

Student choice, league tables and university facilities

MATZDORF, Fides <<http://orcid.org/0000-0003-4479-1249>> and
GREENWOOD, Jon

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/10423/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

MATZDORF, Fides and GREENWOOD, Jon (2015). Student choice, league tables and university facilities. In: ALEXANDER, Keith and PRICE, Ilfryn, (eds.) EuroFM Research Papers - Advancing Knowledge in FM. Schiphol, Netherlands, EuroFM.

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Student choice, league tables and university facilities

Fides Matzdorf
Sheffield Business School
Email f.matzdorf@shu.ac.uk
Tel 0114 225 3892

Jon Greenwood
University of York
Email jon.greenwood@york.ac.uk

ABSTRACT

Purpose

This paper examines the three-way connection between league tables, student choice of university and university facilities, a topic area that has so far seen little research. In the decade since Price *et al.* (2003) highlighted the links between university facilities and students' choice of institution, changes in technology and the rise of league tables render an update necessary.

Design/methodology/approach

The empirical research focuses on one top league university with a 1960s campus, using a mixed-method approach, including results from the annual York University Student Union survey (results of a survey with 2,382 responses, and 3,500 focus group comments) and from research carried out by one of the authors (a survey with 331 responses and 144 comments from focus groups. Results from the Unite Student Experience Report 2012 (based on 1,236 responses) were also used.

Findings

The influence of league tables on students' choices was strongly confirmed. There are expectations that 'premier league' institutions come with top class facilities. Students whose expectations of their institution's facilities are not met, may vent their disappointment via national satisfaction surveys (such as the National Student Survey in the UK).

Originality/value

There has been little research about the connection between league tables, student choice of university and university facilities. This paper makes a start on a three-way connection and maps out the field for further research.

KEYWORDS

University facilities, university estates, league tables, students, higher education

1 INTRODUCTION AND BACKGROUND

The potential connections between university league tables, student choice of university and university facilities have so far seen little research. Price *et al.* (2003.) highlighted the relevance of facilities for students' choice of some institutions. However, changes in technology and the rise of league tables in higher education over the past decade make an update overdue. The limited amount of information and research that is available either

focuses on the impact of league tables on students' choices or on the impact of facilities on universities' business and student choice (see Figure 1). This paper asks whether there is a three-way connection and maps out the field for further research.

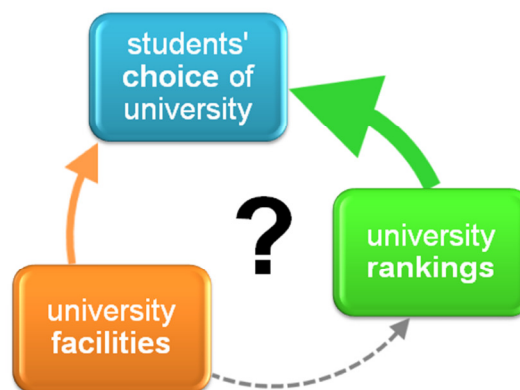


Figure 1. What is the relationship between student choice, league tables and facilities?

1.1 Student choice and university league tables

Over the past decades, “lists and rankings of everything from bestselling novels, to universities, to Madonna’s boyfriends, could reasonably be classified as a contemporary cultural ‘craze’ in the West” (Hearn 2010, p.429). So rankings or ‘league tables’ are no longer restricted to the football scene! Indeed, “university rankings are often described as ‘league tables,’ reflecting the published rankings used to place international football (i.e. soccer) teams in different leagues.” (Dill & Soo 2005, p.526). Gunn & Hill (2008) take this analogy even further, proposing “two ‘selecting’ divisions, typically choosing from a surplus of applicants, and two ‘recruiting’ divisions, typically working to avoid an applications shortfall against target numbers” (p.273). Clearly the ‘lower’ (“recruiting”) divisions have to work harder at attracting students.

The US first produced a university league table in 1983 via *US News*, and the past three decades have seen a steady increase in the number of league tables. Rankings are now used in many countries, including Canada, UK, China, Australia, Poland, Germany, Italy, Ireland and Spain (Roberts & Thompson 2007), and the size of their audience (*ibid.*) is strong evidence that league tables are here to stay. Roberts & Thompson (2007) point out that “this increased incidence of university ladders has undoubtedly been a factor in their increased use by prospective students”. Onsmann (2008) states that prior to the league tables “all universities were equal, with the implicit understanding that some were more equal than others” – a sentiment borrowed from George Orwell’s *Animal Farm*. According to Calhoun (2006), ranking universities is the product of corporatisation and commercialisation of higher education institutions (HEIs) around the world.

As a form of benchmarking customer satisfaction, quality, levels of service provision, or even just popularity, league tables have become a ubiquitous feature of neoliberal consumerism – from hotels to schools and hospitals, restaurants to local authorities (Gunn & Hill 2008). And whilst there is an abundance of criticism, accusing higher education league tables of flawed methodology, over-simplification, elitism and bias (e.g. Brown 2006, Chao 2014, Dill & Soo 2005, Hazelkorn 2014, Marginson 2006, Marginson 2011, OECD 2011, Portnoi *et al.* 2010,

Robinson 2014, Rostan & Vaira 2011), the one conclusion that almost all authors share, is that ‘league tables are here to stay’, not least due to the omnipresence of the internet and the tools linking to it, facilitating data gathering, easy feedback and opinion surveys.

