CORPUS LINGUISTICS MEETS BRANDING:

BRAND PERSONALITY IN CORPORA OF

PRE-1992 AND POST-1992 UK UNIVERSITY WEBSITES

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Abstract

The increasing prominence of digitally-led marketing communications has resulted in an increased demand to produce data-informed analysis to assist in decision-making within Higher Education Institutes (HEIs). As a method, corpus linguistics (CL) has advantages in its development of quantitative and qualitative approaches for conducting detailed and in-depth analysis of large corpora. Due to the advancement of the approaches, this study employs methods in CL to examine textual information of university websites.

UK HEIs operate within the 'knowledge economy' (Brown and Carasso, 2013), where branding is a fundamental aspect of university management (Olssen and Peters, 2007). It is increasingly recognised that prospective students are using university websites and the information they provide to make decisions about where they will pursue their HE (Burdett, 2013). Since students are faced with a large number of potential places to study, universities are encouraged to increase their differentiation and recognition. In seeking this 'brand uniqueness', universities can employ 'brand personality' - a concept that characterises brands akin to a person. The brand personality model comprises five dimensions: COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION (Aaker, 1997). Subsequently, Opoku et al. (2006) expanded lexicons of Aaker's (1997) model, and developed a dictionary of 833 words associated with brand personality. Opoku et al.'s (2006) dictionary of brand personality was used as the basis for analysing the textual content. The corpus statistics and methods in corpus linguistics were used to investigate the website texts that reflect the brand personality model and its dimensions and traits.

In terms of the findings and contribution, Log Ratio was found to be a useful statistical measure for identifying key differences and themes in contexts. The greatest differences are in the EXCITEMENT dimension, which is more prominent in post-1992 universities, and SINCERITY, which is more salient in pre-1992 universities. There are some other differences at the level of text types. The pre-1992 corpus puts greater emphasis on research, while the post-1992 corpus places more emphases on academic and extra-curricular activities and enterprises. Both pre-1992 and post-1992 universities present their identity relating to 19 themes, such as collaboration, contribution to society, cosmopolitan experience, innovation, employability, and support for education and enterprise. Universities can use the findings from this study to develop their brands by focusing on the themes related to the brand personality dimensions that universities intend to emphasise as part of their identity.

Keywords: Brand Personality, Corpus Linguistics Methods, International Students, HEIs

Acknowledgement

Dedication

To my grandmothers.

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List of Abbreviations

Abbreviation	Full Terms
BP	Brand Personality
BP words	Words that are associated with BP (i.e. words in Opoku et al.'s (2006) dictionary of Brand Personality)
BP keywords	Keywords identified in the corpora that were compiled for the present study are also words in Opoku et al.'s (2006) Dictionary of Brand Personality
UCTs	University Corpus Themes (themes that emerge from the qualitative corpus analysis)
DFs	'Decision Factors' for students to study overseas
Pr92	Pre-1992 university corpus
Po92	Post-1992 university corpus
PrH	Pre-1992 higher ranking
PrM	Pre-1992 medium ranking
PrL	Pre-1992 lower ranking
PoH	Post-1992 higher ranking
PoM	Post-1992 medium ranking
PoL	Post-1992 lower ranking
G^2	Log Likelihood
NF	Normalized frequency
Raw F.	Raw Frequency
Sig.	(Statistically) Significant
TTR	Type/token ratio (word types divided by tokens)

Chapter 1. Introduction

1.1 Background

In the knowledge economy, universities are encouraged to present themselves as centres of excellence and to differentiate themselves from other institutions in order to maintain or improve their position in the global context. In promoting universities as globally recognised institutions, language is an important tool to communicate essential information, such as the institution's achievements, to a worldwide audience. With the availability of dedicated lexical tools for analysing texts, universities can employ these tools and apply corpus linguistics methods to develop language that effectively communicates their brands. In this regard, corpus linguistics methods are useful and relevant in our current digital age. The methods enable us to manage and analyse the large datesets that can now be compiled and produced through the use of information technology.

With an increasingly pervasive technological landscape, data-led technology has great potential for use as marketing communication tools to analyse target key demographics (e.g. locations of target prospective consumers and their interests), something which has not gone unnoticed in Higher Education Institutes (HEIs). Universities are working towards achieving differentiation and recognition, and their marketing communications are embedded within management strategies. In doing so, a best-fit with the market and what the public needs can be promoted by the universities, which in turn enables branding strategies to attract students from around the world.

Universities in the UK operate within a wider market-driven 'knowledge economy' where innovative marketing communications are part of favourably positioning university brands as centres of excellence. In this context, universities need to differentiate themselves from their competitors, making clear why (in their view) they are global centres of excellence, so that they can attract students who might otherwise choose to study elsewhere (in the UK or elsewhere in the world). When choosing where they want to study, prospective students use university websites as a fundamental factor in their decision-making process (Burdett, 2013). Therefore, the text of university websites clearly has an important role not only in promoting the universities to an external audience in general terms, but also specifically in seeking to persuade members of one section of their audience to become part of the university (i.e. to enrol as students). Corpus linguistics can effectively be used for analysing textual information. This project, thus, uses methods in corpus linguistics to analyse contexts in UK university websites, in which their identity is reflected in a lexical-based branding model

developed by Opoku et al. (2006). Universities can apply the lexically-informed findings (e.g. implications and contributions of this project) in order to develop how they might create their brands. The findings can be applied for creating uniqueness of the institutions through use of texts and other means of communication.

In order to create a strong brand identity for any product or service, it is important for the relevant organisation's promotional material to focus on its uniqueness and to identify a clear sense of why it is attractive to consumers (Keller, 2013, p. 79). In seeking to create desirable uniqueness for their brand in the global market, the concept of 'Brand Personality' (BP) can be employed as a conscious choice in creating branding activities. The concept of BP has been used to explore the characteristics that are associated with different kinds of brands, by identifying and describing the qualities that personify them and differentiate them from other brands (Keller and Richey, 2006). For instance, the marketing of Campbell's Soup could be said in part to revolve around the idea that 'Mrs. Campbell is a rosy-cheeked and plump grandmother who lives in a warm, cozy house and wears an apron as she cooks wonderful things for her grandchildren' (Keller, 2013, p. 333). BP is a way to characterise a brand akin to a human, focusing on personality traits. It is historically rooted in the notion that people choose a brand in the same way that they choose a friend (King, 1970, p. 14), and thus that it is advantageous to associate the brand with positive human characteristics.

A variety of methodologies has been used to examine the BP of a variety of different products and services. The marketing studies that have employed the BP model have tended to adopt quantitative approaches (i.e. Campbell et al., 2010; Manosilpakorn, 2011; Opoku, 2006; Papania et al., 2008; Rutter, 2013). When it comes to linguistic studies that have explored the brands related to university websites, however, the methods of analysis have predominantly involved qualitative approaches (i.e. Saichaie, 2011; Saichaie et al., 2014; Svendsen et al., 2017; Tang, 2011; Zhang, et al., 2013). Saichaie (2011) employed Critical Discourse Analysis (CDA) to study Fairclough's (1993; 1995a; 2001) dimensions of discourse in texts and images expressed on university homepages, admissions' programmes and students' activities across 12 US-based university websites. Saichaie et al. (2014) analysed content that universities communicate to audiences through selected images and texts on US-based university websites. Svendsen and Svendsen (2018) employed CDA to analyse students' social life-related discourse on Danish university websites. Tang (2011) studied visual elements on the homepages of the top 100 US- and China-based university websites, where the author explored people and architectures represented in the homepages. Zhang and O'Halloran (2013) used CDA as a method to analyse marketing strategies in the mission,

multimodalities and navigational dimensions on the website of the National University of Singapore. Previous studies have employed multimodalities and texts to analyse university websites, but the sample size of universities was limited due to the nature of the qualitative studies. Although the sample size of universities in Tang's (2011) study was large, the homepages were the only object examined. Taking advantage of developments in a quantitative approach to corpus linguistics allows this present study to analyse a larger number of texts from a larger sample size, which is useful for generalising representation of university websites. Although some studies have also employed corpus linguistics to analyse texts (e.g. Kheovichai, 2013; Morrish and Sauntson, 2013; Sauntson and Morrish, 2010), the focus of these studies was on language representation in other contexts such as marketisation of discourse, and not on brand personality. The present study adopts both qualitative and quantitative approaches and uses the methods of corpus linguistics (which have not been used in this context) to investigate the textual content of university websites. This project uses the 'dictionary' of BP as part of Opoku's (2006) study of a methodological design for evaluating BP in online texts and Opoku et al.'s (2006) study on communicating BP on the websites of a number of top South African Business Schools. These studies were developed from the original BP scale established by Aaker's influential 1997 study of BP.

Aaker (1997) developed a list of human personality traits that were linked with perceptions of characteristics of a brand. These human personality traits are what constitute a brand's 'personality'. All of the BP traits developed by Aaker (1997) are referred to as a 'BP scale'. The BP scale comprises five dimensions: COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION. These five dimensions in turn are broken down into a total of 42 human personality traits. Aaker selected these traits from 114 human personality traits first identified in psychology and which have also been used in marketing. These traits were used as the basis for developing her surveys, which elicited participants' perceptions of 37 brands of various products, services and businesses from convenience stores, automobiles, computers, clothes, food, drinks, restaurants, phone services, greeting cards, children's toys, cosmetics, TV stations, medicine and credit cards. From their responses, she identified 42 significant personality traits, which were then grouped into five dimensions. Opoku et al. (2006) subsequently developed a dictionary of 833 words that are associated with the five BP dimensions and the 42 associated traits. This dictionary of 833 terms has been used in BP studies of, for example, brand alignment of business to business (B2B) relationships (Campbell et al., 2010), communication of biotechnology firms to their networks (Papania et al. (2008), Swedish universities' online brand personalities (Opoku et al., 2008), and Asian

medical tourism websites (Manosilpakorn, 2011). The BP dictionary will be used in this research as the basis for analysing the textual content of university websites (see chapter 3 for data and methodology).

In this project, corpus linguistic methods are used to examine and evaluate the applicability of the 833 BP words and the BP model in texts collected from UK university websites. The study focuses on two groups of UK Higher Education Institutions (HEIs): those that were entitled 'universities' before 1992 ('pre-1992' or 'Pr92'), and those that became 'new' universities after 1992 ('post-1992' or 'Po92'). These two groups emerged from The Further and Higher Education Act 1992, whereby polytechnic institutes were renamed 'universities'. Consequently, the number of universities in the UK increased significantly overnight, creating more competition amongst institutions (Brown and Carasso, 2013, pp. 3-4, 31). Investigating texts from pre-1992 and post-1992 university websites can reflect how these two groups of universities present their corporate identity and their relationships with decision factors for students' choice of universities. Texts collected from university websites were selected for two reasons. First, students commonly visit university websites in order to gather information about the institution and the campus (Burdett, 2013, pp.121). Information about universities that are of interest to students during the process of university selection is text based, being related to issues such as academic reputation, fees, financial assistance, resources available, quality of programmes, locations, teachers and student culture (ibid., p. 39). Thus, textual information is a useful source in that it allows specific themes and ideas that are communicated through the websites to be examined, using the established dimensions and traits associated with the BP model as a framework. Second, the results of the analysis in this project can make suggestions about how universities could communicate their 'brand identity' more clearly and/or more effectively. Thus, it is worthwhile studying the BP model and its associated vocabulary in the context of university websites so that findings can be employed in the development of branding strategies for universities. Opoku et al.'s (2006) attempts to develop a methodology for analysing BP using content analysis expanded the lexicon of terms associated with the dimensions and traits of Aaker's model by adding synonyms drawn from the *Encyclopaedia Britannica*'s online thesaurus. Employing the BP dictionary and using corpus linguistic tools for the analysis (in which the themes associated with the BP in the corpus can be identified), this project aims to analyse BP in the context of university websites. It also aims to evaluate the applicability of the BP model in the context of universities.

The results of this project have useful implications in a number of areas. First, the themes that are associated with BP identified from the patterns of contexts in the corpora of University

Corpus Themes (UCTs) can be used for developing the language used on university websites. Second, the UCTs can help inform the areas associated with the BP dimensions, which could suggest ways in which universities might develop the text of their websites in order to better reflect their brand identities. Third, all the UCTs that emerge from the corpus analysis can be used for developing university activities that are related to BP dimensions. In sum, this project employs Opoku et al.'s (2006) operationalised framework for analysing university website texts using corpus linguistic methods. The findings can be usefully employed for the development of universities' brand identities.

1.2 Research Questions

The first two main research questions addressed in this study concern the frequency of words associated with the BP model:

(1) How frequent are the various words associated with the five dimensions of the BP model proposed by Aaker (1997) and Opoku et al. (2006) in the texts from the different sections[1] of the university websites, and what does this reveal about the representation and relative prominence of each dimension?

(2) What patterns of similarity and difference are there in use in the context of the BP words when comparing the website texts of the pre-1992 universities with those of the post-1992 institutions?[2]

Research question (1) will be addressed through the analysis of the frequency of BP words, comparing the rates of occurrence across the different BP dimension, and the different sections of the university websites. Research question (2) will address through the analysis of the prominent words associated with the BP and their patterns of use in contexts.

By identifying the patterns of use in contexts, we can better understand the corporate identity of universities and what is appealing to the students (such as, for example, the particular image that a university has amongst international students). In addition, patterns of use in the contexts of the most prominent BP words also serve the purpose of evaluating the applicability of the BP model for the context of university websites.

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[1] Sections = Six text types: *Funding*, *History*, *Life on Campus*, *Local Area*, *Mission* and *Research*
[2] [and different rankings of institutions: higher, medium and lower rankings]

1.3 Outline

This section provides an overview of the structure of the rest of the thesis. Chapter 2 presents the literature review, which includes the effects of the knowledge economy on Higher Education (HE) and HEIs. These effects foster the facilitation of international student mobility, knowledge transfers and the global recognition of HEIs. The knowledge economy reflects the social changes resulting from the import of neoliberal precepts that promote the marketisation of HE. Findings from studies (i.e. Ek et al., 2013; Askehave, 2007) suggest a number of adverse effects in HEIs as a result of enhanced marketisation, such as issues of funding for universities and for students. Despite these issues, universities have deepened and expanded the market-driven mode of management. Due to the knowledge economy and global competition, as an effect of neoliberalism on HEIs, branding has become an essential aspect helping to construct and reinforce universities' identities and promote their 'uniqueness'. The concepts of how to create a brand are discussed. These concepts involve the constitution of a strong brand and approaches to communication of a brand (Jobber and Ellis-Chadwick, 2013). This chapter concludes with a discussion of the application of corpus linguistic methods to examine the breadth and depth of information regarding the evaluation of applying the BP model to the analysis of UK universities' website texts.

Chapter 3 describes the research design with respect to the application of methods in corpus linguistics to evaluate the use of BP as a tool to analyse texts from the websites of UK universities. The chapter will describe and justify the specific quantitative and qualitative techniques employed, which differ from the method (content analysis) that has conventionally been used in previous BP studies. The methods of corpus analysis are the analysis of the frequencies, type/token ratios, keywords, and the contexts in which the keywords are used and the collocations of words associated with BP. Rationales for the chosen methods (and text types referred to – e.g. *Life on Campus*) are provided throughout the chapter.

Chapter 4 covers the frequency of the BP words (i.e. the established / 'Dictionary' BP words) associated with each dimension. The findings show that between Pr92 and Po92 universities, there are similarities in frequencies of BP words in *Life on Campus* text type, but differences in frequencies in the *Funding* and *Research* text types. In terms of BP dimensions, SINCERITY is prominent in Pr92 universities, while the EXCITEMENT dimension is more prominent in the Po92 institutions. Differences were also found at the level of subcorpora. In the *History* texts, COMPETENCE is a more prominent dimension in Po92, while in the *Funding* texts, RUGGEDNESS is the more prominent dimension in Pr92. When it comes to

the SOPHISTICATION, there is more evidence in the *Funding* texts of Pr92 and *Research* texts of Po92.

Chapter 5 identifies and records the frequency of 'keywords' which are clearly different in some way from the 'BP words'. The keywords are the salient words in the study's corpus while the BP words are the words in the BP Dictionary. The keywords that also appear in the BP Dictionary, referred to as 'BP keywords', are used for the analysis in this chapter. The findings suggest that the majority of the BP keywords are applicable in the contexts of university website texts. In some cases, use in contexts of some BP keywords do not semantically fit with Aaker's (1997) BP model, and thus those BP keywords are not used for the qualitative corpus analysis in this project (Chapter 6).

Chapter 6 analyses the contexts in which the BP keywords established in Chapter 5 are used, focusing on identifying words that commonly collocate with the keywords and the semantic themes that are reflected in these collocating words. The findings suggest that the success of universities can be driven through innovations and enterprise, which in turn can be achieved through collaborations within and beyond academia. In addition, the ideas presented in the contexts of BP keywords from both pre-1992 and post-1992 universities are related to careers and employability, a good academic and social environment for student life, research and a supportive intellectual environment. While the contexts of BP keywords in pre-1992 universities tend towards research, those of post-1992 show a greater emphasis on enterprise related activities.

In concluding, Chapter 7 summarises the findings of the previous chapters, reflecting not only on what they reveal about the characteristics of the university website texts but also what they tell us about the applicability in this context of the BP model and the corpus linguistic methods that have been applied. The BP model is found to be useful for the present corpus-based methods of analysis, yet future research could consider extending the words associated with BP which are specific to the university website genre. Lastly, applying appropriate corpus statistics is a useful approach to effectively guide directions for a qualitative corpus analysis.

Chapter 2. Review of Literature

2.1 Introduction

The first part of this chapter reviews previous studies that have explored the effects of globalisation and neoliberalism on student mobility in HE. The aim is to examine the relationship between globalisation and neoliberalism, and to examine how they link to factors that could influence students when they are making decisions about pursuing overseas HE. HEIs aspires to excel globally, including achieving global recognition and facilitating a range of international activities. Related to this, another aim of this chapter is to review relevant concepts related to corporate branding and approaches to creating a successful brand. In line with good academic practice, effective branding is also useful for HEIs. This is because a strong brand reinforces an institutional identity, which in turn emphasises points of differentiation, resulting in successful branding management.

The chapter begins with a review of globalisation in HE and its effects in terms of student choice and factors that motivate students to study overseas. The second half of the chapter presents approaches to creating a strong brand, including the concept of BP and its lexical models in which this project is grounded. The contents of this chapter comprise a review relating to the effects of globalisation and neoliberalism on HE where students' choice is a central concern (section 2.2). To consider the needs of students and issues that are important to them, section 2.3 discusses motivation factors for student choice. Section 2.4 then reviews issues of corporate and branding communication. Where appropriate, rationales for the chosen concepts for this project are provided.

2.2 The Effects of Globalisation and Neoliberalism on Higher Education

This section will explore the effects of globalisation and neoliberalism on student mobility in HE. The specific issues that will be addressed are: (1) cross-border education and student mobility as an effect of globalisation; and (2) privatisation and student choice as an effect of neoliberalism. The discussion of these two effects will result in the motivation for the way in which universities brand themselves for self-differentiation.

The first issue to consider is cross-border education and student mobility. Developments in these areas can be linked to globalisation in the sense that an increasingly interconnected world, with more open borders, has resulted in the rise of 'transnational education' and the expansion of the international knowledge economy (Teicher, 2004, p. 7). Increasing

globalisation is linked with the advances in information technology that have brought about the 'digital age', which have in turn led to an expansion in the ways that students are able to access information about universities in a number of ways. Firstly, before the digital age, prospective students had less access (or less easy access) to information about HEIs across the world. Secondly, the more limited availability of courses taught in English meant that the range of options available to students for whom this was desirable or necessary because they spoke English as a second or foreign language was much more restricted than it is now. This is evidenced by the significant increase in English Taught Programmes (ETPs) around the world (Dearden, 2014; Macaro, 2018). Cited in Macaro (2018, p. 2), Wächter and Maiworm (2014) reported a significant growth in the number of ETPs, from 725 in 2001, through 2,389 in 2007, to 8089 in 2014, across 2,637 HEIs in 28 countries. Given the more restricted choice of HEIs available in the pre-digital era, recruitment of international students was a less competitive process than it is today, when they can study at an extremely wide number of places because English-taught courses are increasingly available across the world. The main motivations for the substantial increase in ETPs at HEIs around the world are: (1) to attract international students; (2) to internationalise the profile of the institution and its reputation; and (3) to encourage student mobility (Macaro, 2018, p. 6). Globalisation thus increases the choice for students contemplating studying overseas.

The substantial growth in the number of HEIs that students can choose from, in a wider range of countries, has resulted in increased global competition in the recruitment of international students. Consequently, universities need to be able to differentiate themselves from their competitors in order to maintain or improve their position in a global context by attracting students who might otherwise choose to go almost anywhere else in the world to study. This process of differentiation naturally impacts upon and is reflected in the language that the universities use in their promotional materials, including on their websites. The importance of language use in institutional promotion can be associated with the concept of the 'diffusion of innovation' (Roger, 2003). This concept can be understood in terms of the relationship between persuasion by the promoter or institution and decision making by potential customers. The diffusion of innovation is a concept whereby 'diffusion is the process by which (1) an innovation (2) is communicated through certain channels (3) over time (4) among the members of a social system' (Roger, 2003, p. 11). To present information that is new to customers, language use for the promotion should answers questions such as what, how, and why the products are advantageous for consumers in their situations (ibid., p. 14). In applying this notion of the diffusion of innovation to the contexts of university website texts,

we would be focusing on the language used to describe the university (i.e. what the university, or 'product', is), the activities and environment that students would experience (i.e. how they suit the 'customers') and the advantages of studying at the university in question (i.e. why the 'consumer' should choose this particular option). In this respect, language use on university websites can clearly play an important role in students' decision making. In turn, it could be possible as well that students consider the information presented by universities as part of their decision-making process before embarking on their journeys for overseas studies (Burdett, 2013; Trilokekar and Rasmi, 2011). To summarise, one aspect of globalisation is that it has enabled cross-border knowledge transfers and facilitated international student mobility. In responding to the increasingly competitive situation that has consequently developed, universities need to think carefully about how they use language to present themselves in an informative and useful way that assists students in their decision making and promotes their institution as the best option.

The second issue for discussion in this section relates to the impact of neoliberalism in the context of HE, the relevant consequences of neoliberalism are privatisation, enhanced competition among HEIs, and student choices. Neoliberalism is often used and embedded in marketing information on university websites, as evidenced in several linguistic studies (i.e. Morrish and Sauntson, 2013; Saichaie, 2011; Sauntson and Morrish, 2010; Zhang and O'Halloran, 2013). The marketisation of language can be linked to how neoliberalism favours the private rights of market enterprise (Furedi, 2010; Harvey, 2005). As an aspect of neoliberalism, an important characteristic of privatisation is that it involves the minimisation and deregulation of governmental subsidies in various sectors of the economy and society, including HE. This means that the responsibility for the costs of HE tuition fees are shifted more to students and away from collective pubic provision. In line with this perspective, successive UK governments have permitted increases in tuition fees, lifted the caps on the amount that universities can charge home students for their courses, and increased the amount that students can borrow in loans (Brown and Carasso, 2013). The rationale for introducing student fees was that the government believed that this type of privatisation would lead to an increase in the quality and performance of the universities because they would need to focus more strongly on and become more responsive to students' needs (Brown and Carasso, 2013, pp. 18-19). Therefore, student choice comes into play. Neoliberalism (or neoliberal policies) have had an impact on the structure (or organisation or operation) of HE and, in turn, on the ways in which universities market (or promote) themselves and therefore on the kind of language they use in doing so.

