19.7.2018

Talent management in Higher Education: Is turnover relevant?

Abstract

Purpose

Headline staff turnover in universities might be considered "satisfactory", but can mask wide counterbalancing patterns between departments and different staff. The aim of this paper is to explore the benefits of detailed turnover analysis in managing talent in the complex changing landscape of Higher Education in the UK.

Methods

Staff turnover was analysed for both new recruits and staff leaving, as well as net turnover. The *inverted Nomogramma di Gandy* highlighted overall patterns and outliers. Staff characteristics examined included: age, gender, staff type and contractual status.

Findings

There were wide variations in staff turnover for age, gender and type of contract, with particularly high turnover for research staff (influenced by funding sources and use of fixed-term contracts). This disproportionately affected younger staff, who are more likely than their elders to seek employment elsewhere, but might stay if there are career opportunities and development. Practical processes are suggested to improve intelligence that enables the best talent to be identified and retained, supports a life-span perspective and informs emerging issues such as gender pay differentials.

Value

Given the increasing complexity of managing talent in higher education, with its age-diverse and predominantly knowledge-type employees, the research serves to highlight the wide variations in staff turnover between different staff. It is inferred that high localized turnover can adversely impact on a university's research capacity, which in turn presents risks to the achievement of its strategic aims and objectives. Therefore detailed scrutiny of staff turnover dynamics can pinpoint where recruitment and retention policies and practice require focus.

Introduction

In the context of Higher Education (HE) universities are increasingly competing in a global market, and adopting management styles and approaches from the private and industrial sectors (Deem, 2001) (National Audit Office, 2017). This is reflected in competition for academic staff with strong research skills (Mahroum, 1999; Ackers and Gill, 2005 (Weale,

2017)) and the application of performance indicators, such as number of PhD-educated academic staff (Breakwell and Tytherleigh, 2010). Moreover, academic staff are knowledge workers (Arthur, Khapova, & Richardson, 2017) with high international mobility (Bauder, 2015). Given this evolving climate and unique resource, universities must manage their talent positively and proactively and avoid wasting talent (Blackmore, 2014).

A key measure relevant to talent, for HE-sector and other organisations, is staff turnover (Allen *et al.,* 2010). This provides valuable insights to what is happening within the talent pool, generally retrospectively (Veleso *et al.,* 2014). Within the United Kingdom (UK), universities benchmark staff turnover on a university-wide basis, using several different professional, private and public organizations; although it is only one of many Human Resources Management (HRM)-related topics covered. The risk is that headline figures for universities mask wide variations between faculties and departments, and between staff categories, which should be recognised and the associated talent issues addressed. Therefore research was undertaken in a large post-1992 UK HE institution (Armstrong, 2008), with over 2000 staff, five academic faculties and three support/managerial divisions, to establish the degree to which headline, organisation-wide staff turnover can mask wide internal variations which might otherwise go unrecognised.

The aim of this paper is to explore the benefits of detailed turnover analysis in managing talent in the complex changing landscape of Higher Education in the UK. We have limited knowledge about the use of detailed turnover analysis with academics in HE. We need to use HR systems more systematically owing to this resource being internationally mobile knowledge workers in order to better inform theory building and practice The next section reviews current critical literature relating to talent, turnover and context (age and contract). The discussion section evaluates the potential implications, and makes suggestions for improving the management of talent in the sector.

Talent and Turnover

Talent retention is considered a principle HRM challenge, essential to meeting business needs (Suresh, 2014). A range of characteristics, such as natural ability, skills, knowledge, and intelligence, are commonly used in the literature (Festing and Schäfer, 2014), with many context specific. However, there seems to be no agreed definition of ‘talent’ (Hanif and Yunfei, 2013; Veleso *et al.,* 2014), and consequently the term is used in a variety of ways for a variety of purposes (Ulrich, 2011). For example, some see HR practitioners repackage their practices in order to find credibility (Chuai *et al.,* 2008). Other uses differentiate between staff

who are high performing and have high potential (Guthridge *et al.,* 2006) or, more openly, allow a route to high performance and career development for everyone (Lewis and Heckman, 2006). Gallardo-Gallardo *et al.* (2013, p. 293) considered the various meanings for talent and made two distinctions –'talent-as-object' and 'talent-as-subject'. For the former, talent is conceptualized as measures of ability, mastery of practice and commitment which relate to context. In HE, for example, research is increasingly evaluated using bibliometrics based on publications in approved journals (Gingras, 2016). This has resulted in a burgeoning of performance indicators in HE, such as H-index and citation indices, which can be used to decide who represents 'academic talent'. The second meaning, 'talent-as-subject', focuses more on the people's skills and abilities, allowing potential segmentation of staff based on ranking terms of performance and/or capability. In HE, the identification of who is talented may rest with ´elites who provide the basis for recognition' (Van den Brink *et al.,* 2013). Further, in HE, there is growing evidence of segmentation between staff as 'research academics' and staff as 'teaching academics'. The latter can face confusion about their roles, lower status and uncertainty with career paths and promotions (Bennett *et al.,* 2017).

