiz-Quintanilla and Claes, 1996). Focus on income levels in comparison to the same graduating cohort may neglect factors which are potential restrictions on an individual's earning capacity. As Elias and Purcell (2004) note, the wage premium that arises as a result of being a graduate is not immediate and various factors, such as those outlined above, can be associated with a slower growth rate in earnings (Purcell *et al.*, 2007).

Measuring discrepancy in terms of contract status

A widely used concept within the literature is the notion of 'visible' or 'time-related' underemployment (Clogg, 1979), which occurs when an individual is employed in a part-time or temporary position but desires a full time or permanent post. Various measures and definitions have been used (see Table 2), with the central assumption being that underemployed individuals want full time permanent jobs that fully utilise their education and skills (Feldman *et al.*, 1994; Feldman and Turnley, 1995; Kalleberg, 2008; Watson, 2002;

Wilkins, 2007) but are unable to obtain them due to a lack of employment opportunities. They are thus viewed as involuntarily underemployed.

TABLE 2

Yet the extent to which being in part-time or temporary employment is by itself an indicator or characteristic of underemployment may be questioned (Glyde, 1977). Recent studies have highlighted an increased desire from Generation Y or ‘millennials’ for work life balance (Terjesen and Frey, 2008). This suggests that some individuals are voluntarily accepting positions of objective underemployment, as measured by their contract status, to pursue activities outside of formal employment. Measures of underemployment based on contract status thus need refining in order to be able to establish if an individual has voluntarily accepted a temporary or part time position and the reasons for doing so, as this will influence their expectations and experiences of underemployment (Feldman, 1996).

Discussion

Our review has highlighted a range of issues concerning the definition and measurement of underemployment. We noted above that the principal aim of this article was to draw together the diverse research on graduate underemployment. By highlighting competing definitions and approaches, we have also drawn attention to the different perspectives and understandings which inform them. The issues brought to the fore in attempting to answer the question “what is graduate underemployment?” lead the discussion in some fruitful directions, in terms of developing further research into graduate underemployment. An important contribution of the review has been to highlight that research into *graduate* underemployment can cut through some of the definitional complexity which arise in the wider underemployment literature, at least in terms of defining and measuring the educational side of the education-employment mismatch.

The distinction between objective and subjective perspectives (Khan and Morrow, 1991; Jones Johnson and Johnson, 1995) is key to furthering our understanding of this phenomenon, highlighting the need to understand the perspective of the graduates themselves and explore how they make sense of their situation (Feldman, 1996; Jones Johnson and Johnson, 1991). Our review, however, draws attention to the continued dominance of the

objective perspective, particularly in large scale survey based research. In the majority of studies measures of the match between the level of education and employment are acquired through self reports, and it is therefore unclear in what terms individuals are perceiving themselves to be underemployed (Khan and Morrow, 1991). Nevertheless, this data is typically treated as if it was objective data, on the implicit assumption that the graduates are able to gauge their employment against some referent for appropriate graduate employment. This highlights the critical issue of expectations, which we examine in detail below. Individuals' sense of underemployment will be strongly influenced by their employment expectations but the nature of these expectations, and from whence they derive, is neglected in the literature.

Although self-perception measures of graduate underemployment have gone some way to acknowledging the heterogeneity of individuals there is still an emphasis on causality and correlations. This fails to provide insight into the contextual and interpretative frameworks individuals draw upon to make sense of their situation (Feldman, 1996; Johnston, 2003). The graduate population is ever more heterogeneous in terms of occupations and employment entered, and this stems from an increased range of degrees now available, the professionalization of some occupations, and general changes in the labour market and economy. A key factor contributing to this diversity is the increasingly varied demographic profile of students, with wider participation in terms of class, gender, age and race (Johnston, 2003; Pitcher and Purcell, 1998; Purcell *et al.*, 2007). As a result, the expectations individuals hold and their experiences of employment are becoming increasingly varied and this highlights the importance of exploring personal and job characteristics (Johnston, 2003; McGuinness, 2006; Robst, 2008; Tomlinson, 2007).

However throughout the literature there continues to be a sense of a chimerical 'ideal type' of graduate occupation which pervades assumptions and expectations of the kind of employment that individuals should be entering upon graduation from Higher Education. Underlying these expectations is an unexamined assumption about the kind of objective attributes that validate the 'graduateness' of an occupation. This assumption sees rewards, both tangible and intangible, as being a universally valid objective measure of what should be expected from graduate employment – for example wage level and career structure. Such expectations reflect a "conventional wisdom among politicians, parents and students alike" that education will "deliver the economic 'goods'" (Brown and Scase, 1994: 16). However,

as the review has demonstrated, in establishing the nature of a 'graduate job' there are numerous difficulties, particularly if one factors in individuals' differing expectations concerning higher education and its impact on career. Factors including field of study, the socio-demographic background of the graduate and the position of the economy within the economic cycle can all influence individuals' employment expectations. Our review suggests that preoccupation with measurement of underemployment has stymied the development of research which might help in understanding the dynamics of the unfolding experience of graduate underemployment (Feldman, 1996), capturing the interplay between objective and subjective factors.