An increase in the number of HEIs has given students more choice, and thus factors that motivate students to study overseas are an important aspect that universities need to consider (see 2.3 below). In essence, neoliberalism promotes market forces by encouraging a free market and free trade, letting competition play the key role on a global scale (Block, et al., 2013). Yet it is noteworthy that the self-regulating market is not the only effect of neoliberalism. Another effect has been the involvement of trans-national (or international) organisations, which also play a key role in how this kind of competitive market can be steered in policy making. For example, with the rating and league tables introduced by governments and/or by league table agencies, universities to a large extent compete with one another to be placed higher in these rankings. In addition to the league tables and rankings, the UK government has also introduced the Teaching Excellence Framework (TEF) as another measure of the quality of teaching in UK universities (Department for Business, Innovation and Skills, 2016). Hence, in a competitive context of increased student choice, universities have to present themselves on a global stage where the quality of both their research and their teaching comes under intensified scrutiny.

As universities are ranked according to specific criteria that are set by league table agencies, universities globally are to a degree standardised across certain areas of quality. The league tables/rankings put emphasis on a limited number of specific criteria, but there are, inevitably, other characteristics which are *not* included. For example, a university may play an important role in creating a number of jobs and/or developing a healthier community through its unique campaigns and activities[3] that are not part of the criteria for ranking universities in a league table. Although the success of these useful activities can also be recognised in the form of the nomination of a prestigious award (i.e. THE awards), an HEI may well excel in terms of one or more of these other characteristics, but prospective students will not know this if they are only using the league tables/rankings as a guide to gather information, even though these other characteristics may be as important to them as those that are factored into the rankings.

As indicated above in relation to the introduction of TEF, the rise of an increasingly competitive HE sector globally is reflected in specific developments in the UK sector. For example, it is notable that in the recent past the UK government has (1) increased the number of universities in the UK and (2) created competition for university funding. The Department for Education and Science DES (1991) stated that there was an expectation that competition for funds and students would bring 'cost effective expansion' (cited in Brown and Carasso,

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[3] (i.e. community-related activities that are evaluated for the Times Higher Education (THE) Awards)

2013, p. 104). The increased number of universities was a result of The Further and Higher Education Act 1992, which abolished the division between universities and polytechnics (ibid., p. 104). There were 48 degree-awarding universities in the UK in 1979-1980, a figure which increased by 41 immediately after the introduction of 1992 act (Brown and Carasso, 2013, pp. 30-31). The number of UK universities that receive public funding stood at 162 in 2016-2017 (Universities UK, 2018). Consequently, from 1979-2016, the number of UK universities has increased by 337.5%. Additionally, changes to funding bodies were made so that the same funding system applied to both types of university ('pre-1992' and 'post-1992'). This change naturally resulted in more competition for research funding (Pritchard, 2012, pp. 129-133), with the newer, less research-focused institutions potentially at a disadvantage when competing for funds (Høstaker, 2006, p. 109).

In this context of increasing competition, HEIs – as corporate enterprises – have had to develop new management strategies to ensure future growth and prosperity (Askling and Henkel, 2006, pp. 87-88), and global competition is an influential factor which has led to the emergence of the branding and marketing of HEIs (Ramirez, 2018, p. 3). According to the characteristics of the 'ideal-type' model of governance established in Olssen (2002), universities are governed according to the 'private mode' of operation (see Table 1). When it comes to marketing strategies, being seen as a centre of excellence is a core concern because of the competitive nature of the sector. It is in seeking to establish and promote themselves as centres of excellence on a global stage that universities need to focus on developing an appropriate corporate image. This involves establishing and projecting an effective brand identity. One very important way in which this is achieved is through the language they use on their websites, which is the focus of this study.

Aspects	Neoliberalism
Mode of operation	Private
Goal	Efficiency; privatisation
Accountability	Consumer-managerial; performance indicators
Marketing	Centres of excellence; competition; corporate image; branding; public relations

Table 1. 'Ideal-type' Model of Governance of University as an Effect of Neoliberalism (Adapted from Olssen, 2002, p. 45)

The import of neoliberalism in HE, consequently, has created a number of changes in both the social and economic spheres. Changes in the social context are reflected in the promotional

language found in university materials, which is similar to that used in advertising discourse (Askehave, 2007; Fotiadou, 2018). In this sense, universities promote 'products' such as a good student experience in terms of social life, university activities, facilities and academic performance (Askehave, 2007). With regard to the economic context, Fotiadou (2008) and Vuori (2014) found that employability is highly promoted in university website materials, suggesting that universities provide students with skills that meet the needs of their future employers. This implies that students would benefit from HE in terms of financial gain after graduation. All of these studies reveal that the promotional language presented in university materials reflects these changes whereby marketisation has become central to the operational practice of HEIs.

As well as an increase in student choice and a focus on students' needs, neoliberal practice in HE has led to a number of tensions for those involved. For example, Ek et al. (2013) highlighted issues of staff recruitment, aiming at those with qualities that would have a positive impact on the quality assurance of universities (i.e. the need for staff with a doctorate in certain specific areas of specialisations). When it comes to public funding, which favours research, challenges are encountered by less research-intensive universities in terms of financial resources (Brown and Carasso, 2013; Høstaker, 2006), although these universities may excel in other areas that they focus on (such as teaching). Consequently, other sources of funding would be required for the operation of these universities (i.e. recruitment of self-paying students) (Brown and Carasso, 2013; Ek et al., 2013; Høstaker, 2006). In addition to this financial issue, rising fees for home (UK) students (Brown and Carasso, 2013) means that students have an increasing debt burden upon completion of their HE. Although universities claim that graduates will be well-equipped with the qualities and skills required by prospective employers (Fotiadou, 2018; Vuori, 2014) (and will earn more on average than non-graduates), this does not necessarily mean that the prospective jobs that students might expect to find after graduation are guaranteed. However, students will have opportunities to develop a number of skills that their prospective employers might require during their time at a university (see 2.3.1-2.3.3). Despite these various tensions, neoliberal practice has become central to the operation of HE, and universities are encouraged to promote their brands as centres of excellence.

Bringing together the aspects of privatisation and competition through the increased number of universities in the UK, as a result of the import of neoliberalism, universities have recruited fee-paying students, and in turn, the students are encouraged to exercise choice in the pursuit of their HE (Brown and Carasso, 2013, p. 2). The increase in options available to students

means that universities face a challenge to facilitate international student mobility. Since student choice has increased, it is naturally important to consider what factors play a part in the decisions that students make about where to study. The next section examines some of the factors that could potentially impact a student's decision to pursue their HE abroad.

2.3 Decision Factors affecting Student Choices

The aim of this section is to identify some of the main factors that might motivate student mobility across countries. For the purpose of this project, such factors will be called 'Decision Factors' (DFs). These DFs will subsequently be used in section 6.2 as the points of reference in the qualitative analysis of the University Corpus Themes (UCTs) that emerge from the corpora of pre-1992 and post-1992 university website texts. Three areas are focused on in turn: Academic and Extra-curricular Activities, Life Experience, and Career Opportunities.

A fundamental issue framing the discussion of DFs associated with these three factors revolves around the notion of a 'cosmopolitan mindset', an open and globally oriented outlook developed from being exposed to the diversity of people, place and culture (Hannerz, 1996) (see sections 2.3.2 and 2.3.3 for more detail on this). A cosmopolitan mindset is a valuable outlook for students to cultivate while studying abroad. However, it should be noted that in today's world, international travel and study are not the only opportunities that an individual has to experience the diversity of people and cultures and thereby develop this mindset. In a cosmopolitan city full of immigrants and multinational visitors, it is possible that students can experience this diversity in their own cities and countries by taking part in a range of activities, whether academic or non-academic. Moreover, with distance learning, technology and the growing availability of ETPs, including off-shore campuses of universities around the world (Dearden, 2014; Macaro, 2018), it is possible that students can develop a cosmopolitan mindset from an international academic programme or a work place in their own country even if there is limited diversity in the local population. Nevertheless, a key advantage in studying overseas is that students do have opportunities to nurture a cosmopolitan mindset and to gain valuable academic and life experience, all in the same environment and all at the same time. With this combination of elements in mind, and to build on the advantages of studying overseas, the following sections will examine the three DF areas referred to above, beginning with Academic and Extra-curricular Activities.

2.3.1 *Decision Factors associated with Academic and Extra-curricular Activities*

This section reviews DFs that relate to Academic and Extra-curricular activities that students experience living and studying abroad. These DFs are part of knowledge transfer, either within the context of an HEI degree programme or beyond it. Broadly speaking, the DFs that relate to Academic Experience can be associated with the different kinds of knowledge transfer that students engage in by participating in a variety of activities. These activities might be associated directly with the student's degree programme, or might be extra-curricular activities linked with groups or societies, whether affiliated with the university or entirely separate from it. By participating in academic-related activities, students can benefit from knowledge transfer by learning theories, methodologies and conceptual frameworks that differ from those that they have encountered (or would otherwise encounter) in their home nation, and which can therefore challenge their own attitudes and preconceptions and thus form part of a process of reflective practice (Teichler, 2004, p. 13). By reflecting on their academic practice and experiences and/or challenges while living and studying abroad (e.g. by taking part in extra-curricular activities), students can develop both transferable skills to other areas of life and a mindset that can be useful for their future. Researchers such as Anderson and Glover (2017), Dweck (2008), Mraz and Hertz (2015), Nottingham and Larsson (2019), and Oakes and Griffin (2016) refer to this kind of mindset as the 'growth mindset' and point out the important role that such a mindset plays in the process of mental development that leads to success. A growth mindset refers to 'a belief that intelligence and abilities can be 'grown' through experience, effort, strategy, and instruction and support from others' (Nottingham and Larsson, 2019, p. 1). Those with a growth mindset tend to think that they have 'developed' their ability and, likewise, other talents are possible to improve (ibid., p. 1). They embrace challenges as part of their development, learn from feedback, work more after a setback, and are open to making changes to their practices (Dweck, 2008). International students have excellent opportunities to develop their growth mindset while living and studying abroad. The reflective skills that students develop as part of a growth mindset can be transferable to other aspects of their lives, as well as ultimately benefitting them in terms of the way they approach their future work and careers. This point, related to future work and careers, thus naturally overlaps with the issues that will be covered under the heading of DFs that are associated with Career Opportunities (see section 2.3.3). The relationship between the kind of transferable academic skills mentioned above and the enhanced career opportunities to be discussed in section 2.3.3 are exemplified in the following extracts from the website of the global financial institution Morgan Stanley. These pages were

posted on their Students and Graduates webpage on 13 April 2016 and are concerned with their approach to recruiting graduates from disciplines other than business and finance.

> "If you just have highly skilled financial technicians in a room, then you're only going to get a certain perspective," says McKinley-Rowe, who majored in History and Politics. "Business graduates are essential, of course, but we've found that humanities graduates often have a macro viewpoint that might have been missed if they weren't in the room."
>
> Global client-facing businesses need people who are thinking constantly about the wider political or economic landscape and the impact on markets. "By definition, students of history, geography or languages are interested in what's going on in the world," she adds. (Students and Graduates, 2016)

The extract shows that this company appreciates and values the fact that graduates with backgrounds in subject areas not directly linked to their business can have transferable skills that will be useful or appropriate in their organisation.

Despite the potential for an enriching academic experience that helps them develop a growth mindset and valued transferable skills, some students are reluctant to pursue the possibility of overseas study. For example, Trilokekar and Rasmi (2011) conducted a survey to study perceptions of international education and study abroad of 74 students at York University, Canada. They found that there were well-travelled students who were either hesitant about participating in a study abroad programme, or who had definitely decided not to do so. Some of the reasons that they gave were associated with 'academic hassles', which related to a number of issues including obtaining funding for tuition fees, arranging accommodation and being able to transfer academic credit from home institutions (ibid., p. 500). There was also a belief that pursuing international study would increase the risk of delayed graduation. Some 39% of the participants believed this would be the case, compared to 35.1% who did not view that there would be an effect of delayed graduation from studying abroad, with 26% saying they were unsure (ibid., p. 503). The results also showed that those who did not view that studying abroad could delay graduation also expressed an interest in studying abroad (ibid., pp. 503-504). Other issues that were measured as disincentives were the credit approval required for study-abroad courses, concerns about understanding the language and culture of the host country, and worries about possible loneliness (ibid). Hence, the academic experiences that prospective international students might potentially foresee could be both positive and negative. Dissatisfaction might result either directly from negative experiences or more indirectly from expectations about positive experiences that are not fully met; thus, students would need to weigh the advantages and disadvantages before deciding on their journey abroad.

In sum, in terms of Academic and Extra-curricular activities, the DFs that potentially come into play when students are choosing where to study can be identified as follows: ***Diversity***, ***Intellectual Horizons*** (i.e. openness to differences), ***Knowledge Transfer*** and ***Good Practice*** (i.e. developing reflective skills and transferable skills for careers). These DFs will be used as points of references in the qualitative analysis of the corpora in section 6.2. The next section examines DFs that are associated with Life Experience.

2.3.2   *Decision Factors associated with Life Experience*

Life Experience is another key area which benefits students living and studying abroad. In terms of the way in which international students gain from living and studying abroad, the concept of 'Life Experience' can be linked to the ways in which students can benefit from the opportunities for 'self-exploration' and 'self-development' that their new experiences offer them (Brooks and Waters, 2012, p. 74). In this regard, students can have a cosmopolitan experience while living and studying abroad. Some of the DFs in this section thus naturally overlap with those of other sections (i.e. to Academic and Extra-curricular Activities, reviewed in section 2.3.1) in terms of shaping ones' broad worldview from being exposed to different ways of living and thinking in day-to-day life. Hannerz (1996) referred to the characteristics of individuals who are exposed to globally-oriented cultures and their open attitudes towards differences in place and people as having a cosmopolitan perspective. These globally-oriented and open-minded characteristics are referred to 'cosmopolitan mindset' in this project. The ability to transfer the cosmopolitan mindset to benefit life and careers will be referred to 'cosmopolitan skills' (discussed in 2.3.3). As Life Experience involves students broadening their perspectives and learning about life and ways of living through self-exploration and self-development, DFs that are relevant here are: ***Cosmopolitan Experience***, ***Diversity***, ***Intellectual Horizons*** and ***Knowledge Transfer***. As there is limited literature on the specific details relating to life experience that students can explore while living abroad, findings from the qualitative corpus analysis (section 6.2.2, 6.2.4, 6.2.6, 6.2.8 and 6.2.10) are useful in that they provide information about student life.

In addition to general life experiences, issues relating specifically to life on campus can also be DFs that impact students when they are choosing a university. Burdett (2013) conducted a survey and interview study exploring how students choose their colleges and their use of Internet-based resources in their decision making process in choosing a college/university. The participants were 450 first-time freshmen at the University of California, Irvine. The ethnicities of the participants were African-American, Asian-American/Pacific Islander,

Caucasian, Chicano/Latino, Native American, multiracial and others. Burdett found that there were several factors influencing the students' decisions. Many factors involved how they felt about the university environment and the people. Students considered several areas when it came to making a decision on a university of their choice. They considered, for example, the helpfulness of staff members and whether or not the environment was somewhat where they could see themselves feeling comfortable and safe (ibid., pp. 118, 126, 130-135). In other words, the students were concerned with the atmosphere, student culture and their own intuition or 'gut instinct' about the campus. Burdett (2013) also found from the interviews that when prospective students were gathering information about universities online, they were particularly interested in finding out about any financial assistance that was offered, about the university's facilities and about its general reputation. In terms of Life Experience, then, the following DFs can be identified: ***Facilities***, ***Inclusivity***, ***Living Comfort & Safety***, ***Reputation*** *and* ***Support for Education***. The next section examines DFs associated with Career Opportunities.

2.3.3   *Decision Factors associated with Career Opportunities*

An economic advantage that students can gain from studying abroad is that they subsequently have access to a greater range of global career opportunities. The basis for this is that living abroad enables students to acquire and develop skills that are sought after, in particular by global companies and international organisations.

Studying abroad has the potential to give them the experience and the ability needed to manage situations that involve working with people of different mindsets, thereby opening a door for job opportunities that value these kinds of skills (Brooks and Waters, 2012). Clearly, the development of these skills (reviewed in section 2.3.2) can be associated with the individual having a globally-oriented mindset that openly embraces differences in people and ways of life, or cosmopolitan mindset (Hannerz, 1996). This kind of open, globally-oriented view and associated skills obtained from being exposed to differences is exemplified in the following extract from a job advertisement posted on 23 January 2018 by Bloomberg, a global finance and media organisation:

> Are you one of those people who values diversity of thought and perspective? Do you feel passionately about working in an environment that encourages collaboration, and allows you to seek out diverse points of view to be most effective? Do you consider yourself to be brave in the face of the status quo to help drive change? If you answered yes to all of these, this may be the JOB for you! You understand that partnering with business leaders to initiate a more diverse organization takes a lot of work, and you're

excited for that challenge. You know the importance of strategic investment with key organizations who will help Bloomberg to find the best and brightest diverse talent. You bring a deep commitment to building an inclusive Bloomberg workforce, person by person and team by team. (Bloomberg: Diversity and Inclusion Client Manager, 2018)

With its references to diverse perspectives and points of view, the extract is clearly stressing that applicants should have the kind of cosmopolitan skills described above, and is explicitly linking this with the values and aims of the organisation. Thus, the cosmopolitan skills can improve graduates' global career prospects because an open worldview encourages them to think about and understand situations from a broad range of perspectives and to value inclusivity, both qualities which are beneficial to and therefore sought after by global organisations. In addition to the cosmopolitan skills, graduates who have studied abroad are also thought to be adaptable to differences, which is also valued by employers (Teichler, 2004). Besides, they also have opportunities to create connections that could increase their opportunities to work abroad (Rauschnabel et al., 2016; Teichler, 2004). So, graduates who have studied abroad have enhanced career opportunities because their experience of international study tends to make them: (1) open-minded (i.e. they have cosmopolitan skills); (2) adaptable (i.e. they have already demonstrated that they can adapt to new environments that may be very different from their home country); and (3) connected (i.e. they have had the chance to establish networks or working relationships across more than one country). These experiences and qualities are valued by [global] employers, as the Bloomberg advert shows. The fact that they have already adapted to and experienced life in another country / culture also gives these graduates a potential advantage when pursuing job opportunities, not only in their home country but also in the country where they have studied, or indeed other countries around the world.

The points presented above have been made from the broad perspective of the advantages that 'international graduates' might have in relation to global job opportunities in general. It is not always the case for all kinds of job opportunities that an international degree will be valued more than a 'home degree' in and of itself. For example, career prospects in the case of Norway show that a foreign degree is not necessarily more advantageous than a home degree because not every job requires the skills graduate receive abroad (Brooks and Waters, 2012). It is worth noting, however, that this does not negate the fact that individual graduates can improve their own skills through their experiences of international study. In other words, although in a particular context a specific engineering degree from abroad may not be seen as any 'better' or more prestigious than one taken in a home nation, a job applicant who took such a degree abroad has skills and 'non-degree specific' experience (related to their

cosmopolitan mindset and adaptability) that might make appear to be a stronger candidate than candidates who studied at home.

To summarise, when it comes to career opportunities, the DFs that are potentially at play when students are choosing where to study can be defined as follows: ***Collaboration***, ***Cosmopolitan Experience***, ***Diversity***, ***Employability*** and ***Inclusivity***. These DFs will be used as points of reference in the qualitative analysis of the corpora in section 6.2.

Discussing all the DFs identified above, they are generally based on the characteristics and/or skills that students acquire or develop from their overseas education. Considering the students' perspectives, these DFs are directly linked with their conscious decision-making process in their interest in an overseas education, as shown in several studies. For example, Hernández-Díaz et al. (2016), Janda (2016) and Mpinganjira (2009) found that students intending to study abroad consider factors relating to experiencing life overseas and gaining opportunities for career prospects after obtaining a quality education with a worldwide reputation. Similarly, findings from Hesketh and Knight (1999) suggested that prospective students who intend to study in the UK and the USA were interested in knowing about career prospects and a quality degree. They were also interested in facilities that would support their studies, information about how they could finance their education and/or costs of tuition fees, good working relationships amongst students as well as friendly, caring and supportive academic staff. Furthermore, a well-structured programme and efficient administration are also important as part of their decision-making process. Abubakar et al. (2010) studied decision factors of students who chose to study in Australia. The study was conducted with students studying at two universities - one on the East coast and the other on the West coast. They considered the quality of education, recommendations from others, cost of living, proximity to home country, safety, leisure facilities, social activities, advice service for their studies and immigration issues. All of these findings are directly based on students' perceptions, which are associated with the areas of Academic and Extra-curricular Activities, Life Experience and Career Opportunities (discussed in 2.2.1-2.2.3).

In conclusion, across the three areas of Academic and Extra-curricular Activities, Life Experience and Career Opportunities, the following twelve DFs have emerged: ***Collaboration***, ***Cosmopolitan Experience***, ***Diversity***, ***Employability***, ***Facilities***, ***Good Practice***, ***Inclusivity***, ***Intellectual Horizons***, ***Knowledge Transfer***, ***Living Comfort & Safety***, ***Reputation*** and ***Support for Education***. Having considered the issues associated with the students' perspective, the next section turns to the universities' perspective and factors associated with corporate institutions and corporate branding.

2.4 Corporate Institutions and Corporate Branding

This section discusses ideas related to the notion of corporate branding and ways in which it can be analysed. The relevant issues to be covered include corporate identity and corporate image, the concepts of branding and approaches to developing a strong brand (sections 2.4.1-2.4.2). Having established this context and background, section 2.4.3 will then introduce the concept of brand personality as a model for analysing and developing corporate brands, setting out the advantages that this model offers and therefore the reasons that it has been adopted as a suitable approach in the present study.

2.4.1 *Corporate Identity and Corporate Image*

This section discusses two marketing-related concepts that are the heart of the notion of branding and therefore need to be central to the process of creating a strong brand. These fundamental concepts are corporate identity and corporate image. The importance of understanding these concepts is that they can be employed in both maintaining and adjusting the identity that companies – including universities – seek to construct and project to the public. It is important for a company to understand the identity that it wishes and intends to project, so that further, specific aspects of brand development and promotion can be carried out effectively.

Corporate identity has been defined as 'the way an organisation presents itself to all of its stakeholders' (Fill, 2013, p. 360). In communicating corporate identity, a company seeks to convey message to express about itself such as 'what we are' and 'what we do' (ibid., p. 360). This definition focuses on the company's own view of itself, in the context of how this is intended to be perceived by audiences (intended identity). Corporate image is a broader concept that encompasses not only the corporate identity that a company intends to portray, but also the perceptions that the audience (e.g. of prospective customers) have about the company and its image. The corporate image, then, is a matter of the interpretation of a corporate identity by an audience – an interpretation which can be shaped by the values and beliefs of the audience, and the attitudes they have about the organisation in question (Fill, 2013, p. 364).

The concepts of corporate identity and corporate image share similarities with notions of human identity, which can itself be categorised into two parts: self-identity and social

identity. According to Watson (2008), self-identity refers to the 'individual's own notion of who and what they are' (p. 131). Social identity is a matter of the perception of others about an 'individual's own notion of who and what they are' (ibid., p. 131). It is clear, then, that there is a similarity in the way in which corporate identity and human self-identity are defined, and, likewise, the definition of corporate image shares certain features with that of human social identity in that both involve the perceptions others have about the identity in question. A slight difference between the notions of corporate image and human social identity is that the former is a combination of self-constructed identity and socially-perceived identity, while human social identity relates only to the perceptions of others.

A company may of course come to the conclusion that they are not having the kind of impact they want, in terms of their relationship with their customers or users, and that they need to improve their image. It is not easy to change a company's corporate image directly because this is linked with the audience's perceptions. However, companies - including universities - can alter their corporate identity though branding strategies; if such reshaping of corporate identity is successful, this could in turn lead to a change in the company's corporate image as a result of the audience revising their opinion in light of the changes in projected corporate identity (Cornelissen, 2000; Fill, 2013, pp. 364-365). Thus, in the case of universities, if an institution would like to encourage and maintain a positive corporate image, as perceived by its 'audience', including prospective international students, it needs to think about the specific nature of the corporate identity it is projecting – and wants to project. One very significant channel for this projection of corporate identity is through the text of the university's website.