Paradoxically, this inconsistency of meanings and uses for 'talent' could be advantageous because it offers HR professionals freedom to create individual talent management practices (Meyers and Van Woerkom, 2014). The ability to adapt the concept of talent is very relevant to HR professionals in HE, as they increasingly have to behave like their private business sector counterparts, who believe companies can gain competitive advantage through 'talents', because people are unique and cannot be replicated by others. This is directly relevant to the employment of academics, who are not only deemed knowledge-type employees who are, frequently, internationally mobile (Maree, 2017), with particular esoteric knowledge and an individual, human focus; which can be difficult to replace, particularly in science, technology, engineering and mathematics (Cardy and Lengnick-Hall, 2011; Teichler and Cummings, 2015). Therefore, in HE, as a location for knowledge workers, a 'smart' version of talent might be used to retain staff (Whelan and Carcary, 2011).

Comment [HP1]: Rob add reference

In light of the above labour market intelligence is essential where skills shortages are escalating (CIPD, 2015a; (HAYS, 2017); talented people are needed to ensure businesses run efficiently remain competitive and meet strategic goals. (Hancock *et al.,* 2013; Raju *et al.,* 2015). Therefore, knowing who is staying and leaving is critical (Cardy and Lengnick-Hall, 2011), because it can be very costly and not easy to recruit and train new talent (Groysberg, 2010; Collings, 2015); CIPD (2015a:27) reported considerable variance in recruitment organisations' costs; in respect of academic recruitment the data from the the United States

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of America (USA) is significantly higher: estimated recruitment and associated costs of universities replacing faculty members varied between $300,000 and $700,000 (Ehrenberg *et al.,* 2006) and $113,000 to $926,000 (Schloss, Flanagan, Culler, & Wright, 2009)

In order to understand talent retention the most commonly-used statistical measure is labour turnover (Gates, 2004). Nevertheless, there can be 'scant attention given to turnover' (Lawrence *et al.,* 2013), despite the fact that research exists about factors influencing people to leave their jobs (Cardy and Lengnick-Hall, 2011), and factors influencing people to remain with a company (Cotton and Tuttle, 1986)**.** This lack of attention is possibly because the concept of turnover is taken for granted and it involves comparatively straightforward formulae with many published, high-level benchmark analyses. In HE, fair promotion and higher salaries are important to employee satisfaction (Chen *et al.,* 2006), and relevant to the acquisition and retention of key skills, particularly where recruitment difficulties exist, such as specialist areas (CIPD, 2015a).

HE Context

This section will initially outline the key influencers for the UK Higher Education academic recruitment landscape, namely, UK context, employment contracts; research and age diversity. 'Brexodus' is a term used in relation to the turnover of academics from UK universities to Europe with reports of academic skills shortages as a result (Weale, 2017). One unique feature of the UK is the Research Excellence Framework or REF which is used to assess the quality of research in HE institutions, and appears to be driving not only an agenda of accountability but also the use of temporary contracts, a topic that will be discussed later in this section (Jump, 2013). Stern (2016) conducted a review of the REF process and criticized what he termed 'gaming' whereby a publication belonged and, therefore, moved with a researcher. This was particularly criticized as not being conducive to talent development and will be adjusted in the REF 2020 (Ref2020 Consulting, 2015).

In addition, there are particular HE talent retention challenges in respect of research and the use of fixed term contracts. Research funding sources can encourage, or necessitate, the use of fixed-term contracts, their very nature influencing talent retention, often in younger staff (Festing and Schäfer, 2014) and a practice that is increasing (University College Union, 2017). Therefore, HR and HE managers must recognise localised high staff turnover, so that they can understand and appreciate specific talent hotspots, and evaluate whether HRM practices are suitable to ensure appropriate staff retention (Renaud *et al.,* 2015). Furthermore, in terms of talent, management studies continually point to the lower levels of organisational commitment of temporary workers (Coyle-Shapiro & Kessler, 2000; Han,

Moon, & Yun, 2009). Moreover, feelings of job insecurity can cause a negative effect (Piccoli, Callea, Chirumbolo, Ingusci, & Hans De, 2016; Precarious staff at the University of Kent, 2018) including anxiety for young researchers in HE (Anonymous academic, 2018; Locke, 2014). A further issue with the use of fixed term (temporary) contracts is the lower levels of training (Booth *et al.,* 2002).

In the UK, other internal pressures include age where, since April 2011, employers cannot issue retirement notices to employees (Age UK, 2015). The potential for older staff in HE to continue in employment beyond the traditional retirement ages presents a very different scenario, because turnover may reduce if staff opt to continue in post. CIPD (2015b) suggests there are more benefits than disadvantages to employing older workers, but there is the challenge that employees over the age of 65 years could, potentially, remain working indefinitely, thereby creating a redundancy entitlement situation, which organisations may need to budget for. Traditionally older men in the university have been employed mainly full-time and older women mainly part-time, but this may evolve differently in the future as older workers desire flexible working practices that create work/life balance. Nevertheless, it would appear that most HRM systems are geared to employees aged 15 to 55 years and, therefore Hertel *et al.* (2013) recommend that HR policies should adopt a life-span perspective. It is important that HR systems are geared to the breadth of ages from young and older employees so as to ensure that a diversity of talent is retained and developed.

As the number of Generation Y in organisations steadily grows, managers will also need to pay more attention to their needs and talent management processes should be adjusted accordingly (Meyers and Van Woerkom, 2014). Despite the clear benefit of knowledge-sharing in an age-diverse talent environment, there are inter-generational differences, with the different values between younger and older workers potentially creating conflicts in workplaces.

