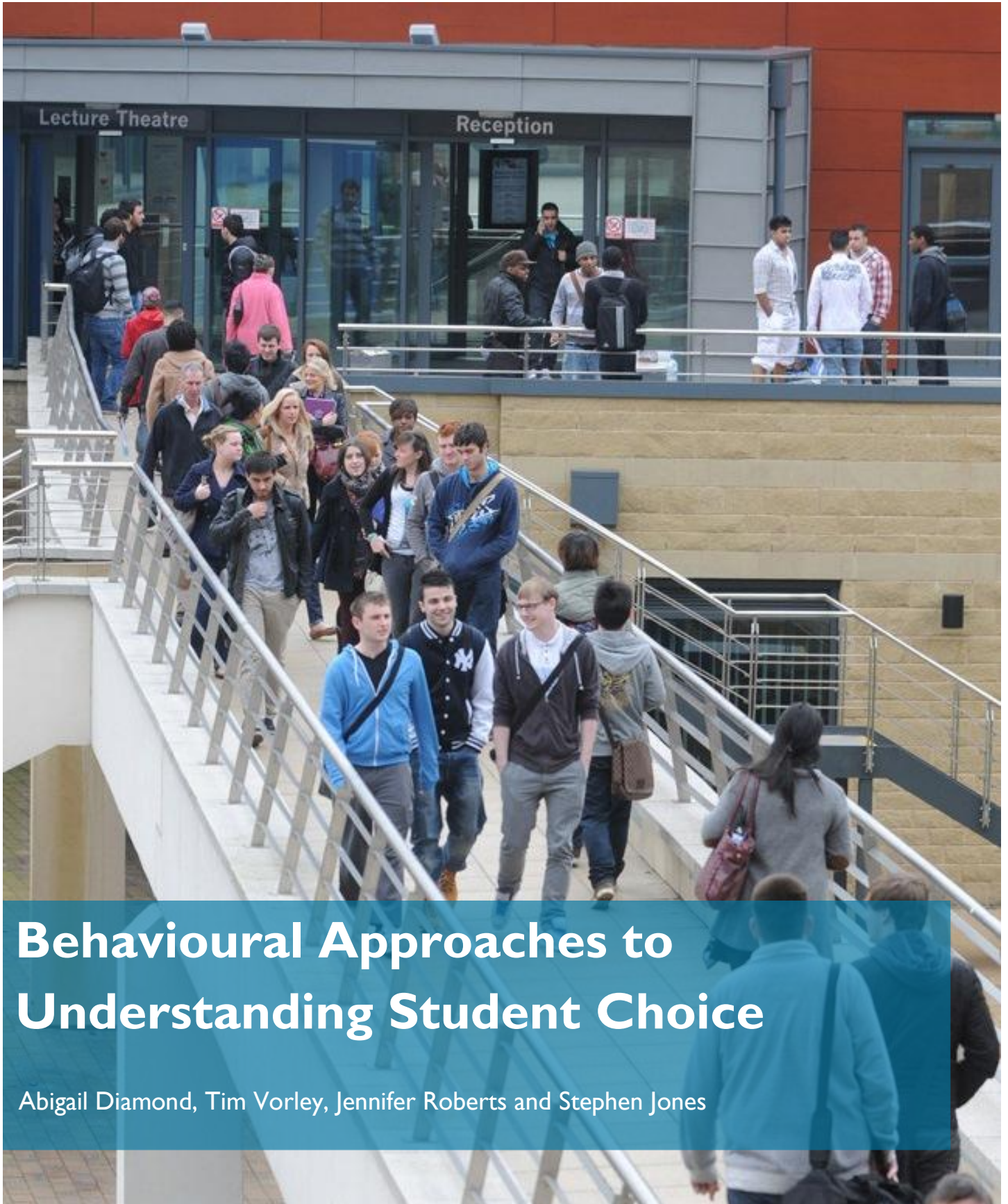




national union of students



# Behavioural Approaches to Understanding Student Choice

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## Introduction from the HEA and NUS

The decision of if, what and where to study in higher education has always been significant, but increased tuition fees in England coupled with a difficult employment market on graduation has seemingly made student choice more important than ever. Yet the sacrifices made by students in embarking on and continuing in higher education, and the benefits obtained during and after their experience, remain more complex than a simple trade-off of fees versus earning potential, vital though those considerations are for many. A degree programme is a major personal, intellectual and financial commitment that often means foregoing other opportunities, while value comes from the learning and life experiences of higher education, of personal development as well as direct gains in employability. There is no clear yardstick with which to weigh-up these diverse factors. Furthermore, the range of higher education providers and degree programmes constitutes a daunting choice environment for prospective students from diverse backgrounds and the challenge is further compounded by the multitude of information, sources, influences, opinions, support and advice available. And providing guidance is difficult because the ‘right decision’, if there can be said to be one, is a personal decision that allows the student to meet their own self-defined aims.

Behavioural approaches, particularly those informed by the insights of behavioural economics, have the potential to better manage this complexity, to understand how prospective students currently make decisions and how they might be helped to make better decisions consistent with their own aims. In other areas, behavioural approaches have been used to explore how decisions can be influenced in the pursuit of public policy goals<sup>1</sup>, but this report represents the first high-level overview of how behavioural economics can help us to understand and improve choices in higher education. None of this means we are advocating the correction of ‘irrational’ decisions by reducing them to a simple monetary calculation. Indeed, so-called ‘deviations’ from ‘objective’ economic behaviour can reveal important values that go beyond maximising personal financial gain. But we would rightly be concerned if students weren’t getting the most out of their higher education experience because their initial decision was swayed by influences and thought processes that were not in their long-term interest.

Good choices by well-informed students matter for public policy because they result from weighing-up the full range of potential opportunities, unrestricted by perceived social norms, peer-pressure or limited exposure to higher-education. This year the introduction of new, standardised Key Information Sets (KIS) for every undergraduate degree programme in the UK has attempted to cut-through the complexity of information. However, the influence of such official sources of information on student choice remains unclear. The research contained in this report suggests that even where information has been readily available in the past, it has not been well used, and that it is most likely to be used by students from more advantaged backgrounds. Providing information alone is not enough and the report makes clear it needs to be accompanied by guidance and multiple modes of communication to be effective and socially progressive.

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<sup>1</sup> See, for example, Dolan, P. et al. (2010) *MINDSPACE: Influencing Behaviour Through Public Policy*. London: Institute for Government.

Good choices by well-informed students also matter for higher education providers who recognise that a good choice is not just about attracting large numbers of students in through the front-door, but attracting students who will get the most out of their experience and who will also stay, engage and succeed. In turn good choices should benefit providers and the sector as a whole by improving student engagement, learning, satisfaction, retention, success, employability, and the wider reputation and perceived value of higher education.

But good choices by well-informed students matter most of all for the students themselves because it will help enhance their own quality of experience. A good choice will be one which enables students to become engaged in their learning and wider higher education experience, one that fits in with their personal and employment commitments, one that helps them develop knowledge, skills and other qualities in a way that satisfies both present and future needs, one that allows them to maximise their potential, and, yes, one that maximises the utility of higher education, however a student wishes to define it for themselves.

The research presented here is of particular interest to the HEA as the body committed to enhancing students' learning experience of higher education across the four nations of the UK. That experience can be improved when prospective students make better choices. The HEA has already sponsored research into the reliability and validity of information targeted at prospective students such as the KIS as a guide to institutional quality<sup>2</sup>. *Behavioural Approaches to Understanding Student Choice* indicates that the higher education sector should be as concerned about how such information is communicated to prospective students and how they are influenced and supported in making their decisions.

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<sup>2</sup> Gibbs, G. (2012) *The Implications of 'Dimensions of Quality' in a Market Environment*. York: The Higher Education Academy.



## Executive summary

The Higher Education Academy (HEA), in partnership with the National Union of Students (NUS), commissioned CFE and The University of Sheffield to undertake research to explore behavioural approaches to understanding student choice. Within our research we applied insights from behavioural economics to help aid understanding of student decision-making, and specifically the mental shortcuts that prospective students use to reduce the burden of complex decision-making, which can give rise to systematic errors or biases. Ultimately, by better understanding how and why prospective students make choices about what and where to study, the intention is to ensure that information, advice and guidance is better attuned to assist them in making choices that are consistent with their own aims. The overall ambition, therefore, is to improve student engagement, satisfaction, retention, success, employability and in turn social mobility – outcomes which are all in the interest of both prospective students and the sector. Accordingly, this report offers a number of pragmatic insights resulting from this research and case studies that provide the basis to support better support student decision-making. Here we summarise our approach to this research and synthesise the main findings.

## Methodology

This study summarises recent findings from the emerging field of behavioural economics, and applies this knowledge to student choice in higher education. The research for this study comprised three stages, as follows:

- a systematic literature review and interviews with experts in behavioural economics and student decision-making;
- qualitative fieldwork with key stakeholders, including the representatives of higher education policy organisations and sector bodies, key staff based at institutions in the UK, and sabbatical officers from students' unions;
- a mapping exercise that brings together key theories from behavioural economics with evidence from studies relating to student choice and decision-making.

## Behavioural economics

Traditional economics has been dominated by *expected utility theory*, which is based on the assumptions that decision-makers operate with complete knowledge and with unlimited capacity to evaluate risks and costs. This model fails to account for much of the actual observed behaviour of people in the real world, which deviates from the expectations of rationality. Behavioural economics, in contrast, proposes the alternative model of *prospect theory*, which offers a modification to the ideal model of a purely rational decision-maker, by recognising that our capacity for *rationality is bounded* and that our decision-making is also characterised by *non-rational behaviour*.

The ways in which we deviate from purely rational behaviour are not random (as the traditional economic model assumes). Instead, we tend to use heuristics (or 'rules-of-thumb') that offer ways of reducing the burden of complex decision-making, but which give rise to systematic errors or biases. With findings from the behavioural sciences, these heuristics can be understood and their biases can be predicted. Behavioural economics thus offers a more realistic description of human decision-making that can be used to better understand and guide the choices that people make.

Behavioural economics has begun to influence public policy in both the US and the UK. For example, Barack Obama hired behavioural economists to inform his successful re-election campaign,<sup>3</sup> and the remit of David Cameron's recently-formed Behavioural Insights Team is to apply the findings of behavioural economics to public policy.<sup>4</sup> The purpose of the Government's Behavioural Insights Team – also known as the Nudge Unit, named after the book by Thaler and Sunstein – is to give 'power back to the individual, encouraging them to think about their choices and how those choices will affect them in the long term'.<sup>5</sup>

Members of the Nudge Unit contributed to a document that has begun to influence policy-making in the UK: *MINDSPACE: Influencing Behaviour through Public Policy*. The MINDSPACE report offers a mnemonic framework that categorises recent findings from psychology and behavioural economics, suggesting how these insights can offer lower-cost outcomes than conventional policy tools.<sup>6</sup> The MINDSPACE framework of behavioural influences and characteristics can be summarised as follows:

- **Messenger:** we are heavily influenced by who communicates information.
- **Incentives:** our responses to incentives are shaped by perceived gains and losses.
- **Norms:** we are strongly influenced by what (we think) others do.
- **Defaults:** we tend to 'go with the flow' of pre-set options.
- **Salience:** our attention is drawn to what is novel and what seems relevant to us.
- **Priming:** our acts are influenced by unconscious cues.
- **Affect:** emotional associations can powerfully shape our actions.
- **Commitments:** we seek to be consistent with our public promises and we reciprocate acts.
- **Ego:** we act in ways that make us feel better about ourselves.

Most of the public policy applications of behavioural economics have involved an attempt to influence behaviour in a certain direction. Policy-makers have tried to 'nudge' people toward positive and away from negative behaviour. This approach is less appropriate for the context of student choice, because there is no desire for a specific outcome for all. Rather, the intention of higher education policy-making is to better inform students and empower them to make better choices for themselves.

In this context the application of behavioural economics seeks to raise awareness of the subconscious and automatic influences that bias the decision-making process of prospective students. The aim of this document is to better understand how we can tailor information and guidance to best help the decision-making of potential students.

## Influencing student choice

Prospective students weigh up a wide range of factors when making decisions about higher education. Recent research in education suggests that the following factors are among the most significant in choosing where to study:

- academic reputation;
- location;
- distance from home;

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<sup>3</sup> <http://www.nytimes.com/2012/11/13/health/dream-team-of-behavioral-scientists-advised-obama-campaign.html?src=me&ref=general>

<sup>4</sup> <http://www.cabinetoffice.gov.uk/behavioural-insights-team>

<sup>5</sup> <http://www.cabinetoffice.gov.uk/news/governments-nudge-unit-goes-global>

<sup>6</sup> <http://www.instituteforgovernment.org.uk/our-work/better-policy-making/mindspace-behavioural-economics>

- course suitability;
- employment opportunities.

In general, these factors are ranked higher in influence than the costs associated with attending university. Ranking of influences varies with student characteristics, however. For example, distance from home tends to be ranked higher by students from lower socio-economic groups. The following sources of information are among the most widely consulted in the process of choosing a university and course:

- university prospectuses and websites;
- UCAS directories and guides;
- family and friends;
- university visits;
- teachers and careers advisors.

University visits are consistently ranked among the most useful sources, but are not as frequently used as other sources. There is evidence to suggest that students from less advantaged backgrounds consult fewer sources of information.

A problem with much of the research into student choice is that the research methods used fail to offer insights into the automatic or uncontrolled forms of mental processing that affect prospective students; because they are unaware of these effects, they are unable to report them in answer to research questions. This is where behavioural economics is able to complement those findings and enhance our understanding of student choice. Psychological research offers explanations for the sub-conscious elements of decision-making, and behavioural economics shows how these effects are incorporated into the everyday choices we face.

In this way, behavioural economics is not only able to account for why we act the way we do, but also to empower us to reduce the unwanted effects of non-rational decision-making by highlighting those effects and their mechanisms. In terms of student choice, therefore, we can better understand why certain groups of students are put off by complex information or are unduly swayed by the way in which it is presented.

## Managing information

Whereas the previous chapter examined the types of information that students actually use, the present chapter explores the types of information sources that students say is the most useful. The top five most useful items include:

- standard of teaching;
- satisfaction with course;
- graduate employment statistics;
- recognition of course by professional bodies;
- satisfaction with support and guidance.

Research in the UK and other countries suggests that whilst most prospective students actively seek such sources of information, a surprising number never try to find it, even if they regard it as being very useful. Furthermore, many prospective students are unsure about how to prioritise different types of information. This becomes a greater issue as the



amount and number and types of information increases – with implications for initiatives such as the introduction of Key Information Sets (KIS).

As a result of these influences and preferences, student decision-making behaviour deviates from that modelled in traditional economic theories based on the assumption of unlimited capacity for rational evaluation. Behavioural economics proposes that prospective students can be affected by a ‘paradox of choice’, in which a growing range of options has the effect of increasing the difficulty of decision-making. It also suggests that information that is perceived as coming from a familiar or an authoritative source is given greater weight during the decision-making process. These findings can be used to evaluate and modify the way in which information and guidance are provided to prospective students considering university.

## Evaluating risk

Traditional economics is based in terms of the risks and rewards associated with the outcomes of decisions. Behavioural economics shows how risks are more frequently evaluated in terms of perceived losses and gains. For example, it shows that we are more averse to losses than we are attracted to gains of the same size, with the effect that individuals may become *risk-averse* in situations of uncertain choices. Furthermore, the theory of hyperbolic discounting describes the way in which we tend to give higher value to immediate rewards, favouring ‘smaller sooner’ to ‘larger later’.

Whilst these findings have been used successfully in the marketing and advertising of commercial products, they can also be applied to the context of student choice, particularly given the trend towards increasing marketisation of the higher education sector. The losses and gains involved in evaluating the choice of whether to enter higher education are fraught with uncertainty and risk, especially so since the introduction of fees and in the currently unstable economic climate. As such, these decisions are subject to the influence of a wide variety of personal, social and cultural factors. The way in which the financial aspects of higher education are presented is therefore critical to the success of initiatives aimed at increasing participation and driving economic growth through up-skilling the workforce.

## Improving access

Education research shows that decisions about whether to enter higher education are shaped by experiences that start much earlier in life. This suggests that information, advice and guidance about potential career paths should start early, in order not to restrict the aspirations of prospective students. Different demographic groups approach the choice of what and where to study in different ways due to variation in expectations of themselves and their peers. For students from lower socio-economic groups, for example, the ‘norm’ may be not to attend university, and their decision-making criteria may be very differently weighted to those from less disadvantaged backgrounds.

Access to higher education is therefore highly sensitive to socio-economic and demographic characteristics. Strategies aimed at widening participation should thus be sensitive to these issues in order to be effective. For these reasons, a blanket approach to guidance is not always the most effective method. Institutions need to ensure a multi-mode communication strategy that involves different ‘messengers’ (ie particularly those who share demographic characteristics with the prospective students) and different mediums (ie online and offline, text/imagery/audio/video). Along with raising awareness through outreach and widening participation initiatives, there is a need to ensure that students from less advantaged

backgrounds are supported to both access and consult more, and more varied, sources of information, advice and guidance.

## Conclusions and recommendations

We set out below recommendations for higher education institutions and policymakers, as well as suggestions for further research in this area.

### Recommendations for higher education institutions

In providing information to prospective students, institutions should ensure they avoid making the task of choosing a university increasingly onerous. The vast amount of information currently available risks becoming self-defeating, insofar as it increases the analysis burden on prospective students (ie creates a ‘paradox of choice’). Also, while objective sources of information are useful for understanding features of courses, it is important that the subjective experiences of university life are not ignored. With this in mind we offer some recommendations for those institutions looking to facilitate better choices by prospective students to ensure better outcomes, both for students and institutions.

Recommendation	Explanation
<b>1: Identify opportunities to engage parents and partners of prospective students.</b>	Parental and peer influences are often subtle and not fully recognised even by those considering an application to enter higher education. One study of decision-making found, for example, that parents often play a role in providing their children with a sense of a ‘hierarchy’ of reputable higher education institutions. Peers can also play a key role in shaping aspirations and perceptions of ability. <sup>7</sup> Institutions should reconsider how they engage with parents and partners of prospective students so that they are able to relate to and influence choices in more constructive ways.
<b>2: Continue to develop information sources, with an emphasis on qualitative descriptions of the student experience.</b>	Behavioural economics warns of evaluating information in ‘joint evaluation mode’ which leads us to focus on very subtle quantitative differences between choices (for example small differences between NSS scores or graduate salaries such as those provided by the KIS), which will have little or no effect on the student’s actual experience at the university of their choice. Institutions should support prospective students by providing additional qualitative information focused specifically on student life and the student experience.
<b>3: Provide guidance to accompany information.</b>	Sources of quantitative data about higher education can be more effective if accompanied by additional guidance on its interpretation and navigation. One example of such guidance is the interactive e-learning module on university decision-making as developed by the University of Birmingham, which could be extended to other institutions.

<sup>7</sup> Brooks, R. (2003) Young People’s Higher Education Choices: The Role of Family and Friends. *British Journal of Sociology of Education*. 24, no. 3, 283–297.

<p><b>4: Adopt multi-mode communication strategies to engage prospective students.</b></p>	<p>Behavioural research suggests familiar and authoritative sources of information are given greater weight. In the context of student choice, there is also some evidence to suggest that unfamiliar sources have less influence, despite those providing the advice being highly knowledgeable. Consequently institutions need to ensure a multi-mode communication strategy that involves ‘messengers’ who share demographic characteristics with the prospective students and different media styles that are salient to their prospective student demographic. Student engagement in delivering outreach programmes to schools is one way of achieving this.</p>
<p><b>5: Simplify application processes to ensure financial assistance is more influential in decision-making.</b></p>	<p>Seemingly minor hurdles, such as tracking down information on family income, can deter students from applying for financial assistance. Providing additional information alone about financial assistance does not increase application rates, but simplification and assistance does. The process of applying for financial assistance should be as straightforward as possible, such as by automatically identifying eligible students and removing application systems entirely. This could include reducing the information applicants must gather, as implemented at Cardiff Metropolitan University, for example.</p>
<p><b>6: Strive to provide maximum support to aid the decision making of prospective students from low socio-economic groups.</b></p>	<p>Those working with prospective students should be conscious that certain groups, such as those from disadvantaged backgrounds, may be more ‘loss averse’ than others. To help challenge the perceived risks regarding entry into higher education we encourage institutions to pro-actively support these students to weigh up potential losses and gains. Along with raising awareness through outreach and widening participation initiatives, these students should be supported both to access and consult more (and more varied) sources of information, advice and guidance.</p>
<p><b>7: Encourage prospective students to visit higher education institutions.</b></p>	<p>Physical visits to university campuses are regularly rated as among the most useful activities in the decision-making process<sup>8</sup>. Our research suggests that visits provide an opportunity not just to gather more detailed information, but also for students to ‘place themselves’ at an institution. Institutions should, therefore, positively encourage and support students to visit, to gain a better sense of the reality of university life and to help them make a choice that is right for them to aid the success of their study. At the same time, however, they should caution prospective students against giving undue weight to isolated experiences and affective events that may not reflect the experience of studying at an institution.</p>

<sup>8</sup> Oakleigh Consulting and Staffordshire University (2010) *Understanding the Information Needs of Users of Public Information About Higher Education*. 41. Bristol: HEFCE; 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, no. 1, 64.

**8: In guidance for prospective students take steps to raise awareness of key influences and common biases in decision-making.**

Behavioural economics draws attention to a wide range of common tendencies within decision-making. Examples include: a tendency to base decisions on a limited number of stand-out facts and experiences; a tendency to base decisions on immediate emotional reactions; and a tendency to give greater weight to short-term rather than long-term preferences and gains. In their outreach and guidance activities, institutions should seek to build greater awareness of these common influences in order to help prospective students assess their options carefully and ultimately reach the decision that best fits their long-term goals. This could include encouraging prospective students to reflect on their reasons for rejecting or selecting specific institutions, and to analyse their aims, giving consideration to long-term and short-term goals and their importance.

## Recommendations for higher education policy-makers

In this study we emphasise how important it is to avoid ‘nudging’ students to enter higher education, particularly where it is not consistent with their aims. This point is of particular significance as increased competition within higher education in the UK has made marketing more acutely important, since funding now follows the student as a consumer.<sup>9</sup> We also emphasise that incentives on institutions should be designed to avoid admissions and student recruitment being reduced to attracting the maximum number of students, regardless of their suitability for an institution. Our research findings suggest the following recommendations for larger scale change at a policy level.

Recommendation	Explanation
<b>1: Enhance careers guidance for school pupils and sixth-form students.</b>	One of the main recommendations of the Browne review was that individualised careers advice should be required in all schools. <sup>10</sup> One of the key findings in this study is that prospective university students often require more than just good information to make the choices that best suit their long-term aims. We therefore – in agreement with the Browne review – propose that the role of careers guidance services should be enhanced. Consideration should also be given to the timing of careers guidance, since research suggests young people’s perspectives on higher education are shaped long before they actually apply.
<b>2: In addition to providing easily accessible information, develop guidance on the decision-making process.</b>	Recent higher education policy has been focused on ensuring that comparable information on higher education courses is made easily available to prospective students. While this work is certainly valuable, we propose that additional independent guidance should be made available to prospective students focusing on the process of decision-making. Such guidance could include tools that

<sup>9</sup>Maringe, F. (2006) University and Course Choice: Implications for Positioning, Recruitment and Marketing. *International Journal of Educational Management*. 20, no. 6, 466–479.