Graduate underemployment - agenda for future research

Our adaptation of Feldman's dimensions of underemployment to the specific case of graduate underemployment, offers a comprehensive yet parsimonious framework for defining graduate underemployment from an objective perspective – certainly our review found no studies which would lead us to add any additional categories. Yet the review has also highlighted that in seeking to define and measure underemployment among graduates, our greatest need is to be able to define a referent standard – a view of what would be appropriate graduate employment. To do so requires us to explore existing expectations about such employment, and our framework provides a useful starting point. By reversing the dimensions for graduate *underemployment*, we can reveal the expected outcomes for graduate employment which are implicit in that framework:

1. Graduates will be employed in jobs commensurate with their level of education;
2. They will be employed in jobs appropriate to the field in which they were educated;
3. They will be employed in jobs which fully utilise the higher-level skills they acquired during their education;
4. They will be employed on permanent, full-time contracts unless they have a preference or a need for temporary and/or part time contracts;
5. On graduating they will receive earnings commensurate with their education.

This description of potentially rather ambitious expectations of the employment outcome of higher education only serves to highlight the lack of an objective referent standard for graduate employment and emphasises the centrality of expectations in taking the research

agenda forward. This is crucial in the context of growing heterogeneity of graduates and graduate employment. This review has drawn attention to the need for research which explores graduates' employment expectations and how they vary in light of this diversity. We propose that a fruitful avenue for research would be to explore the features of jobs which lead individuals to perceive them as appropriate graduate employment. Obtaining a clearer understanding of individuals' expectations of graduate employment (and the sources of these expectations) would provide a vital empirical benchmark against which to assess underemployment.

Adopting student and graduate expectations as a key focus for future research acknowledges the inherent duality of underemployment (objective and subjective), the importance of individuals' sensemaking and the meanings that they ascribe to their employment. This is key to furthering our understanding of graduate underemployment and its potential consequences. Researchers need to examine the expectations different stakeholder groups have of graduate employment, such as the extent to which the graduates (and significant others) perceive they are meeting their own, and others, expectations of what graduate employment should be. It will also be important to establish from whence these expectations are derived (e.g. family, peers, partners, popular culture and the media), whilst also exploring the graduates' *experiences* of that employment and how they make sense of their situation. Calls for such an approach have been made previously by Burris (1983b) and Feldman (1996), but as yet have not stimulated significant research.

One way to facilitate further work in this area is to draw upon ideas from careers studies. The relative neglect of graduate underemployment by career studies was one of the surprising findings of our review. Although some of the key researchers on graduate underemployment are career scholars, the potential benefits of applying career theories and models have as yet not been fully realised. We have already highlighted the relevance of research on career indecision (Feldman, 2003), but we think the careers literature can contribute in two other important ways – through drawing upon models of career success, and through offering a richer conceptualisation of the objective-subjective distinction on underemployment.

The careers literature offers an increasingly sophisticated examination of the idea of career success, which is clearly relevant to graduate underemployment. Two particular issues are highlighted. The first is the inescapable interplay of objective and subjective markers of

career success. Nicholson and de Waal-Andrews (2005) note that despite a number of theoretical arguments for an emphasis on the greater importance of subjective over objective career success (e.g. Weick and Berlinger, 1989), it is impossible to discount objective career success. Indeed, they make a strong argument that it might be unethical to do so, since objective career success is strongly correlated with positive life outcomes such as health and well-being, and indeed longevity. The second important issue for graduate underemployment is the importance of other-referents for our perceptions of career success (Heslin, 2005). These other referents are both those who provide us with relevant comparisons of our own success (e.g. fellow graduates) and those whose evaluations (or imagined evaluations) influence our self-perceptions (Blenkinsopp *et al.*, 2011).

The idea of objective and subjective career is another important concept from the careers literature. Though an objective-subjective distinction on underemployment has already been introduced, this differs from its usage in the careers field, in that subjective underemployment refers largely to the methodological approach of using self-reports to measure underemployment. By contrast, the subjective career highlights the importance of viewing careers from the perspective of the individual to capture their sensemaking within their own social situation over time (Hughes, 1937). Central to this perspective is the view that career provides a means through which an individual can link themselves to societal structures (Barley, 1996) and that others can influence individuals' perceptions of their career. This approach moves away from viewing career as movement along 'objective' trajectories and acknowledges that individuals have their own views and interpretations of their situations linked to their self-identity (Goffman, 1969; Hall, 1976).

Within this perspective career is not defined or measured by extrinsic elements such as salary and hierarchical position, it is a construct that is drawn upon to give meaning to an individual's experiences which can "reflect individual's sense of who they are, who they wish to be, and their hopes, dreams, fears and frustrations" (Young and Collin, 2000:5). Previous research focusing on graduates' experience of employment and their employability has highlighted career and identity as concepts which can be drawn upon to identify interactions, events and experiences which impact on the graduates expectations and experiences of employment (Coupland, 2004; Nabi, 1999; Stewart and Knowles, 1999).