Contribution of this research

Lawrence *et al.* (2013) share how, despite labour turnover being the most common data collected, with the exception of headline rates, the detail is largely ignored. Our findings illustrate how headline organisational rates can mask internal variations. We argue that the lack of attention is particularly problematic with reference to academic staff where there are skills shortages (Dodgson, 2018) and whose career is particularly long standing (Wilson, 2017) with high employment mobility (Maree, 2017). The paper illustrates its findings from research in one large post-1992 HE Institution (Armstrong, 2008) in the UK, and identifies

variations between different gender and age groups. It then highlights potential implications for talent management in light of the evolving age-diversity of the sector.

Methods

Data from the university in question covered the period 1st August 2012 to 31st July 2013; the full academic year prior to the Research Excellence Framework (REF) (2015). This was chosen in part because of suspicions that some universities recruited staff with good records of recent publications, thereby increasing their REF score, and consequently their allocation of related resources.

Data

The anonymous staffing data collected was: Anonymous identifier; Age; Gender; Start Date; Leaving Date; Reason for Leaving; Disability Status; Ethnic Origin; Nationality; Grade Name; Job Name; Department; Location; Full Time Equivalent (FTE); Employment Category; and, Nature of Fixed Term. The categories assigned to each data reflected the actual data available on the university database.

Ages were aggregated into 10-year groups for analytical purposes, with 'Under 20 years' and '60 years and over' at either end of the range. There were separate analyses for Generation Y based on staff aged '35 years and under'.

Nearly all staff had some type of permanent or fixed-term contract. For analytical purposes, all types mentioning 'permanent' were aggregated together and all types mentioning 'fixed-term' were aggregated together. The remaining category was Joint Contract.

Measurement of Turnover

Staff turnover rate is defined as the number of employees who leave a company during a specified time period divided by the average total number of employees over that same time period (Department for Work and Pensions and ACAS, 2014). The data required is simple and should be available within any organisation. The (minimum) data required is:

S - Number of staff at start of period

L - Number of staff lost/leaving during period

N - Number of new staff starting during period

F - Number of staff at finish of period

The turnover rate relating to lost staff is calculated as follows:

$$\text{Lost Staff as Percentage of Average Numbers} = (2Lx100)/(S+F) \quad (1)$$

The corresponding turnover rate for recruited staff is:

New Staff as Percentage of Average Numbers = (2Nx100)/(S+F) (2)

Therefore, the net turnover rate calculation is: (2x(N–L)x100)/(S+F) (3)

Some staff started and left university employment during the period covered; these were counted against both 'lost staff' and 'new staff'. In order to understand the full picture all staff were included, irrespective of whether they left for 'voluntary' reasons, or other reasons such as redundancy. Specific exclusions were casual staff, management consultants, and similar. 'Percentage Stability Index' is a commonly used HRM measure which describes the retention of experienced employees, calculated as the number of workers with one year's service (or more), divided by number of workers employed one year ago, multiplied by ten (Department for Work and Pensions and ACAS, 2014).

Constraints with the analyses were: they involve 'headcounts' of individual university employees, rather than the FTEs; and the 'average number of staff' was taken as the mean of the number of staff at the start and end of the period, viz. (S+F)/2, which is a commonly used calculation.

Results

The scattergram-related *inverted Nomogramma di Gandy (NdiG)* was used to demonstrate variations in staff turnover. It requires minimum data, and by showing many data in one diagram, it acts as an exploratory data analysis tool for considering problematical issues. The emphasis is on 'insightful questioning' and the skill of asking new questions (Gandy, 2009).

The *inverted NdiG's* X axis is 'Lost Staff as Percentage of Average Numbers', (1) above, and the Y axis is 'New Staff as Percentage of Average Numbers', (2) above. Therefore an organisation might be considered 'self-sufficient' or 'self-contained' if there is no gain or loss of staff. In such circumstances, the *inverted NdiG* values would be (0,0). Hence, the further away from this point, the greater the turnover. Organisations with expanding staff appear above the 45° diagonal, whilst those contracting appear below. Data was collated into meaningful categories: 'Staff at 1st August 2012'; 'Leavers'; 'New Staff'; and 'Staff at 31st July 2013'.

Table 1 sets out the above data and indices for age, gender, and type of contract. The related patterns are shown in Figure 1.

[Table 1 near here]

[Figure 1 near here]

There was a decrease in total staff in the year, from 2,346 to 2,277, but this involved an increase in academic staff balanced by reductions in administration and research. The overall reduction of 3% was the net effect of 10% of staff leaving with 7% starting. Staff reduced in all age-sex group except the under 20s, and males aged 20-39 years. The majority of female leavers (57%) were aged under 40 years, compared to 43% for males.
Academic staff had a slightly older age profile than non-academic staff: a mean age of just over 47 years compared to 45 years. The mean age for males was marginally greater than that for females in both categories. The mean research staff age was just over 38 years, but there was a gender difference: 41 years for males and 35 years for females. Gender differences also applied for staff aged 60 years and over: males accounted for 76 (61%) of the 124 full-time staff, while females accounted for 64 (65%) of the 98 part-time staff.
There was greater turnover in younger age groups, particularly the 20-29 years group. Although there were limited differences in net turnover rate between Generation Y and other staff, this masked large differences between the graphical indicator values, with Generation Y being outliers for both males and females.