<sup>10</sup> Browne, J. et al. (2010) *Securing a Sustainable Future for Higher Education: An Independent Review of Higher Education Funding and Student Finance*. 28. London: H. M. Government.

	assist prospective students to think through the most important factors in their choice of institution and narrow down their options. This guidance could be delivered via online sources and through careers advisers.
<b>3: Simplify financial assistance schemes where possible.</b>	There is a widespread lack of awareness of bursaries, fee waivers and scholarships amongst many prospective university applicants. We therefore suggest that the system of financial assistance should be made as simple and uniform as possible at the national policy level. This follows the recommendations of a range of academic studies in this area and CFE's interim evaluation of the National Scholarship Programme. <sup>11</sup>

## Recommendations for further research

Very little research into UK higher education has been conducted from a behavioural economics perspective. There remains a need for more studies to test behavioural theories in the context of UK higher education. Two types of research would be of particular value. First, experimental research is needed with groups of prospective students to test their responses to, among other things, different messengers, contrasting framings of higher education options and the use of commitment devices. Second, research conducted within schools and higher education institutions is needed to test the impact of interventions upon prospective students. We suggest some areas for research that institutions and academic researchers may wish to consider, though this list is certainly not exhaustive.

Recommendation	Explanation
<b>1: Fully assess the information sources and messengers that prospective students draw upon.</b>	Prospective students appear to give more weight to information derived from a familiar source than from an unfamiliar professional. To understand this properly requires an investigation of the effects of using alternative messengers in university guidance. While a range of seemingly positive examples emerged in our research of higher education institutions utilising 'peer messengers' to advise students on university choice, we were not able to determine their effectiveness.
<b>2: Develop further insights into how loss averse certain prospective students are.</b>	Existing research suggests that responses to incentives are shaped by predictable mental shortcuts, which can be explained by 'prospect theory'. This theory suggests that prospective students perceive outcomes as gains and losses relative to a reference point rather than as final states of wealth, and that they tend to be highly loss averse. For example, in assessing the value of fees and support in relation to their current situation and that of their peers, prospective students who view not gaining a qualification as

<sup>11</sup> Harrison, N. and Hatt, S. (2012) Expensive and Failing? The Role of Student Bursaries in Widening Participation and Fair Access in England. *Studies in Higher Education*. 37, no. 6, 695–712; Davies, P. et al. (2008) *Knowing Where to Study? Fees, Bursaries and Fair Access*. Stafford: Staffordshire University/Sutton Trust; Diamond, A. et al. (2012) *Formative Evaluation of the National Scholarship Programme*. Leicester: CFE.

	<p>a loss will be more likely to continue in education than those who see getting a qualification as a gain.<sup>12</sup> This theory needs to be tested and further experimental research is needed to aid our ability to use this theory to explain student decision making.</p>
<p><b>3: Determine how students make decisions about modules.</b></p>	<p>This research uncovered evidence of how prospective students make decisions, but limited evidence about module choices once enrolled on a course of study. However, the behavioural economics approach has potential here too. In fact, a number of the institutions we consulted were taking steps to increase the guidance available to inform module choices. One prime example of this is via a personal tutor scheme, which provides students with one-to-one input to inform decision making. Further research is needed to establish how students experience module choice and what the best ways might be to overcome any difficulties they face.</p>
<p><b>4: Enhance understanding of the relative influence of heuristics and biases on students' decision-making.</b></p>	<p>Behavioural economic theory suggests that prospective students are more likely to be drawn to information that they can easily understand, that seems novel and that they can relate to from their own personal experiences. This is closely linked with the idea that we are over-reliant on what is more 'available' in the mind. For example, prospective students may overestimate the risks of taking a particular course if they are told by a friend that a high proportion of students have failed it. This is despite the fact that the reality of cases may differ according to official statistics (availability bias) and if they have not previously done well academically then the influence of this information is likely to be stronger (salience). There is little hard evidence of the influence of salience in student choice and consequently more work is required to fully understand the implications for the sector.</p> <p>Furthermore because of the strong influence of the affective system on our decision-making we should not rely on standard survey methods to see what influences student choice, because the responses we obtain via recall are unlikely to be a good representation of actual influences. Therefore a Discrete Choice Experiment (DCE) would be a more appropriate way to explore this further. A DCE is a technique for eliciting individual preferences by exploring how people value selected attributes of a programme, product or service (in this case a course and/or institution) by asking them to state their choice over different hypothetical alternatives selected via an experimental design. In this context a DCE would primarily focus upon course choice, and would enable the relative value that</p>

<sup>12</sup> See Page, L., Garboua, L. L. and Montmarquette, C. (2007) Aspiration Levels and Educational Choices: An Experimental Study. *Economics of Education Review*. 26, no. 6, 747–757.



potential students attach to various course attributes, as well as the trade-offs that they are willing to make between these different attributes, to be estimated. The DCE method relies on scenarios that describe different choices students might make. It would therefore require that the course could be described by a set of characteristics, and that students' valuation of the course depended upon these characteristics. More specifically the description of the course would need to be comprised of a set of attributes (such as employment outcomes, location, proxies to describe the student experience, student satisfaction, etc) and ratings for each of these key attributes.

## I Introduction

This report uses insights from behavioural economics into how people make decisions to better inform our understanding of choice in relation to higher education participation. The research aims to assist those working in higher education, as well as others who advise and influence study choices, to more effectively support prospective students in their decision-making.

### The context for potential students' decision-making

Decisions about whether to enter higher education, which institution to attend and which course to study rank among the most significant in a person's lifetime. Attending higher education, whether early or later in life, has enormous implications for one's career trajectory, social status, networks and outlook on life. The process of making the decision has never been simple, and the difference between 'right' and 'wrong' choices can be difficult to comprehend. Advising and guiding students on whether and where to attend university has therefore always represented a significant challenge. A wide range of influences act upon prospective higher education students, whose impact is not easy to understand. There is also a difficult balance between encouraging prospective students to make the choice that fits their long-term interests and pushing them towards specific outcomes.

While student choice has always been a complex topic and one that is worthy of attention, in the last two years it has become particularly salient. In the UK – and in England and Wales in particular – policy-makers have placed greater emphasis upon the importance of informed student choice.<sup>13</sup> Indeed, the stated overall goal of the most recent proposals for reforming the higher education sector, contained in the White Paper *Students at the Heart of the System*, has been to create a higher education sector that is 'more responsive to student choice'.<sup>14</sup> One of the main intentions of the recent restructuring of the fees environment in England and Wales has been to create a sector in which student decision-making plays a much larger role in determining what is offered by higher education institutions. Regardless of financial costs through fees, the decision to enter higher education has always been a major choice, with numerous risks and potential benefits that must be weighed up. Across the UK the 'Key Information Sets' (KIS), introduced in September 2012, are designed to improve student decisions by providing better quality and more accessible information on courses, such as student satisfaction and earnings after graduation.<sup>15</sup>

### Student choice from a behavioural economics perspective

Together, these developments point towards an ideal prospective higher education student who is fully informed of the costs and benefits associated with different higher education choices and rationally selects the option that best fits with their interests and preferences. It recalls a model of decision-making similar to that of conventional economic theory – in which rational agents assess their options effectively and pursue their best interests accordingly. This approach has been widely used in the study of education and has considerable benefits and explanatory power. However, in this report we encourage the consideration of student decision-making from the different perspective of *behavioural economics*.

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<sup>13</sup> See, for example, Department for Business, Innovation and Skills (2009) *Higher Ambitions: The Future of Universities in a Knowledge Economy*. 17. London: BIS; Browne et al. *Securing a Sustainable Future for Higher Education*. Department for Business, Innovation and Skills (2011) *Students at the Heart of the System*. London: BIS.

<sup>14</sup> Department for Business, Innovation and Skills. *Students at the Heart of the System*. 8.

<sup>15</sup> See <http://unistats.direct.gov.uk/find-out-more/key-information-set>.

Behavioural economics seeks to understand the way in which people make decisions, specifically the simplifying techniques that people use when processing information. Like more conventional forms of economics, it seeks to make generalisations and predictions about how people act. However, unlike these theories, it draws from psychology and, to a lesser extent, from the social sciences in order to base its predictions on a more realistic understanding of human judgement. It adds greater nuance to conventional economic theory, which tends to assume that people have stable preferences and can process information effectively to make decisions. Behavioural economics highlights how people consistently use mental shortcuts and tend towards certain outcomes. In this study we explore the ways in which these shortcuts apply to student decision-making.

The purpose of applying behavioural economics to student choice is to bring an improved understanding of how prospective students are influenced by different factors, how they respond to large amounts of information, and how they process decisions – and the answers to these questions may not always be as straightforward as might be assumed. Considering student choice in this way certainly does not negate the importance of providing easily comparable data on higher education institutions and courses, but it may have implications for how information is presented. We seek to highlight the importance of understanding the diverse range of factors that can influence the way in which prospective students make decisions about whether, when, what and where to study. This includes those factors that may draw prospective students away from more reliable and comprehensive sources of higher education data and towards more limited anecdotal sources of information.

It is more important than ever that students are not just given the information to make decisions, but also that the decision-making process is better understood. Today the range of higher education providers in the UK is large and growing, and prospective higher education students are faced with a multitude of decisions regarding their choice of university. These choices do not just relate to which university and what subject to study, but also to fees, living costs and location, as well as personal preference and career aspirations, to name just a few. At the same time, the number of sources of information about the higher education sector, from the media, Government and higher education institutions themselves, are increasing and competing for students' attention. Ultimately, the more informed the decision the greater the chances that it will be better for the prospective students; and students making better decisions is also good for universities and the sector more generally.

Behavioural economics is a burgeoning field and one that has only fairly recently been applied to policy challenges in the UK. Higher education is one area in particular where very little research from a behavioural economics perspective has been conducted. Scholarly work has been published examining the possible applications of behavioural economics to higher education policy. Most of this, however, focuses on the US.<sup>16</sup> There are currently only a small number of behavioural analyses focusing on education in the UK.<sup>17</sup>

Inevitably, therefore, this research project is exploratory in nature and its recommendations need to be applied carefully. Together, the interviews and the literature suggest a range of

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<sup>16</sup> For example, Bettinger, E. P. et al. (2009) *The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment*, NBER Working Paper. No. 15361. Cambridge, MA: National Bureau of Economic Research; Scott-Clayton, J. (2011) *The Shapeless River: Does a Lack of Structure Inhibit Students' Progress at Community Colleges?*, Working Paper. New York: CCRC; Thaler, R. H. and Sunstein, C. R. (2008) *Nudge: Improving Decisions About Health, Wealth, and Happiness*. New Haven: Yale University Press.

<sup>17</sup> Ouazad, A. and Page, L. (2010) *Pupils' Perceptions Shape Educational Achievement: Evidence From A Large- Scale Behavioural Economics Experiment*. London: Department for Education; Page, Levy, Garboua, and Montmarquette (2011) *Aspiration Levels and Educational Choices*; UKES(2011) *Careers Guidance: Understanding the Behaviour of Individuals*. Wath upon Dearne: UK Commission for Employment and Skills.

ways in which behavioural economics could be usefully applied to UK higher education. However, further applied research is needed to test the potential for practical policy interventions that follow on from our analysis.

## Research methods

The findings of this report are based on a series of consultations with experts in both behavioural economics and student choice, as well as interviews with universities, students' unions and key stakeholders in the higher education sector, including the Office for Fair Access (OFFA), funding councils and the Universities and Colleges Admissions Service (UCAS). The research was conducted in three stages, comprising:

- a systematic literature review and expert interviews;
- qualitative fieldwork with key stakeholders (including the representatives of higher education policy organisations and sector bodies, key staff based at institutions in the UK and sabbatical officers from students' unions);
- a mapping exercise bringing together established behavioural economic theories and concepts with existing evidence and studies relating to student choice and decision making.

Further details of the methods used are given in Appendix 3.

## The structure of the report

The report is structured as follows. Chapter 2 introduces and elaborates the discipline of behavioural economics relating to research into student choice, and outlines the MINDSPACE framework for applying behavioural research to public policy.<sup>18</sup> The analysis then focuses on four thematic areas. In Chapter 3 we focus on the influences on student choice, giving an overview of recent research and exploring the way in which different individuals and institutions shape prospective students' perceptions. In Chapter 4 we examine how prospective students process information about higher education. Chapter 5 looks at the assessment of financial and other forms of risk. Chapter 6 focuses on access and student decision-making. Finally, Chapter 7 distils a series of recommendations to improve student choice and identifies further avenues of inquiry that build on this research.

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<sup>18</sup> Dolan, P. et al. (2010) *MINDSPACE: Influencing Behaviour Through Public Policy*. London: Institute for Government.

## 2 What is behavioural economics, and how can it inform student choice?

In this chapter we introduce behavioural economics and its public policy applications. We explain how behavioural economics differs from more conventional economic approaches and suggest ways in which it can be applied to student choice.

### Introduction

Much of the early research into student choice (especially in the US) draws heavily on classical economic theory, which assumes that choices are well considered and based on a stable set of well-defined preferences. In this theory, the individual rationally weighs up the potential costs and benefits of alternative decisions and chooses the option that will maximise their own long-term utility.<sup>19</sup> The current UK policy emphasis on student choice, and information provision to aid this choice, also appears to rely on (or at least imply) a view of students and other relevant decision-makers as rational, freely choosing agents who can effectively process all the information available to them and use it to make decisions that are in their own best interests. This approach is in danger of neglecting a number of important behavioural factors that have a strong influence on decision-making. In the context of complex, long-term, emotive decisions, such as those involved in a student's choice of university career, which many individuals make only once in their lives, behavioural influences can result in choices that do not maximise long-term utility for the individual involved. In reality, individuals reveal systematic deviations from the standard economic view of rational decision-making – especially when faced with complex decisions and a large degree of uncertainty. This non-rational behaviour may have important consequences for the higher education sector as a whole as well as for the broader economy and society.

In this chapter we introduce behavioural economics and suggest that it can help us to understand these systematic deviations, and thus give us a better understanding of how students respond to incentives and use information, and ultimately how they make decisions. We then go on to outline some of the ways in which behavioural economics has informed public policy with reference to Dolan *et al.*'s influential MINDSPACE report for the Institute for Government. We explain the different elements of the MINDSPACE framework and, in the closing sections of the chapter, give consideration to how some of its themes can be applied to student decision-making.

### Rationality and student choice

The concept of *utility* underpins the theory of decision-making in economics. While there are different formulations of this concept, some of which are discussed below, we can largely think of utility as an economic measure of the individual's overall well-being. The standard economic approach assumes that a rational individual will weigh up the costs and benefits of alternative outcomes and choose those that maximise utility over their lifetime,

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<sup>19</sup> Early examples include Miller, L. and Radner, R. (1975) *Demand and Supply in United States Higher Education*. New York: McGraw-Hill; Kohn, M. G., Manski, C. F and Mundel, D. S. (1976) An Empirical Investigation of Factors Which Influence College-going Behavior. *Annals of Economic and Social Measurement*. 5, no. 4, 391–419; Venti, S. F. and Wise, D. A. (1982) Test Scores, Educational Opportunities, and Individual Choice. *Journal of Public Economics*. 18, no. 1, 35–63. For an overview see Desjardins, S. L. and Toutkoushian R. K. Are Students Really Rational? The Development of Rational Thought and Its Application to Student Choice. *Higher Education: Handbook of Theory and Research*, edited by J. C. Smart. Vol. 20, 191–240. Berlin/Heidelberg: Springer Netherlands.

subject to the constraints of time and money. Many other assumptions underlie this approach, such as having sufficient cognitive ability to process the necessary information, and having preferences that are sufficiently well-developed and stable to enable the 'right' decision to be identified.

In student choice, as in many other areas, we are dealing with decision-making under uncertainty because neither the costs nor the benefits of various options can be known with certainty, and they will depend on many factors outside the individual's control. To take one simple example, the individual's wage on graduation, which is likely to be at least three and half years from the initial higher education choice, will depend on the state of the labour market when they graduate. To take another example, for most students the utility derived from higher education is acquired through the process of learning new things, yet the details and the impact of the learning process can never be known in advance. The standard economic approach deals with this uncertainty via *subjective expected utility theory*, whereby an individual bases their decision on their subjective assessment of how likely various outcomes are. Again, rationality is assumed and the information and processing requirements are even more onerous because those subjective assessments will inevitably be based on many things.

### **Student decision-making: a new role for the behavioural sciences?**

While standard economic theory does not assume that all people are rational all the time, it does assume that any mistakes in decision-making are *random*. This is the main point of departure for behavioural economics which recognises instead that *systematic* errors are made in decision-making as a result of a number of important behavioural influences which are better understood by taking a more psychological approach. Individuals reveal systematic deviations from the standard economic view of rational decision-making, especially when faced with complex decisions involving a large degree of uncertainty. Behavioural economics, and behavioural science more generally, can help us to understand these systematic deviations, and can inform our understanding of how students use information and make decisions.

Behavioural economics has emerged from the intersection of economics and psychology. It is based on the proposition that if people do make systematic errors in decision making, then incorporating our knowledge of these errors into economic models can improve our understanding of the way people make decisions. The standard economic agent is assumed to be rational, to have complete and objective knowledge, to have fully formed and stable preferences, to have unlimited cognitive processing ability, perfect self-control, to be motivated by their own selfish preferences, and to always maximise long-term utility. Real decision makers, however, are emotional, impulsive, and forgetful. They cannot process unlimited amounts of information, have incomplete, incoherent and changing preferences, are highly influenced by other people, and can act at odds with their own long-term best interests.

Probably the most well-known academic in behavioural economics is Daniel Kahneman, a psychologist who won the Nobel Prize for Economics in 2002 for his work, which was largely developed with Amos Tversky.<sup>20</sup> As well as a large number of academic papers on relevant topics, Kahneman's recent popular science book, *Thinking, Fast and Slow*, has had unprecedented sales and is influencing policy-makers worldwide, as well as bringing the

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<sup>20</sup> See for example Kahneman, D. and Tversky, A. (1979) Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*. 47, no. 2, 263; Tversky, A. and Kahneman, D. (1986) Rational Choice and the Framing of Decisions. *The Journal of Business*. 59, no. 4, S251–S278.



language of behavioural economics into the mainstream.<sup>21</sup> Similarly, Dan Ariely's *Predictably Irrational* also helps to explain behavioural science research and the implications in a non-technical way.<sup>22</sup>

Kahneman makes an important distinction between two mental systems: System 1 ('fast'), which is automatic, affective, acts quickly with little or no effort and no sense of voluntary control and can process many things simultaneously; and System 2 ('slow'), which is cognitive, reflective, processes things with effort and concentration, and therefore has limited capacity but offers a deeper analysis. Both systems operate when we process information and make decisions, but because System 1 has large capacity and is automatic, it has a powerful influence on decision-making, and we are rarely conscious of this influence. Many of the behavioural factors discussed below operate largely within System 1, thus they are difficult to uncover from traditional survey methods, such as asking people what influenced them or why they made a particular decision. This is one reason why experimental methods are a popular technique in behavioural research.

Behavioural economics has much to say about student decision-making. A number of the human characteristics outlined above, as well as characteristics of the higher education market itself, are particularly relevant. For example, higher education is a highly complex good with both the costs and outcomes subject to uncertainty, and accruing over an extended period of time. The main decision to enter higher education is largely taken at a relatively early stage in life with imperfect information and limited opportunity to form accurate subjective assessments about some of the potential outcomes. The decision can be extremely emotive, where issues of identity and obligation feature strongly. It is a choice that is generally taken only once, so there is very little opportunity to learn from mistakes or gain experience in the market. Also, unlike most other goods and services, it includes entry requirements, and the 'consumption' of the service can often alter the preferences and outlook of the consumer. At present, very little research into the field has been conducted from a behavioural economics perspective. Recently, however, a number of scholars have begun to draw attention to its possible applications.<sup>23</sup>

## Behavioural economics and public policy: the MINDSPACE framework

Following on from the success of books such as Richard Thaler and Cass Sunstein's *Nudge*, behavioural economics has begun to influence public policy both in the US and the UK. One of the clearest examples of the influence of behavioural economics on UK public policy is Paul Dolan et al.'s report for the Institute for Government, *MINDSPACE*.<sup>24</sup> This report classifies well-known behavioural influences under the MINDSPACE mnemonic and explains how behavioural theory can be used in policy to help achieve better outcomes for citizens. The usefulness of the MINDSPACE framework lies in the fact that it summarises, in a non-technical way, common tendencies that have been demonstrated over a range of psychological studies. As the authors themselves note, it is not exhaustive; there is considerable overlap between the influences and they are not mutually exclusive in their

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<sup>21</sup> Kahneman, D. (2012) *Thinking, Fast and Slow*. London: Penguin.

<sup>22</sup> Ariely, D. (2008) *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. London: HarperCollins.

<sup>23</sup> See Jabbar, H. (2011) The Behavioural Economics of Education: New Directions for Research. *Educational Researcher*. 40, no. 9, 446–453; Vossensteyn, J. J. (2005) Perceptions of Student Price-responsiveness: A Behavioural Economics Exploration of the Relationships Between Socio-economic Status, Perceptions of Financial Incentives and Student Choice. Universiteit Twente; Scott-Clayton, *The Shapeless River: Does a Lack of Structure Inhibit Students' Progress at Community Colleges?*; Dynarski, S. and Scott-Clayton, J. (2006) *The Cost of Complexity in Federal Student Aid: Lessons from Optimal Tax Theory and Behavioral Economics*. Faculty Research Working Papers Series. Cambridge, MA: Harvard University, John F. Kennedy School of Government.

<sup>24</sup> Dolan et al., *MINDSPACE*.

influence on behaviours. Nevertheless, MINDSPACE is a useful way of classifying these influences so we adopt this classification below, and provide further detail and examples in Appendix 2.

### The MINDSPACE framework, Dolan *et al.*, 2010

#### Messenger

It is not simply the information itself that determines our decisions; we are also heavily influenced by *who* communicates the information. This affects the way we interpret information and our readiness to accept it. In particular, individuals may act more readily on information if they perceive the messenger to be *authoritative*. Information can also be more effective if there are *demographic and behavioural similarities* between the messenger and recipient. Given the complexity of the student choice context, many different messengers can have an influence on prospective students – parents, friends, teachers, careers advisors, alumni, current students and lecturers. In Chapter 4 we refer to research suggesting that information from some of these messengers tends to be frequently neglected while other sources are given greater weight.