Establishing and projecting corporate identity involves delivering new information to the audience of perspective customers or users that might persuade them to adopt new view (Roger, 2003). In this regard, a consistent and reinforcing communication of brand identity is an integral part of a successful branding process. This is because branding – as a means of establishing a clear corporate identity - is partly about clearly identifying and communicating characteristics that a company believes differentiate it from competitors (de Chernatomy & McDonald, 2003, p. 51; Fill, 2013, p. 327, 634). The successful branding process can be communicated through reinforcing messages coherently through the various channels / media available to the company, which help strengthen a business through trust and positive associations (de Chernatomy and McDonald, 2003, p. 51).

In constructing a distinctive and coherent corporate identity, and in seeking to communicate that identity effectively to their 'audience' (i.e. the prospective students) in such a way that it can potentially shape the audiences' perception of the company (corporate image),

universities will naturally enough be aware of the sorts of factors that students are concerned with and therefore influence how they view universities. In other words, the university will consider the students' DFs when formulating the branding strategy that they are going to use to project their corporate identity. Having established, in the first part of 2.4.1, that there is a link between corporate identity (i.e. the university's perspective) and corporate image (i.e. the students' perception), the university can develop its brand through communicating corporate identity with a consideration of DFs as they are important for students' decision making in undertaking an (overseas) education. DFs thus play a key role as factors that the university can consider when it comes to communicating an effective corporate identity which can, in turn, be reflected in its corporate image as perceived by prospective students. As we can see that establishing a [supposed] corporate identity is important to effective branding, the next section discusses how universities can develop a strong brand.

2.4.2   *Developing a Strong Brand*

This section discusses ways in companies can establish a strong brand. The concepts that are discussed in this section will help to inform the later analysis of the DFs and UCTs. The section begins by defining the concept of 'a brand' and then reviews the benefits of a brand and approaches to developing a strong brand.

A brand is important for business in that it is a 'perceptual entity rooted in reality', which potentially has an impact on shaping or changing the perceptions that reside in the minds of customers (Keller, 2013, p. 36). Definitions of a brand vary in detail depending on the focus of the discussion or study in which the concept is used. The following definitions of a brand deal with the company perspective and the way in which the company seeks to project its identity in order to influence the perceptions of the customers (i.e. projecting its corporate identity). Kotler and Armstrong (2016) define a brand as 'a name, term, sign, symbol or design, or a combination of these, that identifies the products or services of one seller or group of sellers and differentiate them from those of competitors' (p. 263). Fill (2013) defines brands as 'promises' that a company designs in order to shape how it is perceived by stakeholders, and that the 'promises' structure the stakeholders' expectations (p. 326). Similarly, Fill and Forbes (2009) define brands as 'a product of work of managers who attempt to augment their products with values and associations that recognised by and are meaningful to customers' (p. 100). As far as it is about influencing the perceptions of the customer (i.e. influencing the corporate image) is concerned, some definitions of brand focus on the customer's views or interpretations of this projection of corporate identity. For

example, Smith and Zook (2011) add intangible and legal aspects of brands as 'everything a customer (or stakeholder) sees, feels and experiences about a product or service, and a brand can also be an intangible, legally protectable and valuable asset' (p. 32). For branding practitioners or marketers, a brand is referred to as 'something that has actually created a certain amount of awareness, reputation, prominence, and so on in the market place' (Keller, 2013, p. 30). The definition by Fill and Forbes (2009) nicely reflects the place that the concept of brand or branding has in this framework, in relation not only to the concepts of company-focused corporate identity versus the customer-focused corporate image, but also the notion of DF discussed in section 2.3.1-2.3.3. In terms of various concepts having been defined, Fill and Forbes' definition focuses on the idea that a brand is constructed by a company (or its managers) in such a way that it will project and promote a corporate identity that takes account of the customers' perspectives and concerns (i.e. their DFs) in order to try and elicit a positive corporate image in their minds. It also alludes to the fact that in trying to tune into the customers' perspectives (i.e. the DFs in this project), the company is trying to link the branding of their product or service to 'values and associations' that are meaningful to customers. Understandably, as perceptions and ideas in the minds of customers, many of these values and associations will be personified (e.g. the brand might be viewed in terms of trustworthiness or sincerity), and as we shall see, viewing the characteristics of a brand in terms of human personality traits is a useful way to understand what is happening with the way universities brand themselves in the texts of their websites.

Developing a strong brand can be said to benefit customers as well as the organisations themselves. The benefit for customers is, as Jobber and Ellis-Chadwick (2013) suggest, that an effective brand helps customers choose products or services by presenting them with a coherent and accurate presentation of what the company offers, thereby serving as a 'trusted guide' in the decision-making process (pp. 310-313). Additionally, a strong brand highlights the specific 'added values' that the company associates with its product or services, by which it seeks to differentiate them from those of its competitors (ibid.). In this function, as a guide for customer choice, part of the advantage that an effective brand can bring to an organisation is the sense of trust that can be engendered in the customers' minds, a result which leads to a general tendency for customers to favour certain products and services more than they did on their initial encounter with that product or service, thereby leading to a broadening market share (ibid., pp. 310-312). The potential of being able to create this kind of strong brand that is trusted by customers and has a broadly positive impact beyond any single product is naturally an astonishingly attractive prospect for any business operation.

A strong brand can be developed through appropriate branding activities and through a combination of rational and emotional approaches to the communication of the brand to customers (Fill and Forbes, 2009; Kotler and Armstrong, 2016; Riezeboz, 2003). These two approaches to communicating with customers differ in that the rational approach focuses on advertising the more concrete functional benefits and product attributes, whereas the emotional approach focuses on promoting the more abstract desirable benefits, beliefs and values that constitute the 'selling points' of the brand in customers' minds (Keller, 2013; Kotler and Armstrong, 2016). Figure 1 illustrates the combination of the activities involved in developing a brand and the two approaches involved in communicating the brand to customers.
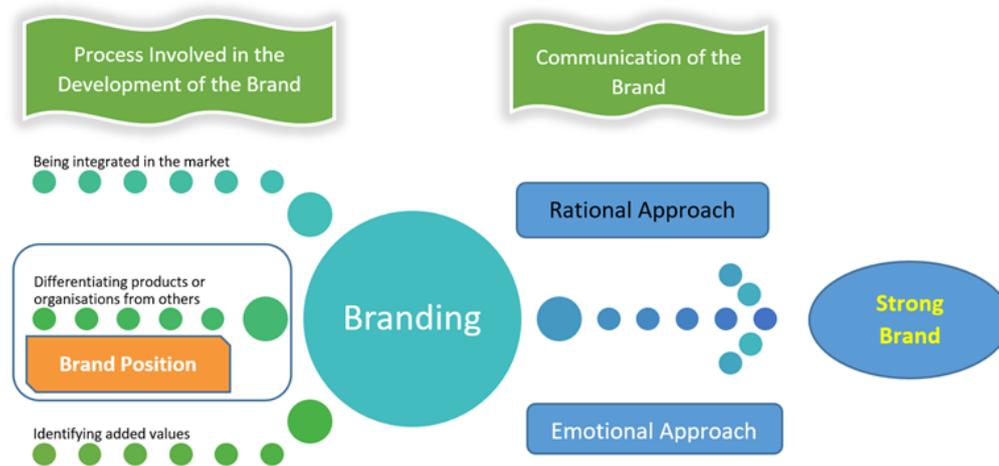
Figure 1. Elements involved in the Development of a Strong Brand (Adapted from Fill and Forbes, 2009; Kotler and Armstrong, 2016; Riezeboz, 2003)

The left-hand side of Figure 1 lists three different kinds of activities involved in the development of a brand: (1) integrating the brand in the market; (2) identifying added values; and (3) differentiating products from others (Fill and Forbes, 2009; Kotler and Armstrong, 2016; Riezeboz, 2003). This current project focuses in particular on the third of these elements, differentiation, which can also be understood as a process of 'brand positioning'. The term 'positioning' in this context refers to 'finding the proper 'location' in the minds of a group of consumers or market segment', and brand positioning can therefore be defined as the 'act of designing the company's offer and image so that it occupies a distinct and valued place in the target customer's minds' (Keller, 2013, p. 79). Jobber and Ellis-Chadwick (2013) state that brand positioning is about 'creating a unique position in the marketplace', which involves 'careful choice of a target market and establishing a clear differential advantage' in the minds

of the people (p. 318). Establishing this differential advantage depends on identifying aspects of the brand that will reflect its uniqueness and represent the kind of characteristics that will be attractive to customers (Keller, 2013, p. 79). With this in mind, it is apparent that, for a successful brand positioning, marketing strategy needs to be clear on issues such as the target customers, the competitors, and the similarities and differences between the brand and its competitors (ibid., p. 79). Thus, 'a good brand positioning helps guide marketing strategy by clarifying the brand's essence, identifying the goals it helps the consumer achieve, and showing how it does so in a unique way' (Kotler and Keller, 2012, p. 298). Figure 2 illustrates the composition of the six elements that are involved in the brand positioning activities.
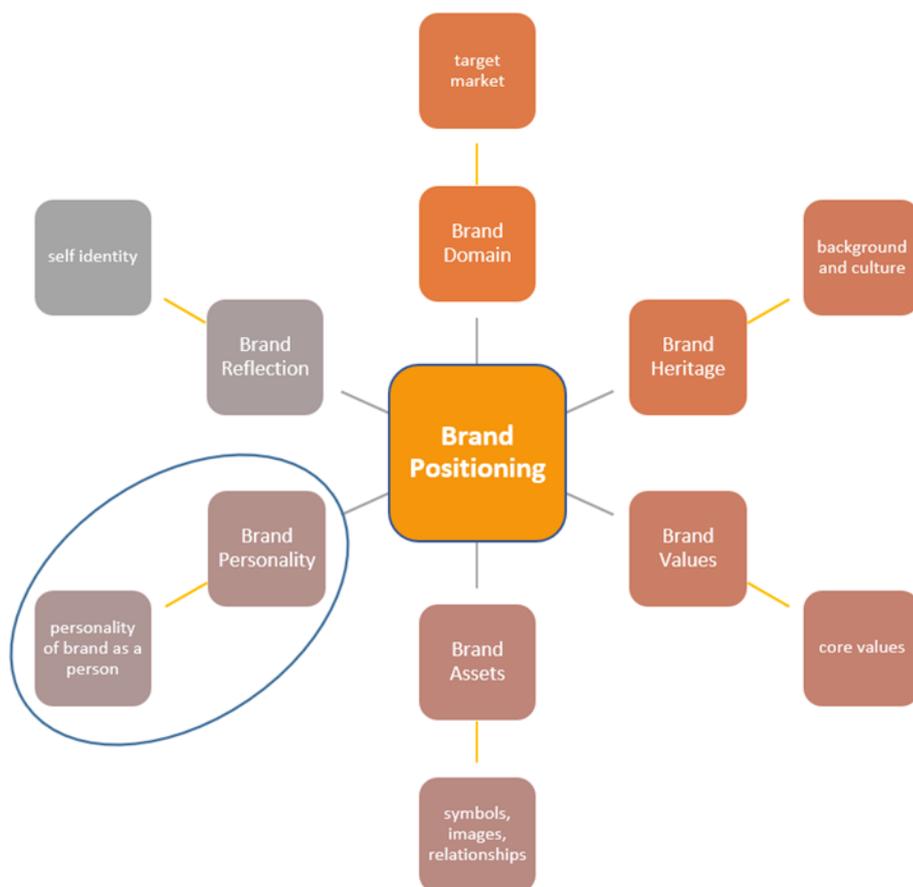
Figure 2. Composition of a Brand Position (Jobber and Ellis-Chadwick, 2007)

As Figure 2 demonstrates, there are six elements involved in creating a brand position in the market place. These elements are the *brand domain*, *brand heritage*, *brand value*, *brand asset*, *brand personality* and *brand reflection*. Jobber and Ellis-Chadwick (2013) describe these elements thus:

> *Brand domain*: the brand's target market. *Brand heritage*: the background to the brand and its culture. *Brand value*: the core *values* and characteristics of the brand. *Brand*

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assets: what makes the brand distinctive from other competing brands, such as symbols, features, images and relationships. *Brand personality*: the character of the brand described in terms of other entities, such as people, animals or objects. *Brand reflection*: how the brand relates to self-identity; how the customer perceives him/herself as a result of buying/using the brand. (pp. 319-320)

In the context of the six aspects of brand positioning identified above, this research is specifically embedded within the concept of brand personality. The rationale for this is that corpus linguistics has much to offer in terms of both quantitative and qualitative approaches to the analysis of lexical models of brand personality. The qualitative corpus analysis helps identify rational and emotional approaches, which are useful for the analysis of text for this project. The concept of brand personality is discussed in more detail in the next section.

2.4.3   *Brand Personality (BP)*

This section reviews the concepts of BP, the advantages associated with it and how the way in which communicating it helps develop a strong brand. The fundamental concepts of BP will be introduced, then the advantages of BP as a framework or model to be used as a marketing tool and also how to understand how brands work in the context of universities will be discussed.

2.4.3.1   *Brand Personality and its Advantages*

In keeping with the distinction and relationship between corporate identity and corporate image discussed in section 2.4.1 and the process of branding outlined in section 2.4.2, Keller (2013) describes the concept of BP in terms of a combination of the attribution of human characteristics to a brand and the perceptions of that personified brand by the customers. In developing this concept, Aaker (1997) created a scale consisting of 42 BP traits grouped under five main personality dimensions, namely COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION. The traits were generated from 114 human personality traits which are used in the fields of both psychology and marketing. BP was constructed from participants' responses to the brands that were used as stimuli. The 631 participants were from various ethnic background and represented diverse demographics and locations in the US. The stimuli comprised 37 brands of various enterprises: convenience stores, automobiles, computers, clothes, food, drinks, restaurants, phone services, greeting cards, children's toys, cosmetics, TV stations, medicines and credit cards. Brands that were used in this context were the names of the companies (i.e. Campbell's Soup, Hallmark Cards). The participants were asked to rate to what extent they agreed with statements about the

brands and the characteristics that were described (i.e. 'Dr Pepper might be non-conforming, fun, interesting, exciting and off-beat') (Aaker, 1997, p. 350). The results from the ratings of the 37 brands on 114 personality traits suggested five distinct dimensions: COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION. The final results showed that 42 (of 114) personality traits are reflected in these five dimensions. Aaker's (1997) BP model was established from the perspective of the customers and their perceptions, which is a way of modelling corporate image.

The model could also be used (whether by a researcher or by a company) to analyse and understand how a company brands itself in terms of constructing and projecting or promoting its corporate identity. Opoku et al. (2006) subsequently extended Aaker's (1997) study into lists of words that are semantically related, resulting in a Brand Personality dictionary' consisting of 833 words, still divided among the original five dimensions: COMPETENCE (168 words), EXCITEMENT (143), RUGGEDNESS (174), SINCERITY (174) and SOPHISTICATION (174). Opoku et al. (2006) established their BP dictionary by searching and compiling synonyms with the assistance of WordStat software. They used the online version of Encyclopaedia Britannica's function (www.britannica.com) and the Dictionary Builder function of the software package to search and compile a thesaurus of the 42 traits identified by Aaker's (1997) BP traits (Opoku, 2006, p. 37). Subsequently, they identified and selected only the thesaurus that was relevant to the BP (ibid., p. 37). They then extended the 42 BP traits into a BP dictionary of 833 words, split across the five dimensions (Opoku et al., 2006). A pre-test and post-test were carried out before the final compilation of the BP words. The tests involve applying the BP words in the dictionary to statistically analyse BP dimensions of African tourism websites, the top 10 MBA programme websites of Africa-based universities and selected 30 university websites that were ranked among the world's top 100 universities (Opoku, 2006; Pitt et al., 2007). The results were accepted by peer review and co-investigators.

After the BP dictionary was created, they used it to analyse the BP characteristics of 11 business school websites by adopting a method of content analysis. The results revealed that many of the BP dimensions from the quantitative content analysis using the BP dictionary shared similarities with BP dimensions that are used to describe consumer brands in other business sectors (Opoku et al., 2006, p. 32). This suggests that the BP dictionary offers a methodological approach to the analysis of online brands. The BP words can be used, with the assistance of textual analysis software, to analyse how organisations communicate their BP in online contexts. Opoku et al.'s (2006) BP dictionary has so far been the only model that has

extended Aaker's (1997) original 42 trait words and applied the resulting set of terms to a large-scale textual analysis of online material. As an established tool, the BP dictionary has therefore been chosen for quantitatively identifying and qualitatively analysing the BP characteristics of university website texts in this research project.

A recent study by Rauschnabel et al. (2016) extended the BP scale concept specifically to the HEI context, with the development of University Brand Personality Scale (UBPS). They developed the scale by: (1) analysing textual data collected from top-10 UK-based, top-10 US-based and top-16 Germany-based universities' public relations documents (e.g. content on their websites), whereby 48 personality-related adjectives were generated; (2) conducting in-depth semi-structured interviews with five German prospective and current students and 1 alumni, generating 47 additional personality-related adjectives; (3) surveying 186 undergraduate students studying at a German university to describe their university, generating 232 more personality-related adjectives; (4) reducing the 327 adjectives (altogether) by checking the suitability of the adjectives for describing the university, which brought down the adjectives to 74 items; and (5) surveying 249 students at a German university with a 7-point Likert scale. The survey asked students to respond to what extent they agreed with the descriptions of their university in terms of its characteristics that corresponded to their perceptions. Subsequently, using interviews and an online survey, they elicited adjectives that students used to describe the characteristics of their universities. Finally, the adjectives were analysed using statistics to categorise those adjectives into dimensions ('factors'). For the final UBPS, the full set of adjectives elicited from the participants was narrowed down to 24 words grouped into the six factors: PRESTIGE, SINCERITY, APPEAL, LIVELY, CONSCIENTIOUSNESS and COSMOPOLITAN (see Table 2).

As this brief outline indicates, Rauschnabel et al.'s (2016) study and the resulting UBPS characterised BP from two perspectives. The first is the intended brand identity that universities project to their audience, including prospective and current students. This perspective was examined by how universities describe themselves on their websites. The second perspective is the perception of the universities' brand identities, which was explored through the interviews and the online survey compiled by the students. The dual perspective (e.g. from both the way in which universities present themselves on websites and how students describe them) is therefore the basis for the construction of the UBPS. The dual perspective is then a reflection of the relationship between the company-focused concept of corporate identity and the customer-focused concept of corporate image, and the way in

which branding represents an attempt by the company to shape and project their corporate identity in such a way as to engender a particular corporate image in the minds of their customers or audience.

Although Rauschnabel et al.'s (2016) UBPS is focused on the same kind of HEI context as the present study, the 24 words involved in the UBPS scale was considered too small a set of the kind of analysis of website texts that is being conducted here. The 833 words of Opoku et al's (2006) BP dictionary, on the other hand, provide a practical and effective starting point for the corpus-based approach that will be described in detail in the next chapter. Nevertheless, given that they both focus on the BP of universities, we will return to Rauschnabel et al.'s (2016) study in Chapter 6 to compare the findings of the present study with the UBPS model.

Dimensions of UBPS	Adjectives
Factor 1 Prestige	Accepted, Considerable, Leading, Reputable, Successful
Factor 2 Sincerity	Fair, Friendly, Helpful, Humane, Trustworthy
Factor 3 Appeal	Attractive, Productive, Special
Factor 4 Lively	Athletic, Creative, Dynamic, Lively
Factor 5 Conscientiousness	Competent, Effective, Organized, Structured
Factor 6 Cosmopolitan	Cosmopolitan, International, Networked

Table 2. University Brand Personality Scale (UBPS) (Rauschnabel et al., 2016, p. 7)

Some scholars, such as Avis (2012) and Malik and Naeem (2012), have doubted the BP model and questioned the way in which it seeks to apply human personality traits to products, services and organisations. Yet, as Table 3 shows, there are a number of studies that have successfully applied the BP model and its traits to the empirical analysis of these sorts of contexts. For example, a study by Banerjee (2016) highlighted the positive views that customers have towards a brand when it has a strong and clear BP, demonstrating that BP also has an impact on individuals' brand preference. Similarly, Freling and Forbes (2005) stressed the importance of developing a distinctively positive BP, with their findings showing a link between a strong favourable BP and a favourable product evaluation. Louis and Lombart (2010) found that BP has an impact on customers' trust, attachment and commitment to the Coca-Cola brand. The results showed that, in the case of Coca-Cola, there are positive associations between: (1) Conscientious and Creative BP traits with brand trust; (2) Friendly and Elegant BP traits with the attachment to the brand; and (3) Friendly and Charming traits with the commitment to the brand. All of these traits have a (direct and indirect) impact on

commitment to the brand. Ramaseshan and Tsao (2007) found that EXCITEMENT and SOPHISTICATION have a positive influence on brand quality. Yao et al. (2015) found that consumers feel emotionally attached to the brand with BP dimensions that reflect their own personality. While specifically in the context of HE in Table 4, findings from Alavijeh et al. (2014) revealed that there is a relationship between brand personality and students' loyalty towards and positive relations with their universities. As discussed, all of these research findings evidently support the claim that BP has a positive impact on branding.

Authors	Focus	Research Tools	Object of Study / (Relevant) Findings
Banerjee (2016)	Influence of consumer personality, BP and corporate personality on brand preference	Surveys	Cars / BP has an impact on brand preference. A strong and clear BP indicates a favourable view of the brand.
Freling and Forbes (2005)	Empirical analysis BP effects	Surveys	Bottled water / There is a relationship between a strong favourable distinctive BP and a favourable product evaluation.
Louis and Lombart (2010)	Impact of BP and trust, attachment and commitment to the brand	Surveys	Coca-Cola / BP has an impact on consumer trust, attachment and commitment towards the brand.
Ramaseshan and Tsao (2007)	Relationships between BP and perceived brand quality	Surveys	Perfume, Cars, Watches, Jeans, Airlines, Shampoo, Hotel, Beer / The EXCITEMENT and SOPHISTICATION dimensions of BP have a positive influence on perceptions of brand quality. BP must be consistent and congruent with brand positioning.
Yao et al. (2015)	Brand attachment: relationships between and consumer personality and BP	Surveys	Mobile phones / There is a positive impact on the brand attachment towards the BP dimensions that matches the participants' personality for who they think they are.

Table 3. Examples of BP Research on Various Products, Research Tools and Findings

Table 4 lists various studies related to an analysis to show that the BP model has often been used in conjunction with quantitative analysis of university brands. These are mainly quantitative research (i.e. employing statistics for analysing data, evaluating relationships between factors). Some authors suggest that qualitative methods should play a part in the analysis of BP research (e.g. Avis, 2012, p. 89). Rutter (2017) includes examples of contexts to explain some features of BP words and BP dimensions in addition to the quantitative content analysis. Yet limited studies conducted in conjunction with qualitative content

analysis have been done. With this respect, applying corpus linguistics in the analysis of texts is useful for an in-depth qualitative and robust quantitative approach to analysis. As will be seen in Chapter 3, the corpus linguistic methods adopted in this study are effective tools for conducting this mix of quantitative and qualitative analyses.