We suggest that this is an important avenue for future research into graduate underemployment, particularly as a means by which to explore how the experience of underemployment changes over time. Hughes (1937) described the subjective career as a ‘moving perspective’ and in doing so stresses the temporal dimension to understanding career. We suggest that subjective underemployment too can best be understood by considering the graduate’s perspective on where their current employment fits into a wider career. In recent work exploring graduates in non-graduate occupations (GINGOs) Scurry and Blenkinsopp (2009) found that their subjective underemployment actually decreased when they realised their work experience had grown to a point where they could envisage parleying it into a promotion.

Implications for Practice

The focus of this review has been on research into graduate underemployment, and the implications of existing work for future development in this field. However, in the context of policy debates surrounding the purpose and value of higher education, this review also has a number of implications for practice. It is useful to think in terms of the various stakeholders involved in higher education – specifically students, teachers and advisers, parents, employers, universities and government.

For students the most obvious implication is in terms of their future employment, and the graduate underemployment literature certainly highlights a number of issues to consider, including degree choice, engagement with career planning and job search. However, perhaps the key theme to emerge from the current review is the issue of their expectations. This is also a key issue for teachers and careers advisers, highlighting a need to work with young people who are considering university to clarify their expectations of higher education and its potential benefits. For parents, who are concerned to advise and support their children, the whole notion of graduate underemployment raises serious questions about the economic value of this investment, which has hitherto been viewed in very positive terms (Brown and Scase, 1994).

For employers, the review raises concerns about the employment of graduates to fill jobs previously held by non-graduates – as Blenkinsopp and Scurry (2007) note, despite the appeal of being able to employ better educated staff, there is a risk in recruiting individuals whose education gives them certain career expectations into jobs with no discernible career

prospects. Within this context, there are potential consequences for performance of individuals, levels of satisfaction, commitment and overall engagement. Given that increasing numbers of graduates are finding themselves in these positions, HR professionals need to seriously consider this group, in particular the management of their expectations. With the growing emphasis in recent years on talent management, this group represent a potential pool of talent for organisations. Organisations should look to strategies that develop this potential, focusing in particular on ways in which they can enhance the retention and engagement of this group. An emphasis on job design and opportunities for career development and management could help achieve this.

For universities it highlights the importance of managing the expectations of individuals, not only in terms of raising aspirations but also in the development of realistic expectations. Their marketing messages about the impact of education on future earnings are generally based on average outcomes, yet there is a real risk that underemployed graduates experience a much lower graduate premium. Factoring in the cost of course fees and living expenses, it seems likely that for some individuals the cost of obtaining a degree will not be offset by their lifetime earnings. Finally, for policy makers it would be useful to consider the notion of expected employment outcomes for graduates in order to consider the emphasis on higher education and the effects that this has on expected employment outcomes for graduates. In a UK context, government ministers have been surprisingly frank about the extent to which the next generation may need to think rather differently about progressing their education, talking up the value of vocational training.

Conclusion

This review has examined a wealth of research from various disciplines in attempting to answer the question “what is graduate underemployment?”. While this review indicates a degree of disciplinary diversity, it also demonstrates some common themes around the definition and measurement of this complex phenomenon. We have also highlighted two important distinctions – between voluntary and involuntary underemployment, and between objective and subjective perspectives – which are crucial to understanding graduate underemployment. We suggest that underpinning many of these issues is the enormous challenge of defining what today should be understood as appropriate employment for graduates, a challenge which is linked to the differing expectations of such employment held

by a range of stakeholders including students, graduates, employers, and governments. There is a need for future research on the area of graduate underemployment which explores the unfolding and dynamic nature of the phenomenon, in particular the ways in which underemployed graduates make sense of their situation over time. We suggest an important basis for developing our theoretical understanding of graduate underemployment is to draw upon relevant theoretical frameworks from career studies – specifically those on the objective-subjective duality of career, career indecision, and career success.

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Table 1 – Occupational education requirements

Technique for measuring	Example measures
Job Analysis (Objective)	Dictionary of Occupational Titles The Standard Occupational Classification,
Realised Matches (Objective/Subjective)	Mean/modal educational attainment of workers in that job or occupation. Labour force data which indicates the distribution of graduates in occupations
Worker Self Assessment (Subjective)	Self report of educational level required for entry and/or performance Satisfaction levels Perceived overeducation/overqualification/ utilisation/no growth

Table 2 – Contract Status Discrepancy

Measure of Contract Status	Definitions
Low hours	Works less than 35 hours
Involuntary part time	Preference for full time position/more hours Difference between actual/ideal hours Availability to work more hours Unable to find full time employment
Intermittent/sporadic /temporary	Insufficient regularity Non-continuous Not permanent