#### Incentives

Our responses to incentives are shaped by predictable mental shortcuts, which have been largely explored via a branch of behavioural economics known as *prospect theory*. Prospect theory is the behavioural economics alternative to expected utility theory. Two aspects of it are of key importance in higher education choices. Firstly, people perceive outcomes as gains and losses rather than as final states of wealth, and tend to be highly *loss averse*. Most of us dislike losses more than gains of the same amount. Because we tend to think in terms of losses and gains rather than final states of wealth, our starting position is of fundamental importance. Within behavioural economics this starting position is known as the *reference point*. *Reference points* mean that we are better at making relative rather than absolute judgements. For example, potential students often assess the value of fees and support in relation to their current situation and that of their peers. In a recent study Lionel Page *et al.* conducted an experiment that suggested that students who view not getting a qualification as a loss will be more likely to continue in education than those who see getting a qualification as a gain.<sup>25</sup>

#### Norms

We are strongly influenced by what others do. Social and cultural *norms* frame behavioural expectations within groups. The power of norms comes from the social penalties of non-compliance and/or the social benefit of conforming. Norms are related to sociological status attainment models in which students choose according to what is expected of them; they are heavily influenced by a given set of norms and values, which are dependent on their constituent group. As we will see in Chapter 7, norms become relevant to higher education decision-making in explaining the relatively low rates of university attendance among poorer high achieving students.

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<sup>25</sup> Page, Levy, Garboua, and Montmarquette. *Aspiration Levels and Educational Choices*.

## Defaults

Many decisions have a default option even if we do not explicitly realise it, and our tendency is to go with this pre-selected option if we do not make an active choice. Opting for *defaults* is a way of limiting our choice set and is another response to complexity. Defaults are closely related to habitual behaviours. The more habitual a behavioural pattern is, the less likely a person is to weigh up the costs and benefits in a rational way. Defaults and habits can be established over long periods of time. Default actions are likely to differ by socio-economic group, as well as by other factors like gender or ethnicity. They closely relate to norms in that for some groups the default action may be to not enter higher education whereas for other groups the default is to enter higher education. For mature learners for example, the default might be to remain in their current employment whilst studying and/or not to study at all. As we will see in Chapter 7, in the US some educators have attempted to alter the default option of not entering higher education among disadvantaged students by requiring them to complete at least one college application.

## Saliency

In order to manage the volume of information we are subject to in everyday life, we tend to use a range of coping strategies. Sometimes, for example, when presented with a large set of options we will avoid a choice altogether, or to choose the status quo (an effect which has been termed the *paradox of choice*).<sup>26</sup> Our attention will also generally be drawn to what is novel and seems relevant to us. The more a message is specific and *salient* to us as individuals the more powerful it is likely to be. We are more likely to be drawn to information that we can easily understand, that seems novel and that we can relate to from our own personal experience rather than it being more general and/or abstract. Unusual or extreme experiences or information are also more likely to be influential than run-of-the mill ones. This is closely linked the idea that we are over-reliant on what is more 'available' in the mind: people tend to overestimate the risk of dangers that come easily to mind (such as a widely reported crime in a student area, for example) and underestimate the dangers of those that are less obvious. People also tend to generalise from their limited personal experience, in the case of prospective students, from peers and friends.

## Priming

*Priming* refers to the idea that our acts are influenced by unconscious cues, so our behaviour may be altered by prior exposure to certain sights, words or sensations. Priming does not have to be subliminal; it can be very explicit. There is very strong evidence for priming from experimental studies but it is hard to relate these to higher education choices. Nevertheless, it is clear that priming is likely to influence how students and their parents view information about higher education and the experience.

## Affect

Emotion is a rapid and automatic response over which we have little control. Our emotional reactions to certain events and images can have a significant impact on our decision making. With regards to student choice, students' emotional reaction to what they observe at events such as open days could potentially have an overriding influence on their decision-making, with available information and data not being fully utilised in the process. As we see in Chapter 4, it has been observed that the final selection of a university often comes down to a spontaneous and uncontrolled sense that it *feels right*.

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<sup>26</sup> Schwartz, B. (2005) *The Paradox of Choice: Why More Is Less*. London: HarperCollins.

## Commitments

Our preferences are inconsistent across time and context, which often leads us to procrastinate and delay taking decisions that are likely to be in our long-term interests. The more effort a choice takes the more likely we will procrastinate. Evidence from the US shows that students are discouraged from applying for financial aid because the system is perceived to be complex; seemingly minor hurdles such as obtaining evidence of family income can deter students.<sup>27</sup> However, in our behaviour we seek to be consistent with our promises – including to ourselves – and to reciprocate acts. Studies have shown that students are often willing to self-impose costly deadlines to help them overcome procrastination.<sup>28</sup>

## Ego

We act in ways that make us feel better about ourselves, supporting the impression of positive and consistent self-image. Decisions that contribute to self-esteem can be very powerful. If our behaviour and self-image (beliefs) are inconsistent, we are often more likely to change our beliefs than the behaviour itself. This challenges the common view that we should first seek to change attitudes in order to change behaviour; it is more likely that attitudes follow behaviour than vice versa. Our desire for a positive self-image contributes to our tendency to compare ourselves with other people. Little is known about the role of ego effects in higher education decision-making, but they may have relevance to various areas. For example, fear of rejection from higher ranking institutions may discourage applications to these institutions, especially if this rejection is not completely private.

## Applying MINDSPACE to higher education choices

So far, most public policy applications of behavioural economics have involved an attempt to influence behaviour in a certain direction. They have tended to follow the central idea of Thaler and Sunstein's book *Nudge*, which suggests that behavioural science can be used to gently push people towards positive behaviours. In one example, the authors argue that nudges can be used to increase organ donation. Most Americans, they observe, are willing to donate organs, but many fail to register their consent. So they suggest a mandated choice programme where, for someone to renew their driver's licence, they must say whether or not they would like to be an organ donor. Such a system operates in Illinois and it helps to nudge people away from their 'default' behaviour. In general, Dolan *et al.*'s MINDSPACE report takes a similar approach by suggesting ways that policy-makers can use non-coercive encouragement informed by behavioural economics to reduce drink driving, increase seatbelt usage and prevent the transmission of AIDS, for example.

This approach is not directly applicable to student choice in the same way, because in this context there is no fixed policy goal. For example, policy-makers are not intending to influence students' choices about which institution to attend, or indeed about whether to enter higher education if this is not consistent with their own aims. Our focus on introducing behavioural economic theory therefore takes a slightly different form from applications of MINDSPACE in a policy context. Essentially, the aim of this research is not to inform guidance for policy-makers, institutions and sector stakeholders with the aim of

<sup>27</sup> Bettinger *et al.*, *The Role of Simplification and Information in College Decisions*; Dynarski and Scott-Clayton, *The Cost of Complexity in Federal Student Aid*.

<sup>28</sup> Ariely, D. and Klaus Wertenbroch K. (2002) Procrastination, Deadlines, and Performance: Self-control by Precommitment. *Psychological Science*. 13, no. 3, 219–224.

nudging students towards making particular choices. Rather, the aim is to better understand how we can help potential students make the best choices for themselves (and by best we mean those choices that will maximise potential students' own long-term utility). We also encourage those within the sector to use the insights offered by the research to help raise awareness amongst students of the subconscious, automatic influences on their choices.

Within this study we have applied behavioural economic theory and concepts to aid understanding of the choices that prospective students make, the effects of incentives and the role of information to help inform better decision-making. However, this application of theory is merely the first step - only through designing experimental research could we really start to establish how prospective students actually behave. A discrete choice experiment could offer a means to control and present hypothetical scenarios or choices to prospective students. Such an experimental approach would require prospective students to choose between two or more discrete alternatives, such as between two higher education institutions or courses which had different attributes. This methodological approach would also provide opportunities to test the effect of different messengers or influencers. Ultimately the use of a discrete choice model would enable prospective students' choices to be statistically related to the choice attributes, the alternatives available and the characteristics of the student. For example, the choice of which course a prospective student selects could be statistically related to their socio-economic status and age, as well as to price, student satisfaction with the course to date, employment outcomes of prior students, and other course or institutional attributes, such as location. A model established in this way could therefore estimate the probability that a prospective student would choose a particular alternative, as well as forecast how prospective students' choices could change as a consequence of changes in their demographic status and/or attributes of the alternatives. This method has an advantage over simple survey data, which is limited by the fact that students may not be fully aware of what is driving their choices.

### 3 Influencing student choice

In this chapter we provide a short overview of recent research into the key influences upon student decision-making. We examine large-scale survey research into the topic, before using qualitative studies, and our own primary research, to look into how different people and institutions play a distinctive role in shaping choices.

#### This chapter reveals that:

- the most significant factors influencing prospective students' decisions are academic reputation and institution location;
- the most widely consulted sources of information are university prospectuses and websites, UCAS directories and guides, and family and friends. However, it is university visits that are considered to be the most useful;
- prospective students from lower socio-economic groups consult fewer sources of information and for them distance from home is a key consideration;
- regardless of information processed, decision-making usually comes down to whether or not it 'feels right', and parental and peer influences can be subtle but highly influential;
- when information is perceived as coming from a familiar or authoritative source then it is given greater weight during the decision-making process.

#### Research into university choice

Research into the decision-making processes of prospective higher education students has a long history, especially in the US where, as the previous chapter observed, various economic models have been developed that try to make generalisations about the process students go through when considering whether and where to apply to a college – from a 'predisposition stage' to a 'search phase' to a 'choice phase'.<sup>29</sup> In this chapter we give a short overview of some of this research as a starting point for understanding student choice in the UK. We look at what different studies have identified as the main influences upon students, the most common sources of information consulted and the sources that are named as most useful. We also outline some findings about how the main influences on university choice differ between groups of students, a subject that this report returns to in later chapters.

The focus of the first half of this chapter is on survey research: we examine studies that have asked current and prospective higher education students to rank the key influences on their choice, and to name the sources of information that are most useful to them. These studies approach the topic from different theoretical starting points and use different methods, but there is some consistency in what their respondents say. In the second half of the chapter, we refer more to qualitative studies, including our own research, to look into

<sup>29</sup> Hossler, D. and Gallagher, K. S. (1987) Studying Student College Choice: a Three-phase Model and the Implications for Policymakers. *College and University*. 62, no. 3. 207–21.



how different people and institutions play a role in shaping prospective students' perspectives. Whereas the first half looks at which criteria and sources prospective students use in decision-making, the second half looks at more subtle influences that rarely come to light through survey research. In doing this we draw on various elements of the MINDSPACE framework, including 'affect', 'norms' and 'messenger' effects.

## What are the key factors in university choice?

A range of studies, both in the US and the UK, have attempted to assess the important factors in the choices made by potential students about which university to attend. In the US, extensive research has identified academic reputation, location, programme of study and employment opportunities/career enhancements as the most important variables affecting higher education student choice.<sup>30</sup> In the UK, the results of a range of surveys have been broadly similar, with the ranking of most to least important roughly corresponding to the order in which the factors are listed above. In a 2006 survey of 651 students based in Scotland across two disciplines (accountancy and engineering) at six different universities, Senga Briggs asked respondents to rank a list of 22 factors in order of importance in the choice of where to study.<sup>31</sup> There was consistency in the top three factors listed: academic reputation, distance from home and location. Cost of package was one of the 22 factors, but it did not feature in the top ten. The fact that this study referred to the Scottish fee environment suggests that the results might be different in the US and the rest of the UK. Yet it is notable that two studies in England carried out in 1981 and in 2012, both of which used conjoint analysis, do not find drastically different results. The former, by Hooley and Lynch, identified six key factors influencing choice, namely: course suitability, university location, academic reputation, distance from home, type of university (modern/old) and advice from parents and teachers.<sup>32</sup> The latter, by Andrew Dunnett *et al.*, singled out course and university reputation as the most important factors, with fees being less important.<sup>33</sup>

Although these findings are fairly consistent, striking differences have been identified between groups of students. In Briggs' study, distance from home and entry requirements were ranked as more important by students who attended 'post-1992' institutions.<sup>34</sup> Location and nearness to home were also found to be more significant for disadvantaged students in a 1998 survey of 20,000 undergraduates carried out by H. Connor *et al.*<sup>35</sup> Along similar lines, in a longitudinal study of college students based in one of the poorer areas of the UK in the North West, the main reasons for choosing the final two selected universities were given as: location (33 per cent), course content (30 per cent), grade requirements (12 per cent), facilities (11 per cent), accommodation (7 per cent), city life (7 per cent).<sup>36</sup> These results support the conclusions of a range of academic studies that distance from home is a

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<sup>30</sup> Moogan, Y. J. and Baron, S. (2003) An Analysis of Student Characteristics Within the Student Decision Making Process. *Journal of Further and Higher Education*. 27, no. 3, 273. See also Kinzie, J. L. *et al.* (2004) *Fifty Years of College Choice: Social, Political and Institutional Influences on the Decision-making Process*. Indianapolis, IN: Lumina Foundation for Education.

<sup>31</sup> Briggs, S. (2006) An Exploratory Study of the Factors Influencing Undergraduate Student Choice: The Case of Higher Education in Scotland. *Studies in Higher Education*. 31, no. 6, 705–722.

<sup>32</sup> Hooley, G. J. and Lynch, J. E. (1981) Modelling the Student University Choice Process Through the Use of Conjoint Measurement Techniques. *European Research*. 9, no. 4, 158–170.

<sup>33</sup> Dunnett, A. *et al.* (2012) Choosing a University: a Conjoint Analysis of the Impact of Higher Fees on Students Applying for University in 2012. *Tertiary Education and Management*. 18, no. 3, 12.

<sup>34</sup> Briggs, S. (2006) An Exploratory Study of the Factors Influencing Undergraduate Student Choice. 713.

<sup>35</sup> Connor, H. *et al.* (1999) *Making the Right Choice: How Students Choose Universities and Colleges*. Brighton: Institute for Employment Studies. This study and the Briggs study come to different conclusions about academic reputation: Connor *et al.* suggest reputation is more important for disadvantaged students, whereas the Briggs study found that pre-1992 ranked academic reputation higher.

<sup>36</sup> Moogan, Y. J., Baron, S. and Harris, K. (1999) Decision-making Behaviour of Potential Higher Education Students. *Higher Education Quarterly*. 53, no. 3, 221.

more significant factor for students from deprived backgrounds.<sup>37</sup> The studies described above generally have much less to say about mature learners, but the evidence available suggests that proximity is more than usually significant for this group too,<sup>38</sup> along with flexible study options and costs.<sup>39</sup>

## What information do prospective students say they use?

A wide range of studies have also looked into the sources of information that prospective students consult when considering their higher education options. The most recent and detailed of these – a report by Oakleigh Consulting and Staffordshire University that was published by HEFCE in 2010 – included a survey of 1,942 prospective and current higher education students, which found that the most popular sources of information were: university prospectuses and websites (88.4 per cent used); UCAS directories and guides (81.1 per cent); family and friends (70.5 per cent); university visits (68.3 per cent); teachers (65.2 per cent); and careers advisors (39.2 per cent).<sup>40</sup> Interestingly, the information sources used most and the information sources that were considered ‘very useful’ were not the same: university visits were considered most useful (58.4 per cent), followed by university prospectuses and websites (54.3 per cent), UCAS directories and guides (48.3 per cent) and student opinion websites (37.1 per cent).

This ranking of the most useful sources of information is broadly supported by other (though not all)<sup>41</sup> studies of the subject. Connor *et al.*'s 1999 study suggested that students found university prospectuses to be most useful, followed by institutional visits and the UCAS handbook.<sup>42</sup> A second publication from the Briggs study, this time incorporating 1,400 undergraduates over two years, indicated that the information sources ranked by Scottish students as most important are university prospectuses, open days, and word of mouth.<sup>43</sup> The one major difference between these older studies and the newer HEFCE study is the importance of the Internet as a tool for finding out about higher education, both through official sources and through student forums and opinion websites. In fact, it is a testament to the rapidly increasing significance of the Internet to prospective university students that over the two years that the Briggs study was conducted the mean score out of ten given to university websites as a source of important information increased from 2.9 (in 2003/2004) to 5.5 (in 2004/2005).

There is also evidence to suggest that just as the main factors affecting student choice differ according to socio-economic group, so too does the type of information used and the amount of information consulted differ for students from more and less affluent backgrounds. One survey of 674 sixth-form students at schools and colleges conducted in the North West of England in 2003 found that pupils from independent schools consulted an average of over nine sources of information while considering their higher education options, compared with pupils from comprehensive schools who referred to an average of

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<sup>37</sup> Callender, C. and Jackson, J. (2008) Does the Fear of Debt Constrain Choice of University and Subject of Study?. *Studies in Higher Education*. 33, no. 4, 405–429; Mangan, J. *et al.* (2010) Fair Access, Achievement and Geography: Explaining the Association Between Social Class and Students' Choice of University. *Studies in Higher Education*. 35, no. 3, 335–350.

<sup>38</sup> See Million+ and NUS (2012) *Never Too Late To Learn: Mature Students in Higher Education*. 12. London: Million+.

<sup>39</sup> It is notable that the increase in fees introduced in 2012 has impacted more on mature learners. See UCAS Analysis and Research (2012) *How Have Applications for Full-time Undergraduate Higher Education in the UK Changed in 2012?* Cheltenham: UCAS.

<sup>40</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 41.

<sup>41</sup> See Johnston, T. C. (2010) Who and What Influences Choice of University? Student and University Perceptions. *American Journal of Business Education*. 3, no. 10, 18. In this survey of 475 university students in the US the most important source of information was found to be family, followed by friends.

<sup>42</sup> Connor *et al.* *Making the Right Choice*.

<sup>43</sup> Briggs and Wilson. *Which University?* 64.

seven sources.<sup>44</sup> Research in the US has also found that higher ability students utilise more complex ‘decision maps’ when choosing a college.<sup>45</sup>

## What does this research not tell us?

The sources cited above are invaluable as a tool for understanding the decision-making processes of prospective higher education students. Even so, the research outlined above has relatively little to say on some issues, and indeed has some weaknesses. One of the drawbacks of some of the studies cited above is a tendency to focus on what undergraduate and further education students say they find helpful and what they say influenced their decisions. These studies gather data that emerges from a process of conscious reflection by the prospective students participating in the research, and so they fail to offer insights into automatic or uncontrolled forms of mental processing whose influence may not be apprehended consciously. Such studies do not offer many clues about the information that prospective students unconsciously filter out or norms that they follow without realising.

Secondly, these studies do not give much background detail as to how influences operate and why certain sources are considered more useful than others. For example, why is it that physical visits to universities are found to be so useful by prospective students? Why are careers guidance services rated fairly low – usually lower than personal sources such as parents and friends – despite the fact that they are generally better informed about university options? These questions require a different style of research that looks into the reasons behind the rankings of factors and sources of information. In the remaining sections of this chapter, we highlight three issues in turn: the role of emotional attachment in university choice, the role of personal influences, and the effect of familiar messengers.

## Affective influences: a university that ‘feels right’

One of the most striking statistics to emerge from the 2010 HEFCE report is the large percentage of respondents who rated formal university visits as ‘very useful’ – a greater percentage than any other source of information covered by the research.<sup>46</sup> This suggests that physically visiting a university plays a particularly valuable and distinctive role. Part of the reason for this undoubtedly lies in the fact that formal open days allow prospective students and their parents to gather more detailed and tailored information. Yet existing qualitative studies of student choice as well as the research conducted for this study show that this is not the sole reason; it is also because personal contact with an institution often leads to the forming of emotional ties between the prospective student and the institution. As Douglas E. Allen demonstrates in a critique of rational choice models of consumer behaviour, regardless of the significant information processing and cognitive stages of decision-making that may or may not exist, final selection of a university often comes down to whether or not it *feels right*. Allen calls these ‘FLAG choices’ – that is, choices based upon the spontaneous, uncontrolled sense that an institution ‘Fits Like A Glove’. He offers the following quotation from a research participant to illustrate his argument:

“I remember when I first visited. It was the first time I had ever been at Winchester, and everyone was so nice. I knew after five minutes that this was the place for me. They actually took me into classes that were going on. I

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<sup>44</sup> Moogan and Baron. An Analysis of Student Characteristics Within the Student Decision Making Process. 275.

<sup>45</sup> Galotti, K. M. (1995) A Longitudinal Study of Real-life Decision Making: Choosing a College. *Applied Cognitive Psychology*. 9, no. 6, 459–484.

<sup>46</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 41; see also the similar findings in Briggs and Wilson. Which University? 64.

think it was classroom number one. We sat down and had coffee in the cafeteria. They were giving me blueberry muffins for free. Everyone was so nice. I was hooked from the minute I walked in the door.”<sup>47</sup>

Similar statements are found throughout Allen’s research, and were made also by many of the students’ union sabbatical officers we interviewed when they spoke about their own and their peers’ reasons for selecting a particular institution. Two sabbatical officers in particular saw their choice of university as ultimately influenced by the fact that they “just had a really strong feeling about” their institution, or that the campus “seemed to have a strong community feel”. Awareness of these effects was widespread among the staff at higher education institutions too. Staff in student recruitment, student services and, especially, marketing were often keen to stress that university choices “are emotional investments, as well as logical investments”.

Indeed, a majority of the institutions we visited – including pre- and post-1992 institutions in rural and metropolitan locations – had in some way incorporated this into their recruitment and outreach practices. They recognised that the open day was the place where, as one staff member put it, prospective candidates stop being simply “candidates on paper” and start to “place themselves” at the institution. As a consequence, concerted efforts had been made to *distil the feel good factors* into the open day experience. Indeed, a number of our interviewees actually recommended making choices based upon Allen’s FLAG model. They saw a feeling of belonging to a university as fundamental to students’ satisfaction, and ultimately to the utility acquired through participating in higher education. They argued against the idea that emotional attachment should be seen as ‘irrational’, and suggested that a feeling of belonging is central to success:

“When I do parent’s talks here, because we show parents around as well as prospective students, I will often say to them, ‘look, the one piece of advice I will give you is that in the vast majority of cases, your son or your daughter will go somewhere, and something will click, and maybe they won’t know precisely what it was, but the phrase will be, *it felt right*’. I think really if you want to succeed in higher education, you probably need to be in a place that feels right.”

Pro-Vice Chancellor, Russell Group university

## Personal influences

The precise impact of personal influences such as family and friends upon the decision-making processes of prospective students is one of the most difficult to ascertain. In the quantitative studies reviewed above, parents and peers are generally considered to be influential but less decisive than factors such as reputation, location and course suitability. For example, in the two surveys conducted for Briggs and Wilson’s study, ‘guidance from parents’ was rated as the twelfth and tenth most influential factor.<sup>48</sup> Parents and peers are also widely used as sources of information about higher education choices, but the information they provide is not always regarded as useful. The respondents to the survey carried out for HEFCE in 2010 suggested that family and friends are widely consulted by

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<sup>47</sup> Allen, D. E. (2005) Toward a Theory of Consumer Choice as Sociohistorically Shaped Practical Experience: The Fits-Like-a-Glove (FLAG) Framework. *Journal of Consumer Research*. 28, no. 4, 515.

<sup>48</sup> Briggs and Wilson. Which University? 63.

prospective students, but that they are regarded as less valuable than information from university prospectuses and websites.<sup>49</sup>

It would be wrong to downplay the role of family and peers because of this apparently low ranking, however. First of all, the role of parents in the choice-making processes of university students may be changing. Two themes emerged relating to parental input during the interviews we conducted at higher education institutions. The first was that the information requested by parents tends to differ from that requested by prospective students; while students focus more on the university experience, parents focus more upon costs and employability. The second was that parental involvement in the decision over which university to attend appears to be increasing. Staff at one institution observed that in recent years some parents have, for the first time, begun to attend the university's welcome events designed to introduce students to the university. Several interviewees suggested that the number of parents attending open days had also increased over the last decade – a suggestion that is also made in some academic writing.<sup>50</sup> The following excerpt from an interview was one of a number of very similar comments:

“If you looked at open days over the last ten years, whereas when my kids were going to university I wasn't even allowed on an open day, these days there is an average of 1.5 parents per student. So if we get, you know, 10,000 people coming here, 4,000 will be students and 6,000 will be parents, because it's the biggest financial decision that anyone will ever make, apart from a house.”