In October 1992 *The Times* published the first ever university league table. By 1998/9 *The Times* had been joined by *The Financial Times*, *The Sunday Times*, *The Daily Telegraph* and an alternative independent web-based league table compiled by ‘Red Mole’ where students rated their university on such features as accommodation, sports facilities and quality of teaching. There are also world university league tables such as The *THE Thompson-Reuters World University Rankings* and the *QS World University Rankings* as well as the *Jiao Tong* which was produced on behalf of the Chinese government.

1.2 Drivers for the current research

This paper is based on a research project which was commissioned by the University of York, a ‘top league’, research-led, campus-based institution in the north of England. The project sought information on how much influence league tables have on a student making their choice of university, and subsequently, how much effort the University needed to put into maintaining and/or improving its ranking. At the same time the project was trying to establish whether or not the facilities provided at the University of York, and specifically those provided by the Directorate of Commercial Services, had a bearing on either the league tables or on students’ choice of university. There was much debate at the University’s senior management group around the level of importance that should be placed on achieving a high league position, however, there was no real data supporting either the view that league ranking was important and needed investment, or the opposing opinion that it was irrelevant, with the institution’s reputation not depending on its league table position.

Whilst a high league position provides for a strong marketing message (Chen 2008, Gun & Hill 2008, Chao 2014), there is a price to pay, either in terms of hard cash (since implementing such a strategy requires significant investment), or perhaps further-reaching, by a change of strategy (Fahey 2007), or even a combination of the two. Fahey, at the time Deputy Vice Chancellor at the University of Monash, Australia (her paper is one of several that have been written by university staff) states that “rankings will actually force institutions to focus on league table criteria, which will inform.... strategic goals, annual plans and resource allocation”. (*Op.cit.*, p.4)

The problem for the University of York was that, for the two years prior to this research project, the University had ‘dropped’ in the league tables. As yet there does not appear to be a corresponding drop-off in applications to the University, but this might only be a matter of time, hence the need to understand more about the student perception of league tables in general.

Moreover, the past decade has seen a tendency to see students as ‘customers’, an approach that was strongly reinforced by the steep increase in student fees within the UK over the past few years. Whilst a publication in 2002 could still claim that “prospective students seem not to be strongly influenced by the annual changes in the league table position of a given institution but are influenced more strongly by competition for places and the quality of the learning environment offered by the university” (Eccles 2002, abstract), does this still hold in 2014?

The picture is by no means clear. A number of researchers and experts in higher education studies maintain that league tables influence students’ decision where to study – but interestingly enough, not many offer any evidence to back up this claim. Al-Juboori *et al.*

(2012) claim that “the number of visitors to the Rankings’ websites is in the order of millions per year and many candidate students use them as a guide for choosing to which (especially foreign) institutions to apply” (p.10, also Aguillo *et al.*, 2010, p.244). Marope *et al.* (2014) assume that rankings provide simple/simplified information to fill the “need to make informed choices of universities, within a context of widely growing diversity of providers” (p.2). According to Dill & Soo (2005), many league tables appeal to the top end of the student market, to “students of high achievement and social class [...] interested in the ‘prestige’ rating of a university” (p.513). Buela-Casal *et al.* (2007) argue that the “main purpose is to give information to the consumer in order to help him to make higher education choices [...]”. Students are considered the more important consumers. Parents are other key collective since they pay expending of students’ education” (*op.cit.*, p.350). Neither of these articles provides evidence for these claims.

Other researchers provide more evidence for their claims. According to Gunn & Hill (2008), student application rate changes between 2001-5 suggest a decreasing impact of rankings on application rates: initially the influence of rankings was very high (explains 96% of variance in application rate changes), but then dropped significantly, “suggesting that it was no longer a key factor in the students’ choice process” (p.288). Instead, they suggest that prospective students apply “divisionally rather than to a particular university” (*ibid.*), i.e. the attraction lies with a type of university rather than individual institutions. According to Marginson (2006 and 2011), “studies of student choice-making find that university status is far more important than teaching quality”. A Scottish study (Briggs & Wilson 2007) found that, even way back in 2003/4, league tables were already the fifth most important source of information that influenced undergraduate students’ choice of university. Griffith & Rask’s (2007) data show that students tended to choose colleges with higher rankings; this tendency was stronger within the top rankings. Chen (2008) provides an overview of factors influencing institutional choice, which shows that amongst undergraduates league table ranking is the third highest factor in importance when choosing a university, whereas for professional graduates, programme ranking is the most important factor, with institution ranking lower in importance (*op.cit.*, p.16).

Others claim the opposite. Veloutsou *et al.* (2005) found that university league tables only came in 9th place in terms of their importance for students’ decision-making, whilst university open days (and of course this includes the influence of the physical environment) were ranked 2nd and university websites 3rd – however, this was a decade ago, and consumer online behaviour has changed significantly during this period! Rostan & Vaira state that “prospective students are, quite unexpectedly, far less interested in these rankings when choosing institutions and study courses. As a matter of fact, students search information different from that presented in league tables and choose accordingly to it” (Rostan & Vaira 2011, p.xiv). Phelps (2013) sees student recruitment as seemingly unrelated to his institution’s place in the rankings. Robinson (2013) emphasises that “there is surprisingly little evidence showing what effect rankings have on student choices. What most sociological research does reveal is that students are far more likely to base their higher education decisions on factors such as funding, proximity to an institution, and particular program offerings — just as was the case before rankings appeared” (p.15).