Marked differences were seen in turnover rates between staff with permanent and fixed-term contracts; the latter only accounted for 8.5% of the talent, and by definition staff normally leave at their contract end. There were low turnover rates for academic staff and high rates for research staff, but of course most academic staff have permanent contracts and research staff have proportionately more fixed-term contracts. For illustration, there were 90 research staff with fixed-term contracts at the beginning of the year, and 67 at the end. Therefore, although they accounted for only 3.8% of the total staff at the beginning of the year, they accounted for 18.5% of the staff leaving and 12.2% of the staff starting. There was very high turnover for part-time research staff on fixed-term contracts, with a net turnover of -74.3; they accounted for 29.7% of part-time staff that left and 13.0% of such staff that started.

Discussion

Hancock *et al.* (2013) highlighted both positive and negative consequences of high staff turnover, concluding that on balance the latter outweighed the former. This study segmented staff into a variety of categories and established varying turnover patterns across the university. In particular, we recommend that turnover should be transparent and calculated for both new staff and leavers because these can vary considerably. The varying patterns for the age and gender, the apparent relationship between fixed-term contracts and research posts, and the different age distributions between the types of staff, all have implications for talent, particularly in light of the high turnover costs (in the USA) of 68 million dollars (Jo, 2008).

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Challenges of an age and gender diverse talent pool

The results presented different challenges at either end of the age spectrum, with highest staff turnover amongst younger staff and older staff increasingly staying on after retirement age. This is because in this university 27% of employees aged over 60 years were actually over 65, with the oldest being 73.

The number of women leaving exceeded men for both the 20-29 and 30-39 years age groups, although women were in the majority for both age groups. To assume and accept greater turnover in these age groups for females can be misleading: Women report unique challenges (Figuroa, 2015) with some arguing that the environment of HE itself 'militates against gender equity' (Duberley & Cohen, 2010). Thus, by assuming that wastage rates for females in certain age groups is inevitable this can lead to structural issues later. We would suggest that the gender pay reporting in the UK is an example with significant pay differences between genders for those in undertaking same or similar work in some occupations reported (ONS, 2018). Moreover in the context of this institution gender pay is a particular issue with women's median hourly rate being reported above 20% (GOV.UK, 2017). This organization, like others, has no additional information about the reason for the loss of 106 (45.5%) staff as these were recorded with the global term 'resignation'. Employment exit interviews can be conducted to provide additional information however the university covered by the research commissioned an independent exit survey of staff which received insufficient responses to make it viable. Proxy data might be routinely collected on all staff leaving, which is recorded by the appropriate superior of the person leaving, who should know sufficient detail for these purposes. Metcalf *et al.* (2005) identified several categories of reasons why staff leave and their plans which can inform the development of such proxy data.

Comment [HP4]: Use ONS (2018), Understanding the gender pay gap in the UK. Office for National Statistics, Londonn

Fixed-term contracts, research and young people

The research evidenced a relationship between staff having fixed-term contracts and research contracts, and also the taking on of new staff (indicator Y). This was relevant in respect of age because 52% of staff with a fixed-term contract were from Generation Y (for both sexes), which compared to 17% for permanent staff. For research staff 62% of staff with a fixed-term contract were from Generation Y (for both sexes), which was much higher than the 13% for academic staff (19% for females and 10% for males).

Five academic departments had high figures for each of the three related indicators. The inference is that these departments recruit (young) research staff on fixed-term contracts to support research projects that they have won/gained funding for, which are themselves for a fixed period. Inevitably cycles of research project funding vary, and so these departments will recruit and shed research staff in line with project plans and funding availability; consequently, in any year some projects will start, some will continue and some will finish, which will reflect in the staff turnover accordingly. Recent findings from South Africa point to the importance of management support for early career academics through TM and development and recognition that enhances organization commitment (Lesenyeho, Barkhuizen and Schutte, 2018). The question for universities is how to make best advantage of this pool of talent? Simply letting them go at the end of their contract and project is probably less than optimal, and these staff will inevitably need to be applying for new jobs well in advance of their contract end-date. Logically this could mean talent management processes involving reviews of research staff with fixed-term contracts, say, 6-months ahead of the termination date, to determine whether to offer a permanent (or even another fixed-term) contract. This would need to take into account a whole range of relevant criteria, including: personal potential; REF potential; research direction; organisational opportunity; and resource availability. If there are no apparent career and development opportunities, staff will start to look elsewhere. The implications for HE HRM resources of such an approach should not be underestimated and a balance may need to be struck with the numbers of such staff; in which case some prioritisation process could be required, with relevant senior faculty managers recommending those for consideration, based on agreed set criteria. The findings from Locke (2014) that head-hunters check university league tables, such as the Complete University Guide (2017), before recruiting senior academics could be more problematic for post-1992 institutions which traditionally have lower rankings than their Russell Group (2017) counterparts. A university's position in the HE market is something that those managing talent will need to be aware of and take into account when making their plans.

Comment [jg5]: Lesenyeho, D., Barkhuizen, N. and Schutte, N.E. (2018). Exploring the causal relationship between the antecedents and consequences of talent management for early career academics in South African higher education institutions. SA Journal of Human Resource Management, Vol 16
DOI: https://doi.org/10.4102/sajhrm.v16i0.912

In terms of this study, the movement of talent tended to be approximately two years before the REF date, and accordingly, the main movement period for talent for the 2014 REF was in 2012/13 (i.e. the period covered by this study).