Authors	Research Focus	Research Tools	(Relevant) Findings
Alavijeh, Rezee and Husseinabadi (2014)	Student-university relations and BP	Surveys	Positive BP on student-university relations has an effect on likelihood of continuing studies and recommending the university.
Chapleo et al. (2011)	Effectiveness of brand communication of UK university websites	Texts (Quantitative content analysis)	Teaching and research are communicated online, but 'emotional values' such as social responsibility are less consistently communicated.
Opoku et al. (2006)	Communicating brand personality: Are the websites doing the talking for the top South African Business Schools?	Texts (Quantitative content analysis)	Some MBA schools have a clear and distinct BP, while other do not. Many BP dimensions found in the MBA schools share similarities to those found in consumer brands.
Rutter (2013)	BP of universities across online media channels of UK universities	Texts (Quantitative content analysis)	There is a positive correlation between BP consistency relating to the prospectus and websites and HEI research and recruitment performance.
Rutter et al. (2017)	BP and marketing communication of top 10 UK HEIs	Texts (Quantitative and qualitative content analysis)	SINCERITY is the common trait communicated in the samples of HEIs, but EXCITEMENT and COMPETENCE are traits of differentiation among the universities.

Table 4. Examples of BP Research on Universities, Research Tools and Findings

Analysing the BP that is projected through website texts is beneficial because the results can be compared with what is being communicated through other media channels to measure the consistency of the brands and assess whether the BP dimensions correspond to the desired corporate identity that the organisation intends to project. Consistency, precision and coherence are all important elements in the creation of a strong and effective brand. Rutter (2013) studied the relationships between BP consistency across multiple marketing media and performance within the UK HE sector. He used Opoku et al.'s (2006) BP dictionary to conduct quantitative content analyses of 18,956,366 words, and employed statistics to measure relationships between BP consistency and performance points (i.e. UCAS points,

REF points). Looking at these factors, Rutter (2013) found that maintaining consistency across media channels had a positive impact on university brand management, and that a strong representation of the SOPHISTICATION dimension of BP could have a positive influence on student recruitment (pp. 2, 229). When a brand is constructed and communicated in a precise and coherent way, it reinforces its own identity, resulting in a successful brand (Phau and Lau, 2001; Ramaseshan and Tsao, 2007; Rutter, 2013). Furthermore, the development of a strong brand has been shown to have a positive impact on brand proliferation (de Chernatomy and McDonald, 2005, pp. 17-18). In terms of the present study, one example of the way in which its findings can be applied is that the University Corpus Themes (UCTs) that are identified and analysed in section 6.2 have the potential to be used as part of a BP communication framework through activities arranged at the university that would correspond to the university brand. Further aspects of the BP model, including the essential relationship between the effective communication of BP and the development of a strong brand, are discussed in detail in the next section.

2.4.3.2 *Brand Personality and Communication Approaches to Branding*

One of the characteristics of a strong brand, according to Aaker (1996), is a distinctive identity (or BP) that encapsulates / reflects the corporate values of the company. BP is a model that researchers can use to analyse / characterise how a brand (and the process of branding) works, but companies / marketers can also use this model (either explicitly or in the sense of applying some of the same concepts / ideas) as a framework in the construction of a brand, by communicating a corporate identity in a way that customers engage with. This is because a company can establish a connection through customer engagement with its brand (Keller, 2013; Monge and Contractor, 2003; Turner et al., 1987). As discussed in section 2.4.2, such communication can be developed through an application of rational (attribute-based) and emotional (desirable-based) approaches (Riezeboz, 2003). BP comes into play in the sense that marketers can focus the communication approach(es) that customers will conceive of and perceive their brand in terms of human personality traits.

The rational approach to the communication of a brand highlights functional benefits such as product performance. An organisation can communicate a brand based on a 'product attribute' which is related to functional benefits (Kotler and Armstrong, 2016, p. 276). Other benefits of brands, such as 'desirable benefits' and 'belief and value', reflect the emotional approach to the communication of the brand, which also contributes to a strong brand because emotional benefits are included in the branding process (ibid.).

Through focusing on the [supposed] emotional benefits, a company might be seeking to establish (1) the uniqueness of their brand and (2) connections that can increase customers' engagement with the brand (Keller, 2013). The emotional approach revolves around identifying the supposed unique qualities of the product and presenting these in such a way that will engage customers, encouraging them to form an emotional attachment to the brand (Keller, 2013; Riezeboz, 2003, p. 57). Successful brands should engage the customers' minds on an emotional level so that deep and strong connections are built, leaving customers feeling that they have a good relationship with the brand as a result (Kotler and Armstrong, 2016, pp. 276-277; McCraken, 1986).

The BP model helps us understand not only how brands are constructed and communicated, but also the nature of the emotional connection that can develop between customers and their favoured brands. This is because studies have shown that customers tend to choose a brand that corresponds to aspects of their own personalities and their sense of who they are (Phau and Lau, 2001). In a sense, by doing this customers are seeking to reflect and reinforce their own identities and sense of 'self' through their consumption of the branded products and services that they choose (Belk, 1998). In this respect, we could say that people choose a brand in a similar sort of way as they choose their friends, namely according to their personality and the way in which their friend's personality complements, and is complemented by their own.

To summarise, BP acts as a framework that can assist marketers to develop a strong brand to further a company's commercial goals. This is because a brand helps communicate the benefits and values that a business, product or service provides to customers, and to differentiate it from competitors (Opoku, 2006, p. 8). This is exemplified by the fact that branding often focuses on 'specific features and values that are to be associated with a corporate brand, and to represent the company and its market offering' (Fill, 2013, p. 360). Information about how a company's services or products differ from those of their competitors aids customers in their decision making (de Chernatomy and McDonald, 2005). Additionally, successful branding identifies 'added values' associated with the products or service, and these are often 'emotional values' that are attractive and favourable to customers, which thereby help to develop a distinctive brand position (de Chernatomy and McDonald, 2005). The way in which a strong brand is established through the relationships between brand positioning and the rational and emotional approaches projecting a brand are summarised in Figure 3.
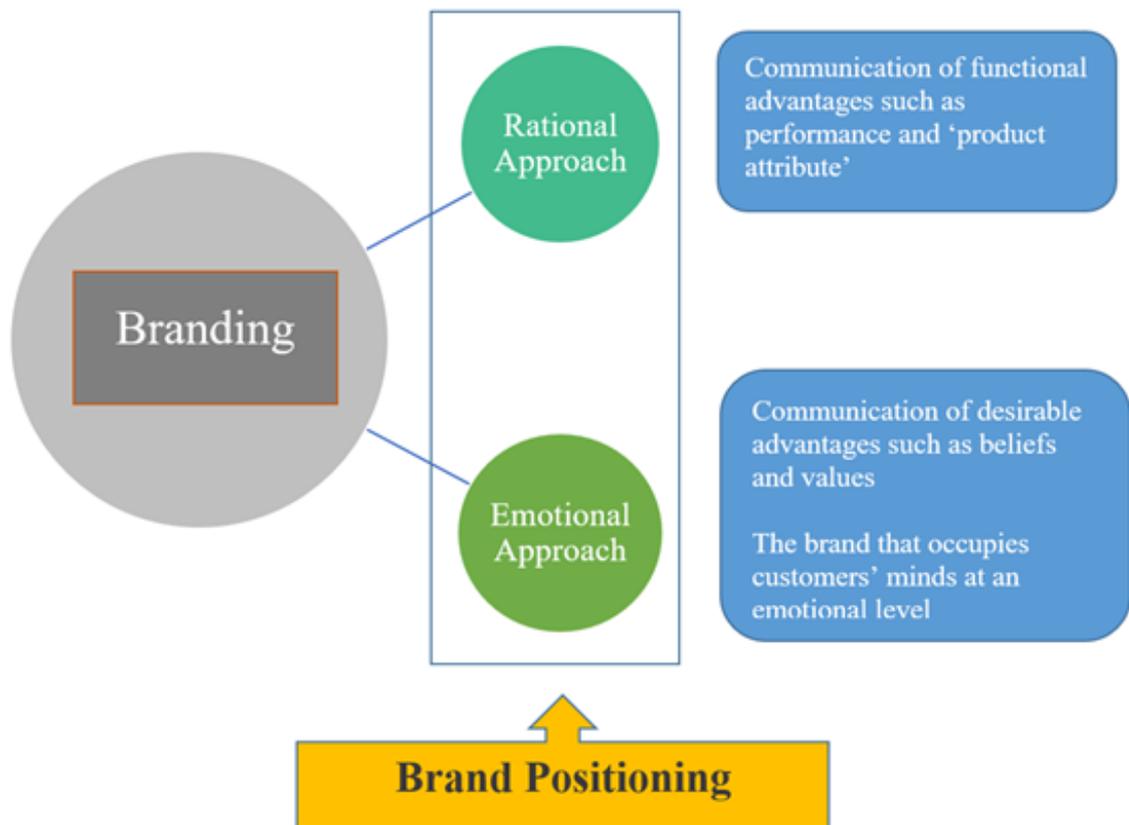
Figure 3. Flowchart illustrating Rational and Emotional Approaches of Branding (Adapted from Keller, 2013; Kotler and Armstrong, 2016)

This research applies the concepts of brand positioning by employing Opoku et al.'s (2006) BP dictionary for the analysis of university website texts. Chapter 4 covers findings from the quantitative corpus analysis of BP. Findings from both quantitative and qualitative corpus analyses of BP are presented and discussed in chapters 5 and 6. In particular, section 6.3 discusses the DFs, UCTs and communication of the Rational and Emotional approach of branding that have been reviewed in this chapter.

2.5 Conclusion

This chapter has reviewed the key ideas and concepts that are at the heart of this project: globalisation and neoliberalism, student DFs, corporate identity and corporate image, branding and brand positioning and the BP model. It began by considering the effects of globalisation and neoliberalism on HE, and in particular the resulting increase in choice that students have available to them, especially those who are considering international study. To understand what motivates students to study overseas, twelve DFs that potentially influence them in their choice of university have been highlighted: ***Collaboration***, ***Cosmopolitan Experience***, ***Diversity***, ***Employability***, ***Facilities***, ***Good Practice***, ***Inclusivity***, ***Intellectual***

Horizons, ***Knowledge Transfer***, ***Living Comfort & Safety***, ***Reputation*** and ***Support for Education***. These DFs are used as reference points for the qualitative corpus analysis in section 6.2. In terms of branding, this chapter first of all established the relationship between the concept of corporate identity (reflecting the perspective of the company) and corporate image (reflecting the perspective of the customer or prospective customer), and used this relationship as the basis for a discussion of what is involved in the concept of branding and the process of creating a strong brand, including brand positioning. Effective brand positioning contributes to the successful development and projection of a strong brand. The BP model has been identified as a useful framework for analysing and understanding the way in which companies (including universities) use branding and brand positioning to project their corporate identity, with the intent of shaping the corporate image that their customers perceive. In terms of the application of the BP model in the present study, Opoku et al.'s (2006) BP dictionary has been identified as a useful tool because of the large number of words it links to each of Aaker's (1997) original five BP dimensions (COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION). This chapter ended with a discussion of the different approaches that companies can use, and combine, in presenting a strong brand to their customers, focusing on its proposed rational and/or emotional benefits. The next chapter describes the methodology that has been adopted in this project, including a discussion of the way in which corpus linguistics methods have been used to analyse the university website texts and identify themes within them that can be associated with the universities' BP, some of which reflect rational and emotional aspects of the DFs that motivate prospective international students.

Chapter 3. Methodology

3.1 Introduction

The previous chapter identified a number of concepts and approaches that can usefully be applied to the analysis of the texts of university websites. Numerous previous studies that have used the BP model to analyse brand positioning have not been conducted from a linguistic perspective and have, moreover, tended to use quantitative methods (see section 2.4.3.1). Linguistic studies that focus on certain aspects of brands and branding have been predominantly qualitative (e.g. Morrish and Sauntson, 2012; O'Mara and Morrish, 2010; Saichaie, 2011; Zhang and O'Halloran, 2013). [Although O'Mara and Morrish (2010) also applied corpus linguistics to study marketisation of HEIs, the main analysis is qualitative, using an appraisal framework.] The present study will examine university website texts within the framework of the BP model from a linguistic perspective, using corpus methods that combine quantitative and qualitative analysis. In doing so, it will reveal broad and deep information about the ways in which universities brand themselves through the information they choose to present online. This chapter is divided into three further parts: covering the research procedures (3.2), data analysis procedure (3.3), and conclusion (3.4).

3.2 Research Procedures

This section describes the research procedures adopted in this project. The methods used are elaborated and substantiated in terms of the theoretical foundations. Throughout the project, statistical techniques associated with corpus linguistics have been used as tools for the analysis of the dataset. The section begins by describing the procedure by which the university websites were chosen (3.2.1), followed by an account of the process of data selection and the sampling techniques (3.2.2), and finally the procedures of data analysis are described and illustrated (3.3.1-3.3.3).

3.2.1 *Samples of Pre-1992 and Post-1992 Universities*

Two categories of universities were identified for this study based on the date when the institution obtained 'university' status. HE institutions that had their 'university' status before the introduction of the Further and Higher Education Act 1992 are considered 'long-established' and are here designated 'pre-1992' universities. Those universities that had previously operated as a different kind of HE institution (e.g. polytechnic institutes) and

obtained 'university' status after the 1992 Further and Higher Education Act are regarded as 'newly-established', and classified here as 'post-1992' universities. The corpus of texts collected from pre-1992 university websites will hereafter be referred to as 'Pr92' while the corpus texts collected from post-1992 university websites will be referred to as 'Po92'. The next sections discuss the process of data selection, including issues related to text collection, the sampling technique, representativeness of samples and, where appropriate, corpus linguistic theories underpinning the practices that were adopted.

3.2.2   *Process of Data Selection*

The process of data selection started with selecting exactly which universities from the pre-1992 and post-1992 categories would be included in the analysis. Universities were selected from the 2016 league table included on the website of *The Complete University Guide* (http://www.thecompleteuniversityguide.co.uk). This league table was chosen because its overall rankings incorporate scores that relate to various aspects, such as students and learning environments, student satisfaction, graduate prospects, facilities and research, which were relevant to the content of the text types that were amalgamated for the corpus creation. In contrast, other league tables place a strong emphasis on research, such as the Times Higher Education rankings,[4] in which research and citations account for 60% of the total score, followed by teaching (30%), international outlook (7.5%) and industry income (2.5%). Because information on university websites is not primarily about research, the second kind of league table was not chosen. Like other online league tables, *The Complete University Guide* can provide rankings for one specific country, which is convenient for focusing on the relative rankings of pre-1992 and post-1992 UK institutions. By ranking the universities according to the chosen country, it is convenient to label pre-1992 and post-1992 UK universities into higher, medium and lower ranking so that universities were selected from throughout the entire range of the league table.

A total of 126 universities were included in the league table: 56 pre-1992 universities and 70 post-1992 universities. The list of UK universities in the league table were divided into higher, medium and lower sections or ('subgroups'). The status ranking of the universities in the pre-1992 and post-1992 categories are relative to their own groups. In other words, the institutions designated higher-ranking in the pre-1992 category are classified as such relative only to the other universities in the pre-1992 category. Likewise, the higher-ranking

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[4] Information about the nature of university ranking of league tables is based on data available on the relevant websites during 2015-2016.

institutions in the post-1992 category are classified as such only relative to the other post-1992 universities. Thus, higher-ranking universities from the post-1992 category were not necessarily ranked higher in the overall league table than mid-ranking and low-ranking pre-1992 universities. The higher, medium and lower rankings are established by dividing each of the two ranked lists of universities (i.e. pre-1992 and post-1992) into thirds: the top third in each list are the higher-ranking institutions, the next third are the medium ranking and the final third are the lower rankings. This procedure created subgroups of 19 higher-ranking, 19 medium-ranking and 18 lower-ranking universities in the pre-1992 category, and subgroups of 23 higher-ranking, 23 medium-ranking and 24 lower-ranking universities in the post-1992 category. The two sets do not in fact divide equally into thirds. Due to the round up number, there is one university less in the lower-ranking of the pre-1992 category, whereas in the post-1992 category, there is one more university in the lower ranking subgroup.

Samples of universities were selected from a total number of 126 universities in order for the number of texts to be manageable for conducting the analysis. Due to the different numbers of universities that belong to the pre-1992 and post-1992 categories, representativeness of the sample in this project was established by using a proportional stratified sampling technique, which is a particularly useful technique in cases when populations are of unequal size (Butler, 1985, p. 7). The samples were selected proportionally from each of the ranking subgroups (higher, medium and lower rankings), meaning that each member of these subgroups in both the pre-1992 and post-1992 categories had an equal chance of being selected. The proportional sample size was determined by following the technique suggested by Butler (1985, pp. 6-7) for calculating a sample size for stratified random sampling with multiple subgroups. The result suggested that the sample size from pre-1992 meant that three universities should be selected from each of the pre-1992 subgroups and four from each of the post-1992 university subgroups. Altogether, nine universities were selected from pre-1992 and 12 samples were taken from post-1992 universities. Overall, this means that texts were collected from the websites of 21 universities, which represent 16.67% of the total number of 126 UK universities listed in *The Complete University Guide* league table.

After selecting universities from the three status-ranked subsets (higher, medium and lower) of the two categories of institutions (pre-1992 and post-1992), texts from their websites were collected in the period from December 2015 to July 2016. Texts were collected from six different text types reflecting the following six themes: *Funding*, *History*, *Life on Campus*, *Local Area*, *Mission* and *Research*. These themes were selected on the basis that they represent information that has the potential to influence students in their choice of overseas

university. For example, when looking at online sources of information about HEIs, students are interested in gathering details about financial resources, student culture, location, the helpfulness of staff and the general reputation of the universities (Burdett, 2013). Full details of the criteria that were used to assign selected texts to one of the six themes can be found in Appendix A. The full list of university websites selected, together with their URLs, can be seen in Table 5. The process of data selection outlined above is summarised below in Figure 4.

Pre-1992 Universities	Website URL
City University of London	https://www.city.ac.uk
London School of Economics	http://www.lse.ac.uk
University of Aberdeen	https://www.abdn.ac.uk
University of Cambridge	http://www.cam.ac.uk
University of Edinburgh	http://www.ed.ac.uk
University of Kent	https://www.kent.ac.uk
University of Liverpool	https://www.liverpool.ac.uk
University of Oxford	http://www.ox.ac.uk
University of Sussex	http://www.sussex.ac.uk
Post-1992 Universities	Website URL
Canterbury Christ Church University	https://www.canterbury.ac.uk
Cardiff Metropolitan University	https://www.cardiffmet.ac.uk
Coventry University	http://www.coventry.ac.uk
Kingston University	http://www.kingston.ac.uk
Nottingham Trent University	http://www.ntu.ac.uk
Queen Margaret University	http://www.qmu.ac.uk
Staffordshire University	http://www.staffs.ac.uk
University for the Creative Arts	http://www.uca.ac.uk
University of Chichester	http://www.chi.ac.uk
University of Gloucestershire	http://www.glos.ac.uk
University of Lincoln	https://www.lincoln.ac.uk
University of Worcester	https://www.worcester.ac.uk

Table 5 List of Selected University Websites and URL

```
University
rankings from
The Complete
University Guide
League Table
(online)

Universities
devided into
Pre-1992 (Pr92)
and Post-1992
(Po92)

All universities
from each of
the two groups
divided by 3 and
categorised as
higher, medium
and lower
rankings
universities
```
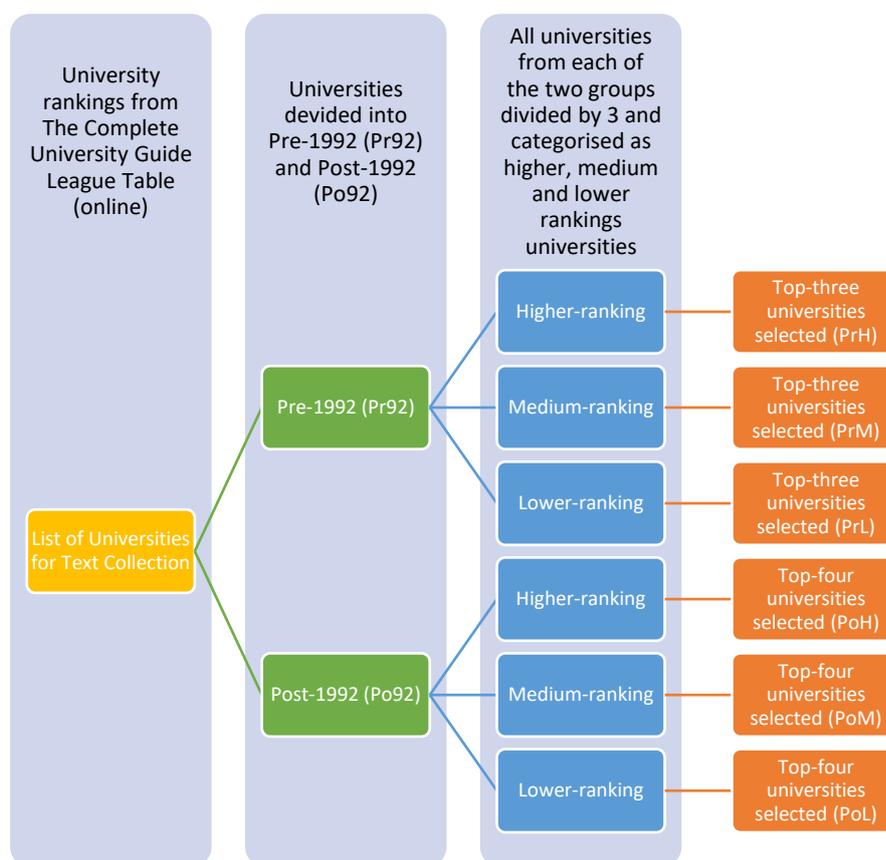
Figure 4 Process of Sample Selection of University Websites

3.2.2.1   *Text Collection, Sampling Techniques and Representativeness of Data Selection*

This section describes the process of data selection, including details of the sampling techniques that that were employed in order to ensure representativeness of data selection. As noted above, the texts that were collected reflect six themes: *Funding*, *History*, *Life on Campus*, *Local Area*, *Missions* and *Research*. The detailed criteria for selecting texts associated with each of these six themes are recorded in Appendix A. These criteria were established in order to ensure that the selected texts were relevant to the stated themes and that texts from each of the university websites in the sample were collected on an equal basis. As labels for the sets of texts that met the relevant criteria were incorporated into the corresponding sections of the corpus, the six themes will also be referred to as 'text types'.

Representativeness was established on the basis of size and composition, following standard practice in corpus construction (Lüdeling and Kytö, 2009). The size of the corpora was determined by the number of texts collected, which varied from university to university. Texts that met the 'text type' criteria were collected as far as possible. The text types selected were based on the idea that they were representative of how the university was presenting itself to the 'outside world' (including prospective students) – which is understandable given that the

focus of one's study is on how the universities 'brand' themselves in order to project their corporate identity to students. Consequently, when looking for suitable texts, the focus was on those parts of the websites (e.g. pages with titles such as 'About us', 'City Life', 'Why Study with us') that were aimed at the outside world, rather than webpages that were intended more for an 'internal' audience of existing members of the university (e.g. certain departmental webpages).

With respect to corpus composition, McEnery and Hardie (2012) suggest that texts selected for a data set should represent a 'typical' type of language that occurs in the source material (p. 9). In keeping with this idea, the aim in the current project was that texts selected from the pre-1992 and post-1992 university websites should reflect 'common' characteristics of the language that can be found in material related to the six themes (*Funding*, *History*, *Local Area*, *Life on Campus*, *Mission* and *Research*). Texts that would have skewed the representation of the 'common' characteristics of language that reflect the universities' own identities, such as information from hyperlinks and other non-university web pages, were therefore excluded. Additionally, the texts were collected from the entire range of the dataset, which in this case, is the composition of higher, medium and lower rankings in *The Complete University Guide* league table. Hence, the texts collected for corpus creation represented the entire dataset.

