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Talent management in Higher Education: Is turnover relevant? Revised Version

Abstract

Purpose

Institution-wide staff turnover in universities might be considered “satisfactory”, but can mask wide counterbalancing patterns between departments and different staff. This paper explores 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 the 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, support a life-span perspective and inform emerging issues such as gender pay differentials.

Value

Given the increasing complexity of managing talent in universities, with their predominantly knowledge-type employees, the research serves to highlight that high localized staff 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.

Talent management in Higher Education: Is turnover relevant?

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 (National Audit Office, 2017). This is reflected in competition for academic staff with strong research skills (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 et al., 2017) with high international mobility (Bauder, 2015) and a group with distinctive characteristics (Beigi et al., 2018). 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 institution-wide figures for universities mask wide variations between faculties and departments, and between staff categories (Gandy et al., In press), 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 institution-wide staff turnover can mask wide internal variations. This found some wide variations, which would otherwise have gone unrecognised.

The aim of this paper is to explore the benefits of detailed turnover analysis in managing talent in the complex changing landscape of HE 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 unique resource, 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 principal 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’ (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 HRM 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 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 HRM 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 HRM 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). Furthermore, UK HE academic staff are more weighted towards the older groups, with 21% aged 55 years and over, and only 25% aged under 35 years in 2008/09 (HESA, 2010). For example, Generation Y or 'Millennials', born between 1977-1994 (Schroer 2015), make up 50% of the worldwide talent, increasing to approximately 75% by 2025 (Deloitte 2014). Therefore, in HE, as a location for knowledge-workers, a 'smart' version of talent might be used to retain staff (Whelan and Carcary, 2011). 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). 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 and in respect of academic recruitment the data from the United States of America (USA) 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 et al., 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, p.513), 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 as 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 Academic Context and Turnover

This section will 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 (2015) 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 is discussed below

(Jump, 2013). A review of the Research Excellence Framework (REF) process (Department for Business, Energy and Industrial Strategy, 2016) criticized 'gaming' (whereby a publication belonged and, therefore, moved with a researcher) as not being conducive to talent development; this issue will be addressed in the REF 2020 (Ref2020 Consulting, 2015).

In addition, there are specific 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 (Han, Moon, & Yun, 2009). Moreover, feelings of job insecurity can cause a negative effect (Piccoli et al., 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).

Other internal pressures include age as, since April 2011, in the UK, 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 more benefits than disadvantages to employing older workers, but there is the challenge that employees aged over 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. Despite the change in law regarding retirement, however, it would appear that most HRM systems are geared to employees aged 15 to 55 years and, therefore Hertel et al. (2013) recommend that HRM policies should adopt a life-span perspective. It is important that HRM systems are geared to the breadth of ages from young to older employees to ensure that a diversity of talent is retained and developed, according to their particular need.

Contribution of this research

Lawrence et al. (2013) share how, despite labour turnover being the most common data collected, with the exception of institution-wide rates, the detail is largely ignored. Our findings illustrate how institution-wide rates can mask internal variations. We argue that the lack of attention is particularly problematic where academics have longstanding careers and high employment-mobility (Wilson, 2017; Maree, 2017). It is also important at a time where there may be skills shortages in some academic areas (Dodgson, 2018). We illustrate these issues from research in one large post-1992 HE Institution (Armstrong, 2008) in the UK. The research also identifies variations between different gender and age groups and then highlights potential implications for talent management in light of the evolving age-diversity of the sector.

Methods

Sample

Data from the university in question covered all 2,510 staff employed during the period 1st August 2012 to 31st July 2013. This was the full academic year prior to the REF and 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. Whilst the main focus was academic and research staff, many issues equally apply to non-academic staff and so all staff were included.

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. For 'Job Name' these were: 'Academic'; 'Administrative'; 'KTP Associate'; 'Manual'; 'Research'; and 'Technical'. 'Academic' covered staff holding academic contracts; most having both teaching and research responsibilities. 'Research' covered (academic) staff specifically employed on research contracts.

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 a straightforward measure 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:

$$\text{Lost Staff as Percentage of Average Numbers} = (2L \times 100) / (S + F) \quad (1)$$

The corresponding turnover rate for recruited staff is:

$$\text{New Staff as Percentage of Average Numbers} = (2N \times 100) / (S + F) \quad (2)$$

$$\text{Therefore, the net turnover rate calculation is: } (2 \times (N - L) \times 100) / (S + F) \quad (3)$$

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.

It is essential to note that the measurement of staff turnover varies between UK universities according to the benchmarking agency used. For example, some include and some exclude staff leaving at the end of a fixed-term contract (Gandy et al., In press). This prompted the comprehensive approach adopted in this research, as the inclusion/exclusion of fixed-term contract staff will obviously influence results.