Monitoring talent management

There is a need for HRM functions to evaluate turnover as highlighted by Hesketh (2014). He found that the necessary systems were 'largely absent'; something subsequently endorsed by CIPD (2015c) which stressed the related challenges involved, as HRM is expected to become more business focussed. This study suggests that in order to operate successfully, Universities must take such pressures and characteristics into account in staff management and recruitment, and must be flexible in their talent management to support the different age groups. There should be greater attention on well-thought determinants for young talent retention, with talent management practices customised for each talent in order to aid their retention as the same retention strategy cannot be applied for everybody anymore (CIPD, 2015a).

The scrutiny of staff turnover, as one of several relevant indicators, is important in the monitoring of talent management. It has traditionally been reactive, and therefore a proactive approach should be adopted to underpin an organisation's talent management; so that strategically it can retain its best talent. There is a danger that 'good' turnover figures in the existing HRM benchmarking systems can lead universities to not look deeper to establish the existence of any widely differing patterns which balance each other at an institutional level, and which could point to localised talent management issues. Therefore staff turnover should be monitored at all levels.

In aggregate, a university's talent management processes should ensure that the skills and talents of all staff are in line with its requirements. The varying and contrasting pressures described herein present university managers and HR staff with major tests they must address both strategically and operationally. Ozcelik's (2015) view that organisations which are able to change their processes according to Generation Y needs will win 'the war for talent', seems realistic. However, against aggregation, is the way different subfields in HE may employ different talent management practices, particularly in relation to the differences between 'academic talent' and 'teaching talent' (Van den Brink *et al.,* 2013). At such levels, talent management is more likely to be based on informal and subjective evaluations. We recommend that talent management in HE be viewed as a strategic issue (Singh, 2014) directly relevant to organisational performance (Hazelkorn, 2015; Swaab *et al.,* 2014).

Conclusion

This study makes contributions to a commonly known, yet underutilized method that can help retain staff. This contribution is in the context of a group of workers with unique characteristics. Firstly, as knowledge workers, learning takes longer to become embedded as they 'tend to learn in an informal, self-directed manner' (Whelan and Carcary, 2011, p.681) and their departure can have significant impact on the flow or (in some cases) removal of knowledge. Secondly, the group are particularly age diverse and internationally mobile. Combining these characteristics, we suggest, makes this a particularly unique group and one where impactful monitoring could create a significant business effect.

We share how headline staff turnover rates can mask wide internal variations. Whilst universities and organisations should benchmark against peers, if they wish to maximize their talent management they should adopt a proactive approach to staff turnover and undertake segmented analyses of local data to understand internal and external dynamics. This will enable an informed view of whether their talent management arrangements meet their strategic aims and objectives, and support the retention and recruitment of the best talent.

HR functions in HE must recognise the distinctiveness of the different life stages of academic and research staff, who are predominantly knowledge-type employees, and adapt policies and procedures so as not to lose such important esoteric knowledge. This is very important because HE is an increasingly complex sector for talent management; its age-diversity and recruitment and retention dynamics being differentially influenced by gender, inter-generational attitudes and legislation. Particular talent management challenges relate to research, because funding sources can encourage the use of fixed-term contracts, and these should be addressed positively and pragmatically.

Comment [HP6]: Remove?

Unless you can find a reference to support this….I could not

References

Ackers, L. and Gill, B. (2005), "Attracting and retaining 'Early Career' researchers in English Higher Education Institutions", *Innovation: The European Journal of Social Science Research* Vol.18 No.3, pp.277-299 doi.org/10.1080/13511610500186649

Age UK (2015), "Default Retirement Age", available at: http://www.ageuk.org.uk/work-andlearning/discrimination-and-rights/default-retirement-age---frequently-asked-questions/ (accessed 12 December 2016)

Allen, D., Bryant, D. and Vardaman, J. (2010), “Retaining Talent: Replacing misconceptions with evidence based strategies”, *Academy of Management Perspectives* Vol.24, No.2, pp.48-64.

Armstrong, C. (2008), “What is a University in the UK?”, available at: http://www.jobs.ac.uk/careers-advice/working-in-higher-education/1135/what-is-a-universityin-the-uk (accessed 12 December 2016)

Barkhuizen, N. (2014), "Exploring the Importance of Rewards as a Talent Management Tool for Generation Y Employees." *Mediterranean Journal of Social Sciences* Vol.5 No.27 pp.1100-1105

Bennett, D., Roberts, L., Ananthram, S. and Broughton, M. (2017), “What is required to develop career pathways for teaching academics”. *Higher Education,* online at doi.org/10.1007/s10734-017-0138-9 (accessed 15 June 2017)

Benson, J., and Brown, M. (2011), "Generations at work: are there differences and do they matter?" *The International Journal of Human Resource Management* Vol.22 No.9, pp.1843-1865.

Blackmore, J. (2014), “‘Wasting talent’? Gender and the problematics of academic disenchantment and disengagement with leadership**”** *Higher Education Research & Development*, Vol.33 No.1, pp.86-99, doi: 10.1080/07294360.2013.864616

Booth, A., Francesconi, M. and Frank, J. (2002) “Temporary Jobs: Stepping Stones or Dead Ends?” *Economic Journal* Vol.112 No.480, pp.F189-F213

Breakwell, G. and Tytherleigh, M. (2010), “University leaders and university performance in the United Kingdom: is it 'who' leads, or 'where' they lead that matters most?”, *Higher Education* Vol.60, pp.491-506

Brookes, R. (2015), *The impact of UK immigration policies on students and staff in further and higher education.* London: University and College Union.