3.2.2.2 *The Corpora*

This section provides details of the size and composition of the Pr92 and Po92 corpora. As noted above, each of these corpora consist of sub-corpora representing the six text types: *Funding*, *History*, *Life on Campus*, *Local Area*, *Mission* and *Research*. The dataset is also divided into subcorpora based on the university rankings. The combination of texts related to all six text types from the higher-ranking pre-1992 university websites is referred to as 'PrH' (i.e. 'Pr' for pre-1992, and 'H' for high-ranking). Following the same pattern, texts from the medium-ranking and lower-ranking pre-1992 institutions are 'PrM' and 'PrL', respectively. The same subcategories can be applied to the post-1992 website texts, which are referred to as 'post-1992' university websites: 'PoH', 'PoM' and 'PoL' (where 'Po means post-1992). Thus, 'Po92' is the abbreviation for the post-1992 corpus. The summary of subdivision of the corpora, together with the details of the number of words they contain, are shown in Table 6.

Text Types	Pre-1992 (Pr92)	Post-1992 (Po92)	Total
Funding	79,874	55,495 (69.48 % of Pr92)	135,369
History	89,818	10,072 (11.21% of Pr92)	99,890
Life (Life on Campus)	48,062 (64.78% of Po92)	74,191	112,253
Local (Local Area)	19,503	18,877 (96.79% of Pr92)	38,380
Mission	13,573	13,401 (98.73% of Pr92)	26,974
Research	62,114	54,327 (87.46% of Pr92)	116,441
Total	**312,944**	**226,363**	**539,307**

Table 6 Corpus Composition: the size (in words) of the components of the corpus
Note: For each text type, the relative sizes of the Pr92 and Po92 subcorpora are indicated by marking the percentage size of the smaller relative to the larger (e.g. *Funding* is 69.48% of the size of Pr92 *Funding*)

Pr92 consists of 312,944 words, while Po92 has 226,363 words, making 539,307 words in total. Pr92 is therefore approximately 38.25%) larger than Po92. When comparing the word counts for the Pr92 and Po92 corpora, it is apparent that the subcorpora associated with three text types, namely *Funding*, *History* and *Life on Campus*, vary quite considerably in size. In contrast, the *Local Area*, *Mission* sections of Pr92 and Po92 are similar in size. The *Research*, *Funding* and *History* sections of Pr92 are notably larger than the corresponding sections for the Po92. The difference is particularly pronounced with the *History* text type, where the Po92 subcorpora is only 11.21% of the size of the Pr92 subcorpus. This would seem to suggest that, overall, the pre-1992 university websites place greater emphasis on the history, research and funding related profiles of the institutions than the post-1992 university websites do. The Po92 *Life on Campus* subcorpora is larger than the corresponding section of Pr92. This would seem to suggest that, overall, the post-1992 university websites place greater emphasis on this aspect of the student experience than the pre-1992 university websites do. The ways in which the different categories of university websites present their brand personality in relation to these six text types is analysed in detail in chapters 4 and 5. The stages involved in conducting this analysis are described in the next section.

3.3 Data Analysis Procedures

Data analysis was conducted in three stages. The first stage involved analysing the corpus to ascertain and compare frequencies of words associated with the five dimensions of the brand personality model in Opoku et al.'s (2006) BP dictionary (BP words). The second stage consisted of identifying which of these BP words are 'keywords' (BP keywords), in the sense of occurring notably more frequent in the university website texts than in 'everyday' use, by comparing their frequency in the Pr92 and Po92 corpora with their frequency in a reference corpus (British National Corpus, 2015). The third stage focused on analysing the contexts in which the identified BP keywords occur in order to determine what patterns can be found in their collocation with other words. The full details of the procedures involved in these three stages are presented below.

3.3.1 *Stage One: Frequency of BP words*

The first stage of the analysis consisted of two steps: first, searching for words associated with the five dimensions of the brand personality model; second, making a statistical comparison of the differences in frequency with which they occur in the corpus.

For the first step, the wordlist of Opoku et al.'s (2006) dictionary of brand personality (reproduced in Appendix B) was used as a tool to identify occurrences of relevant words. The dictionary provides separate lists of words, one for each of the five dimensions of the brand personality model, namely (1) COMPETENCE, (2) EXCITEMENT, (3) RUGGEDNESS, (4) SINCERITY, and (5) SOPHISTICATION. The numbers of words listed in the dictionary for each dimension are 168, 143, 174, 174 and 174, respectively, making 833 words in total. The list of words associated with each brand personality dimension was put into the text analysis programme Wordsmith 7.0 (Scott, 2016) in order to determine which of the BP words occur in Pr92 and Po92. The results generated by Wordsmith took the form of word lists. These frequency lists reflected the characteristics of the corpus texts that were then analysed in detail (see Chapter 4). Word frequencies were established not just for the corpus as a whole, but also for the various sections, or subcorpora: the pre-1992 versus post-1992 institutions (higher, medium and lower ranking), the individual universities, and the six different text types. High or low frequencies of particular words in one subcorpus relative to another can be taken as a general indicator of 'usuality' or 'unusuality' of language, highlighting 'noteworthiness' in the texts that could then be investigated (Hunston, 2002, p. 8).

In considering how BP words would be counted for the quantitative corpus analysis, the technique used is related to the notion of 'typicality' of language use. Regarding 'typicality', the meanings associated with use in context of words with different lemmas (i.e. words followed with *-ed*, *-ing*) can differ (Hunston, 2011, pp. 79-91). For example, the meanings affixed with different inflected forms of the word 'act' vary (i.e. acted, acting, action) although these words share the same root. In addition, the typicality of the central ideas of the contexts can be different although the words are derived from the same root (i.e. use of *graduate* and *graduation*), which will be discussed further in section 3.3.3.2. Because the typicality of use in with different inflected forms can vary in meanings, BP words were counted as they appear in Opoku et al.'s (2006) BP dictionary. For example, the frequencies of *exciting*, *excited*, *excitement* were counted separately. This way of counting is referred to as an 'un-stemmed' technique, where words such as *exciting*, *excited*, *excitement* are treated as different words for counting – they are not merged into one and counted as if they were the same words.

Step two of the analysis involved the application of statistical measures and tests in order to identify the similarities and differences between the Pr92 and Po92 corpora – including the subcorpora of higher-, medium- and lower-ranking universities. Several statistical measures and tests were used for comparing the frequency of information: normalised frequencies (NF), Log Likelihood, Log Ratio and type/token ratios.

NF were needed in order to make meaningful comparisons between texts or corpora of different sizes (McEnery and Hardie, 2012, p. 50). When comparing frequencies of words occurring in one corpus against another, the frequencies were calculated on the basis of a standard principal of NF, with a normalised base. In this case, for each of the five BP dimensions, the normalised frequency of the associated set of BP words in the relevant subcorpus was calculated using the following formula: [(Total Raw Frequency of BP Dimension Words[5] ÷ Total Size of Subcorpus) × 1,000]. The result is effectively the NF (with the normalised base of 1,000) of the subcorpus in question, which is made of BP words associated with the relevant BP dimension. This NF can then be compared with the corresponding results for other subcorpora in order to show clearly the relative prominence of the words associated with each dimension in each subcorpus. After calculating the NFs for each set of BP words, they were plotted in a bar chart for visual comparison between Pr92 and

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[5] The majority of plural forms of nouns, comparative, superlative degree of adjectives of BP words do not appear in Opoku's (2006) Dictionary of Brand Personality. Where applicable, the frequency word count included these inflected forms of words, because these inflected forms do not alter the core meaning of words. The frequencies thus reflect in the BP words and these additional inflected forms of nouns and adjectives.

Po92 across all five dimensions. The comparison of NFs reveals quite clearly whether the normalized frequencies of the BP words associated with each of the dimensions in Pr92 and Po92 are different, but the NFs by themselves do not tell us whether these differences are statistically significant.

There are many statistical tests to determine significance. For the purposes of this project, the Log Likelihood test was chosen. The reason for this is that Log Likelihood does not involve an assumption of normal distribution (Dunning 1993), which suits the non-random nature of language (Kilgarriff, 2005). A normal distribution in this context refers to the distribution of probabilities of the occurrences of language that is randomly produced. However, language is not random. It is produced/created purposefully (i.e. unique vocabulary found in genre-specific contexts). With respect to language use, it is appropriate not to have an assumption of normal distribution because language is non-random by its nature. In this regard, Log Likelihood was the suitable option of statistical test. Although a significance test will indicate whether we can be more confident that a difference in word frequencies is not simply a matter of chance, it does not indicate whether the difference is minor or major. Consequently, the Log Ratio (Hardie, 2014), an effect size statistic, was also calculated in order to measure whether the frequency differences in the two corpora are large or small and to provide an effective way of comparing the size of differences when looking at the different text types.

In the analysis of frequency differences, the frequencies of BP words of some universities that occur in each of the text types are higher than those of other universities. Therefore, the frequency distribution of these subcorpora – BP words of individual universities in each of the text types in each of the BP dimension - was calculated and reported. In order to determine what kinds of hierarchical relationships exist among the various sections of the corpus (e.g. which universities are more similar to or different from each other in terms of the representation of a given BP dimension in their website texts), cluster dendrograms were generated. A cluster dendrogram is a kind of tree diagram that illustrates proximity between items within their own cluster, as well as a further distance between items in one cluster and those in another cluster. For example, in Figure 5, the Dendrogram depicts that the distance of PrH_2_LSE and PrM_3_Sussex is closest, but the distance between these two items as a set/unit is far from PrM_1_Edinburgh. We can see that the Dendrogram pictures PrM_1_Edinburgh as the item that stands out from all the others. Fusion methods are important to understand how the clusters are created. Three types of linkage criteria were employed: single-linkage clustering, average-linkage clustering and complete-linkage clustering. The differences between these three types of linkage relate to the ways in which

the distance or neighbours between the items with the smallest frequencies are merged. Levshina (2015) explains how different linkage methods as follows. Single-linkage clustering is a method in which the tree-generating algorithm 'compares the nearest neighbours in all pairs of clusters and merges those clusters whose nearest neighbours are the closest' (p. 310). Average-linkage clustering is the method in which the algorithm 'compares the average distances between all pairs of clusters and merges those two clusters whose members have the smallest average distance' (pp. 310-311). Complete-linkage clustering is a method in which the algorithm 'compares the farthest neighbours in all pairs of clusters and merges those clusters whose farthest neighbours are the closest' (p. 310).
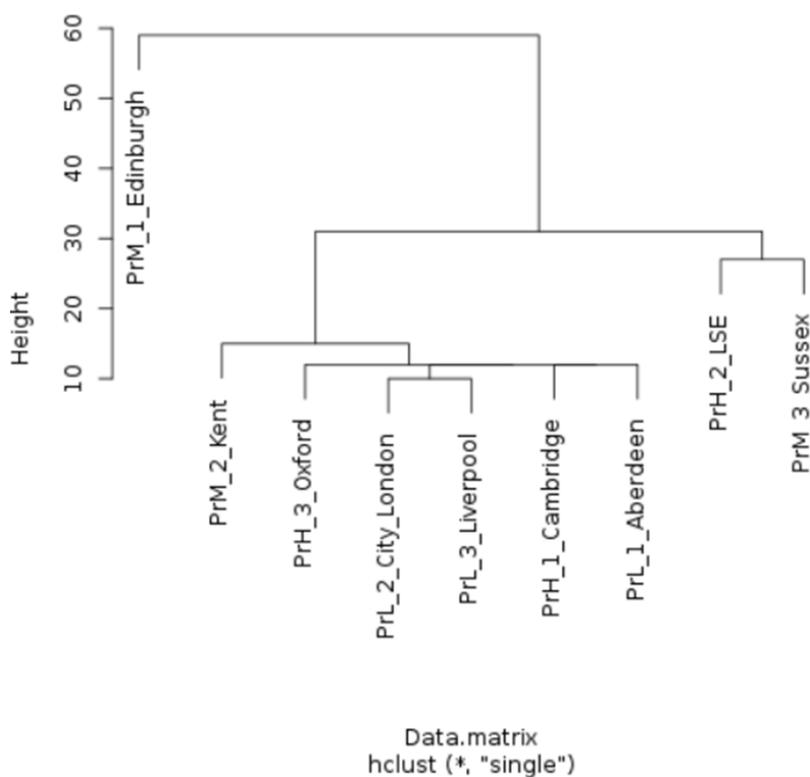
Figure 5 Example of a Cluster Dendrogram (Single Linkage Method)

The clustering process is iterative. First, the two closest or most similar items are merged (joined as branches of a tree), and then the algorithm recalculates the distances/differences between items, treating the merged item as one unit. The process is repeated until all items have been incorporated into the branching of the tree. Levshina (2015) describes the characteristics of a dendrogram as follows: 'Unlike a normal tree, it 'grows' not from the root to the branches, but the other way round.' In the beginning, each object represents its own cluster, or the 'leaf'. 'Next, the most similar objects (the ones for which the distance between the objects is the smallest) are merged. This procedure is repeated again and again. In the end, all leaves and branches are merged into one tree.' (ibid. p. 309). The types of cluster fusion

that were chosen were those that yielded the most robust linkages between clusters, which is determined by the Cophenetic Correlation Coefficient (R_c). R_c is the Pearson correlation showing robustness of clustering, based on calculating the actual distances and the predicted distances (NCSS, 2016, p. 445-14). An R_c value of ≥ 0.75 indicates robust clustering (ibid.). Due to the differences in how the smallest distances between subcorpora are merged, the dendrogram can look different in each of the methods. The type of linkage that was chosen for each of the dendrogram trees was based on the comparison amongst the R_c scores derived from the single, average and complete linkages. The type of linkage that yielded the highest R_c score was selected for the presentation of the frequency distribution of BP words in subcorpora. All of the dendrograms with R_c scores used in this project were generated using the UCREL Clustertool (created by Andrew Hardie), which is incorporated as part of Lancaster Stats Tools online (Brezina, 2018).

The final statistical measure used in the analysis of the frequency of BP words is the type/token ratio, which was calculated in Wordsmith 7.0 tool. The type/token ratio was used to examine whether texts from the Pr92 and Po92 are different in terms of lexical density: that is 'a measure of the proportion of lexical items (i.e. nouns, verbs, adjectives and some adverbs) in the text' (Johansson, 2008, p. 61). The type/token ratio is 'the number of types (unique words) in a text, divided by the number of tokens (total number of words) and expressed as a percentage' (Baker et al., 2006, p. 162). A low type/token ratio tends to indicate repetition of the same words, while a high type/token ratio tends to indicate the use of a greater variety of words (Baker, 2006, p. 52; Baker et al., 2006, p. 162). Comparing the type/token ratios of the different sections of the corpora, if a section that has a higher TTR than another, it suggests that section involves a more varied vocabulary. The analyses that makes use of the statistical measures and methods described in this section can be found in Chapter 4: frequency information and cluster dendrograms relating to the BP words associated with each of the five BP dimensions are presented in section 4.2; type-token ratios are discussed in section 4.3.

3.3.2 *Stage Two: Identifying Keywords*

The second stage of the data analysis involved identifying BP 'keywords' on the university website texts through a comparison of the frequency of BP words in the corpus with their frequency in a reference corpus. A 'keyword' is a word that is 'significantly more frequent in one corpus than another' (Hunston, 2002, p. 68). To identify keywords, a score that shows 'keyness' is used to generate a key word list. Scott and Tribble (2006) define keyness as 'a

quality words may have in a given text or set of texts, suggesting that they are important; they reflect what the text is really about, avoiding trivia and insignificant detail' (p. 56).

Keyness scores are derived from statistical tests (e.g. chi-square, log-likelihood). The text analysis programme Wordsmith can apply a chosen test and generate a keyword such as for a target study corpus in relation to a specified reference corpus. The reference corpus will typically be larger and more general in terms of the text types it contains. The aim of the comparison is to establish which words are more prominent in the study corpus – in this case the Pr92 and Po92 corpora of university website texts – relative to the 'norm' of language represented by the reference corpus (Baker, 2006, pp. 125-126). For the present study, the chosen reference corpus was the British National Corpus (BNC), '100 million word collection of samples of written and spoken language from a wide range of sources, designed to represent a wide cross-section of British English from the later part of the 20th century, both spoken and written' (http://www.netcorp.ox.ac.uk/corpus). The setting for Wordsmith to use in generating the keyword list is discussed later in this section. Those BP words from Opoku et al.'s (2006) dictionary lists that were identified as keywords as a result of the process described above are discussed in detail in section 5.2-5.3, and are also the focus of the analysis of contexts and collocations in section 6.2. There words will hereafter be referred to as 'BP keywords'. In identifying keywords, it is important to consider what types of keywords are best suited to the nature of this project. This issue is discussed below.

The keyword list that was generated by Wordsmith's comparison of the Pr92/Po92 corpora with the BNC includes both positive and negative keywords. Positive keywords are a sign of what is emphasised in a corpus (i.e. proportionally more frequent in the study corpus than the reference corpus), while negative keywords are words that are not highly represented in a corpus (Baker, 2006, pp. 139-140). The two types of keywords are indicated by positive or negative keyness values in the keyword list, where positive keyness values denote prominent words – that is, words that are proportionally more frequent in the study corpus than the reference corpus – while negative keyness values denote words that are particularly infrequent and therefore under-represented in the study corpus relative to the reference corpus (Bondi, 2010, p. 11). In compiling a positive and negative keyword list, a reference was used as a corpus being compared against. A reference corpus represents the 'norm' of a language because it contains a large number of texts that represent language use. They are not merely representative of one particular text type or genre, but a reference corpus enables to function as a 'benchmark' of language 'norm' (Baker, 2006). By comparing a corpus against a

reference corpus, an extraction of words which are prominent from either the investigated corpus or the reference corpus can be retrieved (ibid., p. 139).

Selecting the appropriate keyness statistic for compiling a keyword list is an important step. A list of keywords can differ depending on the statistical method being used to calculate the keyness scores. Bondi (2010) states that keywords are 'keys' to open 'textual doors'. This is because a good keyword can be used to identify its nearby contexts, which can help us understand how the keyword is used, and, through human interpretation techniques in corpus linguistics, specific details of use in contexts can be identified.

As noted above, there are a number of statistical tests that can be used as the basis for generating a keyword list, such as Chi-square and Log-Likelihood, but for this study Log Ratio was chosen. The rationale for this choice is that Log Ratio is an effect size measure rather than a significance test, and thus emphasises lexical words. This is because Log Ratio is closely related to Mutual Information (MI) – both use a binary log for calculation (Hardie, 2014). As words retrieved from MI scores tend to be low-frequency words (Evert, 2010), this means that words that commonly occur (i.e. grammatical words) are more likely ignored, leaving more of the content/lexical words to be retrieved.

As an effect size statistic, Log Ratio generates keyness scores by calculating a 'binary log of the ratio of relative frequencies' of words in two corpora, with each one point increase in the score indicating a doubling in the ratio (Hardie, 2014). In other words, a score of 0 indicates that a word has the same frequency in two corpora, a score of 2 indicates that it is 4 times as common in one of the corpora, a score of 3 that it is 8 times as common, and so on. Hardie (2014) points out that, as measures of statistical significance, other methods that are commonly used for generating keyness scores and identifying keywords focus only on establishing that there is sufficient evidence to be confident that the difference in frequencies between two corpora are not simply attributable to chance. In other words, these significance tests do not take into account, and therefore do not reflect, how major or minor any differences are. For example, Log Likelihood generates keyness scores that reflect whether there are enough words occurring in a corpus as evidence to be confident to a certain degree that any differences between the corpora being compared are significant.

There are other reasons for not using a statistical significance test. In the case of Chi-square and Log Likelihood, which are tests for statistical significance that compare differences of word frequency between corpora, Chi-square is not reliable for small samples (McEnery and Wilson, 2001, p. 84). As Kilgarriff (2005) observes, language is not random. Given that the

Chi-square measure involves an assumption of normal distribution of samples (Evert, 2010), which is in turn based on an assumption of randomness, when it is applied with samples from non-random populations the results are likely to become statistically significant. In other words, results from Chi-square are likely to be statistically significant with a larger corpus, simply by virtue of its size, with the result that any null hypothesis is likely to be rejected when the test is applied to a large dataset (Oakes, 1998, pp. 28-29). Introduced by Dunning (1993), Log Likelihood does not require or assume a normal distribution or random population, and from that perspective it may be seen as a better measure for generating keyness scores to create keyword lists. However, relying only on a measure of statistical significance is problematic because we can only know whether or not there is a difference but not the extent of the difference. Consequently, Log Ratio – an effect size measure – will be used in combination with Log Likelihood. Log Ratio shows whether the difference is major or minor (Hardie, 2014).

For these reasons, Log Ratio was chosen for generating keywords. The threshold of setting keyness of Log Ratio (Log Ratio score) was set at 0.5. Setting up a low threshold of Log Ratio score made it possible to generate a large number of keywords. By having as large a number of keywords as possible, they also appear as words in Opoku et al.'s BP dictionary. These keywords are used for the analysis in context (see Section 3.3.3).

3.3.3   *Stage Three: Corpus Analysis of Contexts*

The third stage of the data analysis focused on the contexts in which the BP keywords occur. This stage consisted of two steps. The first step was to identify words that commonly co-occur with the BP keywords that were discovered in stage two: that is, the collocates of BP keywords. Collocations are useful for analysis in that the words that co-occur with keywords (collocate words) can suggest patterns of meanings in use (McEnery and Hardie, 2012, p.123). The second step was to analyse the uses in the contexts in which BP keywords appear. Both steps help to identify in-depth details of the themes emerging from the contexts in which BP words appear. The details of these two steps are described separately in the following sections.

3.3.3.1   *Identifying Collocates of the BP Keywords*

This section begins by outlining the notion of collocations that has shaped the methods that were adopted for this stage of the data analysis. The terms 'collocation' and 'collocates' (which will be interchangeably used) have been defined in a number of different ways,

focusing on one or more of the following characteristics: collocation is the relationship between words that (1) regularly occur with each other, (2) stay 'directly adjacent' or 'syntactically/phrasally related but not necessarily adjacent' with each other, (3) are semantically related to each other, or (4) are grammatically and lexically related to each other, all of which contribute to meanings (Gries, 2013, pp. 138-139). For example, reflecting the first characteristic listed above, collocation has been described as the 'phenomena of certain words frequently occurring next to or near each other' (Baker, 2006, p. 96). Refining and adding to this basic definition, McEnery and Hardie (2012) characterise collocation as 'a co-occurrence pattern that exists between two items that frequently occur in proximity to one another – but not necessarily adjacently or, indeed, in any fixed order' (p. 123). Adopting a slightly different focus, Evert (2004) defines collocation as 'a word combination whose semantic and/or syntactic properties cannot be fully predicted from those of its components, and which therefore has to be listed in a lexicon' (p. 9). In this case, a collocation (i.e. a combination of words) can work as a unit in terms of meaning and/or syntactic function, which may not be the same as the meaning of the individual words that make up the collocation.

For this project, a quantitative analysis was conducted in order to identify collocations for the purpose of establishing and investigating the kinds of meanings that are active in the contexts in which BP keywords occur in order to develop a sense of the prosody implicated commonly associated with those keywords in the university website texts. In this respect, therefore, the emphasis is on collocation in the broad sense of regularly or predictable co-occurring words that might reveal something about the meanings that tend to be associated with the BP keywords in use. Evert (2004) notes that two approaches can be adopted to search for collocation: using researchers' intuitions (human observation) and using statistics to calculate the frequencies of words that occur in the vicinity of the search terms (machine calculation).