Head of Marketing, Russell Group university

It is worth stressing that these findings are only indications and they should be treated with some caution. In particular, the link between the increasing cost of higher education and increasing parental involvement has not been proven. Also, if there has been an increase in parental involvement it will not necessarily have been consistent across different groups. One large-scale survey published in 2003 suggested that parental involvement during the 12 months preceding entry into higher education is greatest among students at independent boys' schools, and lowest among students who attend smaller community colleges.<sup>51</sup> Yet even though the extent of this change is not fully known, some of the higher education institutions we visited had responded by increasing the amount of information and guidance work they do with parents.

Another thing that can be said about peer and parental influences is that they are not all direct; often they are more subtle. These personal connections are therefore likely to shape potential students preferences rather than directly influencing their specific choices. These influences are harder to identify, especially via surveys. Indeed, they may not always be fully appreciated even by prospective students. Yet there are longitudinal studies that give some insight into how they operate. Longitudinal data gathered as part of a study for the Joseph Rowntree Foundation authored by Keith Kintrea *et al.*, for example, has indicated that while coming from a less affluent background does not, in itself, influence aspirations place, family and school can tend to push children towards having high or low aspirations. As the authors put it “place, family and schools tend to coalesce around particular views of future options and reinforce each other”.<sup>52</sup>

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<sup>49</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 41.

<sup>50</sup> Moogan, Baron, and Harris. *Decision-making Behaviour of Potential Higher Education Students*. 212.

<sup>51</sup> Moogan and Baron. *An Analysis of Student Characteristics Within the Student Decision Making Process*.

<sup>52</sup> Kintrea, K., St Clair, R. and Houston, M. (2011) *The Influence of Parents, Places and Poverty on Educational Attitudes and Aspirations*. 69-70. London: The Joseph Rowntree Foundation.

Another longitudinal study of students attending sixth-form college by Rachel Brooks, which focused upon students described as ‘lower middle class’, indicated that parents and peers influence both perceptions and expectations, but in different ways. Parents, Brooks found, often play a role in providing their children with a sense of a ‘higher education hierarchy’ – that is, a sense of which institutions and which courses are better regarded. Although there was inconsistency across all participants, the students’ understandings of academic reputation were in some cases passed on by parents and parental connections. Peer groups, in contrast, tended to form ‘academic rankings’ and rank themselves relative to their friends. Students aimed higher or lower on their ‘higher education hierarchy’ based upon whether or not they saw themselves as ‘superior’ or ‘inferior’ to their friendship group.<sup>53</sup>

These studies are of interest because they complicate the results of surveys that try to rank the different factors that influence university choice. We saw earlier that academic reputation is usually rated as one of the most influential factors in university choice, and perhaps the most influential factor. Yet Brooks’ study suggests that prospective students’ conceptions of institutional reputation are, at least in part, shaped by parents. What Brooks’ study also indicates is that parents appear to play a role in making prospective students conscious of particular options. This could potentially lead to a form of ‘availability bias’ – that is, a tendency to give greater weight to easily accessible information. Subtle personal influences may therefore be more significant than they might initially seem.

### ‘Unfamiliar’ and ‘authoritative’ influences

As we saw in Chapter 3, Dolan *et al.* are keen to stress that people’s responses to information are often heavily influenced by the messenger that delivers the information. They single out two things in particular that can often have a sizeable impact upon the weight that is given to information. Firstly, they show that, in some situations at least, people are more likely to act upon information if it is delivered by a figure perceived as authoritative. Secondly, they highlight how demographic and behavioural similarities between the messenger and the recipient can improve the effectiveness of an intervention.

Both of these points, and especially the latter, have resonances with research into the decision-making processes of university students. There is evidence to suggest that, in line with the MINDSPACE framework, messengers who are perceived as unfamiliar are often disregarded in the decision-making processes of potential higher education students. For example, despite the fact that they are staffed by individuals who are trained to deal with decision-making, careers services are often ranked as among the least influential sources of information. In Senga Briggs and Alex Wilson’s study, the sources of information considered least useful were newspaper features, careers conventions, careers teachers and careers services.<sup>54</sup> School careers advisers are rated higher in H. Connor *et al.*’s study, coming in fourth behind prospectuses, campus visits and UCAS handbooks. Yet a second category of ‘careers centre staff’ is ranked second from last.<sup>55</sup> Recent longitudinal qualitative research by Paul Greenbank found a similarly negative view of careers guidance services, both at school and university.<sup>56</sup> Importantly, this third study also indicates that the negative response to careers services is related to their perceived unfamiliarity. Greenbank quotes one of his participants as saying “I know that a careers adviser has a lot more knowledge, but a careers adviser does not know me”. His research suggests that the view taken by students when

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<sup>53</sup> Brooks. *Young People’s Higher Education Choices*.

<sup>54</sup> Briggs and Wilson. *Which University?*

<sup>55</sup> Connor *et al.* *Making the Right Choice*.

<sup>56</sup> Greenbank, P. (2011) I’d Rather Talk to Someone ‘I Know’ Than Somebody ‘Who Knows’ - the Role of Networks in Undergraduate Career Decision-making. *Research in Post-Compulsory Education*. 16, no. 1. 31–45.



considering higher education and wider career options is: *'I'd rather talk to someone I know than somebody who knows'*.<sup>57</sup>

The experiences of interviewees in this study support Greenbank's findings. The staff we spoke to in careers services observed that they sometimes have difficulty reaching target audiences. One reason suggested for this was a supposedly widespread perception that careers services cater for people who lack academic ability. A second was that careers services are not considered to be familiar. As one interviewee commented:

"I think, generally, we probably don't have the same significance for people as the contacts they know, and that's because they don't know of us. So, if you asked a sample, which we do in our market research, 'Where do you get your careers advice from?', they get it from parents, they get it from the internet, they might get it from their tutors, and then we come about fourth, I think, in terms of where they get their advice from."

Careers Service Director, post-1992 university

Interestingly, in Greenbank's study lecturers were found not to suffer from the same negative perceptions by students, and were viewed as more reliable even as a source of careers advice. The research was carried out with students already at university, some of whom viewed lecturers as part of their 'network of intimacy'. For others, however, the more positive view appeared to stem from a view of lecturers as authoritative.

Further research is needed before it will be possible to say how widespread these perceptions of unfamiliarity and authority are among prospective students, and whether involving different messengers can have an effect on choices. Nevertheless, these findings do suggest some possibilities. In the field of medicine, one study has shown that health interventions delivered by health educators are more effective in changing behaviour compared with interventions delivered by either trained facilitators or teachers.<sup>58</sup> Another has shown that using older students as 'peer teachers' to deliver lessons in health education can significantly improve young people's healthy-living knowledge and behaviour.<sup>59</sup> Similar research projects in a higher education context may be able to suggest ways in which the effectiveness of guidance relating to higher education decision-making can be improved. There is, we suggest in the following chapter, a real need for such effective guidance for prospective higher education students, many of whom struggle to process the many sources of information available concerning university choice. Our interviews strongly indicated that higher education institutions are increasingly keen to use students in their recruitment activities, with many seeing them as more effective on account of their demographic and behavioural similarity with those applying to the university. One example of this is given in Case Study I below. It may be that similar messengers can be effectively utilised in an advice and guidance contexts too.

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<sup>57</sup> Ibid., 36. Emphases in the original text.

<sup>58</sup> Webb, T. L. and Sheeran, P. (2006) Does Changing Behavioural Intentions Engender Behaviour Change? A Meta-analysis of the Experimental Evidence. *Psychological Bulletin*. 132, no. 2, 249–268.

<sup>59</sup> Stock, S et al. (2007) Healthy Buddies: a Novel, Peer-led Health Promotion Program for the Prevention of Obesity and Eating Disorders in Children in Elementary School. *Pediatrics*. 120, no. 4, e1059–e1068.

## Case Study I: University of the Arts, London: The Commonplace Platform

The University of the Arts, London (UAL) conducted research to find out which sources of information prospective students use. The findings showed that among a diverse range of information sources, including careers advisers, websites, open days, friends, and parents who are quite involved in decision making, many prospective students use the website as the primary point of entry. Learning from this research, UAL has developed its website in a way that builds upon the unique characteristics of the institution and allows the marketing of its courses to address the characteristics of prospective students. Its online platform called *Commonplace* is for prospective and current students. The content is almost entirely created by students and is authentically ‘on their wavelength’, providing an aspirational model of design practice relevant to their future careers. The platform illustrates life choices and where university can lead for prospective students in a way that reflects UAL’s study environment.

Fundamentally, the platform is a way of providing a range of information about university life from the perspective of current students, particularly those who want to find out about what it is like living at the university. The platform covers a broad range of subjects, such as finance, travel, social life, study advice and advice on day-to-day living; it even includes suggestions about what to bring when starting university and how to set up a bank account. Staff at UAL are clearly positive about the development:

“I think *Commonplace* is a really interesting development, because it is purely student content. [...] So, for example, it will have places to eat if you’re a Camberwell student, but it’s this beautifully drawn map and pictures of places to eat by an illustration student. For us it’s really great because it’s authentic.”

Most recently UAL has added a ‘departures’ section, where it has commissioned graduates to write blogs about their life as recent graduates, and what they are doing immediately post graduation.

## Summary

A wide range of factors impact upon the choices of prospective higher education students, and they do so in different ways. In fact, a distinction can be made between those sources of influence that can be processed cognitively and reflectively (via what Kahneman calls ‘System 2’ of the mind) and those whose impact is more immediate (relating to ‘System 1’). The impact of the latter category of influences is not well understood, but in this short chapter we have presented indications of how they shape the ways in which information and guidance is used by prospective students.

## 4 Managing information

In this chapter we discuss the sources of information available to prospective students and explore how behavioural economics can help to explain how it is interpreted and processed.

### This chapter reveals that:

- prospective students tend to *under-explore* the available information sources and are not pro-active information seekers, preferring informal sources and more intuitive forms of decision-making;
- key aspects of the utility that a student realises through the student experience are difficult to quantify and measure, but prospective students would like more qualitative insights that encapsulate this;
- prospective students should avoid focusing on very subtle quantitative differences between choices, (eg NSS scores) which will have little or no effect on their actual experiences at the university of their choice;
- presenting prospective students with too many options or too much information could lead to a paradox of choice which, among other things, can cause decision paralysis;
- most prospective students do not find themselves overwhelmed by information but many still find the choice process complex and difficult.

When they make choices about whether to enter higher education and where and what to study, prospective students are faced with multiple sources of information to process and interpret. The main sources of this information continue to be institutions' websites, prospectuses and UCAS data. However, with the introduction of the Key Information Set (KIS) and the launch of the 'Which? University' guide in 2012,<sup>60</sup> the higher education sector is providing more information than ever before in response to prospective students' needs.

These developments in the way that information is made available follow a number of specific studies that explored the information needs of prospective students in detail. They include the report *Understanding the information needs of users of public information about higher education*, which was undertaken on behalf of HEFCE and completed in August 2010. We consider the insights offered by such studies within this chapter, as we reflect on the likely impact of the introduction of new information sources. We also explore the ways in which insights from behavioural economics can aid our understanding of prospective students' utilisation of information to inform their choices. In reaching conclusions about how prospective students interpret information, we acknowledge that they are not a homogenous group and that consequently there will be variation in the extent to which they are even aware of and/or seek to explore certain sources of information.

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<sup>60</sup> See Which? University Guide, available at <http://university.which.co.uk/>

## Information searching and seeking

The previous chapter outlined some of the findings from the 2010 HEFCE study into prospective students' information needs. Another intriguing finding from this study relates to the information students would like to access when choosing a course and a university. The three types of information identified by the survey respondents as most useful were standard of teaching, satisfaction with course and postgraduate employment rates. Interestingly, however, between a quarter and a half of respondents who rated particular items of information as 'very useful' also reported that they had not tried to find that information.<sup>61</sup> In most cases this information was available and over 80 per cent of respondents who looked for this information were able to find it.

This finding suggests that some prospective students may presume information is not available, but it also hints that many 'under-explore' the decision to enter higher education – a conclusion supported by some non-UK studies of higher education and career decision-making. A Greek study concluded that more than 40 per cent of students could not be classified as 'information-seekers',<sup>62</sup> while a US study observed that, given their importance, students undertake surprisingly minimal search efforts regarding educational options, often resorting to trial-and-error.<sup>63</sup> A similar observation has been made in a UK study of career decision-making, which found that, in general, prospective students tend to use informal sources of information and more intuitive forms of decision-making.<sup>64</sup> Each of these studies suggests that when prospective students make complex, high-stake decisions with long-term implications, such as decisions about entry into higher education, they struggle to determine which factors are most important, and to gather relevant information on these factors.<sup>65</sup> These findings support the central idea that there are limitations to the traditional economic model of fully informed prospective students effectively drawing on available evidence to make their choices.

Such findings were further corroborated in interviews for this study. Most notably, we identified near-unanimous agreement that many prospective students take a *chaotic, bits and pieces* approach to decision-making. This view prevailed among representatives of a range of different higher education institutions, with the following excerpt offering a good example of these perceptions:

“Whatever the KIS shows, and whatever the [Destination of Leavers from Higher Education survey] shows, and whatever the [National Student Survey] shows, I think students will continue to use word of mouth, influencers, who will lead them, often reinforcing their opinions, which is where there's a problem I think. ... The KIS and other such objective sources, they're not going to be as significant in student choices as many think.”

Pro-Vice Chancellor, Russell Group university

This view was supported by the experiences of careers advisers who regularly work with prospective students:

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<sup>61</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 38–39.

<sup>62</sup> Menon, M. E., Saiti, A. and Socratous, M. (2007) Rationality, Information Search and Choice in Higher Education: Evidence from Greece. *Higher Education*. 54, no. 5, 705–721.

<sup>63</sup> Norton Grubb, W. (2006) 'Like, What Do I Do Now?' the Dilemmas of Guidance Counseling. In *Defending the Community College Equity Agenda*, edited by T. Bailey and V. Smith Morest. 195–222. Baltimore, MD: Johns Hopkins University Press.

<sup>64</sup> Greenbank, P. (2010) *Initiating Change in Career Decision Making: An Action Research Approach*. Manchester: HECSU.

<sup>65</sup> See also Mangan, J. Hughes, A. and Slack, K (2010) Student Finance, Information and Decision Making. *Higher Education*. 60, no. 5, 459–472; Christie, H. and Munro, M. (2003) The Logic of Loans: Students' Perceptions of the Costs and Benefits of the Student Loan. *British Journal of Sociology of Education*. 24, no. 5, 621–636.

“I think the emphasis at the moment seems to be around using the KIS data as a basis for choice, and...that if you’ve got that data laid clearly on the UCAS website, it will help student choice. Actually, I’m not sure it will, because I’m not sure how much students look at that as a basis for choice.”

Head of Careers, pre-1992 university

Our research discovered some concerns, especially among careers and admissions professionals, over the extent to which potential students are well-informed. Many believe that certain groups of students are especially unaware of the various available sources of information, particularly those whose study pathway may not be as clear-cut and who are perhaps less likely to enter higher education. If this view is accurate, then the KIS data may well be used principally by those who would have attempted to access such information anyway, such as families with prior experience in higher education.

Our research also identified a degree of uncertainty regarding the likelihood of prospective students making use of the KIS data directly. Despite this, several guides aimed at prospective students, such as the Virgin Guide or the Sunday Times league table, draw on the KIS data as a source. This means that prospective students are more likely to be exposed to the data in some form, even if indirectly, and it is consequently more likely to affect their choices.

The aim of introducing the KIS was to increase prospective students’ ability to compare the quality of higher education courses, but to realise this aim more fully, there is a need to promote more direct use of this data. As such, the sector should consider whether this could be accompanied by changes in the way prospective students are guided towards available information and made aware of its importance and use. Reassuringly, institutions we consulted felt that prospective students’ awareness of available information may be improving. With the recent introduction of the KIS and other sources of information such as the ‘Which? University’ guide in 2012,<sup>66</sup> information use may continue to rise. It will be interesting to revisit this over the next two years to gain a clearer picture of the impact of these new developments.

## Appraising the unknown: information asymmetry

Currently the KIS includes current employment rates for course graduates, and data such as mean average salaries and student experience from the National Student Satisfaction Survey. Despite the range of information already available, our research found that institutions consistently believe students would welcome additional qualitative information focused on student life and the student experience. Many institutions cautioned against encouraging students to rely solely on quantified measures or statistics, which inevitably lack detail on the type of experience a particular institution may provide. We found a prevalent feeling that the subjectivity of the student experience cannot be reduced to a limited set of objective measures of course quality; social milieu and other less quantifiable factors play a key part in the learning experience. Consequently most institutions we consulted were interested in developing new sources of information for prospective students to complement the KIS, while better encapsulating the nature of the student experience at their specific institution, as exemplified by this quotation:

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<sup>66</sup> See Which? University Guide, available at <http://university.which.co.uk/>

“This, I think, is one of the issues for universities, and certainly one that we’re grappling with. There’s a lot of publicly available data, and most of it’s been there for a very long time. It does say something. It’s not always readily comprehensible, because it doesn’t necessarily deal with it in a qualitative way.”

University focus group

Although key stakeholders (eg institutions and sector bodies) provide information, it is difficult for students to know in advance what the experience of studying a particular subject at a particular institution at a particular time will be. So despite the reviews of the way in which information is presented, there remains information asymmetry with respect to students’ choices about whether to enter higher education and what to study once on a programme. For this reason, higher education has been described by some as a ‘post-experience’ good, the effects of which cannot be known until later, usually well after, the course has been completed. Key aspects of utility are also realised during the period of study, but the precise nature of this is more difficult to quantify and measure. The efforts of individual institutions are focused primarily on responding to this asymmetry and on plugging identified gaps.

## Coping with complexity: information overload

There is a rich body of existing research into student choice, some of which includes direct fieldwork with prospective students. On the whole it reveals that to date, whilst prospective students have not typically been confused or overloaded by the large volumes of information, many have still ‘*found the choice process complex and difficult*’.<sup>67</sup> From this research we can also conclude that prospective students require better information that is more focused and less one-sided, and which contains more about specific courses, institutions and aspects of student life. However, in seeking to address these information gaps and asymmetry, institutions should avoid providing so much that they begin to overwhelm prospective students.

Furthermore, behavioural economics suggests that our daily experiences can be so overwhelming we naturally use coping strategies that filter out much of the information we are presented with.<sup>68</sup> For example, with the rise of the Internet our ability to access information has effectively outstripped our ability to process it.<sup>69</sup> In the context of student choice, with the previously mentioned need to increase the information that is available for prospective students, it is important to consider how any additional information provided might ultimately be processed and comprehended by prospective students.

Behavioural economics describes how individuals who are either uninformed or overwhelmed with too much complicated information are likely to make systematically biased decisions that may not be in their best interests. So, if we follow behavioural economic thinking, we realise that where prospective students are confronted with too much information they will unconsciously filter out much of it as part of their own instinctive coping strategies. Prospective students may come to over-rely upon small pieces of information (such as fees) or on certain familiar cases (such as their peers’ experiences) or views expressed in forums (such as the Student Room). They may even defer decisions or disengage entirely if things become too complex. Notable behavioural economists, such as Barry Schwartz, have argued that presenting too many options can lead to a ‘paradox of

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<sup>67</sup> Connor et al. *Making the Right Choice*. 2.

<sup>68</sup> Dolan et al. *MINDSPACE*. 39–40.

<sup>69</sup> Schwartz. *The Paradox of Choice*.



choice' which, among other things, can cause 'decision paralysis'.<sup>70</sup> This is of particular concern given that studies in the US have observed that a complex and confusing menu and structure of choices can cause prospective community college students to lose the drive to continue their education.<sup>71</sup>

## Simplification, salience, heuristics and rules of thumb

In developing the KIS and other information sources, the sector has had to determine which information is 'key' and most salient to prospective students. Given that students are not a homogenous group, salience will vary between prospective students. What is most salient to a prospective student whose primary interest is in improving their employability might not be as pertinent to another student motivated by learning itself. This implies that a range of indicators is necessary.

Certain studies have identified the use of heuristics as a useful way to describe and interpret the strategies adopted by prospective students when making choices. For example, Jean Mangan, a Professor of Education Economics, provides the following observation about a study she conducted on the decision-making of prospective students:

“[The] only way we could interpret it was that there was a heuristic-, they were thinking, ‘Oh this is complicated, I’m going to look at this decision and then I’ll look into this decision.’ It was a sequential approach, so it was this idea of heuristics of simple rules of thumb that come out of this area that was what we used to try and interpret it.”<sup>72</sup>

We found evidence that institutions were familiar with students' simplification strategies for decision-making. There was a consensus that prospective students are likely to interpret certain pieces of information, such as the level of fees charged or entry grades, as a proxy for course quality. Further research is needed to understand more about how students and universities use such proxies.

## Guidance and the interpretation of information

If prospective students draw upon heuristics to simplify their choices, educators and careers guidance specialists have a notable role to play in providing more informed, *better* rules of thumb, or pathways through the available information. Our interviews show widespread agreement that information alone is not enough, and that there is already too much information for one individual to process. Therefore, it would be valuable to guide prospective students through the vast amount of available information by developing better informed heuristics, reducing both bias and the calculations required to analyse costs and benefits.

Accordingly, it is for guidance professionals to focus not only on signposting information, but also to help students make better decisions, more consistent with their own aims. One quotation that neatly summarises this prevalent view is as follows:

“Information is not enough. Students have got to be more directed into getting hold of it at the right time and processing it, and that doesn't necessarily mean that they get vast amounts of information, because that in

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<sup>70</sup> See: Ibid.

<sup>71</sup> Scott-Clayton. *The Shapeless River: Does a Lack of Structure Inhibit Students' Progress at Community Colleges?*

<sup>72</sup> This comment is in reference to Mangan, Hughes, and Slack. Student Finance, Information and Decision Making”

itself is probably too much for them....Actually knowing what to do with information is very difficult. ...At 17, 18 you don't want parents making your decisions, but on the other hand, you've made very few important decisions through your life. ...They haven't got the experience of doing it. ...They need some way through it."

Jean Mangan, Professor of Education Economics

Prospective students need guidance on their decisions and yet the careers advisers we consulted acknowledged that it remains important to improve guidance at school or pre-university level. A consequence of this is a potential lack of support for many students, who are likely to resort to rules of thumb and other simplifying strategies to help interpret the information and choices open to them.

Within our consultations we found many institutions are targeting schools and teachers, rather than prospective students directly, to respond to the need for better guidance. As a strategy this enables them to challenge myths and common 'rules of thumb', where these appear to be unhelpful in informing students' choices. This is not limited to face-to-face guidance services: one university we visited for this research had recently developed an interactive e-learning module on decision-making (see Case Study 2 below). A number of those we consulted suggested greater use could be made of online data tools, to challenge certain rules of thumb. For example, publishing profiles of current students could demystify the application process and better inform students about their choices.