Brown, E., Thomas, N. and Bosselman, R. (2015), “Are they leaving or staying: A qualitative analysis of turnover issues for Generation Y hospitality employees with a hospitality education”, *International Journal of Hospitality Management* Vol.46, pp.130-137 doi:10.1016/j.ijhm.2015.01.011

Cardy, L. and Lengnick-Hall, M. (2011), “Will They Stay or Will They Go? Exploring a Customer-Oriented Approach to Employee Retention”, *Journal of Business and Psychology* Vol.26, pp.213-217

Chartered Institute of Personnel and Development (2015a), “Resourcing and Talent Planning”, available at: http://www.cipd.co.uk/binaries/resourcing-talent-planning_2015.pdf (accessed 12 December 2016)

Chartered Institute of Personnel and Development (2015b), “Managing an age-diverse workforce: What employers need to know”, available at:

http://www.cipd.co.uk/binaries/managing-an-age-diverse-workforce_2015-what-employersneed-to-know.pdf (accessed 12 December 2016)
Chartered Institute of Personnel and Development (2015c), “Views of Our Profession”, in *HR Outlook*, available at: http://www.cipd.co.uk/hr-resources/survey-reports/hr-outlook-winter-2014-15-views-profession.aspx (accessed 12 December 2016)
Chen, S-H., Yang, C-C., Shiau, J-Y. and Wang, H-H. (2006), "The development of an employee satisfaction model for higher education", *The TQM Magazine* Vol.18 No.5, pp.484-500
Chuai, X., Preece, D. and Iles, P. (2008), “Is talent management just old wine in new bottles? The case of multinational companies in Beijing”, *Management Research News* Vol.31 No.12, pp. 901-911
Collings, D. (2015), “Talent Management and Human Resource Development”, paper presented at 16th International Conference on Human Resource Development Research and Practice across Europe, July 3-5, University of Cork, Ireland
Complete University Guide (2017), “University League Tables 2018”, available at: https://www.thecompleteuniversityguide.co.uk/league-tables/rankings. (accessed 28 September 2017)
Cotton, J. and Tuttle, J. (1986), “Employee turnover: A meta-analysis and review with implications for research”, *Academy of Management Review* Vol.55 No.1, pp.55-70
Coyle-Shapiro, J., and Kessler, I. (2000), "Consequences Of The Psychological Contract For The Employment Relationship: A Large Scale Survey", *Journal of Management Studies Vol.*37 No.7, pp.903-930 doi: 10.1111/1467-6486.00210
Deem, R. (2001), “Globalisation, New Managerialism, Academic Capitalism and Entrepreneurialism in Universities: Is the Local Dimension Still Important?”, *Comparative Education* Vol.37 No.1, pp.7–20
Deloitte (2014), *Big Demands and High Expectations: The Deloitte Millennial Survey - Executive Summary*. London: Deloitte, available at: http://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-dttl-2014-millennial-survey-report.pdf (accessed 18 November 2015)
DeLong, D., and Trautman, S. (2011), *The Executive Guide to High Impact Talent Management: Powerful Tools for Leveraging a Changing Talent.* New York: McGraw Hill.
Department for Work and Pensions and ACAS (2014), “Managing attendance and employee turnover”, available at: http://www.acas.org.uk/media/pdf/q/k/Managing-attendance-and-employee-turnover-advisory-booklet.pdf (accessed 12 December 2016)
Ehrenberg, R., Rizzo, M. and Jackson, G. (2006), “Who bears the growing cost of science at universities?”, *Cornell Higher Education Research Institute* Working Paper 35.

Festing, M., and Schäfer, L. (2014), "Generational challenges to talent management: A framework for talent retention based on the psychological contract perspective." *Journal of World Business* Vol.49 No.2, pp.262-271

Gallardo-Gallardo, E., Dries, N. and González-Cruz, T.F. (2013), "What is the meaning of 'talent in the world of work?'", *Human Resource Management Review*, Vol.23 No.4, pp.290-300

Gandy, R. (2009), "Demonstrating Churn Diagrammatically", paper presented at 32nd Institute for Small Business & Entrepreneurship Conference, November 3-6, Liverpool

Gates, S. (2004), "Measuring More than Efficiency", Research Report no. R-1356-04-RR. New York: Conference Board

Gingras, Y. (2016) *Bibliometrics and Research Evaluation: Uses and Abuses.* MIT Press, Boston, MA.

Groysberg, B. (2010), *Chasing stars. [electronic resource]: the myth of talent and the portability of performance*, Princeton, N.J. ; Woodstock : Princeton University Press

Guthridge, M., Komm, A.B., and Lawson, E. (2006), "The people problem in talent management", *McKinsey Quarterly* Vol.2 No.1pp.6-9

Han, S-S, Sook, J.M., and Yun, E.K. (2009) "Empowerment, job satisfaction, and organizational commitment: comparison of permanent and temporary nurses in Korea." *Applied Nursing Research* Vol.22 No.4, pp.e15-e20. doi: https://doi.org/10.1016/j.apnr.2009.06.004

Hancock, J., Allen, G., Bosco, F., McDaniel, K. and Pierce, C. (2013), "Meta-Analytic Review of Employee Turnover as a Predictor of Firm Performance", *Journal of Management* Vol.39 No.3, pp.573-603

Hanif, M., and Yunfei, S. (2013), "The role of talent management and HR generic strategies for talent retention." *African Journal of Business Management* Vol.7 No.29, pp.2827-2835

Hazelkorn, E. (2015), *Rankings and the Reshaping of Higher Education: The Battle for World-Class.* Springer.