This project has taken a statistical approach to the identification of collocational patterns. This is because there is a possibility that co-occurrences identified or selected on the basis of observation and intuition could be a matter of chance, while using statistical methods increases the likelihood that the collocations extracted from texts are not attributable to coincidence (Evert, 2004, p. 20). Although there are other approaches for corpus-based discourse analysis, using statistics was deemed suitable for the context of this study. In the first stance, due to a large body of texts and a large number of search words (BP keywords), using statistics to identify collocate words for an initial impression of meanings that are associated with BP was practical. In the second stance, using statistics made it possible to

identify collocations of words within a larger span. The focus of collocations in the traditional practice is on the words that are observed nearby or are immediately adjacent to each other. Stubbs (2009) notes that collocation is often referred to as a relation between two lemmas as a co-selection of language in use. For example, *quaff* regularly co-occurs with *beer* or *wine*; *play-role* is often used together in a different form (i.e. *play* a *role*, a *role* to *play*) (ibid, p. 119). When statistics come into play, collocations do not have to refer to those words that are located immediately next to each other. Rather, words within the span of search words can be identified as collocates and thus their associated meanings can be attributed.

As with the keyword search described in section 3.3.2, Log Ratio was the statistical measure chosen for compiling collocate words because it emphasises retrieving them in a way in which the difference is large between their occurrence in a study corpus compared to the reference corpus. The programme #LancBox, developed by Brezina, McEnery, and Wattam (2015), was the software used for the analysis because it has Log Ratio options built in to its collocation search function. The settings used for the collocation searches were as follows. The Log Ratio threshold value for the collocation search was set at five, with the span set at five words to the left and five words to the right of the search words (i.e. the BP keywords). A Log Ratio value of five means that the collocations retrieved are a minimum of 32 times more common in the study corpus (the Pr92 and Po92 corpus of the university website texts) than in the reference corpus that it is compared against (the BNC). The default setting of Log Ratio value is three, but for this project the Log Ratio threshold value was set at five. The reason for this is that, in initial trial runs, the collocations retrieved with a threshold setting of five included a lower number of grammatical words compared with those retrieved with a threshold setting of three or four. As a result, the collocations retrieved with a Log Ratio threshold setting of five were suitable for this study, in which lexical or content words are the focus. As well as a Log Ratio threshold value of five, a minimum frequency of 10 was also set as a criterion for including words in the collocate lists in order to keep them manageable and to focus on the most frequent collocates. After the BP keywords were identified, the next stage is to adopt approaches for the in-depth analyses of contexts, which are detailed in the next section.

3.3.3.2 *Patterns of BP Keywords in Contexts*

Having generated the lists of collocates that co-occur with the BP keywords associated with each of the five BP dimensions in section 3.3.3.1, the next step was to identify patterns in the collocate words in terms of similarities of meaning, thus grouping them together into semantic categories of themes, based on interpretation of collocate words and the contexts. For

example, *award* and *recognition* were grouped together with other similar words into semantic category of **Success**. The set of semantic categories that are associated with each of the BP dimensions as a result of this process was subsequently used as the basis for a more-in-depth qualitative analysis of the contexts in which the BP keywords appear.

The analysis began with analysing patterns of contexts. A pattern in language is a repetition of words, sounds, rhythms or structures which can be consciously designed for a specific effect (e.g. rhythmic and rhetorical effects), while at other times patterns can occur naturally (Hunston, 2010, pp. 152-153).

The patterns of use in contexts of the BP keywords were identified on the basis of: (1) looking for patterns in meanings of collocates – i.e. grouping the collocates of the BP keywords together to identify semantic themes that were associated with the five BP dimensions (established in the end of 3.3.3.1); and (2) using the notions of centrality and typicality as a guide. Having established the information in (1), the collocates were grouped together to identify semantic categories. These categories were useful in that the most common collocates in conjunction with their associated categories were identified, which suggested a direction to investigate further by employing the techniques in (2), described as follows.

The process of categorising the collocates in order to identify relevant semantic themes was guided by the related notions of centrality and typicality. Centrality is 'Central', referring to meanings from co-texts in concordances being grouped into 'categories' based on patterns being observed (i.e. semantic patterns or themes) (Hunston, 2002, p. 42). Typicality relates to 'typical use' of language in texts which are from highly frequent meanings in words, collocate words or contexts, and the meanings observed can be either metaphoric or literal (Hunston, 2002, p. 42). For example, in this study *graduate* (noun) and *graduation* in the university corpora commonly appear in different kinds of contexts that reflect different kinds of meanings or themes of meaning, despite the fact that they are related words. While *graduate* tends to occur with prospects, *graduation* commonly occurs with ceremony. Use in context, thus, has a large impact on applications. For example, when identifying patterns of contexts for the purpose of arranging appropriate activities, a job fair is suitable for use of '*graduate* prospects' whereas a party is a suitable activity for '*graduation* ceremony'. As meanings of words, in particular those sharing the same roots (e.g. *graduate* and *graduation*), might be difficult to differentiate by using intuition, analysing contexts in which BP keywords appear is a useful method to interpret the sense of meanings, shown as patterns from contexts. It is also noteworthy that the difference between these two words is also simply a natural consequence of the fact that, although they are related, they mean different things: *graduate* [noun] is a

word for a person who has graduated (note that there is also a verb *graduate*); *graduation* is a word for the process of graduating, or the ceremony at which it occurs (i.e. the ceremony at which a graduate graduated).

The themes that were identified as a result of the process described above will be referred to as University Corpus Themes (UCTs). Some of the UCTs can also be related to Decision Factors (DFs), reviewed in section 2.3.1 – 2.3.3. The identified UCTs that are associated with each of the five BP dimensions (i.e. the ways in which the BP keywords are associated with each of the five BP dimensions are used in the university website texts, such as, for example, the *Friendship* UCT use associated with the EXCITEMENT dimension). An implication for UCTs is for universities using related themes to improve their branding (see section 6.3). The qualitative analysis of the collocates that occur in the BP keyword contexts was the last part of the corpus analysis process carried out in this project.

These identified UCTs were used for two contributions. Firstly, UCTs listed in each of the five BP dimensions can be used for branding universities. The benefits of this categorisation are for use of developing language in websites where UCT corresponds to the appropriate BP dimensions. For example, *Friendship* is one of the UCTs in the BP EXCITEMENT dimension; ideas in relation to establishing friendship could be used with BP words and contexts that are associated with BP EXCITEMENT dimension. Secondly, the UCTs were categorised under two approaches to branding: the rational (functional) approach and the emotional (desirable) approach. The benefits of grouping the UCTs into these two approaches are for the use of developing branding activities or creating language that is associated with the approaches universities prefer. For example, *Living Comfort* is a UCT that could be an aspect emphasised for the emotional (desirable) approach of branding. If universities would like to increase this approach to branding, they could develop language or create activities that are associated with good living for students. Examples of UTCs in each of the BP dimensions are shown in Figure 6. All of the stages and steps involved in the data analysis are summarised in figure 7 and 8 below.

Figure 6 Examples of UCTs from Contexts of BP dimensions and Approaches for Branding (See section 2.4.3.2 and 6.3 for detail)

Corpora Created
- Pr92 (Pre-1992 university websites)
- Po92 (Post-1992 university websites)

Stage 1: Frequency Information of BP Words
- Normalised the frequency (NF) of BP words in Pr92 and Po92 corpora
- The NF of BP words in each of the BP dimensions shown in bar charts
- Log Likelihood, Log Ratio used as statistical measures for the comparison of the similarities and differences between Pr92 and Po92 corpora
- The frequency distribution of subcorpora of each universities shown in bar charts
- Cluster Dendrogram trees created to show closeness in similarities or differences of university corpora.
- Type/token ratio calculated to examine the complexity of texts from Pr92 and Po92

Stage 2: Identifying Keywords
- Keyword list generated by employing Pr92 and Po92 as the study corpus and BNC as the reference corpus
- Log Ratio (setting 0.5) as the statististical measure for compiling the keyword lists
- BP keywords identified (Keywords that are also words that appear in BP dictionary)

Stage 3: Analysing Contexts: Collocations
- Collocations of BP keywords identified by Log Ratio (setting 5)
- Collocations identified by using BP keywords from each of the BP dimensions as search terms
- Collocational patterns grouped based on semantic similarities, referred to as 'Semantic Categories'

Stage 3: Analysing Contexts: Patterns of Contexts
- Patterns of contexts in which the BP keywords appear.
- Ideas suggested in contexts examined by application of the notion of 'centrality' and 'typicality' of use of BP keywords
- The ideas retrieved from 'centrality' and 'typicality' of BP keywords in used referred to as University Corpus Themes (UCTs).
- UCTs used for discussions with DFs and rational and emotional approaches of branding

Figure 7 Overview of the Stages of Data Analysis

```
Stage 1                    Stage 2                 Stage 3
Brand Personality (BP)     BP Keywords             Collocation and Contexts
Words
```

Stage 1 – Brand Personality (BP) Words

- Normalised Frequency (NF) of BP words
  - NF = (No. of BP words ÷ corpus size) × 1000
    - Chats of normalised frequency of BP words of each of the five dimensions, Log Likelihood, Log Ratio, Frequency Distribution, Cluster Dendrogram trees
      - Frequencies of BP words compared across text types of sub-corpora.

- Lexical Density
  - Type/token ratio (%)
    Type = BP word found in corpora
    Token = BP words list
    - Lexical density of words in Pr92 and Po92

Stage 2 – BP Keywords

- Keywords list of the corpora (BNC as the reference corpus)
  - Log Ratio (0.5) for keywords (Pr92 and Po92 corpora against BNC)
    - Keyword list created
      - Keywords that are also words appear as BP words were picked out, named as BP keywords.
        - BP keywords (used as search terms for the analysis of contexts)

Stage 3 – Collocation and Contexts

- BP Keywords from each of the BP dimensions used as search terms to identify collocations
  - Collocations by using Log Ratio (setting at 5) and also filtering out by setting a minimum frequency of 10 occurrences
    - Collocate words identified and grouped into 'Semantic Categories' based on similarity in patterns of the meanings
      - 1) Semantic Categories used for narrowing down the ideas for in-dept analysis of contexts
        2) Ideas from contexts in which BP keywords appear identified as UCTs
        - UCTs and contexts for use for branding

Figure 8 Detailed Breakdown of the Stages of Data Analysis

3.3.4 *Reliability*

This section discusses reliability in terms of how and why the chosen methods of corpus analysis are employed in this study. Two important aspects to consider in relation to the reliability of this study are the frequency of information and the analysis of contexts. Reliability refers to the data collection and the analysis that are replicable (Denscombe, 2010). The reliability in this study is underpinned by the process of data collection and replicability of the analysis. Firstly, in terms of data, the account of the processes of data collection and analyses have been given in the preceding sections of this chapter and are supported by further detailed information recorded in the relevant Appendices at the end of the thesis. Secondly, the analysis of the frequencies of BP words and the identification of (a) the BP keywords and (b) the collocates of those keywords involved statistical measures and tests that have been fully described in the preceding sections of this chapter, and which are therefore easily replicable. Lastly, even though the analysis was not 'formulaic' in a quantitative sense, in the case of the qualitative element of the analysis (examining the BP keyword contexts and categorising the collocates into semantic themes) followed established guidelines (mentioned in section 3.3.3.1 and 3.3.3.2) and was all carried out by the same person, and the coding was judged based on the patterns of use that frequently occur in the contexts. There are thus no issues of intercoder reliability.

3.3.5 *Validity*

Research validity can be divided into issues of 'external validity' and 'internal validity'. External validity refers to the generalisability of findings beyond the context of the study, whereas internal validity refers to the soundness of the research instrument (Richards et al., 2012, p. 326). The external validity of the methodology relates to the selection of the universities and sampling of their website texts, while internal validity relates to the method and statistical measures that were used to identify keywords and their collocates. Sections 3.3.2 and 3.3.3.1 discussed the statistical measures in detail.

In this project, external validity – or generalisability – relates to the selection of the universities. The suitability stems from the fact that the sampling procedure used to choose the university ensured that the sample size was representative of the wider population (see section 3.2.1 and 3.2.2 for more detail). This covers the generalisability of the findings to other UK universities that were not part of my samples. The findings in this project also correspond to Rauschnabel et al.'s (2016) study of universities in Germany and the UK (i.e. *Resilience* in this project and Rauschnabel et al.'s *Conscientiousness*), indicating that the

results of this study are also generalisable beyond the UK context. Section 6.3 discusses the similarities between the findings in this project and Rauschnabel et al.'s (2016).

In this project, internal validity can be related to approaches adopted in text sampling and the identification of keywords and collocates. Purposive sampling was used for text selections and the combination of Log Likelihood (as a significant measure) and Log Ratio (as an effect size measure) in identifying keywords (discussed in 3.3.1 and 3.3.2).

In corpus linguistics, there are two main issues that are discussed in relation to research validity: 'total accountability' and 'data selection' (McEnery and Hardie, 2012, p. 14). Total accountability refers to 'an unbiased (e.g. randomised) subsample of the examples in the corpus' applied as a basis principle for text collection (ibid., pp. 15). In seeking total accountability, researchers could avoid prior assumptions of unconscious bias from sample selections of favourable subsets by either using the entire corpus or randomising subsamples in the entire corpus (McEnery and Hardie, 2012, pp.14-15). The text collection is thus based on unbiased randomised sampling, with the entire corpus treated as a totality of a data source (ibid., p. 15). In addition, examples that do not fit this criterion of investigation in corpus data can be filtered out (ibid., p.15). However, McEnery and Hardie (2012) point out that language is non-finite (ibid., p. 15), seeking totality from random sampling of texts would not suit the research that investigates specific texts, in which vocabulary used can be skewed towards specific themes. Rather than random sampling, when it came to selecting texts from the websites, it was appropriate to adopt a judgement (or purposive) sampling approach so that texts that fit criteria (see Appendix A and section 3.2.2.1) were collected for corpus creation.

3.4 Ethical Considerations

To ensure that any relevant ethical considerations were taken into account, the Copyright, Design and Patents Act (1988) was reviewed, and the project was conducted in accordance with its guidelines. The chosen texts from selected university websites were analysed for the purposes of research as a private study in a non-commercial context. In this context, texts from the university websites and data analysis are used in this study for a non-commercial purpose, and do not infringe any copyright in the work provided that they are accompanied by a sufficient acknowledgement, with reference to the Copyright, Design and Patents Act (1988) in relation to research and private study states:

[F3 (1) Fair dealing with a **F4** … work for the purposes of research for a non-commercial purpose does not infringe any copyright in the work provided that it is accompanied by a sufficient acknowledgement.**]** (Copyright, Designs and Patents Act, 1988, Ch. 3, item 29)

A **F4** … refers to 'Research, private study and text and data analysis for non-commercial research' (The Copyright and Rights in Performances (Research, Education, Libraries and Archives) Regulation, 2014, No. 1372, item 3).

All of the university websites that were used as sources for the texts incorporated into the Pr92 and Po92 corpora are fully acknowledge in Table 5 in section 3.2.2.

3.5 Summary

This chapter has discussed the details of the research design adopted in this project. The relevant universities were chosen from *The Complete University Guide* (for 2016) using a random sampling technique (section 3.2.2). The university selection was discussed in terms of stratified purposive sampling and an appropriate sample size that is representative of the population (all the universities in the league table). The BP word frequencies were established for the five BP dimensions with the assistance of the textual analysis programme Wordsmith 7.0, and the detail of frequency word lists was discussed (section 3.3.1). Then the second stage was the process of generating keyword lists by comparison with a reference corpus, the BNC, using Log Ratio (section 3.3.2). Following that came the process of identifying collocates and classifying them according to semantic categories (section 3.3.3.1), and the subsequent section discussed use in context of BP keywords (section 3.3.3.2). Finally, in light of the methods adopted, the chapter ended with a brief discussion of issues relating to reliability, validity and ethics that are relevant to this project.

Chapter 4. Corpus Analysis: Brand Personality Dimension Word Frequencies

4.1 Introduction

This chapter discusses the principal similarities and differences that were discovered in the comparison of the Pre-1992 (Pr92) and Post-1992 (Po92) UK university websites in terms of their representation of the five brand personality (BP) dimensions that were outlined in section 2.4.3. The discussion is in four main parts. Section 4.2 identifies which of the BP dictionary words associated with each of the five BP dimensions can be found in each subcorpus, and the differences in the frequencies of these words across the two datasets. With respect to the *History* text type, a major difference in the normalised frequencies of BP words associated with the COMPETENCE dimension can be seen, but the difference becomes subtle in relation to the EXCITEMENT dimension. In contrast, the significant difference in the normalised frequencies of BP words in the *Life on Campus* text type of the EXCITEMENT dimension is large. As for the RUGGEDNESS dimension, the significant differences are in the *Funding* and the *Research* text type. For the SINCERITY dimension, there is a major difference in the *Funding* text type and a minor difference in the *Research* text type. While both Pr92 and Po92 corpora have high frequencies in the *Local Area* text type of the SOPHISTICATION dimension, the frequencies are statistically different between Pr92 and Po92 corpora in the *Funding* and *Research* text types. Section 4.3 presents frequency information in terms of the type/token ratios (TTR), which reflect the lexical density of the identified BP words of the five dimensions between the two corpora. Finally, the main findings presented in this chapter are summarised in Section 4.4.

4.2 BP Dimensions: Frequency Information

This section examines the representation of the five BP dimensions in the Pr92 and Po92 corpora. To carry out this aspect of the corpus analysis, Opoku et al.'s (2006) dictionary was used. The dictionary provides a list of 833 words (BP words) that are claimed to represent the five BP traits, namely COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION (see Section 2.4.3.1). These BP words were used to count for their frequency occurrences in the texts of Pr92 and Po92 corpora. The following sections focus on each of the five BP dimensions in turn, beginning with COMPETENCE.

4.2.1 *COMPETENCE*

This section presents the analysis of the COMPETENCE dimension of BP. The analysis begins with the frequencies of the words associated with the COMPETENCE dimension (COMPETENCE words or BP COMPETENCE words).

Figure 9 first of all shows the normalised frequencies (NF) which were discussed in section 3.3.1. Log Likelihood and Log Ratio are presented in Table 7. Log Likelihood (G^2) is a measure of the statistical significance of differences in the frequencies between Pr92 and Po92, while Log Ratio is a measure of the effect size (see section 3.3.2). The bold entries in Table 7 highlight the text type(s) where there is a statistically significant difference in the frequency of BP COMPETENCE words in Pr92 and Po92. Both G^2 and Log Ratio are presented, in addition to the raw frequencies of sub-corpora of the six text types: *Funding*, *History*, Life on Campus (*Life)*, Local Area (*Local)*, *Mission* and *Research*.

	Funding	History	Life	Local	Mission	Research
COMPETENCE BP words per 1000 words (Pr92)	5.6	3.6	4.3	2.4	11.4	7.2
COMPETENCE BP words per 1000 words (Po92)	5.0	8.9	5.0	2.3	11.0	6.4

Figure 9 Normalised Frequencies (NF) of BP COMPETENCE Words in the Six Text Types of Pr92 and Po92

Text Types	Pr92 BP Raw F.	Po92 BP Raw F.	G^2	p	Sig.	Log Ratio
Funding	445	280	1.7	0.2	No	0.14
History	320	90	**49.4**	**0.002 e^{-9}**	**Yes**	-1.33
Life	207	368	2.7	0.1	No	-0.20
Local	46	43	0.03	0.9	No	0.05
Mission	155	147	0.1	0.7	No	0.06
Research	449	384	0.1	0.7	No	0.03

Table 7 Frequency Differences, G^2, p, Significance and Log Ratio of COMPETENCE Words
The symbol e^{-9} indicates that there are 9 more zeros added in 0.002.

Mission is the theme that yields the highest normalised frequencies of COMPETENCE words in both Pr92 and Po92. Although there are differences between the Pr92 and Po92 frequencies in a number of text types, the differences are only statistically significant in relation to the *History* text type (p = 0.002 e^{-9}, p < 0.05), where Po92 has a higher normalised frequency than Pr92 (Raw F. = 90 versus 320; NF = 8.9 versus 3.6). It is noteworthy that although the raw frequency in the *History* text type of Pr92 (Raw F. = 320) is clearly higher than that of Po92 (Raw F. = 90), the normalised frequency of Pr92 turns out to be lower that of Po92. This is due to the large difference in the size of the *History* text type sections of the two subcorpora. While that of Pr92 is 89,818, the *History* corpus size of Po92 is only 10,072, making the frequency of BP COMPETENCE words in Po92 of this text type proportionally higher than in Pr92, as reflected in the higher normalised frequencies. This suggests that there is a greater focus on *History*-related information in the Pr92 corpus, which can partly be linked to the fact that Pr92 institutions have a longer history, which is promoted in the website texts. Turning to the analysis of Po92 institutions, although the *History* corpus size of Po92 is small, the higher normalised frequency of BP COMPETENCE words in Po92 (8.9 versus 3.6 in Figure 9) suggests that *History*-related information is also promoted in the Po92 university texts. Even though, Po92 universities are relatively 'new', they also have long history as HEIs before they obtained the 'university' title.

Positive numbers indicate a more common use of BP words in Pr92, whereas negative values indicate a more common use of the BP word frequency in Po92 (or a less common use in Pr92). As shown by the negative value in the Log Ratio column of the *History* text type, the frequency of BP words of Pr92 is less common in comparison with those of Po92. Looking at the other values in the Log Ratio column, we can see that the *History* score is the highest and stands out from all six text types. In other words, as well as being the only text type with a statistically significant difference, it is also notable (but not surprising) that this text type has the largest result for effect size, as shown in the largest Log Ratio value. The difference indicates that, relative to Pr92, the Po92 websites have more of an emphasis on the

COMPETENCE dimension in their *History*-related texts (at least so far as the COMPETENCE dimension is reflected in the words listed in the BP dictionary).

Next, we will look at more frequency details of Pr92. Figure 10 illustrates the frequency distribution of Pr92 across the different rankings of universities. The abbreviation 'H' labels the higher ranking, 'M' labels the middle ranking, and 'L' labels the lower ranking. Figure 10 shows high frequencies of BP COMPETENCE words in the *Funding* texts from PrM_1 (University of Edinburgh), and also in the *Research* texts from PrL_2 (City University of London). The high frequencies in these text types help to account for the total raw frequencies, as seen in Figure 11, with high numbers for from PrM_1 (University of Edinburgh) and PrL_2 (City University of London). Figure 12 is a Dendrogram (see section 3.3.1 for more detail) reinforcing the patterns seen in the BP COMPETENCE word frequencies, with PrM_1 (University of Edinburgh) and PrL_2 (City University of London) on top of the branch, separated from the other institutions, meaning that their frequencies are predominantly high compared to other subcorpora in the lower branches. The Cophenetic Correlation Coefficient (R_c) is 0.87, indicating a good linkage of the neighbouring cluster (R_c > 0.75) detailed in section 3.3.1.