### **Case study 2: University of Birmingham: interactive e-learning module giving advice and guidance on university decision-making**

As part of their engagement and recruitment strategy, the University of Birmingham has developed an interactive e-learning module designed to supplement the talks and presentations given to schools and sixth-form colleges throughout the country.

"[The e-learning module is] about choosing. It's designed to help sixth formers through the process of choosing a university and filling out their UCAS form. So when we go into schools, we will leave that with the teachers so that there is some sort of way of reinforcing the messages that we have been giving in our talk."

The module is interactive and contains six components, covering areas such as the initial decision to go to university, the process of choosing a course, writing a personal statement and the formal procedure for applying to higher education through UCAS. The aim of the module is both to reinforce the messages given in their outreach work, and to provide teachers with a resource that they can use into future.

## **Summary**

It is clear that the provision of information to potential students is important. However, the insights from behavioural economics suggest that it is more than information alone that influences choices. The way options are organised and information is presented is as significant an influence as the information itself, if not more so in some cases. Similarly, providing contextual information and guidance on how to interpret and evaluate information is critical to student decision-making.

## 5 Evaluating risk

Perceptions of, and attitudes to, risk have a key role in shaping decision-making. Understanding the importance of how prospective students perceive the benefits and losses associated with higher education is therefore important to support better decision making.

### This chapter reveals that:

- understanding and estimation of the risks associated with entering higher education is influenced by a complex mix of social pressures, personal identity, norms and expectations and social and cultural contexts;
- there have always been risks in entering higher education but when combined with rising costs and the prospect of debt the question of *loss aversion* has become more pertinent;
- potential students tend to be loss averse, so they perceive the need to relocate, break social ties or work commitments, as risks which can lead them to self impose a reduced choice of courses or universities, or at the most extreme they revert to the default position of non-participation;
- a way to assuage the financial risks is to offer financial assistance, but many prospective students are unaware of the various forms of support that are on offer and if these seem too complex then they will not apply.

In the simplest terms, when we assess the risks of an activity or seek to justify a decision, we assess the costs and benefits involved. When comparing a number of options, such as choosing a university to apply to, prospective students must compare the relative costs and benefits of each option. Of course, the accuracy of the information used to inform the decision is fundamental to the strength of the outcome. Building on conventional cost-benefit analysis, the psychological insights of behavioural economics can support a more realistic understanding of how people typically assess risk which can thereby facilitate better decision-making.

In relation to prospective students' perceptions of the risks of entering higher education, this chapter identifies several emerging themes relating to both financial and other types of risk. Firstly we discuss how the changing higher education fee structures, along with less secure employment prospects, may be changing the ways students view higher education, moving towards a more consumer-driven market, but not necessarily one with competition on lowest price alone. We then consider the important finding from behavioural economics that people generally seek to avoid losses, over and above seeking gains, and the implications this has for higher education student choice. As well as financial components of risk, we consider other important risks prospective students might consider, including relocation from place and family, and disruption of employment. Finally, this chapter concludes with a consideration of financial assistance and its potential to assuage students' aversion to the financial risks of higher education.

## Finance and fees

Financial assessments of costs and benefits of higher education have long been a consideration for prospective students. Following the report of the Anderson Committee in 1960 it was recommended that every student on a degree course for the first time would be eligible for grants to cover tuition fees and maintenance.<sup>73</sup> Inflation eroded the real terms value of maintenance grants during the 1970s and 1980s, meaning that students often needed to supplement the grant with their own contributions.<sup>74</sup> Tuition fees themselves remained covered until the 1990s when a fixed contribution to the cost of tuition was introduced. This cost increased incrementally through the 2000s and the current fee cap of £9000 was introduced at the start of the 2012/13 academic year. In this sense, the financial cost of higher education has been a longstanding issue since the 1970s – it is just the level of that cost that continues to rise.

The new fees regime has engendered a greater emphasis on the concept that studying for a degree represents a financial investment for prospective students. Institutions we interviewed noted a deliberate semantic shift towards emphasising the importance of investing in one's future through higher education. Previous research highlighted that in the UK graduates can expect, on average, to earn up to £400,000<sup>75</sup> more over the course of their career as a result of their higher education study, which represents the private benefit to the individual student over their career. There are also considerable public benefits of higher level study, although these have come to be subtly re-defined, as the value of higher education is increasingly seen through a lens of economic imperative.<sup>76</sup>

Our findings suggest that universities already sense that students are acting more like consumers in making decisions about higher education, with greater prominence given to pecuniary factors, employment and career prospects. Compared with those applying to university five years ago, the current cohort face a much more uncertain employment market, threatening their realisation of the graduate earnings premium, as well as a changed fees regime.

“I think the fees have made students have to address that question more clearly, ‘Is it worth me going? Why am I going? What am I hoping to get out of it?’ So that’s just what you do, everyone else is doing it.”

Recruitment Manager, Russell Group university

In the admission cycle for autumn 2012 entry, rather than rushing towards universities with lower fees, applications remained high for students wishing to attend higher fee universities. This suggests that higher education can be interpreted as a ‘Veblen good’, for which preference increases as price increases. One common explanation among the stakeholders interviewed was that the fee differential between £6000 and £9000 was not significant once the decision to pursue higher education had been made.<sup>77</sup> Also, under the current student finance system, loan repayments are not made until a student is earning more than £20,000

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<sup>73</sup> Anderson Committee (1960) *Grants to Students*. London: HMSO.

<sup>74</sup> James, E. (1978) Product Mix and Cost Disaggregation: a Reinterpretation of the Economics of Higher Education. *The Journal of Human Resources*. 13, no. 2, 157.

<sup>75</sup> Greenaway, D. and Haynes, M. (2000) *Funding Universities for National and International Competitiveness*. Nottingham: University of Nottingham School of Economics; Greenaway, D. and Haynes, M. (2003) Funding Higher Education in the UK: The Role of Fees and Loans. *The Economic Journal*. 113, no. 485, F150–F166.

<sup>76</sup> Nickolai, D. H., Hoffman, S. G. and Trautner, M. N. (2012) Can a Knowledge Sanctuary Also Be an Economic Engine? The Marketization of Higher Education as Institutional Boundary Work. *Sociology Compass* 6, no. 3, 205–218.

<sup>77</sup> See also UCAS Analysis and Research. *How Have Applications for Full-time Undergraduate Higher Education in the UK Changed in 2012?*

and are written off after 30 years, arguably offsetting the financial risks of being unable to pay back the loan. Despite this, rising maintenance costs were regarded as an issue, and a number of institutions were found to offer a 'lower risk solution' that was regarded as more appealing to the local student market.

The UK higher education sector is still in the early stages of the new fee regime, and it will be some years before we start to see how this affects the long-term decisions of those considering higher education. Ultimately, while there is a series of risks associated with debt, finance and fees in going to university that can affect application decisions, many of the benefits and losses are not easily calculable and remain dynamic and uncertain. Consequently the consensus among those interviewed was that it is too early to determine the impact of the fee increase, and early evidence suggests that the initial response is mixed.

## Loss aversion and higher education

One of the key points of the area of behavioural economics known as prospect theory is that people tend to be loss averse – that is, people tend to prefer avoiding losses to acquiring equivalent gains. In turn, this loss aversion can lead to a broader sense of risk aversion. There have always been risks of higher education associated with the opportunity/time cost, the effort involved in study, the risk of choosing the wrong course or institution and the risk of failure or of stress. Depending on the prospective students and their choices, higher education may also entail temporary dislocation from one's current home, friends and family, ending or reducing current employment or finding new childcare solutions. When combined with rising costs and the blurring boundaries as to whether higher education is a public or private good, the question of loss aversion has become ever more pertinent. A disproportionate focus on potential risks and losses in prospective students can overshadow the consideration of benefits of higher education and may lead to poorer decisions – a theme picked up in the interviews with both the experts and institutions.

Understanding and (over-)estimation of risks is affected by a complex nexus of social factors, including personal identity, life history and ethnic, cultural and religious background.<sup>78</sup> A diverse range of social and cultural influences define the norms and expectations of prospective students, and the socio-cultural circumstances of prospective students often define their reference points and decisions. The decision to go to university can be life-changing, and committing three years or more of one's life can make prospective students understandably apprehensive:

“The potential students were worried, obviously, about the cost, but also the duration. Three years, if you ask a sixteen year old, is a long chunk of their lives, and many, especially the widening participation pupils, will ask, ‘Will I finish it? Will I drop out? What happens?’ Retention is a big issue.”

Expert stakeholder

A number of interviewees distinguished between those students for whom the transition to higher education is linear and straightforward, effectively a non-decision, and those prospective students from under-represented groups for whom the decision is more complex and the perceived risk greater. This split is reflected also in research from the US,

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<sup>78</sup> Bloomer, M. and Hodkinson, P. (1997) *Moving into FE: The Voice of the Learner*. London: Further Education Development Agency. Available at: <http://www.eric.ed.gov/ERICWebPortal/detail?accno=ED414494>.

which has demonstrated that low income students and parents of colour tend to overestimate the costs of attending higher education, underestimate the benefits, and make larger prediction errors than middle class parents.<sup>79</sup>

In addition to the social outcomes associated with going to university (that is, life experience, friendship, social status and a familiarity with different cultures), there are potential social risks associated with choosing a university. Previous research has found that a preference to remain close to home is generally decided before students make the decision about which university to attend. Factors that can lead to residential attachment include a value placed on family life, maintaining social and work commitments (such as sporting commitments), part-time jobs and so on.<sup>80</sup> Breaking these social ties and commitments is often perceived as a risk, and as a result the default position reverts to non-participation or looking at only local universities. This choice to remain close to home may fit with the best interests of some students, yet there is a danger that the perceived risk of breaking social ties may substantially reduce the range of both institutions and courses open to prospective students and result in different, potentially poorer, decisions.

The consensus from existing research is that financial costs and the prospect of debt are those most commonly cited by prospective students, above concerns about HE experience, such as workload, leaving home or the time taken to complete a course.<sup>81</sup> During the interviews there was a recognition that many students have come to view higher education debt as a normal part of university life and that those most averse to debt – generally, lower income groups – are the least likely to apply to study at university. That said, departures from the 'traditional' model of university experience to enable students to save money and/or earn while studying have become increasingly important for tackling aversion to both financial and social risk, especially among those from less advantaged/non-traditional backgrounds.<sup>82</sup>

Being better informed when choosing universities is clearly in the interest of prospective students, but having the right students is as important for universities. Although increased competition in UK higher education makes marketing to students ever more important,<sup>83</sup> academic standards could be put at risk if university admission and student recruitment were reduced to questions of attracting the maximum number of students, potentially leading to a 'race to the bottom' within the sector. In our interviews with universities, the importance of making sure that the right student is on the right course was a recurring theme. If a student finds themselves on the wrong course, while the first concern is with the student, the institution also faces financial implications for a place forgone. Moreover, dropout rates can affect the reputation of a given course or university, which is particularly damaging when student satisfaction is becoming an increasingly important factor in student decision making.

Universities must be aware that prospective students may perceive higher education in terms of its risks, whether financial or otherwise. For example, strategies to either assuage

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<sup>79</sup> Grodsky, E. and Jones, M. T. (2007) Real and Imagined Barriers to College Entry: Perceptions of Cost. *Social Science Research*. 36, no. 2, 745–766; Mundel, D. S. (2008) What Do We Know About the Impact of Grants to College Students? In *Effectiveness of Student Aid Policies: What the Research Tells Us*, edited by S. Baum, M. McPherson and P. Steele. 9-38. New York: The College Board.

<sup>80</sup> Alford, S. M. (1998) The Impact of Inner-city Values on Student Social Adjustment in Commuter Colleges. *NASPA Journal*. 35, no. 3, 225–233.

<sup>81</sup> Bates, P. et al (2009) *Who Is Heading for HE? Young People's Perceptions of and Decisions About, Higher Education*. London: Institute for Employment Studies/Department of Business Innovation and Skills; Callender, C. and Jackson, J. (2004) *Fear of Debt and Higher Education Participation*. London: London South Bank University.

<sup>82</sup> Connor, H. (2001) Deciding for or Against Participation in Higher Education: The Views of Young People from Lower Social Class Backgrounds. *Higher Education Quarterly*. 55, no. 2, 204–224.

<sup>83</sup> Maringe. University and Course Choice.



unjustified perceptions of risk, or mitigate genuine risks, may prove valuable for encouraging applications, particularly from lower income groups. Since the utility, or prospects, of pursuing higher education are neither certain or immediate, and given the increasing costs and uncertain economy, evaluating the potential value of losses and gains has become more difficult. As such, it is more important than ever that prospective students have the information and support to make well-informed decisions about institutional choice. As one higher education sector body representative articulated:

“One of the principles behind what we’re doing is, sort of, myth busting really. You know, the myths that exist surround fees as a barrier to going to university. So, even the simple fact of, you don’t have to pay them upfront, the point at which they get written off, the point at which you’ll repay them etc. So we absolutely have a role to, you know, bust those myths.”

Sector body representative

## Financial assistance and student decision making

One way to allay student fears of financial risks is to increase awareness of financial assistance available to certain groups of students. As noted above, over the past decade maintenance grants have reduced since the introduction of the £3000 fee in 2004 and the Higher Education Act stated that universities charging the full tuition fee must offer bursaries.<sup>84</sup> Universities had to provide a statutory minimum bursary of £300 to low-income students, and many institutions provided additional discretionary financial support to a wider range of students.<sup>85</sup> Given the increase in tuition fees, it is unsurprising that bursaries and alternative sources of financial support have become a sustained focus of discussion, although there is a lack of evidence to enable us to determine whether such mechanisms improve access or student mobility, or simply act as recruitment incentives. Over the past few months it has become increasingly apparent that the array of bursaries on offer has grown as universities strive to meet their Access Agreements, with such support also serving to differentiate and enhance their position in the higher education market.<sup>86</sup>

The result, however, is that while there may be more forms of financial assistance available, it is not necessarily having the intended impact. A number of the interviewees highlighted that many prospective applicants were unaware of the various bursaries, partial-fee waivers and scholarships, while the complexity of applying for funding can put off entitled students from applying for financial assistance.<sup>87</sup> Moreover, the overwhelming experience of those working in university admissions and recruitment is that students appear to prioritise choosing an institution first and then look into the finances as a separate secondary issue. This view, which is supported by a number of studies,<sup>88</sup> is illustrated well in the following excerpt:

“I’m sceptical about that actually impacting the individual’s decision-making. I think it’s a nice-to-have, for those who are already considering coming here,

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<sup>84</sup> Callender, C. (2010) Bursaries and Institutional Aid in Higher Education in England: Do They Safeguard and Promote Fair Access? *Oxford Review of Education*. 36, no. 1, 45–62.

<sup>85</sup> Harrison, N., Baxter, A. and Sue Hatt, S. (2007) From Opportunity to OFFA: Discretionary Bursaries and Their Impact. *Journal of Access Policy and Practice*. 5, no. 1, 3–21.

<sup>86</sup> McCaig, C. (2010) Access Agreements, Widening Participation and Market Positionality: Enabling Student Choice? *The Marketisation of Higher Education and the Student as Consumer*. 115–128, edited by M. Molesworth, R. Scullion, and E. Nixon. London: Routledge.

<sup>87</sup> Bates et al. *Who Is Heading for HE? Young People’s Perceptions of and Decisions About, Higher Education*.

<sup>88</sup> Davies et al. *Knowing Where to Study? Fees, Bursaries and Fair Access*; Harrison and Hatt. *Expensive and Failing?*

who have already got something in their back pocket that makes them think, 'Oh yes, I might be able to get that particular financial prize'."

Director of Student Services, post-1992 University

Given the situation in the UK, it is notable that in the US the complexity of applications for financial aid has been found in recent research to deter eligible students. This research has shown how seemingly minor hurdles, such as tracking down information on family income, can prohibit students from applying for aid, especially if attending college is not the 'default' option.<sup>89</sup> In this context, experiments incorporating behavioural economics have been used to show how simplification and assistance – although interestingly, not additional information alone – can increase the application rates for financial assistance.<sup>90</sup> A desire for a simplified system was found among a number of our interviewees; in one institution we visited, steps were being taken to simplify the bursary system, with student data being used to automatically identify eligible student and do away with an application system entirely.

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<sup>89</sup> Dynarski and Scott-Clayton. *The Cost of Complexity in Federal Student Aid*.

<sup>90</sup> Bettinger et al. *The Role of Simplification and Information in College Decisions*.

## 6 Improving access

Social mobility has been identified as a principal goal of government policy and higher education is seen as integral to its achievement. This chapter examines the relevance of student decision-making in the context of widening access to higher education and considers how insights from behavioural economics may be relevant in this context.

### This chapter reveals that:

- decisions about higher education are often shaped long before the point at which prospective students begin to apply to institutions, which highlights the need to intervene early to raise aspirations;
- prospective students from lower socio-economic groups are more likely to choose universities based on their proximity to home, are less likely to search for external information on universities, and are more likely to rely upon information from friends and peers;
- for prospective students from low-participation backgrounds, non-participation in higher education is the status quo, which can represent a powerful norm and may consequently result in them defaulting to this position even if participating could maximise their long-term utility;
- people's preferences are inconsistent over time. Some students may not pro-actively decide against applying to university, but if their commitment to doing so is inconsistent, they may just 'go with the flow' and opt for the default of non-participation.

Students from non-traditional and disadvantaged backgrounds have lower than average participation rates in higher education. Although prior educational attainment explains part of this difference, the choices students make and the environment and information available to them are also important influences. Thus, a better understanding of student choice from the perspective of disadvantaged prospective students can bring useful insights to efforts to widen participation and improve access. In this chapter we explore how perceptions relating to participation in higher education are formed amongst disadvantaged and non-traditional prospective students, before considering how theories and concepts from behavioural economics, including cultural norms, status quo bias and framing effects, can contribute to efforts to widen access.

### Social mobility and decision-making

As a part of the UK Coalition Government's social mobility strategy, *Opening Doors, Breaking Barriers*, higher education was identified as one of the main mechanisms for achieving social mobility.<sup>91</sup> The recent report by the Independent Reviewer on Social Mobility and Child Poverty highlighted that universities are promoting social mobility as well as recognising that schools are highly influential in the decision-making process of prospective students.<sup>92</sup> Progress has certainly been made in widening access over the last decade. In particular,

<sup>91</sup>HM Government (2010) *Opening Doors, Breaking Barriers: A Strategy for Social Mobility*. London: The Cabinet Office.

<sup>92</sup> Milburn, A. (2012) *University Challenge: How Higher Education Can Advance Social Mobility*. London: The Cabinet Office.

between 2004 and 2012 the application rates of young people living in the most disadvantaged 20 per cent of UK areas (as measured by rates of higher education entry) increased proportionally by over 60 per cent. Yet despite this success, those living in the lowest income areas had application rates of 23 per cent in 2012, compared with 48 per cent for their peers living in the highest income areas.<sup>93</sup> By far the greatest determinant of participation in higher education in the UK remains prior academic attainment.<sup>94</sup> Yet even when educational attainment is controlled for, non-traditional and disadvantaged students have lower than average participation rates.<sup>95</sup>

While boosting the educational achievements of disadvantaged students prior to entering higher education remains an underlying priority, institutions' own outreach activities are an important mechanism by which to promote social mobility and encourage disadvantaged pupils to apply to university.<sup>96</sup> In the interviews conducted with university representatives during the course of this research, there was clear evidence of significant activity being undertaken to promote access to higher education. There are numerous outreach programmes underway and a wide array of opportunities for school pupils from non-traditional and/or disadvantaged backgrounds to engage with higher education institutions. In addition, institutions that charge fees greater than £6000 per annum are obliged to use a proportion of their fee income to widen access and/or improve student retention and success.

We saw earlier that the decision-making processes of prospective students from non-traditional and/or disadvantaged backgrounds tend to be different from those from more affluent backgrounds. Prospective students from lower socio-economic groups are more likely to choose universities based on their proximity to home,<sup>97</sup> are less likely to search for external information on universities,<sup>98</sup> and more likely to rely upon information from friends and peers. We propose that behavioural economic concepts can also be used to better understand the reasoning behind the choice *not* to participate in higher education. We also suggest that some behavioural economic ideas, if applied carefully, can inform interventions aimed at improving participation among disadvantaged students.

## Norms and non-participation

In Chapter 4 we saw how prospective students' choices are socially and culturally embedded, with parents, peers and wider social networks playing a role in influencing decisions. This offers a starting point for understanding differential participation in higher education. When a prospective student has grown-up with norms emphasising the value of higher education and with support towards entry, there is a greater chance of that individual entering higher education. By contrast, some studies have identified an 'anti-education' culture that results in a lack of aspiration within some disadvantaged families and schools.<sup>99</sup> The move into higher education can also represent a profound upheaval for students from non-traditional backgrounds. As a report for DEMOS argues, "The cultural shift involved in

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<sup>93</sup> UCAS Analysis and Research. *How Have Applications for Full-time Undergraduate Higher Education in the UK Changed in 2012?* 6.

<sup>94</sup> Haroon Chowdry et al. (2008) *Widening Participation in Higher Education: Analysis Using Linked Administrative Data*. London: Institute for Fiscal Studies.

<sup>95</sup> See Ibid., 16; National Equality Panel (2010) *An Anatomy of Economic Inequality in the UK*. 362. London: Government Equalities Office.

<sup>96</sup> HM Government. *Opening Doors, Breaking Barriers: A Strategy for Social Mobility*. 49; Harris Martin (2010) *What More Can Be Done to Widen Access to Highly Selective Universities?* London: OFFA.

<sup>97</sup> Callender, C. and Jackson, J. (2008) Does the Fear of Debt Constrain Choice of University and Subject of Study? *Studies in Higher Education*. 33, no. 4, 405–429.

<sup>98</sup> Menon, M. E., Saiti, A. and Socratous, M. (2007) Rationality, Information Search and Choice in Higher Education: Evidence from Greece. *Higher Education: The International Journal of Higher Education and Educational Planning*. 54, no. 5, 705–721; Moogan and Baron. *An Analysis of Student Characteristics Within the Student Decision Making Process*.

<sup>99</sup> Forsyth, A. and Furlong, A. (2003) *Losing Out? Socioeconomic Disadvantage and Experience in Further and Higher Education*. 52-53. Bristol: The Policy Press.

someone going to university when few people in their family, peer group or school have done so cannot be underestimated.”<sup>100</sup> This upheaval is likely to be closely related to the connection that has been identified between socioeconomic background and the likelihood of failing to continue in higher education.<sup>101</sup>

## Timing of interventions

One way of changing individual norms and defaults is to intervene early in prospective students’ thinking about their relationship with higher education. A number of universities described the importance of engaging with schools from an early age (ie Years 6 and 7), to promote awareness of universities and ensure that higher education becomes part of their educational norms, even if it is not a common choice among their socio-economic or ethnic group. In agreement with Connor *et al.*’s study of student choice, the participants in our research argued that decisions about further study are often shaped long before the point at which prospective students begin to apply to institutions.<sup>102</sup> In addition to raising awareness about higher education, a number of institutions hosted campus visits, often targeting under-achieving local schools, the demographic of which was not represented at university. Such outreach and engagement activities also provide an important function in raising the aspirations of students from an earlier stage in their education, and in promoting social mobility. The importance of this approach was described by one expert stakeholder we interviewed:

“People are making those embryonic decisions about whether or not they aspire to go to higher education, perhaps in primary school or in secondary school before they’ve taken their GCSEs, or even in the decision whether or not to take Level 3 qualifications and which ones they should take.”