So the larger picture remains somewhat inconclusive. On the other hand, HE within the UK is very much in flux, especially since in recent years the National Student Survey (NSS) has gained a strong foothold and (despite accusations of faulty design and oversimplification) is increasingly used by institutions as a quality benchmark, influencing national league tables and resource allocation (Hazelkorn 2011, p. 163).

Our own research at York seems to confirm that league tables are indeed taken seriously by the students – however, since this study was only a small pilot undertaken in one university, we would at this stage not want to generalise any conclusions.

1.3 Student choice and university facilities

Despite increased (and still increasing) competition within the HE sector and a general trend towards viewing university facilities as strategic assets (e.g. Price *et al.* 2003, Veloutsou 2004, Matzdorf 2010), the research landscape remains somewhat bare, as regards the influence of HE estates on student recruitment. In part, this can be explained by the difficulty for estates and facilities departments to gain access to students – often the ‘powers that be’ (usually the university’s Registry, which tends to be in charge of data gathering, as regards students) argue that students suffer from ‘survey overload’ and are reluctant to descend upon them with yet another survey. As far as potential students and applicants are concerned, access is even more difficult.

Price *et al.* (2003) is one of few papers asking the question “What is the impact of facilities on student choice?” within the UK. Their study surveyed a total of 8742 students across 9 English universities. Similar studies were carried out in the US in 1986 by the Carnegie Foundation for the Advancement of Teaching and in 2006 by APPA’s Center for Facilities Research (Reynolds & Cain 2006; APPA is the US Association of Higher Education Facilities Officers). The APPA study found that “an attractive campus and quality facilities do play a role in the student’s decision process, but they are not necessarily a deciding factor. However, the results suggest a significant number of respondents had rejected an institution because important facilities were missing, inadequate, or poorly maintained. It may be safe to say that having a quality built environment is a necessary but not sufficient condition to recruit and retain students” (*op.cit.*, p.41). This confirms the Price *et al.* (2003) finding that university facilities can become a deciding factor if a student has received more than one offer of a university place and is looking for differences between specific universities. One of the observations reached through their research is that particularly among ‘new’ universities (post-1992) a ‘facilities-enhanced’ position had been adopted by some institutions as a means of standing out amongst rival institutions and attracting students, a strategy that pays off particularly via open-day visits. This reinforces the results from the Carnegie Foundation’s earlier studies (1986 and 1990) that campus visits are a major factor in students’ location decisions.

In addition, the APPA study found that students attached high importance to those facilities related to their “major” (their main subject of study) – over 70% of respondents confirmed this, and, even more importantly, 29.3% of respondents pointed out that “they had not chosen an institution because a facility was missing” (Reynolds & Cain 2006, p.23). One specific point are recreation facilities: “Many campuses are building recreation facilities. This survey indicates that the lack of recreation facilities is the fourth highest reason cited (8.5%) among students who rejected an institution because of missing facilities.” (*Op.cit.*, p.24)

As Barnett & Temple put it in their 2006 report on future changes in HE: “The quality of an institution’s physical facilities will increasingly be seen as an important marketing asset and will accordingly attract more resources and management attention.” (*Op.cit.*, p.4) So far, we have seen their prediction confirmed. Interestingly though, in their 22-page report, whilst there are various acknowledgements that university facilities can be/are part of the institution’s marketing plan, there is not a single mention of the words ‘league table(s)’ or ‘ranking(s)’!

Temple's 2009 paper talks about "locational capital", but does not relate it to attracting or recruiting students. Vidalakis *et al.* (2013) tested students' perceptions of several university buildings and found "that the general consensus among students (60 per cent) is that students did not consider buildings as a strong determinant of their decision to apply to the specific university [...] no matter the building, students were neither encouraged nor discouraged to apply to this university because of the quality of facilities." (Vidalakis *et al.* 2013, p.498)

In its 2012 and 2013 surveys of new students, *First Impressions*, York University's student union (YUSU) found that after 'academic reputation', the main reason why students had chosen to study here was its location – this echoes Price *et al.* (2003), where location was a strong 'pull' factor for some HEIs, and makes it clear that students indeed pay attention to the environment they study in. The 2013 version of the new students' survey for the first time also included "York is a campus-based university", and since over a quarter of respondents rated this as a main decision factor, it emphasises the relevance of campus facilities.

So whilst there appears to be a facilities influence on students' decision where to study, the evidence remains somewhat inconclusive. Given that all those studies that are looking for a link are actually coming from a facilities management angle, there is always the possibility that by their very nature these surveys draw special attention to university facilities, thereby raising an awareness in their respondents that was not originally there. Also, the actual surveys use *current* students, rather than *prospective* students, as subjects, so there is always the risk of 'post-rationalisation'.