'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.

Presentation of Turnover Rates

The scattergram-related inverted Nomogramma di Gandy (NdiG) was used to demonstrate variations in staff turnover and highlight outliers. 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'.

Results

Table 1 sets out the above data and indices for age, gender, type of contract and type of staff, and should be looked at in conjunction with the related patterns in Figure 1.

[Table 1 near here]

[Figure 1 near here]

Total staff decreased from 2,346 to 2,277, with an increase of 1.2% academic staff enabled by reductions in administration and research. Staff reduced in all but two age-sex groups, with the overall reduction of 3% being the net effect of 10% staff leaving and 7% starting.

That turnover was greater in younger age groups (particularly the 20-29 years group) was no surprise, but concentrating on net turnover figures can be misleading; despite limited differences in net turnover between Generation Y and older staff, this masked major differences between their graphical indicator values, with Generation Y being outliers for both males and females.

Mean ages for most groups were broadly similar, but there were gender differences for research staff (41 years for males and 35 years for females) and staff aged 60 years and over, where males accounted for 76 (61%) of the 124 full-time staff, while females accounted for 64 (65%) of the 98 part-time staff.

The fact that academic staff mainly have permanent contracts and many research staff have fixed-term contracts (where by definition staff normally leave at their contract end) was reflected by marked differences in their respective figures. Research staff with fixed-term contracts numbered 90 at the beginning of the year and 67 at the end. Yet although they were 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. Closer inspection found five academic departments (three in Science and two in Technology) with high figures for each of: taking on new staff (indicator Y) (ranging 12.5-23.1); percentage of staff with fixed-term contracts (ranging 20.8%-43.6%); and percentage of research staff (ranging 11.7%-44.4%). This relationship between fixed-term contracts and research jobs appears to be a growing tendency (Metcalf et al., 2005). Consequently, the above results serve to highlight where management should focus attention in respect of staff retention and talent management, something that will not necessarily be evident to those universities that measure staff turnover excluding fixed-term contract staff (Gandy et al., In press).

Discussion

Hancock et al. (2013) highlighted both positive and negative consequences of high staff turnover, concluding that on balance the latter outweighed the former. Therefore understanding staff turnover is essential for any organization; but the lack of consistency in measuring staff turnover, between benchmarking agencies used by UK universities, militates against sector-wide comparisons (Gandy et al., In press). This study segmented staff into a variety of categories and established varying turnover patterns across the university. In particular, 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 (Figuroa, 2015).

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; 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 'militate(s) against gender equity' (Duberley & Cohen, 2010, p.195). Thus, by assuming that wastage rates for females in certain age groups is inevitable can lead to structural issues later. For example, the gender pay reporting introduced to the UK in 2017 highlighted significant pay differences

between genders for those undertaking same or similar work in some occupations (Office for National Statistics, 2018). In the context of this institution, we found that gender pay is a particular issue with men's median hourly rate being over 20% more than women's (GOV.UK, 2017). A subject for further research could be whether higher turnover for women means they do not progress up pay scales as far as men, thereby contributing to their average pay being lower. This organization, like others, has no additional information about the reason for the loss of 106 (45.5%) staff as these were recorded using a 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, but received insufficient responses to make it viable. It is recommended that internal processes are put in place to routinely collect exit data on all staff leaving; doing this just before they leave should yield a much better response than any post hoc survey. Metcalf et al. (2005) identified several categories of reasons why staff leave and their plans which can inform the development of such data.

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 talent management and development, and recognition that enhances organization commitment (Lesenyeho et al., 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. It is recommended that talent management processes should review 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.

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 be focused and flexible in their talent management and recruitment to support the different age groups. For example, all staff from age 60 should be proactively engaged to review their work-life balance and intentions. This should involve positive support so that their future contributions can be optimally managed; which could include cascading their valuable and possibly unique skills and knowledge to colleagues. There should also 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 must be adopted to underpin an organisation's talent management; so that strategically it can retain its best talent. There is a danger that 'good' institution-wide benchmarked turnover figures can mean universities do not look at patterns below institution level, and thereby miss high localized turnover which could point to talent management and other 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 HRM staff with major tests they must address both strategically and operationally. Ozcelik's (2015) idea 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). The more formal articulation of these sub-fields in the UK HE sector increases the pressure on this complex environment. We recommend that talent management in HE be viewed as a strategic issue (Singh, 2014) directly relevant to organisational performance (Hazelkorn, 2015).

Conclusions

This study makes contributions to a commonly known, yet underutilized method that can help manage staff retention. 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.

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. We add to the research opportunities already proposed the exploration of the impact of fixed-term contracts on age and gender diversity in HE.