Expert stakeholder

More conventionally, universities sought to engage with students at the point at which they were making decisions about higher education through school visits and summer schools, although the universities interviewed referred to a more prominent role in preparation workshops for higher education. These activities were recognised as an important way of challenging norms around higher education, as well as providing advice and support to parents and teachers. While such activities are open to all prospective students regardless of background, the impact is often greatest among non-traditional and/or disadvantaged groups who have previously had no contact with, or experience of, universities.

## Defaults, commitments and participation

In recent years, educational researchers influenced by behavioural economic theory have suggested that, in addition to social norms, *status quo bias* can be a useful tool for understanding non-participation in higher education. Status quo bias is an often unconscious preference to remain in the ‘default’ option, even when choosing another option will increase a person’s long-term utility.<sup>103</sup> As we saw in Chapter 3, defaults are closely related to habitual behaviours and cultural forms. The more habitual a behavioural pattern is, the less likely you are to weigh up the costs and benefits of alternatives in a rational way. It has

<sup>100</sup> Evans, S. and Whitehead, R. (2011) *London’s Calling: Young Londoners, Social Mobility and Access to Higher Education*. London: Centre for London.

<sup>101</sup> Vossensteyn. Perceptions of Student Price-responsiveness.

<sup>102</sup> Connor *et al*, *Making the Right Choice*.

<sup>103</sup> Kahneman, D., Knetsch, J. and Thaler, R. (1991) Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *The Journal of Economic Perspectives*. 5, no. 1, 193–206.

been argued that for potential higher education students from non-traditional backgrounds, non-participation in higher education is taken to be the 'default'.<sup>104</sup>

Typically, in discussions about widening participation in UK higher education, the use of terms such as 'defaults' and 'status quo bias' in relation to student decision-making is relatively rare. Aside from the behavioural economists with whom we consulted, it was unusual for our interviewees to consider widening access in these terms. Indeed, only one representative of a higher education institution interviewed mentioned that participation in higher education could represent a 'default' option. Nevertheless, the concept can be applied in a range of ways to the subject of student choice.

In the context of the US there are examples where strategies have been developed that seek to directly modify the default options of prospective students. One example set out in Thaler and Sunstein's book *Nudge* concerns a school in Texas (San Marcos High) that attempted to raise participation in higher education by making it mandatory for its students to make at least one college application. Adopting this strategy proved to have a positive impact on participation, as within one year (between 2004 and 2005) the percentage of students who enrolled in college went up by 11 per cent.<sup>105</sup> However, we would argue that there are clear dangers in this approach, namely, that individuals could be nudged into making choices not consistent with their own aims. Some, for very good reason, may not consider higher education to be the right choice for them. Indeed, one point of consensus across the institutional representatives we interviewed was that there was no benefit to be had, either to universities or to students, from attracting people who are not right for a particular degree. As one interviewee observed:

"I have to be perfectly honest with you, if we've worked so hard to get a student here into that week one welcome, the last thing you want is for them to drop out in the first few months. You don't get the income for that student – that is the obvious point – but it's like all that hard work has been lost."

Director of Marketing, post-1992 university

Nevertheless, there are other, less prescriptive ways of incorporating status quo bias into widening participation practices. Behavioural economics proposes that preference for a default option can often be a strategy for responding to complexity. In this case, the person limits his or her choice set by simply 'going with the flow'. The decision to opt for the status quo can also be the result of the fact that people's preferences are inconsistent across time and context, which can often result in individuals procrastinating and delaying decisions that are likely to be in their long-term interests. One recent study of low-income students in the US observed that students often do not actively decide against applying to college; many fail to enrol because of a series of missed deadlines or some other minor hurdle.<sup>106</sup> Their commitment is not consistent and so they fall into the 'default' of non-participation. As we observed in Chapter 5, one way that this may be remedied is via advice and guidance, especially guidance that seeks to simplify decision-making. However, the MINDSPACE framework proposes that *commitments* can also be a powerful tool to help prospective students achieve long-term aims. While it has been observed in behavioural economic research that people will often procrastinate and delay taking long-term decisions, it has also

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<sup>104</sup> See Jabbar. *The Behavioral Economics of Education*.

<sup>105</sup> Thaler and Sunstein. *Nudge*. 205–206.

<sup>106</sup> Avery, C. and Kane, T. J. (2004) Student Perceptions of College Opportunities: The Boston COACH Program. 355-394 edited by C. M. Hoxby. Vol. *College Choices: The Economics of Where to Go, When to Go, and How to Pay For It*. Chicago, IL: University of Chicago Press, 2004.



been found that people seek to be consistent with their promises – including promises to themselves. Experimental research by Daniel Ariely and Klaus Wertenbroch has shown that students are often willing to impose deadlines on themselves to achieve longer-term goals, even costly ones.<sup>107</sup> This suggests that commitment devices could be productively used to aid prospective higher education students in achieving their long-term goals. As Dolan *et al.* observe, even simple commitment devices such as encouraging individuals to write down their long-term goals can have an effect on outcomes.<sup>108</sup>

## Reference points and framing effects

One final concept from behavioural economics that has been linked with efforts to widen access in higher education is the notion of *framing*. The way in which outcomes are presented, or framed, can have a significant effect upon the choices that people make.<sup>109</sup> More specifically, choices can be markedly different depending on whether information is framed in terms of gain or loss. For example, in the context of student choice the statistic '68 per cent of our students are in graduate jobs 12 months after graduating' is likely to be more encouraging than '32 per cent of our students are not in graduate jobs 12 months after graduating', despite the fact that the information is the same.

Although research into this area is only in its first stages, it has been suggested that *reframing* the choice to enter higher education could potentially have an impact on participation among non-traditional students. The starting point for this suggestion is the idea, touched upon in the previous chapter, that prospective students view the decision to enter higher education differently depending upon their reference points. Two students who face the same costs and benefits of attending higher education may not make the same decision about whether to enter because they may have received different kinds of information, with the result being that they seek to avert different losses. For example, referring to his research into behavioural economics and participation in higher education, Johan J. Vossensteyn proposed in interview that perceptions of cost may differ between students from lower and higher socio-economic groups:

“My hypothesis is that for students that come from lower socio-economic backgrounds, going to university may be regarded as a cost, in terms of, ‘I lose three to five years of work income’. In upper-class families, if you don’t go to college, that is a cost because you actually damage the prestige of your family, because you didn’t go to a highly prestigious institution.”<sup>110</sup>

Vossensteyn suggests that because costs/losses are more powerful as a motivating factor than equivalent gains, those from lower socio-economic groups are deterred from entering higher education, while those from higher socio-economic groups are spurred on. A very similar argument has been made by Page *et al.*, who found that framing tasks in terms of losses and gains has a significant effect on the persistence of students who are required to perform sequential tasks.<sup>111</sup> They draw on these findings to maintain that students whose parents have not received a university education are likely to view that as their reference point, with the result that higher education exists in their ‘gain domain’. By contrast, higher education is placed in the ‘loss domain’ for students whose parents are college graduates.

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<sup>107</sup> Ariely and Wertenbroch. Procrastination, Deadlines, and Performance.

<sup>108</sup> Dolan *et al.* *MINDSPACE*. 26.

<sup>109</sup> Kahneman, D. and Tversky, A. (1984) Choices, Values, and Frames. *American Psychologist*. 39, no. 4, 341–350.

<sup>110</sup> See also Vossensteyn. Perceptions of Student Price-responsiveness.

<sup>111</sup> Page, Levy Garboua, and Montmarquette. Aspiration Levels and Educational Choices.

The question that follows from this is whether it would be feasible to reframe the choice to enter higher education so costs and benefits appear differently. Vossensteyn suggests that such a change may be effective, but acknowledges that sufficient research has not yet been conducted to test this. Our interviews with stakeholders and the representatives of higher education institutions found that some work is already underway with groups of students to try and present educational choices in different ways. One representative from a major higher education sector body, for instance, proposed (based upon her work with mature learners) that it was important to emphasise the non-financial rewards from higher education:

“We worked out that when people said they might want a better job in the future, what they meant was, they weren’t packing shelves. They didn’t mean, ‘We’re going to get this fantastic graduate premium, or £100,000’ [...]. The word that we came up with was ‘rewarding’ – that people might want to have a more rewarding job, because that triggered this idea of a job that was more interesting, you know, and you would do something that you might really like to do, when you haven’t had the opportunity to do it earlier, perhaps.”

The idea of reframing educational choices has to be treated with caution. This is not only because of the need for more systematic research into the effects of different framing options on choices, but also because of the need to avoid nudging people into making the wrong choices for them. Yet these efforts could potentially act as a starting point for more detailed analysis of how the framing of higher education choices can affect participation. If applied carefully, it may be possible to develop guidance tools that frame the costs and gains of higher education differently in order to give prospective higher education students a better understanding of the possibilities open to them.

## Summary

Although there is a significant need for more research into the ways in which behavioural economics can inform efforts to increase access to higher education, we have highlighted a range of applications and pointed to some ways in which behavioural insights might be employed to aid students in achieving their long-term goals. As we have seen, there is a danger in employing behavioural approaches of nudging prospective students in directions that will not ultimately benefit them. However, we acknowledge a need to encourage certain types of prospective students to challenge accepted norms and to focus on their long-term goals. Evidently not enough is currently known about the impact of framing upon student decision-making, and further experimental research with prospective students is needed to investigate how framing affects university choice. We do suggest, though, that institutions and careers guidance service consider making use of commitment devices to help prospective higher education students identify and stay committed to their long-term career and educational aims. This might involve working with students to identify their long-term aims at an early stage and encouraging them to write down or commit to the necessary steps to achieve those aims.

## 7 Conclusions and recommendations

This final chapter summarises the central findings from the study and points to how the principles of behavioural economics can help us better understand prospective students' decision-making. It also offers some key recommendations for the sector's consideration and suggests directions for future research.

This report aims to introduce recent ideas from the developing field of behavioural economics and show how these can inform understanding of the decision-making processes of prospective higher education students. The central insight of behavioural economics is that people's decision-making is not based on a stable set of preferences and rarely involves systematic assessment of all options, as economic theory has conventionally assumed. Rather, our preferences are generally inconsistent over time and we regularly resort to using heuristics to simplify decisions. In this report, we have highlighted how the decision-making processes of prospective students are complex, involving short- and long-term preferences. We have emphasised how preferences are shaped, often subtly, by a wide range of factors. We have also drawn attention to evidence that suggests prospective students do not always seek out available information and can even disengage from decision-making if it appears too complex.

In the preceding chapters we identified the main influences on student choice and provided an overview of recent research into the ways in which individuals and institutions shape the perceptions of prospective students. We then examined how prospective students process information about courses and assess the risks of attending university, especially in relation to the costs and benefits of higher education. Finally, we looked into how the decision-making processes of prospective students relate to questions of access to higher education, and suggested ways in which behavioural economics can be used in efforts to widen participation in universities. In this concluding chapter we distil the key findings from these previous chapters and draw out a series of recommendations for institutions and policy-makers to improve student choice. We also offer avenues of enquiry for future research that build on the exploratory findings of this research.

### Decision-making is more complex than we often realise

This study shows that prospective students do not make decisions about higher education in a straightforward way and there are diverse influences on their decision-making. Reputation, location, distance to home and course suitability are all recognised as key factors in deciding which institution to attend. However, alongside these a variety of other processes shape prospective students' decisions, including the important influences of peers and family in shaping expectations and norms. Behavioural economics tells us that since much information is processed unconsciously, asking students what factors influenced their decisions, or what information they would find useful in their decision-making is unlikely to be sufficient; students may be influenced by factors or using simplification strategies that they are not consciously aware of. Overall, the message is that understanding more about the typical ways students actually process information and make choices can shape better responses from universities, schools and careers advisers, as well as from prospective students themselves.

## The decision-making process differs between prospective students

There is strong evidence to suggest that socioeconomic background is central to explaining students' choices related to enrolment, continuation and drop-out, and that students from families where there is no history of attending university may be more averse to the prospect of incurring higher education debt. Furthermore, evidence suggests that prospective students from lower socio-economic groups consult fewer sources of information and prefer to study closer to home. Although there has been less research into the decision-making processes of mature students, the data available suggests that cost and location are more significant for this group. Different reactions and attitudes among different student groups and individuals potentially require information available to support decision making to be presented in different ways. A single set of data, presented in a standardised way, may not be enough to satisfy the information needs of different student groups. Moreover, as a broad social network, parents and peers are often involved in prospective students' decision-making processes, so there is a need to engage not just with students themselves but with those who shape their understandings and expectations.

### Information, although vital, is not enough

As noted above, one of the central tenets of behavioural economic theory is that people do not engage with information in a systematic way and often use simplifying strategies. In some cases, a large and complex menu of options can result in a 'paradox of choice' where people opt for the 'default' option or disengage from the decision-making process entirely. A majority of the participants in this study saw the decision-making of prospective higher education students as a 'chaotic', 'bits and pieces' process. Very few believed that prospective students balance the costs and benefits of higher education participation in a methodical way. Other studies have also highlighted how prospective students can find the choice process complex and difficult,<sup>112</sup> and often do not engage with the information that is available.<sup>113</sup> The study also suggested a preference among many students for qualitative, personalised sources of information, especially focusing on student life and the student experience.

One way of addressing these issues is through making information more easily accessible in a single source. Our respondents agreed that the development of the KIS, and the wider UK Government drive to publish independent information about courses and university performance, represents a constructive step forward. However, simply providing more information – especially quantitative data – is unlikely to be sufficient to facilitate effective student choices. A number of respondents felt that this information would require introduction and translation, either by individuals with knowledge and/or experience of higher education, or through guidance on how to interpret and navigate the data. Such qualitative guidance could encourage students to avoid too narrow a focus on small quantitative differences between courses and institutions. Behavioural economics highlights a tendency for people to give these differences too much weight when faced with complex choices, which may result in decisions that are not in a person's long-term interest.

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<sup>112</sup> Connor et al. *Making the Right Choice*. 2.

<sup>113</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 38–39; Grubb. 'Like, What Do I Do Now?'

## Fees and incentives are not well understood

The difficulties that people have processing information are particularly relevant to the subject of fees and financial support. Respondents were divided over the effect of the recent changes to fee levels in England on student choice. Most agreed it is too early to say how higher fees will influence student choice in the long term, though a number reported increased interest in costs and employability, especially from the parents of prospective students. However, our interviewees felt that the new fee arrangements are not well understood by prospective students and many have an exaggerated perception of the financial risks of participation.

Finance is thus an area where increased guidance is likely to be particularly important. This study highlighted how the utility gained through pursuing higher education is neither certain nor immediate, and given the increasing costs and uncertain economy, evaluating the potential value of losses and gains has become more difficult. Strategies to either assuage unjustified perceptions of risk, or mitigate genuine risks, may therefore prove valuable for encouraging participation, particularly among lower income groups.

There was also near consensus in this study that the current system of financial assistance for students is too complex and has little influence on decision-making. A range of other studies have shown that the decision to apply for financial aid is frequently taken *after* the decision to apply to university, meaning that aid has little opportunity to impact on the decision-making of prospective students.<sup>114</sup> Prospective students, it has been proposed, respond to the complex application process by adopting a sequential approach to decision-making.<sup>115</sup> Furthermore, research from the US has shown that a complex financial aid application system can deter eligible applicants. US-based studies also suggest that simplified information and assistance increase application rates, while increased information alone has little effect.<sup>116</sup>

## Behavioural economic ideas have a range of relevant applications for student choice, though these need to be tested further

Over the course of this study some possibilities for practical applications for behavioural economics came to light. For example, in line with behavioural economic theory, evidence emerged to suggest that prospective students respond differently to different messengers, and that familiar messengers are regarded as resulting in more positive responses. This leads to the suggestion that employing 'peer messengers', targeted at particular types of students, may be an effective strategy for guidance and outreach.

In a second example, some evidence emerged indicating that prospective students' preferences are inconsistent across time and context, and that they can delay decisions that are in their long-term interests. For example, studies in the US have suggested that disadvantaged prospective students often struggle to identify and stay committed to long-term goals. Based on this, this study proposed that the use of commitment devices could potentially be a valuable tool in helping students identify and stay committed to their long-term career and educational aims.

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<sup>114</sup> Davies *et al.* *Knowing Where to Study? Fees, Bursaries and Fair Access*; Harrison and Hatt. *Expensive and Failing?*

<sup>115</sup> Mangan, Hughes, and Slack. *Student Finance, Information and Decision Making*.

<sup>116</sup> Bettinger *et al.* *The Role of Simplification and Information in College Decisions*.

Thirdly, the way options are framed, for example presenting choices as a loss or a gain, can significantly affect people’s decisions. This study drew attention to how access to higher education among disadvantaged and non-traditional students might be improved by reframing the choice to go to university so that costs and benefits are understood differently.

In all three cases more needs to be done to test these proposals. We did, however, find cases of institutions using some of these ideas already. Student involvement in outreach is used in many institutions. For example, Nottingham Trent University has had success with a peer-mentoring approach to student writing support.<sup>117</sup> Institutions and sector bodies are also seeking to encourage participation by reframing the decision to enter higher education in terms of rewards and benefits. These examples remain anecdotal and more systematic experimental work is needed to test their impact.

This study has been a useful first step in exploring how we might positively inform and understand student decision making, and represents one of the first attempts to apply behavioural economics to choices about participation in education. The project was primarily a review of existing evidence, supplemented with qualitative depth interviews with those working with prospective students and in higher education. This method can raise awareness of important points to consider in relation to student decisions, but it cannot uncover in detail the unconscious strategies and processing that prospective students adopt; to achieve this would also require additional primary experimental research, which is discussed in the recommendations below.

## Recommendations

Below are recommendations for higher education institutions and policymakers, as well as suggestions for further research in this area.

### Recommendations for higher education institutions

In providing information to prospective students, institutions should ensure they avoid making the task of choosing a university increasingly onerous. The vast amount of information currently available risks becoming self-defeating, insofar as it increases the analysis burden on prospective students (ie creates a paradox of choice). Also, while objective sources of information are useful for understanding features of courses, it is important that the subjective experiences of university life are not ignored. With this in mind we offer some recommendations for those institutions looking to facilitate better choices by prospective students to ensure better outcomes, both for students and institutions.

Recommendation	Explanation
<b>I: Identify opportunities to engage parents and partners of prospective students.</b>	Parental and peer influences are often subtle and not fully recognised even by those considering an application to enter higher education. One study of decision-making found, for example, that parents often play a role in providing their children with a sense of a ‘hierarchy’ of reputable higher

<sup>117</sup> Hardy, C. and Foster, E. (2008) Other People’s Writing: Peer Mentoring for Academic Writing. Presented at the NTU Annual Learning and Teaching Conference, Nottingham Trent University.



	<p>education institutions. Peers can also play a key role in shaping aspirations and perceptions of ability.<sup>118</sup> Institutions should reconsider how they engage with parents and partners of prospective students so they are able to relate to, and influence, choices in more constructive ways.</p>
<p><b>2: Continue to develop information sources, with an emphasis on qualitative descriptions of the student experience.</b></p>	<p>Behavioural economics warns of evaluating information in ‘joint evaluation mode’ which leads us to focus on very subtle quantitative differences between choices (for example small differences between NSS scores or graduate salaries such as those provided by the KIS), which will have little or no effect on the student’s actual experience at the university of their choice. Institutions should support prospective students by providing additional qualitative information focused specifically upon student life and the student experience.</p>
<p><b>3: Provide guidance to accompany information.</b></p>	<p>Sources of quantitative data about higher education can be more effective if accompanied by additional guidance on its interpretation and navigation. One example of such guidance is the interactive e-learning module on university decision-making as developed by the University of Birmingham, which could be extended to other institutions.</p>
<p><b>4: Adopt multi-mode communication strategies to engage prospective students.</b></p>	<p>Behavioural research suggests familiar and authoritative sources of information are given greater weight. In the context of student choice, there is also some evidence to suggest that unfamiliar sources have less influence on a student’s choice, despite those providing the advice being highly knowledgeable. Consequently, institutions need to ensure a multi-mode communication strategy involving messengers who share demographic characteristics with the prospective students and different media styles that are salient to their prospective student demographic. Student engagement in delivering outreach programmes to schools is one way of achieving this.</p>
<p><b>5: Simplify application processes to ensure financial assistance is more influential in decision-making.</b></p>	<p>Seemingly minor hurdles, such as tracking down information on family income, can deter students from applying for financial assistance. Providing additional information alone about financial assistance does not increase application rates, but simplification and assistance does. The process of applying for financial assistance should be as straightforward as possible, such as automatically identifying eligible students and removing application systems entirely. This could include reducing the information applicants must gather, as implemented at Cardiff Metropolitan University, for example.</p>
<p><b>6: Strive to provide maximum support to aid the decision-making of prospective students</b></p>	<p>Those working with prospective students should be conscious that certain groups, such as those from disadvantaged backgrounds, may be more ‘loss averse’ than others. To help challenge the perceived risks regarding entry</p>

<sup>118</sup> Brooks. Young People’s Higher Education Choices.

<p><b>from low socio-economic groups.</b></p>	<p>into higher education we encourage institutions to proactively support these students to weigh up potential losses and gains. Along with raising awareness through outreach and widening participation initiatives, these students should be supported to access and consult more (and more varied) sources of information, advice and guidance.</p>
<p><b>7: Encourage prospective students to visit higher education institutions.</b></p>	<p>Physical visits to university campuses are regularly rated as among the most useful activities in the decision-making process.<sup>119</sup> Our research suggests that visits provide an opportunity not just to gather more detailed information, but also for students to ‘place themselves’ at an institution. Institutions should, therefore, positively encourage and support students to visit, to gain a better sense of the reality of university life and to help them make a choice that is right for them to aid the success of their study. At the same time, however, they should caution prospective students against giving undue weight to isolated experiences and affective events that may not reflect the experience of studying at an institution.</p>
<p><b>8: In guidance for prospective students take steps to raise awareness of key influences and common biases in decision-making.</b></p>	<p>Behavioural economics draws attention to a wide range of common tendencies within decision-making. Examples include: a tendency to base decisions on a limited number of stand-out facts and experiences; a tendency to base decisions on immediate emotional reactions; and a tendency to give greater weight to short-term rather than long-term preferences and gains. In their outreach and guidance activities, institutions should seek to build greater awareness of these common influences in order to help prospective students assess their options carefully and ultimately reach the decision that best fits their long-term goals. This could include encouraging prospective students to reflect on their reasons for rejecting or selecting specific institutions, and to analyse their aims, giving consideration to long-term and short-term goals and their importance.</p>

## Recommendations for higher education policymakers

Throughout this research we have emphasised how important it is to avoid ‘nudging’ students to enter higher education, particularly where it is not consistent with their aims. We reiterate this point again here, as increased competition within higher education in the UK has made marketing more acutely important, since funding now follows the student as a consumer.<sup>120</sup> We also emphasise that incentives on institutions should be designed to avoid admissions and student recruitment being reduced to attracting the maximum number of students, regardless of their suitability for an institution. Our research findings suggest the following recommendations for larger scale change at a policy level.