Hertel, G., Heijden, B., Annet, H. and Deller, J. (2013), "Facilitating age diversity in organizations – part I: challenging popular misbeliefs", *Journal of Managerial Psychology Vol.*28 No.7/8, pp.729-740.

Hesketh, A. (2014), "Managing the value of your talent - A new framework for human capital measurement", available at: http://www.cimaglobal.com/Documents/Thought_leadership_docs/Organisational%20management/Managing-value-of-talent.pdf (accessed 12 December 2016)

Higher Education Statistical Agency (2010), "Resources of Higher Education Institutions 2008/09 - Table 5: Staff (excluding atypical) by activity, mode of employment, age and gender", available at:

https://www.hesa.ac.uk/index.php?option=com_content&view=article&id=3432 (accessed 11 September 2015)
Jump, P. (2013), “Cardiff baker's dozen: for expiry date, check the REF”, *Times Higher Education,* 27 June, pp.6-8
Kibui, A., Gachunga, H., and Namusonge, G. (2014), "Role of Talent Management on Employees Retention in Kenya: A Survey of State Corporations in Kenya: Empirical Review." *International journal of Science and Research* Vol.3 No.2, pp.414-424
Kumar, P. (2014), "Managing career aspirations of Generation Y - a key to business excellence." *Global journal of multidisciplinary studies* Vol.3 No.5, pp.101-112
Lewis, R. and Heckman, R. (2006), “Talent management: a critical review”, *Human Resource Management Review* Vol.16 No.2, pp.139-154
Locke, W. (2014), "The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment." *European Journal of Education* Vol.49 No.1, pp.77-90
Lawrence, J., Celis, S., Hee-Sun, K., Ketchen-Lipson, S. and Tong, X. (2013), “To stay or not to stay: retention of Asian international faculty in STEM fields”, *Higher Education* Vol.67, pp.511-531
London Business School (2014), “News and Events: 90% of Gen Y spends less than five years with an employer”, available at: https://www.london.edu/news-and-events/news/90-of-gen-y-spends-less-than-five-years-with-an-employer#.Vlh1btLhDwc (accessed 12 December 2016)
Mahroum, S. (1999), “Patterns of Academic Inflow into the Higher Education System of the United Kingdom”, *Higher Education in Europe* Vol.24 No.1, pp.119-129
Metcalf, H., Rolfe, H., Stevens, P. and Weale, M. (2005), “*Recruitment and Retention of Academic Staff in Higher Education”,* National Institute of Economic and Social Research. ISBN 1 84478 523 8
Meyers, M. and Van Woerkom, M. (2014), “The influence of underlying philosophies on talent management: Theory, implications for practice, and research agenda”, *Journal of World Business* Vol.49 No.2, pp.192-203
Ozcelik, G. (2015), "Engagement and Retention of the Millennial Generation in the Workplace through Internal Branding." *International Journal of Business and Management* Vol.10 No.3, pp.91-107 doi: 10.5539/ijbm.v10n3p99
Piccoli, B., Callea, A., Chirumbolo, A., Ingusci, E., and De Witte, H. (2016), "Job insecurity and performance: the mediating role of organizational identification." *Personnel Review*. doi: https://doi.org/10.1108/PR-05-2016-0120
Raj, M. (2015), "Talent Retention: A Major Challenge in Modern Corporate Culture." In *Redefining the Human Resource Paradigm in Changing Cultural, Social and Economic*

Environment, edited by S Bhakar and G Jaiswal, pp.243-250. New Delphi: India And Bharti Publications.
Raju, S., Suresh, A., Chand, R. and Chauhan, S. (2015), “Pattern and trend in labour use in Indian agriculture: An analysis across major crops and states”, *Economic Affairs* Vol.60 No.1, pp.99-108. doi: 10.5958/0976-4666.2015.00014.5
Ref2020 Consulting (2015), available at: http://www.ref2020.co.uk/ (accessed 12 December 2016)
Renaud, S., Morin, L., Saulquin, J., and Abraham J. (2015), "What are the best HRM practices for retaining experts? A longitudinal study in the Canadian information technology sector." *International Journal of Manpower* Vol.36 No.3, pp.416–432.
Research Excellence Framework (2015), available at: http://www.ref.ac.uk/about/ (accessed 12 December 2016)
Russell Group (2017), “Our universities”, available at: http://russellgroup.ac.uk/about/our-universities/ (accessed 28 September 2017)
Schroer, W. (2015), “Generations X,Y, Z and the Others”, *The Social Librarian,* available at: http://www.socialmarketing.org/newsletter/features/generation3.htm. (accessed 12 December 2016)
Shree, S., and Sharma, L. (2014), "More than an alphabet at Workplace." *SPCERA International Journal of Business & Management* Vol.2 No.6, pp.57-64
Singh, T. (2014) "Contemporary trends in talent management – strategizing towards building strong organization." *Abhinav-National Monthly Refereed Journal Of Research In Commerce & Management* Vol.3 No.10, pp.1-8
Suresh, B. (2014), *Talent management for organizational excellence: a new corporate mantra,* available at: http://dmietrjournal.yolasite.com/resources/DMIETR%20HRMM%20JUNE%202014%20(3).pdf#page=45 (accessed 24 March 2015)
Swaab, R., Schaerer, M., Anicich, E., Ronay, R., and Galinsky, A.D. (2014), "The Too Much Talent Effect Team Interdependence Determines When More Talent Is Too Much or Not Enough." *Psychological science* Vol.25 No.8, pp.1581-1591
Teichler, U. and Cummings, W. (2015), *Forming, Recruiting and Managing the Academic Profession*. Springer
Tulgan, B. (2011), "Generation Y: All grown up and now emerging as new leaders" *Journal of Leadership Studies* Vol.5 No.3, pp.77-81 doi: 10.1002/jls.20237
Ulrich, D. (2011), “Integrated talent management” In *The Executive Guide to Integrated Talent Management,* edited by K. Oakes and P. Galagan, pp.189-211. ASTM Press, Alexandria, VA,