1.4 How do university facilities influence league tables?

The researchers' 'hunch' was that there might be a link between the quality (or perceived quality) of HE facilities and their ranking in the league tables. Whilst we were quite aware that this would be difficult to draw out and make explicit, we still made the attempt. There are several obstacles that make this a difficult undertaking:

1) For a long time, league table producers have been accused of a lack of transparency with regard to the ranking criteria and their respective weightings. Whilst league tables are beginning to be slightly more transparent (see for example Hazelkorn's (2014, p.18) breakdown of indicators and weightings for different league tables), there is still little evidence exactly how the physical and service structures of a university are absorbed into the rankings. Within the UK, the annual National Student Survey (NSS, see http://www.thestudentsurvey.com/content/nss2012_questionnaire_english.pdf), based on satisfaction scores of final-year students, is gradually being included into UK rankings – it is not entirely clear how this would impact on international league tables. Again, facilities are only indirectly included – mostly through the very broad questions on "learning resources" (which mention only resources related directly to learning, such as IT equipment, library services and specialist facilities such as laboratories) and "overall satisfaction" – there is no mention of the overall 'student experience', which might include the wider social environment, such as sports facilities, catering and accommodation. Discussions about including questions about the latter are ongoing (cf. the latest review by Griggs *et al.* 2014), and opinions are divided.

2) There is a dearth of evidence/research, as academics and HE managers focus mostly on the academic side or on administrative processes respectively, and FM research focuses on the FM side, with a regrettable lack of crossover. On the one hand this could be attributed to 'silo mentality' and vested interests of the different groups and departments involved, but on the other hand the complexity of interrelated factors makes it difficult to find the right approach,

not to speak of funding for such multi-disciplinary research. Some of the papers and studies on competition within HE ‘casually’ mention investment in facilities as part of universities’ strategies to increase their profile and prestige. For example, Brewer *et al.* (2001) mention investment in student consumption benefits such as dormitories, eating facilities, or fibre optic computer networks as means to heighten attractivity for high ability students. Hazelkorn in a very recent publication (2014) presents a list of actions taken by HEIs to enhance their rankings (*op.cit.*, p.22, Table III), which includes three actions that (potentially) include/affect facilities:

- “Establish Centres-of-Excellence & Graduate Schools” (this often includes investment into prestigious or landmark buildings),
- “Develop/expand English-language facilities, international student facilities” (this affects facilities as well as services),
- “Realign resources to favour science/bio-science disciplines” (again, this involves the physical research environment as well as staffing levels and financing high-profile projects).

A fourth action, “Recruit/head-hunt international high-achieving/HiCi scholars” (*ibid.*) may or may not have a facilities aspect – it could involve single offices, car parking spaces and other facilities that individual institutions may offer to high-profile academics as prestigious ‘perks’, however without affecting students directly. Hazelkorn does not explicitly mention facilities implications – typical of research into this topic.

2 DESIGN/METHODOLOGY/APPROACH

Our research focuses on the University of York, a top-league, research-led university with a 1960s out-of-town campus, located in the north of England. There is no evidence that this institution has so far had any particular emphasis on its facilities strategy in terms of attracting students (cf. Price *et al.* 2003).

Data was analysed mainly from three separate sources:

- Results from the Unite Student Experience Report 2012 (based on 1,236 responses)
- Results from the annual York University Student Union survey (results of a survey with 2,382 responses, and 3,500 focus group comments).
- Result from a mix of survey (331 responses) and focus groups (144 comments) carried out by one of the authors.

The survey consisted of a mostly quantitative questionnaire with one open field area and was designed to follow the standard Likert scale, to attempt to assess influence of various factors in student choice, and importance of different types of facilities.

Of the 331 responses, 76% came from UK home undergraduates, 12% overseas undergraduates and the remainder a fairly even split between UK and overseas postgraduates. The majority of the respondents (72%) were in their first year.

3 FINDINGS/RESULTS

The researchers’ original ‘hunch’ that league tables influence students’ choices was strongly confirmed by both survey and focus groups (see Table 1).