<sup>119</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 41; Briggs and Wilson. *Which University?*. 64.

<sup>120</sup>Maringe. *University and Course Choice*.

Recommendation	Explanation
<p><b>1: Enhance careers guidance for school pupils and sixth-form students.</b></p>	<p>One of the main recommendations of the Browne review was that individualised careers advice should be required in all schools.<sup>121</sup> One of the key findings in this study is that prospective university students often require more than just good information to make the choices that best suit their long-term aims. We therefore – in agreement with the Browne review – propose that the role of careers guidance services should be enhanced. Consideration should also be given to the timing of careers guidance, since research suggests young people’s perspectives on higher education are shaped long before they actually apply.</p>
<p><b>2: In addition to providing easily accessible information, develop guidance on the decision-making process.</b></p>	<p>Recent higher education policy has been focused on ensuring that comparable information on higher education courses is made easily available to prospective students. While this work is certainly valuable, we propose that additional independent guidance should be made available to prospective students focusing on the process of decision-making. Such guidance could include tools that assist prospective students to think through the most important factors in their choice of institution and narrow down their options. This guidance could be delivered via online sources and through careers advisers.</p>
<p><b>3: Simplify financial assistance schemes where possible.</b></p>	<p>There is widespread lack of awareness of bursaries, fee waivers and scholarships among many prospective university applicants. Therefore, we suggest the system of financial assistance should be made as simple and uniform as possible at the national policy level. This follows the recommendations of a range of academic studies in this area and CFE’s interim evaluation of the National Scholarship Programme.<sup>122</sup></p>

## Recommendations for further research

As mentioned at the start of this report, very little research into UK higher education has been conducted from a behavioural economics perspective. There remains a need for more studies to test behavioural theories in the context of UK higher education. Two types of research would be of particular value. First, experimental research with groups of prospective students to test their responses to, among other things, different messengers, contrasting framings of higher education options and the use of commitment devices. Second, research conducted within schools and higher education institutions to test the impact of interventions with prospective students. We suggest some areas for research that institutions and academic researchers may wish to consider, though this list is certainly not exhaustive.

<sup>121</sup> Browne et al. *Securing a Sustainable Future for Higher Education*. 28.

<sup>122</sup> Harrison and Hatt. *Expensive and Failing?*; Davies et al. *Knowing Where to Study? Fees, Bursaries and Fair Access*; Diamond et al, *Formative Evaluation of the National Scholarship Programme*.

Recommendation	Explanation
<p><b>1: Fully assess the information sources and messengers that prospective students draw upon.</b></p>	<p>Prospective students appear to give more weight to information derived from a familiar source than from an unfamiliar professional. To understand this properly requires an investigation of the effects of using alternative messengers in university guidance. While a range of seemingly positive examples emerged in our research of higher education institutions utilising ‘peer messengers’ to advise students on university choice, we were not able to determine their effectiveness.</p>
<p><b>2: Develop further insights into how loss averse certain prospective students are.</b></p>	<p>Existing research suggests that responses to incentives are shaped by predictable mental shortcuts, which can be explained by ‘prospect theory’. This theory suggests that prospective students perceive outcomes as gains and losses rather than as final states of wealth, and that they tend to be highly loss averse. For example, in assessing the value of fees and support in relation to their current situation and that of their peers, prospective students who view not gaining a qualification as a loss will be more likely to continue in education than those who see getting a qualification as a gain.<sup>123</sup> This theory needs to be tested and further experimental research is needed to aid our ability to use this theory to explain student decision-making.</p>
<p><b>3: Determine how students make decisions about modules.</b></p>	<p>This research uncovered evidence of how prospective students make decisions, but limited evidence about module choices once on programme. However, the behavioural economics approach has potential here too. In fact, a number of the institutions we consulted were taking steps to increase the guidance available to inform module choices. One prime example of this is via a personal tutor scheme, which provides students with one-to-one input to inform decision making. Further research is needed to establish how students experience module choice and what the best ways might be to overcome any difficulties they face.</p>
<p><b>4: Enhance understanding of the relative influence of heuristics and biases on students’ decision-making.</b></p>	<p>Behavioural economic theory suggests that prospective students are more likely to be drawn to information that they can easily understand, that seems novel and that they can relate to from their own personal experiences. This is closely linked with the idea that we are over-reliant on what is more ‘available’ in the mind. For example, prospective students may overestimate the risks of taking a particular course if they are told by a friend that a high proportion of students have failed it. This is despite the fact that the reality of cases may differ according to official statistics (availability bias) and if they have not previously done well academically then the influence of this</p>

<sup>123</sup> Page, Levy, Garboua, and Montmarquette. Aspiration Levels and Educational Choices.

information is likely to be stronger (salience). There is little hard evidence about the influence of salience in student choice and, consequently, more work is required to fully understand the implications for the sector.

Furthermore, because of the strong influence of the affective system on our decision-making, we should not rely on standard survey methods to see what influences student choice because the responses we obtain via recall are unlikely to be a good representation of actual influences. Therefore a Discrete Choice Experiment (DCE) would be a more appropriate way to explore this further. A DCE is a technique for eliciting individual preferences by exploring how people value selected attributes of a programme, product or service (in this case a course and/or institution), by asking them to state their choice over different hypothetical alternatives selected via an experimental design. In this context a DCE would primarily focus upon course choice, and would enable the relative value that potential students attach to various course attributes, as well as the trade-offs that they are willing to make between these different attributes to be estimated. The DCE method relies on design of scenarios that describe different choices students might make. It would, therefore, require that the course could be described by a set of characteristics, and that students' valuation of the course depended upon these characteristics. More specifically, the description of the course would need to comprise a set of attributes (such as employment outcomes, location, proxies to describe the student experience, student satisfaction, etc) and ratings for each of these key attributes.

## Appendix I Glossary of key terms

Below are some terms commonly used in the field of behavioural economics with brief definitions and explanations.

**Anchoring:** Describes the tendency to relate judgements to a familiar piece of information, or anchor point. Anchors tend to be used when people make decisions without much prior knowledge.

**Availability bias:** Refers to the way in which mental evaluations are distorted by the varying extent to which prior events can be recalled. Because recollection tends to focus on the most memorable events that are most easily recalled (known as the availability heuristic), a judgement based on these recollections is likely to be biased in their favour by ignoring other pertinent instances.

**Bounded rationality:** A theory authored by Herbert Simon (1957) which challenges the assumptions of traditional economics. Traditional economics assumes that people make rational decisions which maximise their utility and act as purely rational agents with unlimited capacity for calculation. Bounded rationality recognises that human capacity is limited and that satisficing may be a rational behaviour in this context.

**Confirmation bias:** Deviations from objective judgement that stem from the tendency to accept information that supports individual beliefs and to reject information that challenges them.

**Framing:** The way in which alternative ways of presenting information can affect the extent to which it is interpreted positively or negatively. For example, the difference between describing a glass as half full, half empty or 50/50.

**Heuristic:** In psychology, problem-solving techniques that are developed through experience. Although heuristics can work fairly well, they also have a tendency to lead to cognitive biases. In behavioural economics, Daniel Kahneman and Amos Tversky identified a range of heuristics employed in decision-making.

**Hyperbolic discounting:** The tendency to prefer immediate gratification to delayed rewards. This phenomenon of preferring 'smaller sooner' to 'larger later' is thus a *time-inconsistent* or *time-asymmetrical* form of discounting.

**Loss-aversion:** Describes a tendency to evaluate gains and losses asymmetrically. People tend to be more averse to losses than they are attracted to gains of equal size.

**Mental accounting:** Refers to the tendency to allocate money to 'mental budgets'. Whereas conventionally economics has seen all wealth as fungible, behavioural economics stresses that people tend to think of funds as existing in different 'accounts'.

**Paradox of choice:** The situation in which the (large) number of choices involved in a decision affects the ability to make that decision, and the utility gained from the decision. This effect contrasts with the belief that greater choice is always better.

**Prospect theory:** A foundational theory within behavioural economics, comprising a critique of *expected utility theory* in traditional economics. It has been used to explain the variety of decisions that people make in uncertain situations. Two of prospect theory's key insights are that people tend to be **loss averse** and that they perceive outcomes as gains and losses rather than as final states of wealth, thus the starting position (or **reference point**) is of fundamental importance.



**Reference point:** One of the central themes in behavioural economics is the idea that human judgements are not absolute, but made relative to a reference point (usually a person's current state of wealth).

**Representativeness bias:** Refers to a tendency to make judgements by comparing how representative something is to an image or stereotype we have.

**Status quo bias:** The deviation from rational decision-making that results from an irrational preference to remain in the current state of affairs rather than to opt to change the situation.

**Utility:** A term central to economic theory that refers to the 'satisfaction' that a consumer obtains from consuming a good. Traditional economics assumes that decisions are based on (rational) choices that maximise utility.

## Appendix 2 Student choice in the MINDSPACE framework

This table outlines some of the central insights from behavioural economics, organised according to the MINDSPACE classification framework by Dolan *et al.*<sup>124</sup> Behavioural economic concepts are outlined in the left-hand column, and are elucidated in the context of student choice in the central column. The right-hand column provides evidence for the influence of these concepts on student choice from existing literature and from the research activity conducted as part of the present report by CFE. It also highlights areas for future research in cases where little or no evidence exists, or where it is inconclusive.

Behavioural influences	Application to student choice	Current evidence
<b>Messenger: We are heavily influenced by <i>who</i> communicates information</b>		
The way we interpret information, our readiness to accept it and our resulting actions depend on who the <b>messenger</b> is. The degree of influence is governed not only by the status of the messenger but also by the relationship of the messenger to the individual – for example, we may disregard beneficial advice from someone we do not like.	Many different people have an influence on student choices at various stages in the decision-making process: friends, family (especially parents and older siblings), teachers/tutors, government, and celebrities. In addition, traditional (print) and social (web-based) media may be perceived as having particular characteristics as messengers, and may alter the way in which information is understood and acted upon. Thus any source of information has the potential to affect the understanding of the information that it delivers.	
We are more ready to act on information if we perceive the messenger as <b>authoritative</b> . <sup>125</sup>	Prospective students may be more responsive to information from those viewed as experts. They may also be more responsive to information that comes from official sources.	There is some evidence to suggest that students weight the advice of lecturers highly because of their perceived expertise, though this needs to be tested further. <sup>126</sup>
Information can be more effective if there are <b>demographic and behavioural similarities</b> between the messenger and recipient.	Peers can be effective messengers for hard-to-reach young people. <i>Availability bias</i> suggests that we will attribute more weight to the isolated experiences of our friends and family than to	Nottingham Trent University had success with a peer-mentoring approach to student writing support, which had high take-up and retention amongst students. Peer mentors were generally

<sup>124</sup> Dolan *et al.* MINDSPACE.

<sup>125</sup> Webb and Sheeran. Does Changing Behavioral Intentions Engender Behavior Change?

<sup>126</sup> Greenbank. I'd Rather Talk to Someone 'I Know' Than Somebody 'Who Knows'.

Behavioural influences	Application to student choice	Current evidence
	official statistics.	<p>postgraduate students, who embody both authority/experience and accessibility/familiarity.<sup>127</sup></p> <p>One study has indicated that when looking for careers guidance young people generally prefer to talk to someone ‘they know’ than someone ‘who knows’.<sup>128</sup></p>
Attitudes to messengers vary by socio-economic group (SEG), with evidence that those from lower SEGs are more sensitive to characteristics of the messenger. <sup>129</sup>	The outreach efforts of higher and further education institutions may be made more effective if they are aware of prospective students’ responses to different messengers.	There may be lessons from the Aimhigher approach where university students have acted as mentors to secondary school pupils to support them in continuing to higher education. In London 80 per cent of the young people involved had no parental experience of higher education and 73 per cent were from the most deprived areas of London. The mentoring approach, combined with summer schools on university finance and careers advice, had a positive influence on intention to apply to higher education. <sup>130</sup>
<b>Incentives: Our responses to incentives are shaped by predictable mental shortcuts</b>		
Standard economic models suggest that we can (and do) weigh up the costs and benefits of decisions rationally. Behavioural economics recognises that we do not always weigh options in a rational manner and that our responses to <b>incentives</b> are heavily influenced by psychological processes. A key area of behavioural economics	In student choice we are dealing with decision-making under uncertainty. The individual’s wage on graduation will depend on the state of the labour market when they graduate, which cannot be clearly known. Also, for most students the utility derived from higher education is acquired through the process of learning new things, yet	

<sup>127</sup> Hardy and Foster. *Other People’s Writing: Peer Mentoring for Academic Writing*.

<sup>128</sup> Greenbank. *I’d Rather Talk to Someone ‘I Know’ Than Somebody ‘Who Knows’*.

<sup>129</sup> Marta R. Durantini *et al.* (2006) Conceptualizing the Influence of Social Agents of Behavior Change: a Meta-analysis of the Effectiveness of HIV-prevention Interventionists for Different Groups. *Psychological Bulletin*, 132, no. 2, 212–248.

<sup>130</sup> Cited in Evans and Whitehead, *London’s Calling: Young Londoners, Social Mobility and Access to Higher Education*.

Behavioural influences	Application to student choice	Current evidence
<p>here is <b>prospect theory</b>. Prospect theory is the behavioural economics alternative to <b>expected utility theory</b> which is key to traditional economics. It has been used to explain the variety of decisions that people make in uncertain situations.</p>	<p>the details and the impact of the learning process can never be known in advance.</p>	
<p>Two elements of prospect theory are of particular importance. The first is that we are better at making relative rather than absolute judgements; we tend to view outcomes as gains and losses rather than as final states of wealth. Hence the <b>reference point</b> (starting position) is of fundamental importance. The reference point is usually the current state of wealth.</p>	<p>Reference points are important for valuing costs and benefits and assessing the influence of peers. Potential students will assess the value of fees and support in relation to their current situation and that of their families. This can explain why there are different levels of price responsiveness for different SEG that cannot be explained solely by income and substitution effects. While the financial outlook of students over a lifetime may be similar, they will respond to price in according to their families' current income situation.</p>	<p>Vossensteyn shows that students from lower SEGs are more likely to overestimate present costs and benefits and underestimate their future income relative to other students.<sup>131</sup></p> <p>US evidence shows that low income students and parents of colour overestimate the costs of attending college, underestimate the benefits of college, and make larger prediction errors than middle class parents.<sup>132</sup></p>
<p>The second is that we are affected by <b>loss aversion</b> – that is, we are significantly more averse to losses than we are attracted to gains of the same size. We are risk-averse in gains and risk-seeking in losses.</p>	<p>Given the recent changes to the higher education finance system and the large sums of money now involved, subjective perceptions of the losses and gains associated with higher education are increasingly pertinent. Prospective students tend to calculate the financial gains and losses in personal terms rather than by purely rational assessment. Debt aversion is irrational in a standard economic sense because, on average, the private benefits of higher education are high and the risk of repayment difficulties is low.</p>	<p>According to a study by Callender and Jackson, the costs of higher education loom larger than the benefits for many prospective students from lower income families.<sup>133</sup> This holds even when accounting for differences in educational institution, gender, ethnicity and age. Debt aversion not as significant for those from the higher income groups.</p> <p>McPherson and Shapiro show that students are less likely to attend high-cost institutions even if</p>

<sup>131</sup> Vossensteyn. Perceptions of Student Price-responsiveness.

<sup>132</sup> Grodsky and Jones . Real and Imagined Barriers to College Entry; Mundel. What Do We Know About the Impact of Grants to College Students?

<sup>133</sup> Callender and Jackson. *Fear of Debt and Higher Education Participation*.

Behavioural influences	Application to student choice	Current evidence
	<p>However, behavioural economics suggests that aversion may be an issue. Loss aversion and debt aversion likely to be greater for those from lower SEG. Students from lower SEG may be more sensitive to price changes that are negligible in term of lifetime costs and benefits.</p> <p>Students may also be more deterred by study costs than they will be attracted by subsidies of the same size.</p>	<p>fully compensated by student support; this is due to loss aversion.<sup>134</sup> Vossensteyn highlights how students often try to avoid taking up loans by taking part-time jobs while studying; this often delays graduation so lowers lifetime earnings, hence in a standard economic sense it is irrational.<sup>135</sup></p> <p>The above research findings contrast with the analysis of student application data for the academic year 2012-2013 by UCAS Analysis and Research.<sup>136</sup> Though this study recognised that students from lower SEGs are under-represented in higher education, it found that the fee increases in England and Wales had a similar effect on students from more and less affluent backgrounds. The response to the fee change is a key area for further investigation.</p>
<p><b>Time-preference and hyperbolic discounting</b> – We prefer immediate gratification over postponed higher rewards. Thus we put off decisions that involve immediate costs but easily make the choice if it involves immediate rewards. This can be time inconsistent in that it may be inconsistent with long-term preferences.</p>	<p>Hyperbolic discounting is particularly relevant for higher education choice is that in terms of student finance, present cash-in-hand may be perceived as having greater value than future earnings.</p> <p>The effect of hyperbolic discounting is also likely to be involved in student choice because weighing up the costs and benefits of university involves short-term and long-term judgements of cost and benefit. In the short-term, higher education satisfies demand for curiosity, knowledge and</p>	<p>Despite the many potential applications of these concepts to higher education, they have not been applied in many studies. However, a number of our interviewees did suggest that their students display a strong preference for immediate financial aid rather than fee waivers whose benefit is felt in the long term.</p>

<sup>134</sup> McPherson, M. and Schapiro, M. O. (1998) *The Student Aid Game: Meeting Need and Rewarding Talent in American Higher Education*. Princeton, NJ: Princeton University Press.

<sup>135</sup> Vossensteyn. Perceptions of Student Price-responsiveness.

<sup>136</sup> UCAS Analysis and Research. *How Have Applications for Full-time Undergraduate Higher Education in the UK Changed in 2012?*

Behavioural influences	Application to student choice	Current evidence
<p><b>Mental accounting</b> – Our different pools of resources are not perceived as fungible according to behavioural economic theory. Spending decisions are determined by the source of the income. In contrast, standard economic theory assumes that all wealth is fungible.</p>	<p>independence; in the long-term it provides benefits via lifetime earnings, higher status and greater job satisfaction.</p> <p>Particularly relevant for higher education choices is that in terms of sources of income the most easily spent is ‘cash in hand’ the least easily is ‘future income’, that is, money that will be earned later in the lifetime.</p> <p>Also individuals tend to have a hierarchy of spending determined by:</p> <ul style="list-style-type: none"> <li>• need – we are more likely to spend on basic needs like housing and transport;</li> <li>• pleasure – we like to spend on things that give pleasure;</li> <li>• time – we are more likely to spend on things that give immediate benefits rather than long-term ones;</li> <li>• security – more likely to spend on things that give us secure collateral with a certain high return;</li> <li>• tangibility – more likely to spend on things that are tangible.</li> </ul>	<p>Vossensteyn argues that in terms of these mental accounting rules, higher education:</p> <ul style="list-style-type: none"> <li>• is not seen as a basic need;</li> <li>• can give pleasure and pain;</li> <li>• has long-term benefits (largely) rather than immediate ones;</li> <li>• is perceived as an uncertain investment;</li> <li>• is not a tangible good.<sup>137</sup></li> </ul> <p>All of this may help explain debt aversion among prospective students.</p>
<p><b>Decision utility vs experienced utility</b> – Standard economic models deal largely with <i>decision utility</i>, the predicted utility you derive from an outcome. In order to make a choice you need to predict the utility you will obtain from the outcome of that choice, this must be done ex ante. For example, do you walk or take the car to</p>	<p>In the context of higher education choices there are many reasons to expect decision utility and experienced utility to diverge. Potential students have little or no experience of higher education to guide them. They also have to make decisions about which institution to go to and/or which course to do based on their predictions of what</p>	<p>Though there is little UK-based higher education research that refers to the distinction between decision and experience utility, there are studies that have drawn attention to the differences between expectations of and experiences of university life, especially among disadvantaged students.<sup>138</sup></p>

<sup>137</sup> Vossensteyn. Perceptions of Student Price-responsiveness.

<sup>138</sup> Evans and Whitehead. *London's Calling: Young Londoners, Social Mobility and Access to Higher Education*; Forsyth and Furlong. *Losing Out?*



Behavioural influences	Application to student choice	Current evidence
<p>work? You have to choose before you set off by predicting which will be best. Once you have made the choice you experience the outcome and derive <i>experienced utility</i> – in this case you may walk... but then it rains so your experienced utility is not as high as you predicted it would be. Experience and decision utility tend to diverge because we are not good at predicting future utilities – while this may be because of unpredictable events (like the weather) much of this is due to biases. In economic terms this means we are very poor at making decisions that maximise our own long-term utility.</p>	<p>it will be like.</p> <p>Those groups who have little experience of higher education in their peer group may see even greater divergence between decision and experienced utility because they have less information on which to base their ex ante decision.</p>	
<p><b>Norms: We are strongly influenced by what others do</b></p>		
<p>Social and cultural <b>norms</b> condition behaviour and expectations within groups. The power of norms comes from the social penalties of non-compliance or the social benefit of conforming. Adherence to a particular set of norms identifies or defines specific social groups and may provide a basis for membership and exclusion.</p> <p>We take our understanding of norms from others so they can develop and spread very quickly, but they can also be very difficult and slow to alter once established.</p>	<p>Regardless of the original causal factors for the underrepresentation of students from disadvantaged backgrounds in higher education, behavioural approaches suggest that this is likely to be perpetuated via the effect of social norms.</p> <p>Norms are related to status attainment models in education research. These suggest that students choose according to what is expected of them. They are heavily influenced by a given set of norms and values, which are dependent on their constituent group.</p>	<p>Meijers suggests that students rarely take account of labour market opportunities when choosing a college.<sup>139</sup> They rely more on where their friends go, prefer to stay close to home and prefer popular courses.</p> <p>Kintrea <i>et al.</i> found that, while coming from a less affluent background does not, in itself, influence aspirations, place, family and school can tend to push children towards having high or low aspirations. '<i>[P]lace, family and schools tend to coalesce around particular views of future options and reinforce each other</i>'.<sup>140</sup></p>
<p>Norms may be related to loss aversion. Different social groups may understand costs and benefits differently because their decisions are based upon</p>	<p>Among higher SEGs the norm may be to go into higher education, meaning that not entering is seen as loss. For lower SEGs the norm may be</p>	<p>An experimental study by Page <i>et al.</i> found that framing tasks in terms of losses and gains has a significant effect on the persistence of students.<sup>141</sup></p>

<sup>139</sup> Meijers, F. (1995) *Arbeidsidentiteit: Studie - En Beroepskeuze in De Post-industriële Samenleving*. Alphen aan de Rijn: Samson H.D. Tjeenk Willink.

<sup>140</sup> Kintrea, St Clair, and Houston. *The Influence of Parents, Places and Poverty on Educational Attitudes and Aspirations*.

<sup>141</sup> Page, Levy Garboua, and Montmarquette. *Aspiration Levels and Educational Choices*.