	PrH_1	PrH_2	PrH_3	PrM_1	PrM_2	PrM_3	PrL_1	PrL_2	PrL_3
Funding	14	23	47	160	61	49	26	35	30
History	47	52	4	100	21	74	5	17	0
Life	16	5	22	14	34	14	31	34	37
Local	2	7	8	5	10	1	6	1	6
Mission	3	31	14	21	11	15	14	26	20
Research	39	67	22	32	37	30	36	144	42

Figure 10 Distribution of the Raw Frequencies of Pr92 Subcorpora: COMPETENCE
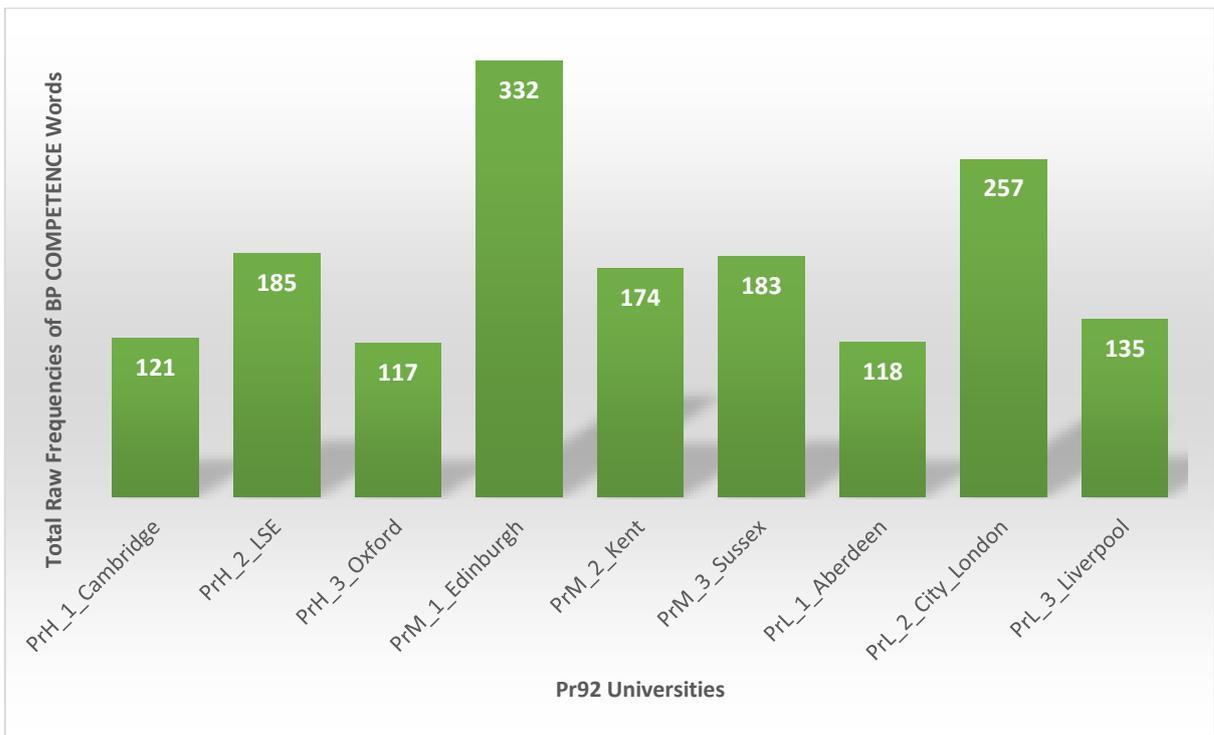
Figure 11 Total Raw Frequencies of COMPETENCE words in Pr92 Universities
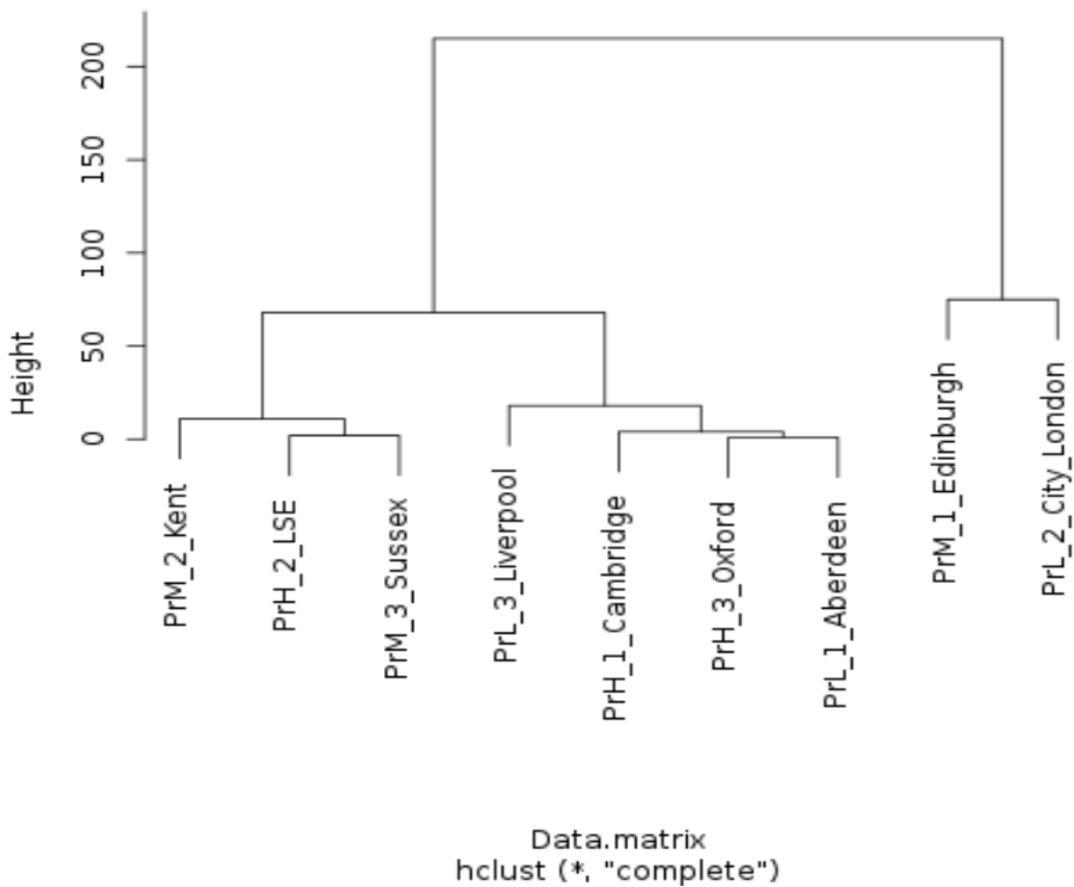
Figure 12 Cluster Dendrogram (Complete Linkage Method) of Pr92 Subcorpora: COMPETENCE

Following on from Figure 10-12, Figure 13-15 illustrate the frequencies of BP words in the Po92 website texts. Figure 13 reveals that *Research* text type of PoL_2 (Kingston University) and *Life on Campus* of PoL_4 (University of Worcester) are the main sources of BP COMPETENCE words in Po92. Figure 14 shows that the total raw frequency of PoL_2 (Kingston University) is the highest, at 210. The cluster dendrogram in Figure 15 has a Cophenetic Coefficient of 0.85, indicating a reliable value (> 0.75) of neighbouring clusters. This dendrogram reinforces the fact that PoL_2 (Kingston University) stands out as being most different from the other Po92 universities in terms of the frequency of BP COMPETENCE words. It is noticeable that despite the frequency spike relating to *Life on Campus* from PoL_4 (University of Worcester), the total raw frequency across all text types for this institution is in fact only the fourth highest (at 134), as can be seen in Figure 14.

	PoH_1	PoH_2	PoH_3	PoH_4	PoM_1	PoM_2	PoM_3	PoM_4	PoL_1	PoL_2	PoL_3	PoL_4
Funding	19	54	23	13	49	19	35	17	16	18	5	12
History	5	3	2	0	42	2	0	10	2	4	16	4
Life	22	34	21	12	20	26	28	23	36	33	36	77
Local	4	6	1	6	1	3	3	5	3	8	0	3
Mission	29	5	10	10	16	13	27	3	3	9	17	5
Research	22	39	15	33	21	6	20	27	18	113	9	25
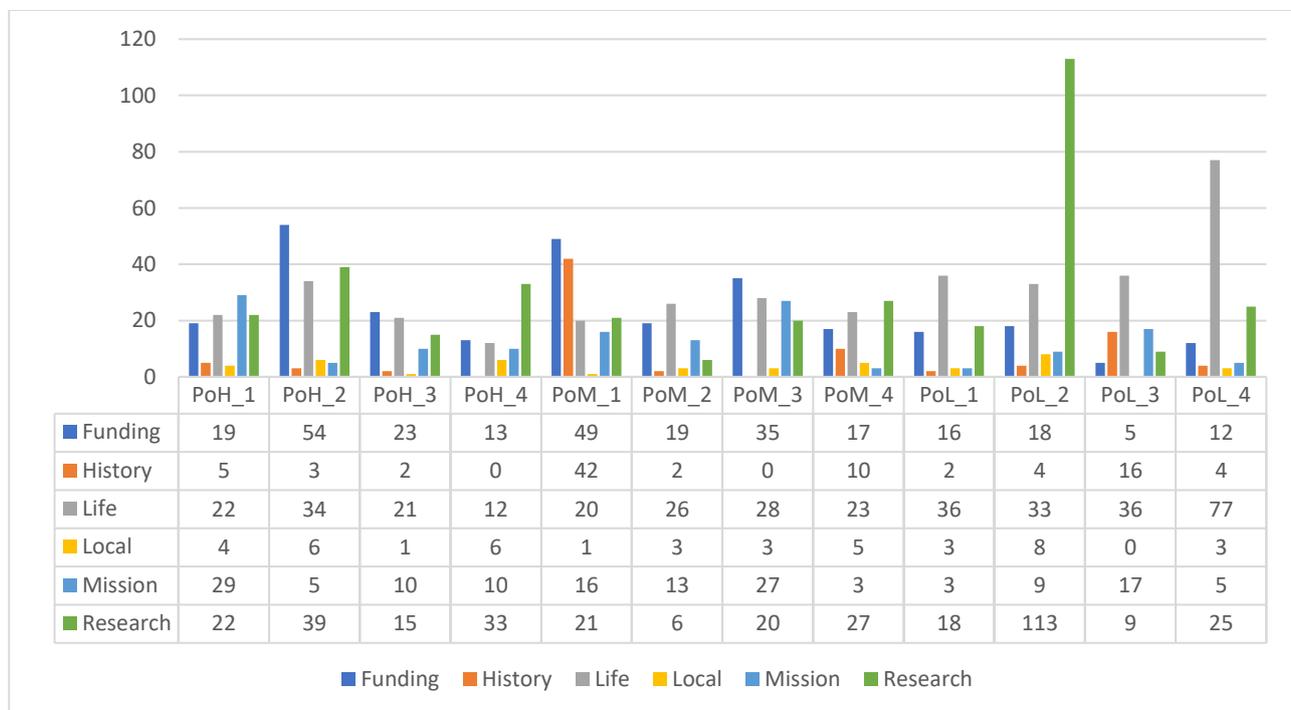
Figure 13 Distribution of Raw Frequencies of Po92 Subcorpora: COMPETENCE

Figure 14 Total Raw Frequencies of COMPETENCE words in Po92 Universities
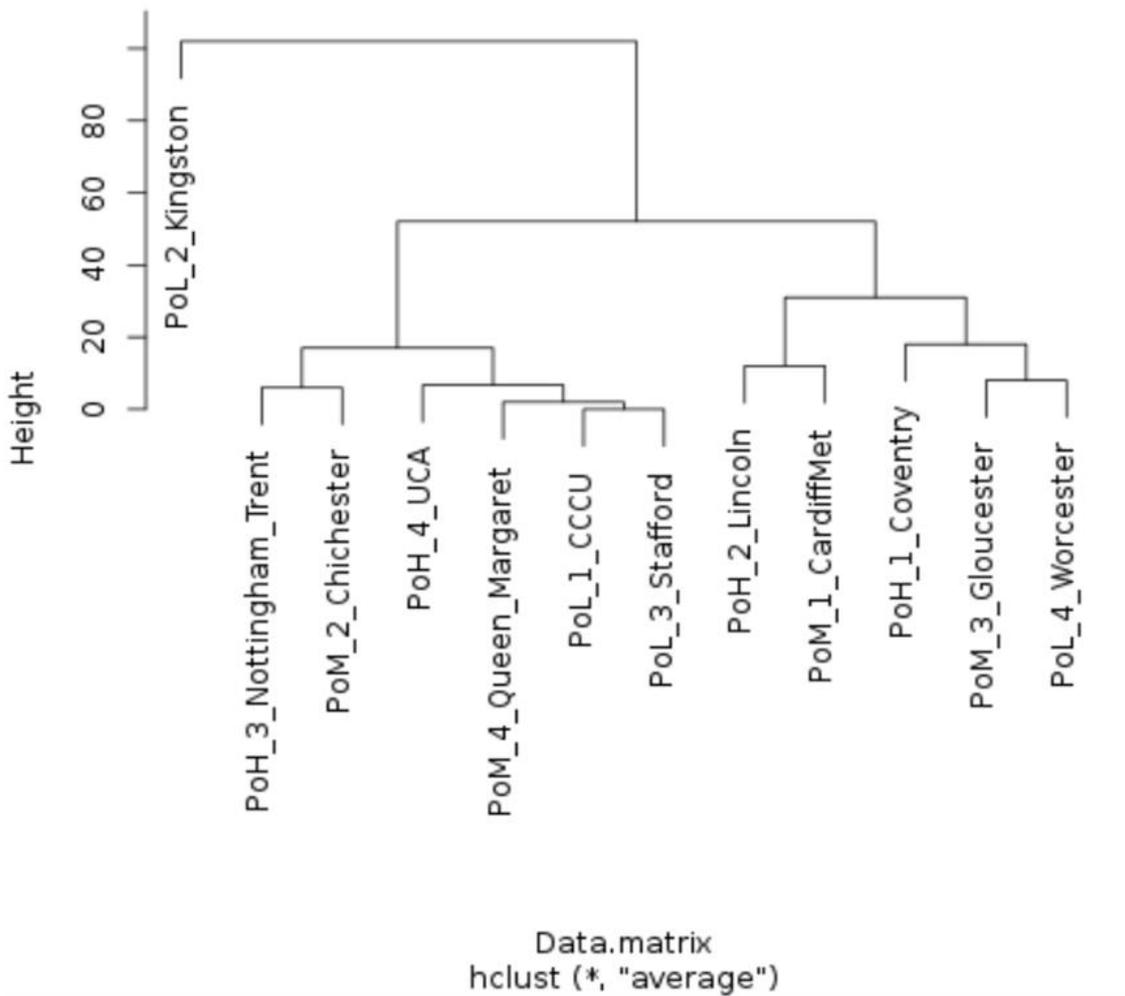
Figure 15 Cluster Dendrogram (Average Linkage Method) of Po92 Subcorpora: COMPETENCE

4.2.2 *EXCITEMENT*

Figure 16 presents the normalised frequencies of words associated with the BP dimension of EXCITEMENT in the subcorpora of the six text types. It shows that the *Funding* sections of the university websites have the lowest frequency of EXCITEMENT words in both Pr92 and Po92. The difference in frequencies between Pr92 and Po92 in the *Funding* text type appears small, a supposition confirmed by the Log Likelihood test results recorded in Table 8, ($G^2 =$ 0.9, < 3.84; p = 0.342, > 0.05), meaning it is not statistically significant. On the other hand, the differences in all of the other text types (i.e. *History, Life, Local, Mission, and Research*) are statistically significant, again as shown in Table 8. In all five of these other text types, the frequencies of EXCITEMENT words are significantly higher in Po92 than in Pr92 ($G^2 > 3.84$, $p < 0.05$). Looking down the Log Ratio column of Table 8, it is clear that the Log Ratio values of these five text types are all higher than that of *Funding*, showing that the effect size of the differences in the frequencies for these five text types are larger. The negative values indicate that in texts associated with *History, Life on Campus, Local Area, Mission* and *Research*, it is the Po92 corpus that has a greater frequency of BP EXCITEMENT words. In addition, the high frequency in relation to the *Life on Campus* text type stands out, in particular, with $G^2 = 43.66$ (p = 0.003 e^{-8}) and a Log Ratio value of -0.66, which is higher than the other text types. This suggests that it would be worthwhile examining the EXCITEMENT dimension of the *Life on Campus texts* in more detail (see examples of use in contexts in section 6.2.4).

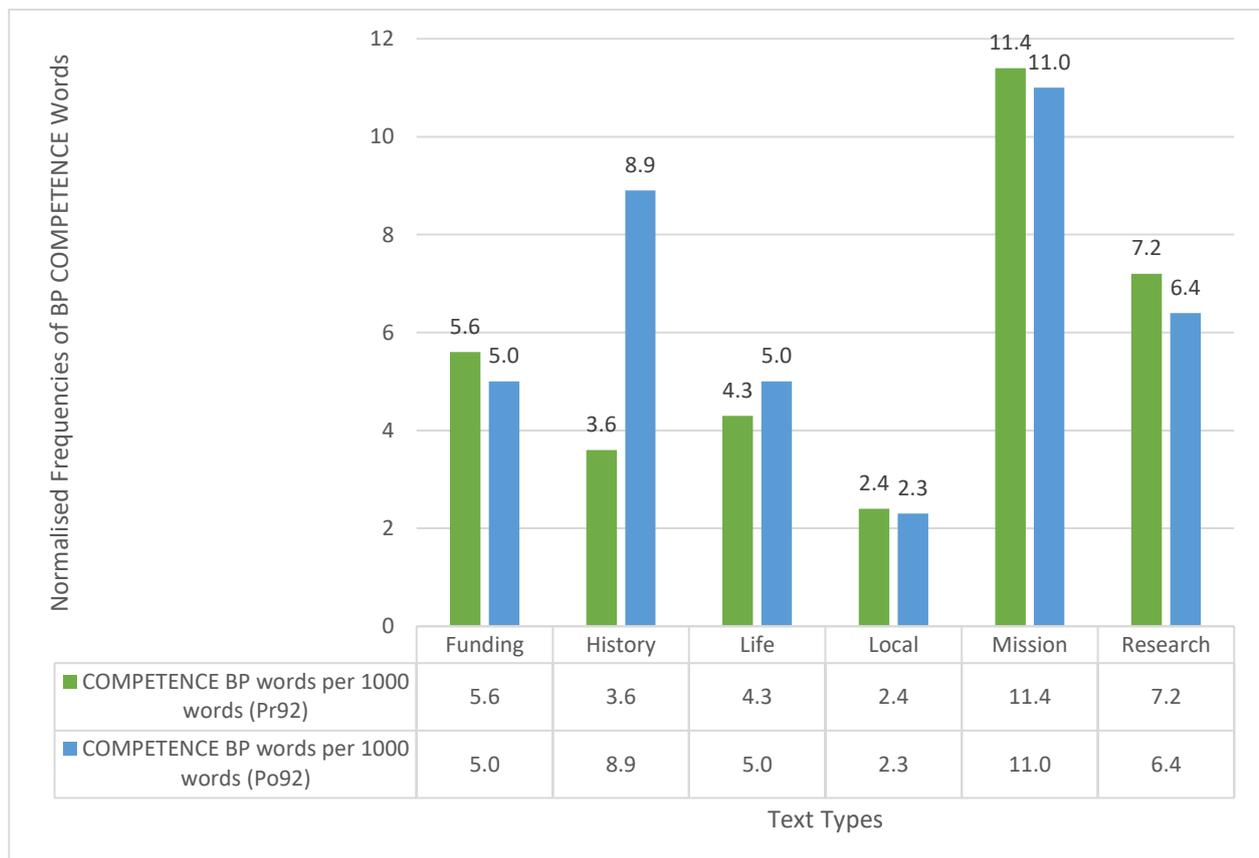|	Funding	History	Life	Local	Mission	Research
EXCITEMENT BP words per 1000 words (Pr92)	3.4	7.1	5.8	6.7	6.9	5.7
EXCITEMENT BP words per 1000 words (Po92)	3.1	9.5	9.1	9.2	9.3	8.2

Text Types

Figure 16 Normalised Frequencies (NF) of EXCITEMENT Words in the Six Text Types of Pr92 and Po92

Text Types	Pr92 BP Raw F.	Po92 BP Raw F.	G^2	p	Sig.	Log Ratio
Funding	273	173	0.9	0.342	No	0.13
History	634	96	**6.98**	**0.008**	**Yes**	-0.43
Life	278	678	**43.66**	**0.003 e^{-8}**	**Yes**	-0.66
Local	131	173	**7.27**	**0.007**	**Yes**	-0.45
Mission	94	124	**4.53**	**0.033**	**Yes**	-0.42
Research	351	443	**26.57**	**0.002 e^{-4}**	**Yes**	-0.53

Table 8 Frequency Differences, G^2, p, Significance and Log Ratio of EXCITEMENT Words

Looking at Figure 17, it is clear that, among the Pr92 institutions, the highest frequencies of BP EXCITEMENT words are associated with PrM_1 (University of Edinburgh), PrM_3 (University of Sussex) and PrH_1 (University of Cambridge). The noticeable peaks are from texts related to the *History* and *Mission* of PrM_1 (University of Edinburgh), and the *History* from PrM_3 (University of Sussex), and PrH_1 (University of Cambridge). The total frequencies recorded in Figure 18 also correspond to the peaks observed in Figure 17 in that the two highest frequencies in the bar chart are from PrM_1 (University of Edinburgh) and PrM_3 (University of Sussex). Only PrH_2 (LSE) is a greater overall frequency than PrH_1 (University of Cambridge), as Figure 18 shows in comparison to the observed peaks in Figure 17. The Cluster Dendrogram in Figure 19 shows that PrM_1 (University of Edinburgh) is the top branch, followed by PrM_3 (University of Sussex). The Cophenetic Coefficient is 0.87 ($R_c > 0.75$), meaning that the linkage of the clusters suggest robustness between distances.