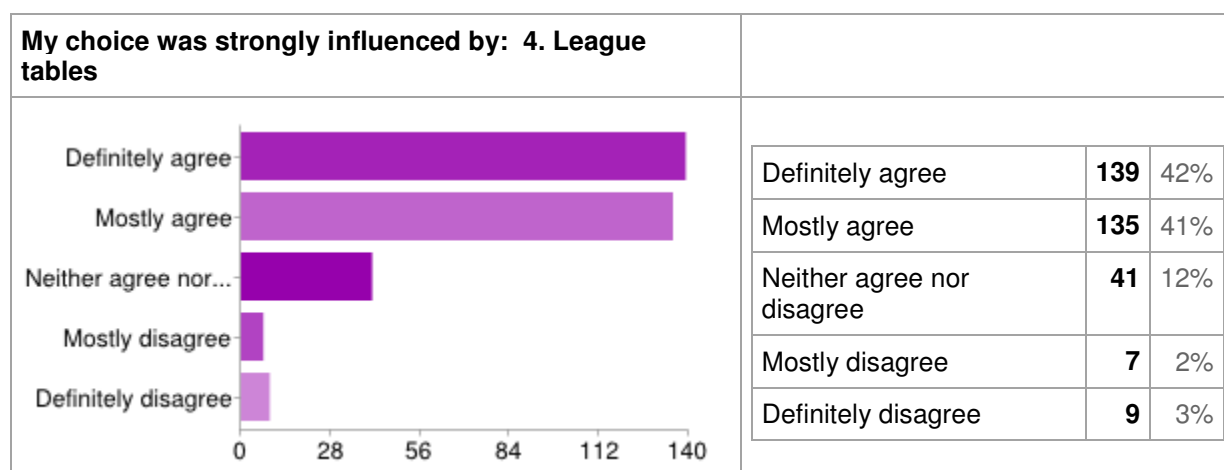


Table 1: Influence of league tables on students' choice of university

Whilst university facilities do not feature high on prospective students' 'mental checklists', there are expectations that, for example, premier league institutions also come with top class facilities – this emerged in particular where such expectations were not met. So whilst university facilities can have a direct impact on students' location choices, this is more often the case where specific subjects are concerned (e.g. sports science or specialist engineering disciplines that require dedicated specialist facilities), or where institutions market themselves as 'modern' and invest in facilities with a 'wow factor'. The university researched here does not fall into these categories. Top league universities tend to be selected with a focus on reputation. However, there is an indirect impact via league tables, since students whose expectations of their institution's facilities are not met, may vent their disappointment via satisfaction surveys (such as the National Student Survey in the UK). Plenty of anecdotal evidence hints to this, but more rigorous research would be needed to highlight this link.

These expectations were apparent in some of the focus group comments ("As York is a campus uni I expected the facilities to be here", "I had an expectation that all the facilities such as bars would be present so I didn't research this before I arrived"), and also in the 2011 "Student Experience Survey" carried out by the student union at the University of York (YUSU 2011). These surveys have been conducted annually since 2010, asking students for their satisfaction and importance ratings with university and student union provision in a range of areas, some of which are facilities-related: study spaces, sports facilities, social spaces, food outlets, accommodation and security services. In the 2011 survey study spaces and sports facilities had the lowest satisfaction ratings of all factors, with study spaces rated as highly important, which should have been "cause for concern as they are aspects where the respondents feel that the University is underperforming" (YUSU 2011, p.16). "Only 41% of students reported that they were happy with the sports facilities on campus, others described them as 'disappointing' and too expensive. Many were disappointed with the lack of a swimming pool with one individual going as far as to say '[I] might not have joined up had I realised.' Others felt that the gym was too small and 'massively overpriced, for being incredibly under-equipped'." (*Op.cit.*, p.15) Food outlets and retail outlets attracted dissatisfaction from around a quarter of respondents. Clearly there had been expectations, which the campus reality did not match. These findings are confirmed by other research, such as the UNITE Student Experience Report 2012 (UNITE 2012), which asked about the effects of increased UK tuition fees on students' expectations – and found they had increased, too. Table 2 highlights this – but note that the majority of respondents seem to have a 'realistic' attitude as far as prices are concerned: they do not expect them to drop!

Has the fee increase changed expectations?	Agree	Disagree	Don't Know
Academic facilities will improve	206	129	76
Teaching staff will be more accessible	158	151	99
Social facilities will improve	129	172	106
Student accommodation will improve	169	152	82
Sports facilities will improve	128	165	112
University catering will be cheaper	85	209	113

406 answered question

Table 2: Higher tuition fees and changing expectations (adapted from UNITE 2012, p.7)

There is also some focus group evidence that flagship buildings and facilities make an impact on students during open days: “I was blown away by buildings such as the HUB, it was a decision clincher”, “The facilities did not influence me but I loved Heslington East and I made my choice based on that”, “I used the Open Day to deselect universities from my shortlist. I saw the HUB building on Heslington East and was impressed enough to choose York”, “The new sports facilities are great”.¹

However, flagship buildings, the facilities and attractive setting of an institution are of no value if the decision to exclude that university has already been made.

Another point that came out in focus group conversations was that individuals were prone to ‘ranking’ themselves and matching themselves against the university rankings: “I immediately disregarded the top 10 in the league tables as not attainable for me” – “I focused on the entry levels for universities ranked 10 to 20 in the league tables followed by modules and course content, finally I considered rents and affordability.”

4 DISCUSSION AND FUTURE RESEARCH

The research at York drew out the way in which prospective students are now using the league tables to come up with a shortlist. This part of the selection process is a ‘desktop job’ where criteria such as league position are combined with personal preferences such as location and overall cost. If an institution does not make the personal ‘shortlist’, they will not make the ‘to view at open day’ list either.

The fact that students ‘rank’ themselves against the league position of universities is interesting: if York were to improve by just a few places and rejoin the ‘top 10’, then it would lose one particular share of the market (i.e. those students who do not rank themselves highly enough to apply) but gain another (i.e. more ‘high-flying’ students who aim for the ‘top ten’).

¹ Anecdotal evidence highlights the connection between high-class facilities, student expectations and institutional reputation. Two examples (well known within the UK higher education facilities management ‘scene’) are universities at Bath and Loughborough. Both of them have invested heavily in world-class sports facilities, hence have attracted some of the top governing bodies for a variety of sports, such as the English Cricket Board and the Amateur Swimming Association, both of which have located bases at Loughborough – this is well known nationally and internationally. This investment in facilities has had a significant impact on student recruitment and indeed the student experience. ‘Team Bath’ are well known for sporting supremacy, and both universities now sit above York in the overall league tables, with academic output now matching the sporting output.

To what extent this would however make a difference in terms of application numbers is almost impossible to quantify!

Unfortunately, the opportunity to examine what has changed since the rise of league tables was limited to one institution. The research project was commissioned and funded by this institution and carried out by its Commercial Directorate, to find out more about the value of its facilities to its students, rather than as a sector-wide project. Access to students was limited, and it was not possible to randomise or select samples. A very tight time frame also limited the amount of analysis possible. Moreover, the questionnaire would need redesigning for wider applicability.