Behavioural influences	Application to student choice	Current evidence
a different reference point.	<p>not to go into higher education, hence entering is seen as a gain. According to prospect theory, we are more motivated by losses than by gains, meaning that those from lower SEGs are deterred from higher education, while those from higher SEGs are spurred on.</p> <p>Norms may also determine the extent to which students are willing to incur debt. Are loans common in that students peer group? Similarly, in the peer group is debt seen as a positive enabling thing or a negative, worrying thing? Do families in the peer group cope well or badly with debt?</p>	<p>Based on these findings they suggest that higher education exists in the 'loss domain' for students whose parents are graduates, and in the 'gain domain' for students whose parents do not have a degree.</p> <p>In England, Dunnett <i>et al.</i> found that students from families where the norm is no history of attending university will experience more disutility from higher fees.<sup>142</sup></p>
Following social norms is one way of limiting our choice set when we are faced with a large and complex range of options. Rather than working through the options we often 'follow the crowd'. This tendency can be linked with <i>status quo bias</i> (see below).	The relationship between norms and complexity suggests that more than just additional information for prospective students may be needed in cases where social norms act against positive higher education choices	Research in the US has suggested that a complex range of higher education choices can negatively affect the persistence of prospective students from lower SEGs. <sup>143</sup>
Norms are relevant to market segmentation and customer insight. It is important to recognise how attitudes and motivations vary between different groups. This can help to guide the right incentives and the most effective information to provide.	Key in this context is understanding how attitudes and motivations differ between the different groups we are concerned with. This might mean differences between groups of potential students and also between students and their parents.	More research is needed into these differences, but some inter-group differences in attitudes towards higher education have been observed between ethnic groups. For example, a study by Davies <i>et al.</i> found South Asian students much more likely to be living at home whilst studying, regardless of their family income. This is likely to reflect a different attitude toward family life and kinship networks. <sup>144</sup>

<sup>142</sup> Dunnett *et al.* Choosing a University.

<sup>143</sup> Scott-Clayton. *The Shapeless River: Does a Lack of Structure Inhibit Students' Progress at Community Colleges?*

<sup>144</sup> Davies *et al.* *Knowing Where to Study? Fees, Bursaries and Fair Access.*

Behavioural influences	Application to student choice	Current evidence
Defaults: We tend to 'go with the flow' of pre-set options		
<p><b>Defaults</b> are the options that are pre-selected in the absence of an active choice. They are closely related to habitual behaviours. The more habitual a behaviour, the less likely we are to weigh up the costs and benefits in a rational way. Defaults and habits can be established over long periods of time. Many decisions have a default option even if we do not explicitly realise it.</p> <p>Relying on defaults is one way of limiting our choice set when faced with a large and complex range of options.</p>	<p>Default actions are likely to differ by SEG, and other groups, for example defined by gender or ethnicity. They are closely related to norms in that for some groups the default action may be to not enter higher education whereas for other groups the default is to enter higher education.</p> <p>Defaults and habits in relation to higher education choices will be a result of long-term familial and peer groups behaviours and experiences. This suggests that early interventions for young children may be beneficial in questioning the defaults at an early stage in the educational process.</p>	<p>Students may not have clear goals and may be uncertain about their own capacities.<sup>145</sup> In the absence of clear alternatives, defaults have more power.</p>
<p><b>Status quo bias</b> is an often unconscious preference to remain in current state of affairs, even when choosing another option will increase a person's long-term utility.</p> <p>The perceived disadvantages of leaving a situation loom much larger than the advantages. Thus status quo bias can be seen as a special case involving <i>reference points</i> and <i>loss aversion</i>.</p>	<p>Entering higher education represents a substantial change from the status quo – especially for students without a family history of participation in higher education – and it is characterised by a high degree of uncertainty. It may be easier to evaluate the potential consequences of directly entering the labour market because they accrue in the short term rather than the long term.</p> <p>Choosing an institution is a complex choice, and one response to this complexity may be to 'go with the flow'.</p> <p>Status quo bias can also potentially help to explain why students may be sceptical of change</p>	<p>Avery &amp; Kane carried out a study of low income seniors in Boston, US. It found that often students did not actively decide against applying to college but failed to enrol due to a series of minor hurdles. College was not the 'default option' for them.<sup>146</sup></p> <p>Thaler and Sunstein cite the example of a school in Texas that attempted to overcome status quo bias by requiring all seniors to apply to at least one college. This, combined with some other efforts (such as increasing and improving careers guidance) increased the percentage enrolling in college by 11 per cent.<sup>147</sup></p>

<sup>145</sup> Jongbloed, B. W. A. et al, (2006) Strengthening Consumer Choice in Higher Education. In *Hard Choices: Cost-Sharing, Efficiency and Equity in Higher Education Policy*. Dordrecht: Kluwer.

<sup>146</sup> Avery and Kane. Student Perceptions of College Opportunities.

<sup>147</sup> Thaler and Sunstein. *Nudge*.

Behavioural influences	Application to student choice	Current evidence
	(for example, the new fees structure) even if that change may be beneficial to them.	
The <b>paradox of choice</b> refers to idea that a large set of options can lead consumers to diversify excessively, to avoid a choice altogether, or to choose the status quo.	In the higher education context potential students are faced with many potential choices which may cause inaction (inability to make a choice) due to the possibility of regret.	Scott-Clayton found that the wide range of higher education choices in the US can create a paradox of choice. Large numbers of options and how they are presented is very confusing for students. <sup>148</sup>
<b>Saliency: Our attention is drawn to what is novel and what seems relevant to us</b>		
We unconsciously filter out a lot of information as a way of coping with the amount of information we are faced with. Our behaviour is greatly affected by what our attention is drawn to. The more a message is specific and <b>salient</b> to us as individuals the more powerful it is likely to be. We are more likely to be drawn to information that we can easily understand, that seems <b>novel</b> and that we can relate to from our own <b>personal experience</b> . This can be related to a number of common heuristics (see ‘rules of thumb’, below).	Information sources like the KIS are inevitably abstract to people with no experience of higher education. Use could be made of video and ‘day in the life’ types of information to complement the more abstract information and make it more meaningful by putting it into context with things that students understand about higher education.	Research by Oakleigh Consulting and Staffordshire University found that prospective students do not consistently seek out sources of quantitative data, even sources of data that are regarded as potentially useful. <sup>149</sup>
<b>Bounded rationality</b> – One reaction to complexity is to only consider a limited range of choices and choose the first satisfactory one – satisficing instead of maximising.	In higher education the choice set is large and the knowledge and information required to process these choices is limited.	Christie and Munro argue that potential students lack full information, and/or do not use the information that is available. <sup>150</sup> In the US, one study observed that, given their importance, students undertake surprisingly minimal search efforts regarding educational options, often resorting to trial and error. <sup>151</sup> Greenbank has

<sup>148</sup> Scott-Clayton. *The Shapeless River: Does a Lack of Structure Inhibit Students’ Progress at Community Colleges?*

<sup>149</sup> Oakleigh Consulting and Staffordshire University. *Understanding the Information Needs of Users of Public Information About Higher Education*. 38–39.

<sup>150</sup> Christie and Munro. *The Logic of Loans*.

<sup>151</sup> Grubb. ‘Like, What Do I Do Now?’.

Behavioural influences	Application to student choice	Current evidence
<p><b>Rules of thumb</b> – We use a variety of <i>heuristics</i> to simplify complex decisions. We sometimes focus on irrelevant aspects of information and we adopt internally enforced rules of thumb to limit our behavioural responses. Some relevant rules of thumb are listed below.</p>		<p>also observed foundation degree students in the UK displaying ‘satisficing behaviour’.<sup>152</sup></p>
<p><b>Representativeness bias</b> – We make judgements by comparing how representative something is to an image or stereotype we have. This tends to lead to very biased responses because the likelihood of belonging to a particular category is dependent on other important factors besides representativeness.</p>	<p>Potential students may have strong views on the stereotypical student at particular institutions and/or on particular courses, this may lead them to reject these options for themselves even though they do not reflect reality.</p>	<p>Research by Brooks found that stereotypical understandings of an ‘academic hierarchy’ play a role in the decision-making of prospective students, though further research is needed into this area.<sup>153</sup></p>
<p><b>Availability bias</b> – We are affected by the ease with which we can summon events to memory, therefore we have a biased view of frequency and risk. We use examples that are unlikely to be representative but are the most memorable, dramatic or frightening.</p>	<p>Prospective students may generalise from a limited number of personal examples that are easily recollected by them.</p> <p>Media coverage of high profile crimes (especially violent crimes) in particular locations are likely to have a large effect on views of that place as a potential place to study, regardless of the official statistics.</p>	<p>Scott-Clayton has argued that reliance by prospective students on idiosyncratic information can be viewed as an instance of availability bias.<sup>154</sup></p>
<p><b>Anchoring</b> - If we are making a decision about something for which we have little or no information, it is standard to ‘anchor’ the decision on information that we have derived from a related problem. We tend to start with something familiar and make decisions or</p>	<p>In the context of higher education, anchoring may help explain attitudes to finance and debt. Prospective students may relate financial information that they are given to an anchor – a value they have encountered in a different context.</p>	<p>In our research, there were some anecdotal examples of students relating financial information to an anchor – for example, to their parents’ income. Much more research is needed into the role of anchors in prospective students’ decision-making, however.</p>

<sup>152</sup> Greenbank, P. (2009) Re-evaluating the Role of Social Capital in the Career Decision-making Behaviour of Working-class Students. *Research in Post-Compulsory Education*. 14, no. 2, 157–170.

<sup>153</sup> Brooks. Young People’s Higher Education Choices.

<sup>154</sup> Scott-Clayton, J. (2011) The Structure of Student Decision-making at Community Colleges. *CCRC Brief*. 49.

Behavioural influences	Application to student choice	Current evidence
<p>adjustments based on the anchor. The anchors can be biased because they might be unrelated to the question at hand and even if they are related we tend to adjust too little from them.</p>		
<p><b>Priming: Our acts are influenced by unconscious cues</b></p>		
<p><b>Priming</b> is a method of triggering or influencing patterns of behaviour through establishing semantic association with words or phrases. People's behaviour may be altered by prior exposure to certain sights, words or sensations. Priming does not have to be subliminal; it can be very explicit.</p>	<p>Priming can influence how students and their parents view information about, and experiences of, higher education. Consideration should be given to the influence of priming (both intentional and unintentional) in any of the information that is provided. However, we cannot possibly control for all the unintentional priming effects that prospective students might encounter.</p> <p>Environments (school and/or family) that provide positive or negative images of higher education may actually affect participation partly through priming effects.</p>	<p>There is a large amount of robust evidence for priming using experimental data, but very little in the context of student choice in higher education.</p>
<p><b>Affect: Our emotional associations can powerfully shape our actions</b></p>		
<p><b>Emotion</b> is an automatic response over which we have little control. It is a powerful influence in decision making.</p>	<p>Our affective responses may help explain the fact that often information has little effect on behaviour or has unintended impacts.</p>	<p>Allen's research suggests that, regardless of the significant information processing and cognitive stages of decision-making that may or may not exist, final selection of a university often comes down to whether or not it <i>feels right</i>.<sup>155</sup> Our interviews with experts, students' unions and university representatives support this, indicating that feelings for the location and appearance of a university have a huge effect on the final decision about where to study.</p>
<p>Kahneman describes 'two systems thinking':</p> <ul style="list-style-type: none"> <li>• <b>System 1</b> – automatic/affective. Acts</li> </ul>	<p>Both Systems 1 &amp; 2 will operate when students are making higher education choices.</p>	<p>Vossensteyn focuses on the relationship between behavioural approaches and financial decisions in</p>

<sup>155</sup> Allen. Toward a Theory of Consumer Choice as Sociohistorically Shaped Practical Experience.



Behavioural influences	Application to student choice	Current evidence
<p>quickly with little or no effort and no sense of voluntary control. Can process many things simultaneously;</p> <ul style="list-style-type: none"> <li>• <b>System 2</b> – cognitive/reflective. Processes things with effort and concentration. Therefore has limited capacity but offers a deeper analysis.<sup>156</sup></li> </ul> <p>Both systems operate when we process information and make decisions. The fact that System 1 has large capacity and is automatic means it has a powerful influence on decision-making and we are rarely conscious of this influence.</p> <p>Many <b>heuristics</b> and <b>biases</b> that we utilise in decision making are linked to our emotional responses (see below).</p>	<p>Traditionally, policy makers assume we make all decisions using System 2 to rationally weigh up the costs and benefits of our possible choices. This is the rationale behind making more and more information (like the KIS) available to people to inform their choice. In reality both our affective and cognitive systems will process the information; in fact much of it may have been discounted by the affective system before the cognitive system even gets going.</p>	<p>higher education and describes this two system thinking as adding an intermediate stage of psychological information processing prior to more rational economic decision making.<sup>157</sup></p>
<p><b>Impact bias</b> – We tend to overestimate the impact of an affective event because of <b>focalism</b> and <b>immune neglect</b>. Focalism means we pay too much attention to the central event and overlook other context events that will reduce its impact. Immune neglect means that after an affective event happens we tend to rationalise it thus reducing its impact on us.</p>	<p>When making higher education choices students will be prone to both focalism and immune neglect. They will focus only on the decision and tend to neglect the context in which they will actually experience higher education. In reality there will be other things going on in their lives which will moderate the impact of their choices.</p>	<p>Although focalism and immune neglect are key concepts in the behavioural sciences, there is very little higher education research that draws upon the concepts.</p>
<p><b>Commitments: We seek to be consistent with our public promises and we reciprocate acts</b></p>		
<p>We make <b>commitments</b> to ourselves and other people and try to be consistent with these.</p>	<p>Prior commitments to self and family are relevant in higher education because the decision whether or not to go into higher education is often taken</p>	<p>The decision whether or not to go into higher education is taken long before application.<sup>158</sup> Decisions primarily influenced by students' prior</p>

<sup>156</sup> Kahneman. *Thinking, Fast and Slow*.

<sup>157</sup> Vossensteyn. Perceptions of Student Price-responsiveness.

<sup>158</sup> Connor *et al.* *Making the Right Choice*.

Behavioural influences	Application to student choice	Current evidence
	long before applications. Hence it may be difficult for new information at the potential application stage to influence strong prior commitments.	attainment, access to career advice, gender, and family and school expectations.
Our <b>preferences are inconsistent</b> across time and context, which frequently causes us to procrastinate and delay decisions that are likely to be in our long-term interest. However, because we do not trust how we will behave in the future we often seek to manipulate future options by making commitments.	Commitment devices may be a useful tool for increasing higher education participation. For example, they could potentially be used to encourage prospective students to identify long-term goals at an early stage and stick to them. Similar devices could also be used to aid undergraduates as they progress through university and choose modules. Even writing down long-term goals may have an effect.	Experimental research by Ariely and Wertenbroch has shown that students are often willing to impose deadlines on themselves to achieve longer-term goals, even costly ones. <sup>159</sup> Further research is needed to test whether imposed deadlines and commitment devices can have an impact upon student choice.
<b>Ego: We act in ways that make us feel better about ourselves</b>		
We behave in ways that support the impression of a <b>positive and consistent self-image</b> . Decisions that contribute to self-esteem can be very powerful. Self-image varies across groups, which suggests that market segmentation and customer insight are important.	Consideration should be given to the effects of information on self-esteem. For example, fear of rejection from higher ranking institutions may discourage applications to these institutions, especially if this rejection is not completely private. This is linked to peer effects because traditionally school cohorts will be involved in much discussion about who has applied where and what offers have been obtained.	Research has consistently shown that confidence in one's ability can be a major barrier to students from disadvantaged backgrounds. It also indicates that many disadvantaged students fear being placed in a context that makes them more conscious of their disadvantage. <sup>160</sup>
Our desire for a positive self-image contributes to our tendency to compare ourselves with other people.	Young people tend to be more susceptible to social norms than older adults, and have a greater tendency to compare themselves with other people. This means peer effects may be particularly significant among younger applicants to higher education.	One study suggests that peer groups tend to form 'academic rankings' and rank themselves and their abilities relative to their friends. Students aim higher or lower when applying to university depending on whether or not they see themselves as superior or inferior to their friendship group. <sup>161</sup>

<sup>159</sup> Ariely and Wertenbroch. Procrastination, Deadlines, and Performance.

<sup>160</sup> Forsyth and Furlong. *Losing Out?*

<sup>161</sup> Brooks. *Young People's Higher Education Choices*.

<b>Behavioural influences</b>	<b>Application to student choice</b>	<b>Current evidence</b>
<p>If our behaviour and self-image (beliefs) are inconsistent we are more likely to change our beliefs than the behaviour itself. This goes against the common belief that we should first seek to change attitudes in order to change behaviour. It is more likely that attitudes follow behaviour that vice versa.</p>	<p>One way that people may respond to the risk of failure is by developing an 'anti-education' attitude that supports a positive and consistent self-image.</p>	<p>The existence of an 'anti-education' culture has been observed in studies of disadvantaged students<sup>162</sup> but more research is needed to understand how this relates to the need for a positive self-image.</p>

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<sup>162</sup> Forsyth and Furlong. *Losing Out?*

## Appendix 3 Details of the research methodology

### Stage 1a: Literature review

The research team began by carrying out a systematic review of the academic literature on student decision-making, focusing in particular on student choice and the behavioural sciences. All major electronic databases and journals of relevance to the project were searched using terms including ‘student choice’, ‘student behaviour’, ‘student aims’, ‘course selection higher education’ and ‘student risk aversion’. In addition to this formal search, the research team carried out their own additional investigations using our own networks, web searches and informal contacts, as well as drawing on the knowledge of the interviewees who were consulted during other research stages.

### Stage 1b: Expert interviews

Building upon the review of the relevant literature, the team then carried out seven interviews with academics with expertise in student choice-making, behavioural economics, or both. Two of these interviews were carried out over the Internet, four by telephone and one face-to-face, and they lasted between 45 and 60 minutes. The aim of the interviews was to encourage the participants to reflect on the possible application of behavioural economic theories to research into the decision-making processes of higher education students. Details of experts who agreed to participate in the study are given in Table A3.1.

**Table A3.1: Experts interviewed for this research**

Name	Area of expertise
<b>Dr Edward Cartwright</b>	Behavioural economics specialist working as a Senior Lecturer at the University of Kent. Writes on the subject of behaviour and the public good, among other things.
<b>Dr Hans Vossensteyn</b>	Professor at the MBA-Hochschul- und Wissenschaftsmanagement at the Fachhochschule Osnabrück. He wrote his PhD on behavioural economics and student choice, and has since published extensively on the subject.
<b>Prof Jean Mangan</b>	Professor of Education Economics at Staffordshire University. Specialises in quantitative studies of higher education and has used behavioural economics to interpret her research.
<b>Dr Jan Moorhouse</b>	Higher education researcher with a background in marketing and consumer behaviour. Notable for writing a paper on the effects of the 2012 fee increases upon the decisions of potential higher education students.
<b>Prof Peter Davies</b>	Professor of Education Policy Research at the University of Birmingham. He is currently leading a major piece of research, funded by the Nuffield Foundation, which looks at how information (including the KIS) shapes student choice.
<b>Dr Paul Greenbank</b>	Reader in Educational Development at Edge Hill University who specialises in cognitive models to analyse the career decision-making of young people.
<b>Dr Yvonne Moogan</b>	Higher education expert with a background in marketing who has carried out a range of in-depth studies of student choice making for universities and in the private sector.

## Stage 2a: Policy-maker and sector body interviews

The second stage of the research consisted of a series of interviews with groups of key higher education stakeholders. The research team contacted the representatives of a range of higher education policy and sector bodies including OFFA, UCAS, HEFCE, HECSU and NUS. These interviews had three primary aims: first, to understand the participants' views regarding the influences on student decision-making; second, to capture descriptive data concerning the information that is currently available to aid students' decision-making; and third, to understand the participants' views on the possible impact of sector-wide changes (such as the recent fee changes and the introduction of the Key Information Sets) on student choice. These interviews were all conducted by telephone and lasted between 30 and 60 minutes. Details of the organisations whose representatives were consulted in this research are given in Table A3.2.

**Table A3.2: Representatives of higher education policy and sector bodies interviewed for this research**

HE policy bodies	HE sector bodies
Office for Fair Access (OFFA)	Higher Education Careers Services Unit (HECSU)
Universities and Colleges Admissions Service (UCAS)	<i>Which?</i>
Higher Education Funding Council for England (HEFCE): two interviewees	The Russell Group
Higher Education Public Information Steering Group (HEPISG)	The 1994 Group
	Million+
	The National Union of Students (NUS)

## Stage 2b: Institution visits and interviews with students' unions

Between August and September 2012 the research team carried out research at ten higher education institutions across the UK, where we interviewed staff working in student services, student recruitment, careers, marketing and admissions, as well as registrars and pro- and deputy vice chancellors with responsibility for student experience. Our aim when inviting institutions to participate was to develop a sample that was as representative as possible, so institutions were invited to participate based upon their mission group affiliation, region and geographic location. The institutions we included cover a wide range of institutional types and locations. We were able to secure the consent of at least one institution from all of the English regions apart from the North East, as well as one institution from Wales and one from Scotland. The sample covered a range of older and newer universities, including institutions rated among the most and least successful in university rankings. In all, the sample included four Russell Group institutions, three other 'pre-1992' institutions and four 'post-1992' institutions. It also included six institutions based in metropolitan, areas, three in suburban areas and one in a rural location.

We included 36 individuals in our interviews at higher education institutions. The majority of these were one-to-one interviews, though two institutions asked if we could carry out a

group interview with a number of staff at once. All but three were carried out face-to-face, with the remainder conducted by telephone. With the participants we discussed recruitment strategies and research carried out into student behaviour at their institution. We also asked about their perspectives on the influences on student choice, the information that is available to aid student decision-making and recent policy developments in the area.

To build upon the insights of the staff working in higher education institutions, the research team conducted a further ten interviews with 13 students' union sabbatical officers. Much like the interviews with institution staff, in these interviews the research team sought to gather data about student decision-making and the provision of information to prospective higher education students. However, in these interviews the researchers also gathered information on the roles of students' unions in advising students. In two cases, they were conducted during or shortly after a visit to a higher education institution. In the other cases, sabbatical officers were contacted with the help of a contact within NUS. All but one of the interviews were conducted one-to-one and over the telephone. The remaining interview was conducted in-person in a small group consisting of four sabbatical officers. Details of the participants are given in Table A3.3.

**Table A3.3: Participating students' unions**

University	SU role(s)
University of the Arts London	President
University of Bath	Education Officer
Royal Holloway, University of London	President
University of Leeds	Education Officer
Birmingham City University	Education Officer
University of Exeter	President
University of Manchester	President
University of Edinburgh	VP Societies and Activities
Staffordshire University	President
University of Sheffield	President, Environment Officer, Sports Officer and Education Officer

### Stage 3: Mapping behavioural insights

Following the completion of the interviews, the recordings were transcribed and the transcripts were thematically coded. Through this process the interviews were compared with one another to identify common experiences and views, as well as differences between institutional types. To assess the claims made by the interview participants, we compared interviews not only with one another but also, wherever possible, with the findings of empirical studies examining the decision-making processes of prospective higher education students. In the chapters that follow, primary and secondary research is presented alongside one another with the aim of building as reliable a picture of UK higher education as possible within the scope of this research.

In the final stage of the research, the data emerging from both the current literature and the interviews were mapped against behavioural economic theory and principles with the aim of: 1) identifying findings from previous studies that appeared to relate to established ideas from behavioural economics; and 2) identifying policy challenges within higher education that could be illuminated by utilising a behavioural approach.

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