We share how institution-wide 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. We encourage future researchers to explore and create practical labour turnover tools for HR functions so that they can identify the reasons for labour turnover.

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, with its age-diversity, recruitment and retention dynamics.

References

Age UK (2015), "Default Retirement Age", available at: <http://www.ageuk.org.uk/work-and-learning/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.

Anonymous academic (2018), "For academics on insecure contracts, it's hard not to feel undervalued " *Guardian*. 20 April available at: <https://www.theguardian.com/higher-education-network/2018/apr/20/for-academics-on-insecure-contracts-its-hard-not-to-feel-undervalued>. (accessed 20 July 2018)

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-university-in-the-uk> (accessed 12 December 2016)

Arthur, M., Khapova, S. and 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*, Vol.53, No.1, 83-96. doi: 10.1111/j.1468-2435.2012.00783.x

Beigi, M., Shirmohammadi, M. and Arthur, M. (2018), "Intelligent career success: The case of distinguished academics." *Journal of Vocational Behavior* 107 doi: 10.1016/j.jvb.2018.05.007

Bennett, D., Roberts, L., Ananthram, S. and Broughton, M. (2017), “What is required to develop career pathways for teaching academics”. *Higher Education* 75 doi: 10.1007/s10734-017-0138-9 (accessed 15 June 2017)

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

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

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)

Department for Business, Energy and Industrial Strategy (2016), “Building on Success and Learning from Experience: An Independent Review of the Research Excellence Framework (Lord Stern Review)”, available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/541338/ind-16-9-ref-stern-review.pdf (accessed 12 December 2016)

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)

Dodgson, L. (2018). “9 'future-proof' careers, according to the world's largest job site.”

Independent. 26 January available at: <https://www.independent.co.uk/news/business/future-proof-careers-what-jobs-survive-future-robots-a8179746.html> (accessed 10 July 2018)

Duberley, J. and Cohen, L. (2010). “Gendering career capital: An investigation of scientific careers.” *Journal of Vocational Behavior*, Vol.76 No.2, pp.187-197. doi:

10.1016/j.jvb.2009.09.005

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

Figuroa, O. (2015) "The Influences Impacting Staff Turnover in Higher Education." *Journal of Management and Sustainability* Vol.5 No.4, pp.86-93

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

Gandy, R., Harrison, P., and Gold, J. (In press), “Criticality of Detailed Staff Turnover Measurement”, *Benchmarking: an International Journal*

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.

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

Groysberg, B. (2010), *Chasing stars: 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.1, pp.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: 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

HAYS. (2017). “Regional Dynamics of the Global Labour Market Skills in Demand and Tomorrow's Workforce.” Available at: <https://www.hays.at/documents/10192/3074702/hays->

[global-skills-index-report-2017-complete-version-engl.pdf/fa4c6f01-641b-281d-a792-053af86ea862](https://www.oecd.org/skills/global-skills-index-report-2017-complete-version-engl.pdf/fa4c6f01-641b-281d-a792-053af86ea862) (accessed 10 July 2018)

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

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, a912 doi: 10.4102/sajhrm.v16i0.912

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

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

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

National Audit Office. (2017). "The higher education market." Available at:

<https://www.nao.org.uk/report/the-higher-education-market/> (accessed 10 July 2018)

Office for National Statistics (2018), "Understanding the gender pay gap in the UK." London available at:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/articles/understandingthegenderpaygapintheuk/2018-01-17> (accessed 10 July 2018)

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* Vol.46 No.8 pp.1508-1522 doi: 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." Counterfire 20 March available at: <http://www.counterfire.org/news/19560-precarious-staff-statement-university-kent> (accessed 20 July 2018)

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)

Schloss, E. P., Flanagan, D. M., Culler, C. L. and Wright, A. L. (2009). "Some Hidden Costs of Faculty Turnover in Clinical Departments in One Academic Medical Center". *Academic Medicine*, Vol.84 No.1, pp.32-36. doi: 10.1097/ACM.0b013e3181906dff

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)

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](http://dmietrjournal.yolasite.com/resources/DMIETR%20HRMM%20JUNE%202014%20(3).pdf#page=45) (accessed 24 March 2015)

Teichler, U. and Cummings, W. (2015), *Forming, Recruiting and Managing the Academic Profession*. Springer

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

Wilson, C. (2017). "The 50 Jobs Where People Work the Longest." available at: <http://time.com/4726657/retirement-age-jobs/> (accessed 10 July 2018)

Weale, S. (2017). "UK risks mass exodus of EU academics post-Brexit, finds report." *Guardian*. 14 November available at: <https://www.theguardian.com/education/2017/nov/14/uk-risks-mass-exodus-of-eu-academics-post-brexit-finds-report> (accessed 10 July 2018)