We would therefore not attempt to make generalisations for the whole HE sector, but rather set out to identify a research agenda for future explorations. However, in our view the results were worth reporting, to emphasize the importance of returning to the sector and establishing what, if anything, has changed students' choices in the new era of greater technological mobility, greater competition, and, for the UK at least, higher fees.

Since the data were obtained within one university only, this research would need to be repeated on a wider scale in order to allow for comparisons and broader conclusions. Hence this study should be considered a pilot – but what came to light certainly asks for further inquiry!

As two reviewers from outside UK academia pointed out, 'league tables' are an inaccurate term for the ranking of higher education institutions. However, at least in the UK, the sporting metaphor has become commonplace and would be understood and used by academic managers. Many directors of estates and facilities will agree that the rise to prominence of such tables has given the estate a place on vice-chancellors' agendas that it did not previously have, at least in institutions that are not in the perceived 'premier division' of such tables. The Price *et al.* (2003) survey on the venue choices of over 8000 students confirmed the difference in all but the most reputationally endowed institutions.

The question whether 'premier-league' institutions can afford to ignore their ranking in university league tables is – pun intended! – academic. The direction of recent developments, with increased international competition and growing opportunities for students to voice their discontent with inadequate provision indicates that institutions have to be able to compete on all fronts, including infrastructure and services. Whilst it is impossible at this stage to pin down and quantify an influence of university facilities quality on league tables, indirect links such as satisfaction survey results, 'tactical' student feedback ('if I mark them down on their sports facilities, they will hopefully improve them') and the impact of open days seem to indicate that there could indeed be a connection that would warrant vice-chancellors' attention.

Since open-day visits are often not an option for overseas students, this would raise the question whether those seeking to study outside their home country rely more on league table rankings, but it would also important to evaluate their use of online information sources, including virtual campus tours and the way university facilities are presented, emphasised, and featured on institutions' websites – an area of research that we have not been able to even touch on.

Any or all of these factors ask for further investigation. Quite likely, such research would be difficult to fund, as universities are competing against each other, so they are less likely to fund sector-wide research, especially if they are concerned about negative publicity.

Drawing not just researchers' but also senior managers' attention to this three-way connection between university facilities, league tables and student choice has been the

purpose of this paper. The aim is to alert senior management thinking to league table ranking and university estates. Whilst we are aware that we have posed more questions than we can answer, stimulating the discussion is a first step in the right direction.

ACKNOWLEDGMENTS

We are very grateful to our anonymous reviewers for their constructive, positive and helpful comments, which we have taken on board and incorporated into the final version of the paper, as far as possible.

REFERENCES

- Aguillo, I. F., Bar-Ilan, J., Levene, M. and Ortega, J. L. (2010), "Comparing university rankings", *Scientometrics*, 85, 1, 243-256.
- Al-Juboori, A.F.M.A., Su, D. J. and Ko, F. (2012), "University ranking and evaluation: Trend and existing approaches", *International Journal of Advancements in Computing Technology*, 4, 5, 10.
- Anonymous (2010). Leagues apart: University rankings. *The Economist (US)*, 394 (8675), 58.
- Barnett, R. and Temple, P. (2006). *Impact on space of future changes in higher education*. Bristol, UK Higher Education Space Management Project, Higher Education Funding Council for England.
- Bowman, N. A. and Bastedo, M. N. (2009), "Getting on the front page: Organizational reputation, status signals, and the impact of US news and world report on student decisions", *Research in Higher Education*, 50, 5, 415-436.
- Brewer, D., Gates, S. M. and Goldman, C. A. (2001), *In Pursuit of Prestige: Strategy and Competition in US Higher Education*, Transaction Press, New Brunswick, NJ, .
- Brewer, D., Gates, S. M. and Goldman, C. A. (2001), *In Pursuit of Prestige: Strategy and Competition in US Higher Education – Technical Papers*, RAND.
- Briggs, S. and Wilson, A. (2007), "Which university? A study of the influence of cost and information factors on Scottish undergraduate choice", *Journal of Higher Education Policy and Management*, 29, 1, 57-72.
- Brown, R. (2006), "League tables – do we have to live with them?", *Perspectives: Policy & Practice in Higher Education*, 10, 2, 33-38.
- Buela-Casal, G., et al. (2007), "Comparative study of international academic rankings of universities", *Scientometrics*, 71, 3, 349-365.
- CABE (2005). *Design with Distinction: The Value of Good Building Design in Higher Education*. London, CABE Publications.
- Calhoun, C. (2006), "The university and the public good", *Thesis Eleven*, 84, 1, 7-43.
- Callender, C., and Ramsden, P. (July 2014). *Review of the National Student Survey – Appendix A: Literature Review*. Bristol, Higher Education Funding Council for England.
- Callender, C., Ramsden, P. and Griggs, J. (July 2014). *Review of the National Student Survey: Summary Report*. Bristol, Higher Education Funding Council for England.
- Carnegie Foundation for the Advancement of Teaching (1986), "How do students choose a college?", *Change: The Magazine of Higher Learning*, 18, 1, 29-32.