University College Union (2017) “Stamp out casual contracts”, available at: https://www.ucu.org.uk/stampout (accessed 26 September 2017)

Van den Brink, M., Fruytier, B. and Thunnissen, M. (2013), “Talent management in academia: performance systems and HRM policies”. *Human Resource Management Journal* Vol.23 No.2, pp.180–195

Veleso, E., Silva, R., Dutra, J., Fischer, A. and Trevisan, L. (2014), “Talent Retention Strategies in Different Organizational Contexts and Intention of Talents to Remain in the Company”, *Journal on Innovation and Sustainability* Vol.5 No.1, pp.49-61

Whelan, E. and Carcary, M. (2011), “Integrating talent and knowledge management: where are the benefits?”, *Journal of Knowledge Management* Vol.15 No.4, pp.675-687

Anonymous academic. (2018). For academics on insecure contracts, it's hard not to feel undervalued Retrieved from https://www.theguardian.com/higher-education-network/2018/apr/20/for-academics-on-insecure-contracts-its-hard-not-to-feel-undervalued

Arthur, M., Khapova, S., & Richardson, J. (2017). *An Intelligent Career: Taking Ownership of Your Work and Your Life*. New York: Oxford University Press.

Bauder, H. (2015). The International Mobility of Academics: A Labour Market Perspective. *International Migration, 53*(1), 83-96. doi:doi:10.1111/j.1468-2435.2012.00783.x

Coyle-Shapiro, J., & Kessler, I. (2000). Consequences Of The Psychological Contract For The Employment Relationship: A Large Scale Survey. *Journal of Management Studies, 37*(7), 903-930. doi:10.1111/1467-6486.00210

Dodgson, L. (2018). 9 'future-proof' careers, according to the world's largest job site. Retrieved from https://www.independent.co.uk/news/business/future-proof-careers-what-jobs-survive-future-robots-a8179746.html

Duberley, J., & Cohen, L. (2010). Gendering career capital: An investigation of scientific careers. *Journal of Vocational Behavior, 76*(2), 187-197. doi:https://doi.org/10.1016/j.jvb.2009.09.005

GOV.UK. (2017). Gender Pay Report 2017-18.

Han, S.-S., Moon, S. J., & Yun, E. K. (2009). Empowerment, job satisfaction, and organizational commitment: comparison of permanent and temporary nurses in Korea. *Applied Nursing Research, 22*(4), e15-e20. doi:https://doi.org/10.1016/j.apnr.2009.06.004

HAYS. (2017). *Regional Dynamics of the Global Labour Market Skills in Demand and Tomorrow's Workforce*. Retrieved from London:

Locke, W. (2014). The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment. *European Journal of Education, 49*(1), 77-90.

Maree, K. (2017). *Psychology of career adaptability, employability and resilience*: Springer.

National Audit Office. (2017). *The higher education market*. Retrieved from London:

Piccoli, B., Callea, A., Chirumbolo, A., Ingusci, E., & Hans De, W. (2016). Job insecurity and performance: the mediating role of organizational identification. *Personnel Review*. doi:https://doi.org/10.1108/PR-05-2016-0120

Precarious staff at the University of Kent. (2018). We're not going to take it any more - statement from precarious staff at the University of Kent. Retrieved from http://www.counterfire.org/news/19560-precarious-staff-statement-university-kent

Ref2020 Consulting. (2015, 11 September 2015). Retrieved from http://www.ref2020.co.uk/links.html

Schloss, E. P., Flanagan, D. M., Culler, C. L., & Wright, A. L. (2009). Some Hidden Costs of Faculty Turnover in Clinical Departments in One Academic Medical Center. *Academic Medicine, 84*(1), 32-36. doi:10.1097/ACM.0b013e3181906dff

Weale, S. (2017). UK risks mass exodus of EU academics post-Brexit, finds report. Retrieved from https://www.theguardian.com/education/2017/nov/14/uk-risks-mass-exodus-of-eu-academics-post-brexit-finds-report

Wilson, C. (2017). The 50 Jobs Where People Work the Longest. Retrieved from http://time.com/4726657/retirement-age-jobs/