- Cassidy, R. (2007), “How facilities affect students’ college choices”, *Building Design & Construction*, 48, 11, 9.
- Chao, R. Y. (2014), “Rankings – power, influence, university reconstruction”, *University World News (Global Edition)*, 14 February 2014.
- Chen, L. (2008), “Internationalization or international marketing? Two frameworks for understanding international students’ choice of Canadian universities”, *Journal of Marketing for Higher Education*, 18, 1, 1-33.
- Clarke, M. (2007), “The impact of higher education rankings on student access, choice, and opportunity”, *Higher Education in Europe*, 32, 1, 59-70.
- Dill, D. D. (2009), “Convergence and diversity: The role and influence of university rankings”, *University Rankings, Diversity, and the New Landscape of Higher Education*, 97-116.
- Dill, D. D. and Soo, M. (2005), “Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems”, *Higher Education*, 49, 4, 495-533.
- Eccles, C. (2002), “The use of university rankings in the united kingdom”, *Higher Education in Europe*, 27, 4, 423-432.
- Erkkilä, T. (2013), *Global University Rankings: Challenges for European Higher Education*, Palgrave Macmillan, New York; Houndmills, Basingstoke, Hampshire, .
- Fahey, S. (2007), *Intersections in the roles of the DVCs (International) and the DVCs (Research): A Monash Experience, Universities Australia*. Monash University, Australia.
- Griffith, A. and Rask, K. (2007), “The influence of the US news and world report collegiate rankings on the matriculation decision of high-ability students: 1995–2004”, *Economics of Education Review*, 26, 2, 244-255.
- Griggs, J., Green, S., Drever, E., Pollard, E. and Williams, M. (2014). *Review of the National Student Survey – Appendix B: The Stakeholder Strand*. Bristol, Higher Education Funding Council for England.
- Griggs, J., Green, S., Pollard, E. and Williams, M. (2014). *Review of the National Student Survey – Appendix C: The Student Strand*. Bristol, Higher Education Funding Council for England.
- Gunn, R. and Hill, S. (2008), “The impact of league tables on university application rates”, *Higher Education Quarterly*, 62, 3, 273-296.
- Hamid, Y., Baldry, D. and Alexander, K. (2007), “Strategic facilities management in higher education institution”, in *ARCOM Doctoral Workshop: Facilities, Refurbishment and Maintenance Management*, Division of Built Environment, Faculty of Development and Society Sheffield Hallam University, UK, pp. 1-12.
- Hazelkorn, E. (2009), *Rankings and the Battle for World-Class Excellence: Institutional Strategies and Policy Choices*, Dublin Institute of Technology, .
- Hazelkorn, E. (2010), “Handle with care”, *The Times Higher Education Supplement: THE*, 1955, 39.
- Hazelkorn, E. (2011). Questions abound as the college-rankings race goes global. *The Chronicle of Higher Education*, 57 (28). Online at: <http://chronicle.com/article/Questions-Abound-as-the/126699/> .
- Hazelkorn, E. (2014), “Reflections on a decade of global rankings: What we’ve learned and outstanding issues”, *European Journal of Education*, 49, 1, 12-28.

- Hearn, A. (2010), "Structuring feeling: Web 2.0, online ranking and rating, and the digital 'reputation' economy", *Ephemera: Theory and Politics in Organization*, 10, 421-438.
- Hemsley-Brown, J. and Oplatka, I. (2006), "Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing", *International Journal of Public Sector Management*, 19, 4, 316-338.
- Institute for Higher Education Policy (editor) (April 2007). *College and University Ranking Systems: Global Perspectives and American Challenges*. Institute for Higher Education Policy. Online at <http://www.ihep.org/sites/default/files/uploads/docs/pubs/collegerankingsystems.pdf>.
- Johnston, T. C. (2010), "Who and what influences choice of university? Student and university perceptions.", *American Journal of Business Education (AJBE)*, 3, 10.
- Kallio, R. E. (1995), "Factors influencing the college choice decisions of graduate students", *Research in Higher Education*, 36, 1, 109-124.
- Li, M., Shankar, S. and Tang, K. K. (2011), "Why does the USA dominate university league tables?", *Studies in Higher Education*, 36, 8, 923-937.
- Marginson, S. (2006), "Dynamics of national and global competition in higher education", *Higher Education*, 52, 1, 1-39.
- Marginson, S. (2011), "Higher education and public good", *Higher Education Quarterly*, 65, 4, 411-433.
- Marginson, S. and Van der Wende, M. (2007), *Globalisation and Higher Education*. OECD Publishing, OECD Education Working Papers, No. 8. Online at <http://www.oecd.org/edu/research/37552729.pdf>.
- Maringe, F. (2006), "University and course choice: Implications for positioning, recruitment and marketing", *International Journal of Educational Management*, 20, 6, 466-479.
- Marope, M., Wells, P. J. and Florea, S. (June 2014), University rankings: the many sides of the debate, *Management of Sustainable Development*. Quality Research Centre, Lucian Blaga University of Sibiu, Sibiu, Romania.
- Matzdorf, F. (2010), "Benchmarking the business performance of departmental space in universities", in *European Facility Management Conference 2010: 9th EuroFM Research Symposium*, Madrid, 1-2 June 2010.
- Onsman, A. (2008), "League tables: What chance of promotion or relegation", in *IMHE 2008 General Conference*, Paris, France.
- Organisation for Economic Cooperation and Development (2011), "League tables that rank", *The OECD Observer*, 287, 23. Online at http://www.oecdobserver.org/news/fullstory.php/aid/3740/League_tables_that_rank_.html.
- Oswald, A. (2001), "An economist's view of university league tables", *Public Money and Management*, 21, 3, 5-6.
- Oswald, A. (October 2004), *How should we react to world university league tables?* The University of Warwick, (Article written for The Independent newspaper). Online at <http://www2.warwick.ac.uk/fac/soc/economics/staff/ajoswald/worldunis04.pdf>
- Oswald, A. (2011), "You want fame? Here's where you start paying", *Times Higher Education*, 6 Oct 2011, 15.
- Phelps, Christopher (2013). We'll never be royals. *The Chronicle of Higher Education*, 16 October 2013. Online at <http://m.chronicle.com/article/Well-Never-Be-Royals/142329>

- Portnoi, L. M., Bagley, S. S. and Rust, V. D. (2010), "Mapping the terrain: The global competition phenomenon in higher education", Portnoi, L. M., Rust, V. D. and Bagley, S. S. (Eds.), *Higher Education, Policy, and the Global Competition Phenomenon*, Palgrave Macmillan, New York, 1-13.
- Price, I., Matzdorf, F., Smith, I. and Agahi, H. (2003), "The impact of facilities on student choice of university", *Facilities*, 21, 10, 212-30.
- Ramsden, P., Batchelor, D., Peacock, A., Temple, P., Watson, D. (2010). *Enhancing and Developing the National Student Survey: Report to HEFCE*. Bristol, Higher Education Funding Council for England.
- Reynolds, Gary L. and Cain, David (2006). *Final Report on the Impact of Facilities on the Recruitment and Retention of Students*. Alexandria, Virginia, US, APPA Center for Facilities Research.
- Roberts, D. and Thompson, L. (2007), *Reputation Management for Universities: University League Tables and the Impact on Student Recruitment*, Knowledge Partnership.
- Robertson, S. L. and Olds, K. (2012), *World University Rankings: On the New Arts of Governing (Quality)*. Centre for Globalisation, Education and Societies, University of Bristol, Bristol, UK.
- Robinson, D. (2013), "The mismeasure of higher education? The corrosive effect of university rankings", *Ethics in Science and Environmental Politics*, 13, 11-17.
- Rostan, M. and Vaira, M. (Eds.) (2011), *Questioning Excellence in Higher Education: Policies, Experiences and Challenges in National and Comparative Perspective*, Springer.
- Rust, V. D. and Kim, S. (2012), "The global competition in higher education", *World Studies in Education*, 13, 1, 5-20.
- Stack, M. L. (2013), "The Times Higher Education ranking product: Visualising excellence through media", *Globalisation, Societies and Education*, 11, 4, 560-582.
- Steiner-Khamsi, G. (2003), "The politics of league tables", *Journal of Social Science Education*, 2, 1-6.
- Temple, P. (2008), "Learning spaces in higher education: An under-researched topic", *London Review of Education*, 6, 3, 229-241.
- Temple, P. (2009), "From space to place: University performance and its built environment", *Higher Education Policy*, 22, 2, 209-223.
- Temple, P. and Fillippakou, O. (2007), "Learning spaces for the 21st century", *Higher Education Academy*. Online at https://www.heacademy.ac.uk/sites/default/files/Learning_spaces_v3.pdf.
- Tofallis, C. (2012), "A different approach to university rankings", *Higher Education*, 63, 1, 1-18.
- Tsikliras, A., Robinson, D. and Stergiou, K. (2014), "Which came first: The money or the rank?", *Ethics in Science and Environmental Politics*, 13, 2, 203-213.
- UNITE (2012). *UNITE Student Experience Report 2012*. The Unite Group plc. Online at <http://www.unite-group.co.uk/binaries/697/639/unite-student-experience-report-2012-final.pdf>.
- UNITE (2014). *Students Matter. The UNITE Students Student Experience Survey 2014 full report*. Unite Group plc. Online at http://www.unite-group.co.uk/binaries/907/908/unite_long_report_2014.pdf.

University of York Students' Union (2011). *Student Experience Survey 2011*. York, UK. Online at <https://www.yusu.org/docs/research/2011/The-Student-Experience-Survey-2011.pdf>.

University of York Students' Union (2012). *First Impressions Report 2012*. York, UK. Online at <https://www.yusu.org/docs/research/2012/First- Impressions.pdf>.

University of York Students' Union (2012). *Student Experience Survey 2012*. York, UK. Online at <https://www.yusu.org/docs/research/2012/The-Student-Experience-Survey.pdf>.

University of York Students' Union (2013). *First Impressions Report 2013*. York, UK. Online at <https://www.yusu.org/docs/research/2013/First- Impressions-2013.pdf>.

University of York Students' Union (2013). *Student Experience Survey 2013*. York, UK. Online at <https://www.yusu.org/docs/research/2013/The-Student-Experience-Survey-2013.pdf>.

Veloutsou, C., Lewis, J. W. and Paton, R. A. (2004), "University selection: Information requirements and importance", *International Journal of Educational Management*, 18, 3, 160-171.

Veloutsou, C., Paton, R. A. and Lewis, J. (2005), "Consultation and reliability of information sources pertaining to university selection: Some questions answered?", *International Journal of Educational Management*, 19, 4, 279-291.

Vidalakis, C., Sun, M. and Papa, A. (2013), "The quality and value of higher education facilities: A comparative study", *Facilities*, 31, 11/12, 489-504.