	PrH_1	PrH_2	PrH_3	PrM_1	PrM_2	PrM_3	PrL_1	PrL_2	PrL_3
■ Funding	16	15	24	106	31	26	13	14	28
■ History	123	61	5	200	39	177	14	12	3
■ Life	23	18	27	12	47	28	43	38	42
■ Local	6	22	12	27	23	4	16	13	8
■ Mission	1	25	15	7	2	18	3	13	10
■ Research	38	76	18	28	26	29	35	69	32
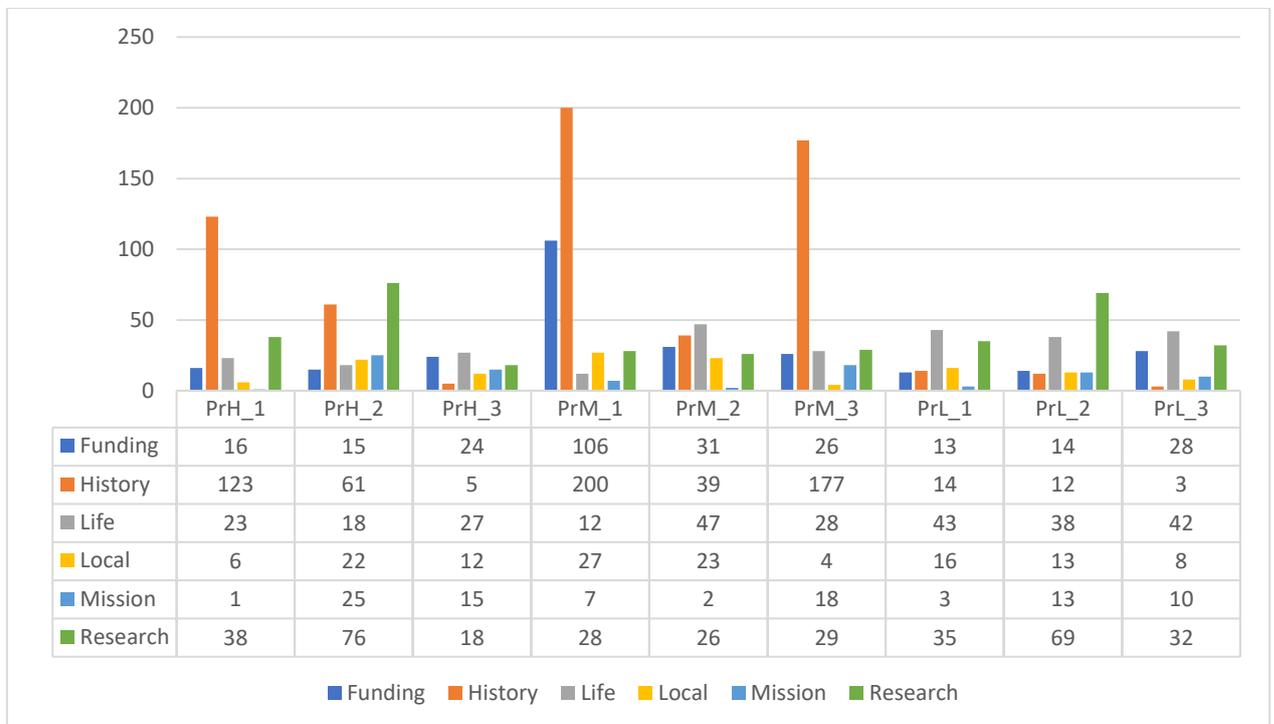
Figure 17 Distribution of Raw Frequencies of Pr92 Subcorpora: EXCITEMENT
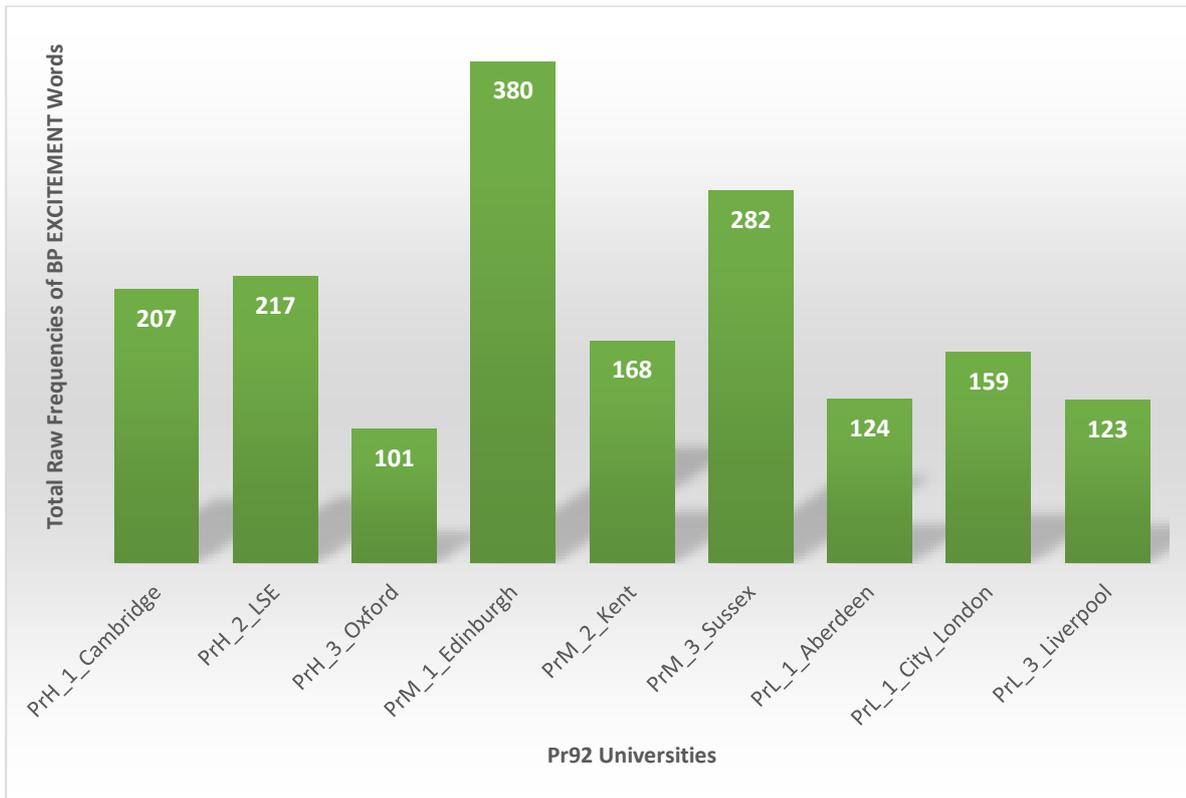
Figure 18 Total Raw Frequencies of EXCITEMENT Words in Pr92 Universities
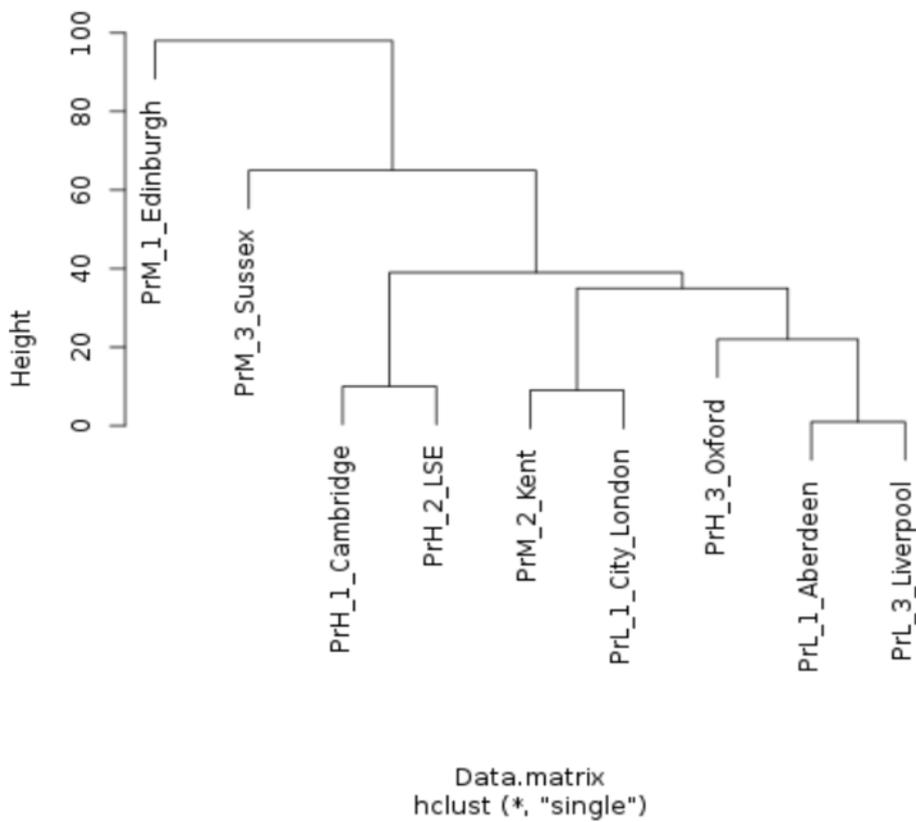
Figure 19 Cluster Dendrogram (Single Linkage Method) of Pr92 Subcorpora: EXCITEMENT

Turning now to the frequency of EXCITEMENT BP words in the texts of the Po92 institutions, Figure 20 clearly shows that PoL_2 (Kingston University), and PoL_4 (University of Worcester), and PoL_1 (Canterbury Christ Church University) have some of the highest frequency peaks. Figure 21 shows that the total frequency of PoL_2 (Kingston University) is the highest of the Po92 universities. The dendrogram in Figure 22 reinforces this, with PoL_2 (Kingston University) located on the top branch. The Cophenetic Coefficient of the cluster dendrogram is 0.88 ($R_c > 0.75$), which means that the cluster linkage is robust. Other peaks of frequencies in Figure 20 are associated with the *Life on Campus* text type from PoL_4 (University of Worcester) and PoL_1 (Canterbury Christ Church University), but the total frequencies of these two universities, as shown in Figure 21, are not noticeably higher than the others, leaving PoL_2 (University of Kingston) leading the way in terms of the frequency of the EXCITEMENT BP words.

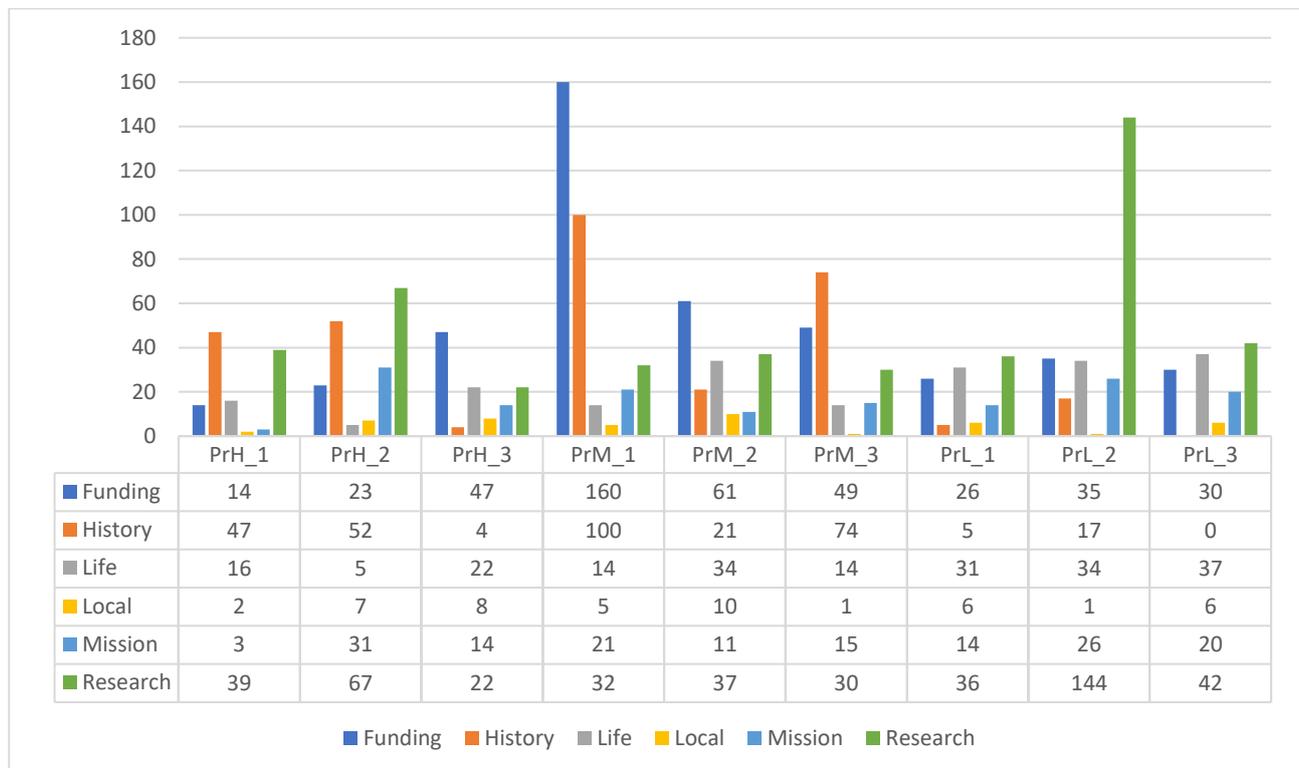|	PoH_1	PoH_2	PoH_3	PoH_4	PoM_1	PoM_2	PoM_3	PoM_4	PoL_1	PoL_2	PoL_3	PoL_4
Funding	14	24	9	24	20	4	33	28	18	7	4	13
History	3	5	3	14	30	5	1	20	3	1	4	7
Life	57	29	35	39	19	35	62	44	106	95	48	149
Local	5	13	8	42	5	6	3	23	16	33	12	9
Mission	27	11	12	11	11	4	20	4	4	7	15	7
Research	45	34	14	58	6	20	33	27	46	154	8	22

Figure 20 Distribution of Raw Frequencies of Po92 Subcorpora: EXCITEMENT

Figure 21 Total Raw Frequencies of EXCITEMENT Words in Po92 Universities
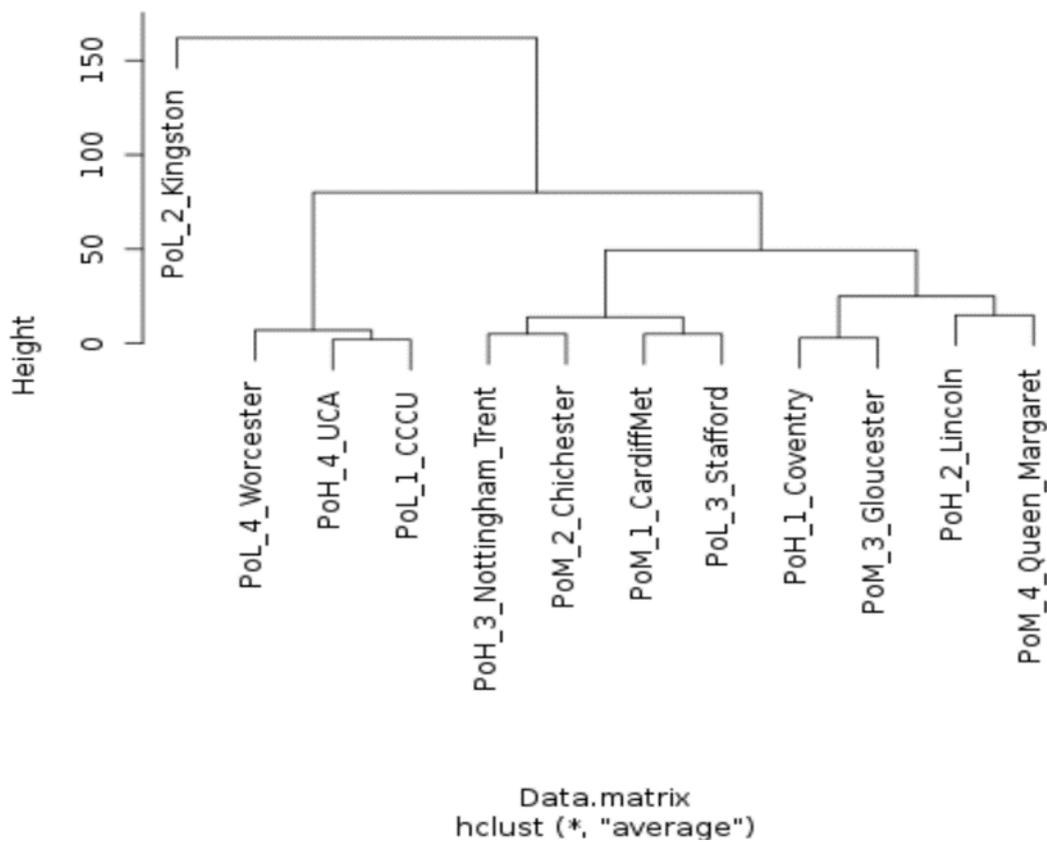
Figure 22 Cluster Dendrogram (Average Linkage Method) of Po92 Subcorpora: EXCITEMENT

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4.2.3 *RUGGEDNESS*

As shown in Figure 23, it is clear that the Pr92 university websites reflect high relative frequencies in RUGGEDNESS in the *Mission* text type. Although the difference of normalised frequencies in the *Mission* text type of Pr92 (3.8) and Po92 (2.6) appear relatively large (1.2), the Log Likelihood test in Table 9 shows that the difference is not statistically significant ($G^2 = 3.13$, $p < 0.05$). The only statistically significant difference between the Pr92 and Po92 texts is observed for the *Funding* text types, with $G^2 = 14.82$ (> 3.84), $p = 0.001$ e^{-1} (< 0.05), where the frequency of RUGGEDNESS words is higher in the Pr92 than in the Po92. Looking down the Log Ratio column, it can be observed that the Log Ratio value in the *Funding*-related text type is the highest, and the positive score indicates that the frequency of RUGGEDNESS BP words is more common in Pr92.

The values related to the *Research* text type are also notable, even though the differences between Pr92 and Po92 are not statistically significant. When looking at the p-value, it is clear that this is at the borderline (i.e. $p = 0.058$), only very slightly above the conventional cut-off point of a statistical significance of 0.05. Yet, looking at the Log Ratio value of 0.33, which does not strikingly stand out, it is apparent that the effect size is not large even though the difference between Pr92 and Po92 is close to the cut-off point of being statistically significant. Thus, it is the difference in the *Funding* text type frequencies of RUGGEDNESS BP words that appears to be the most notable.

Figure 23 Normalised Frequencies (NF) of RUGGEDNESS Words in the Six Text Types of Pr92 and Po92

Text Types	Pr92 BP Raw F.	Po92 BP Raw F.	G^2	p	Sig.	Log Ratio
Funding	129	48	**14.82**	**0.001 e⁻¹**	**Yes**	0.90
History	99	13	0.27	0.599	No	-0.23
Life	73	119	0.14	0.713	No	-0.08
Local	31	41	1.74	0.187	No	-0.45
Mission	52	35	3.13	0.076	No	0.55
Research	164	114	3.59	0.058	No	0.33

Table 9 Frequency Differences, G^2, p, Significance and Log Ratio of RUGGEDNESS Words

Looking specifically at the Pr92 institutions, Figure 24 shows that the highest the frequency of BP RUGGEDNESS words are found in the *History* pages of PrM_3 (University of Sussex), the *Research* pages of PrH_2 (LSE) and the *Mission* pages of PrM_1 (University of Edinburgh). The bar chart in Figure 25 illustrates the total frequencies that reinforce the peaks shown in Figure 24, indicating that the total frequency of BP RUGGEDNESS words distinguishes the texts from PrM_1 (University of Edinburgh), PrH_2 (LSE) and PrM_3 (University of Sussex) in particular from those of the other institutions. Despite the high total frequencies of the RUGGEDNESS BP words that occur in the texts of these universities, the distribution of the total frequencies across all universities show that PrH_1 (University of Cambridge), PrH_3 (University of Oxford) and PrL_1 (University of Aberdeen) are notably lower than the other universities, as seen in Figure 25, and reinforced by the fact that they are grouped in the same cluster in the Dendrogram tree (Figure 26). The picture presented by the

Dendrogram also shows that PrM_1 (University of Edinburgh) and PrH_2 (LSE) are clustered together due to their similarities in the highest frequencies. The Cophenetic Coefficient is 0.80 ($R_c > 0.75$), indicating the robustness of neighbouring clusters.

	PrH_1	PrH_2	PrH_3	PrM_1	PrM_2	PrM_3	PrL_1	PrL_2	PrL_3
Funding	9	4	23	34	21	7	9	14	8
History	13	19	0	25	1	41	0	0	0
Life	5	6	5	14	7	7	9	9	11
Local	3	8	1	9	4	0	0	2	4
Mission	0	9	5	3	5	8	1	3	18
Research	17	40	5	6	17	7	17	32	23
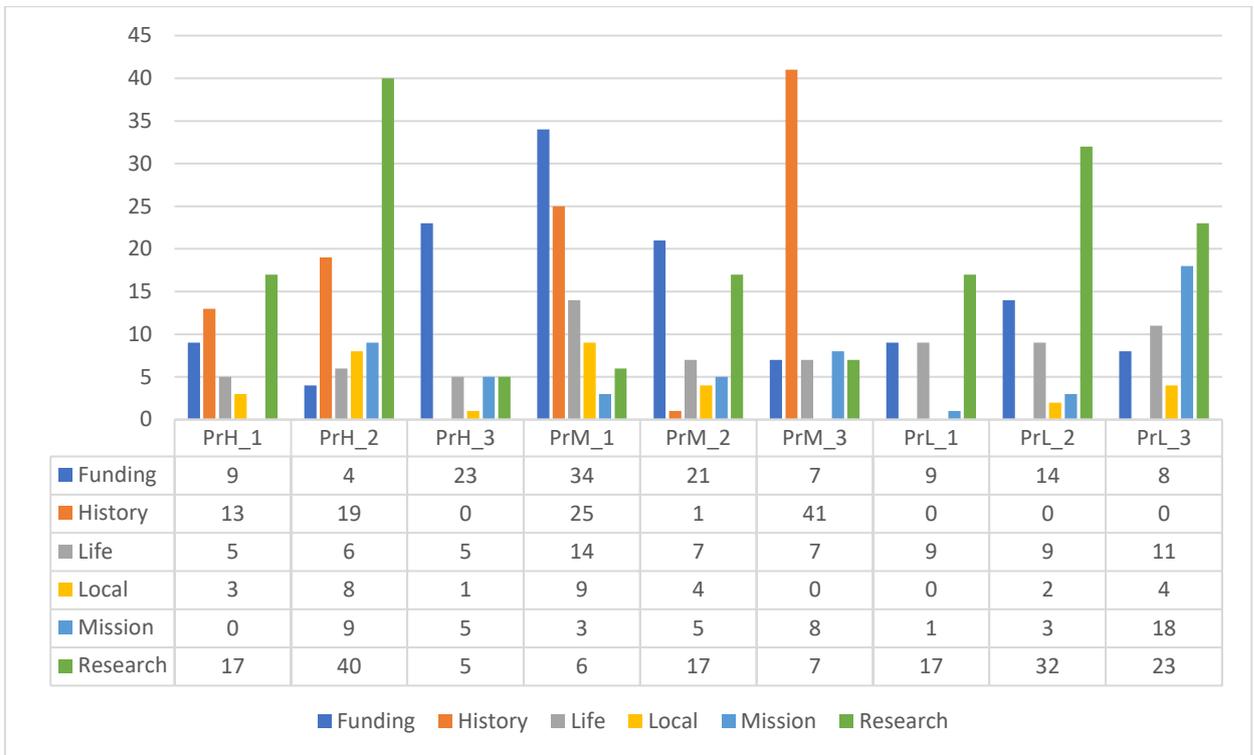
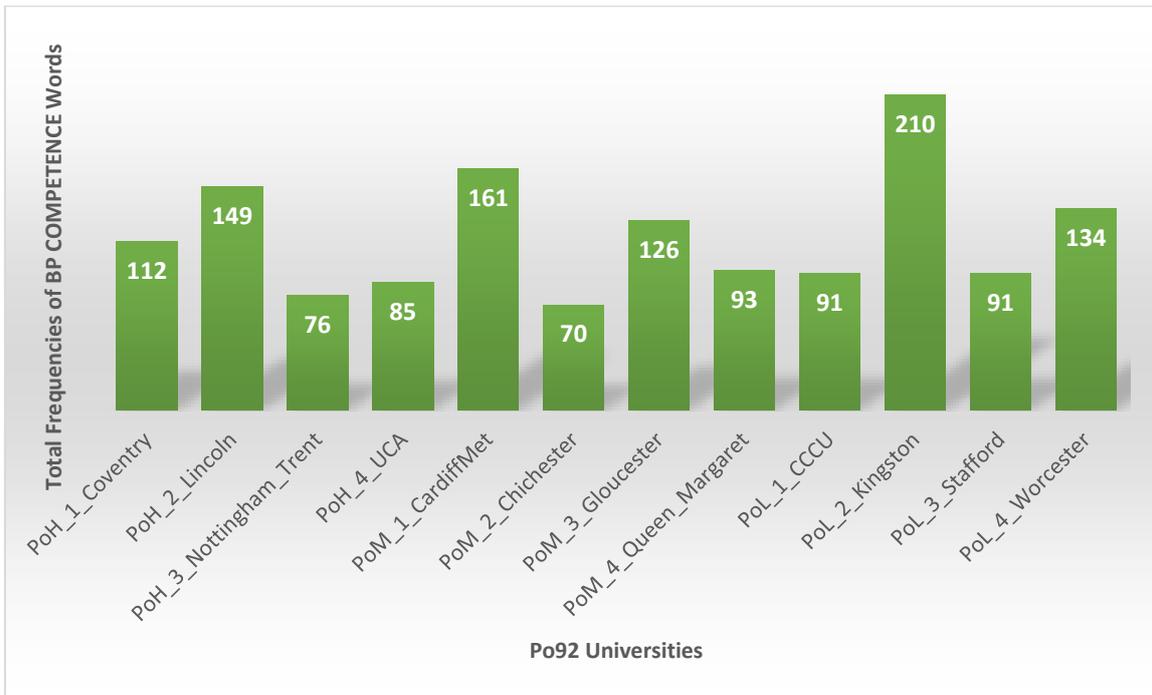*Figure 24 Distribution of Raw Frequencies of Pr92 Subcorpora: RUGGEDNESS*

Figure 25 Total Raw Frequencies of RUGGEDNESS words in Pr92 Universities
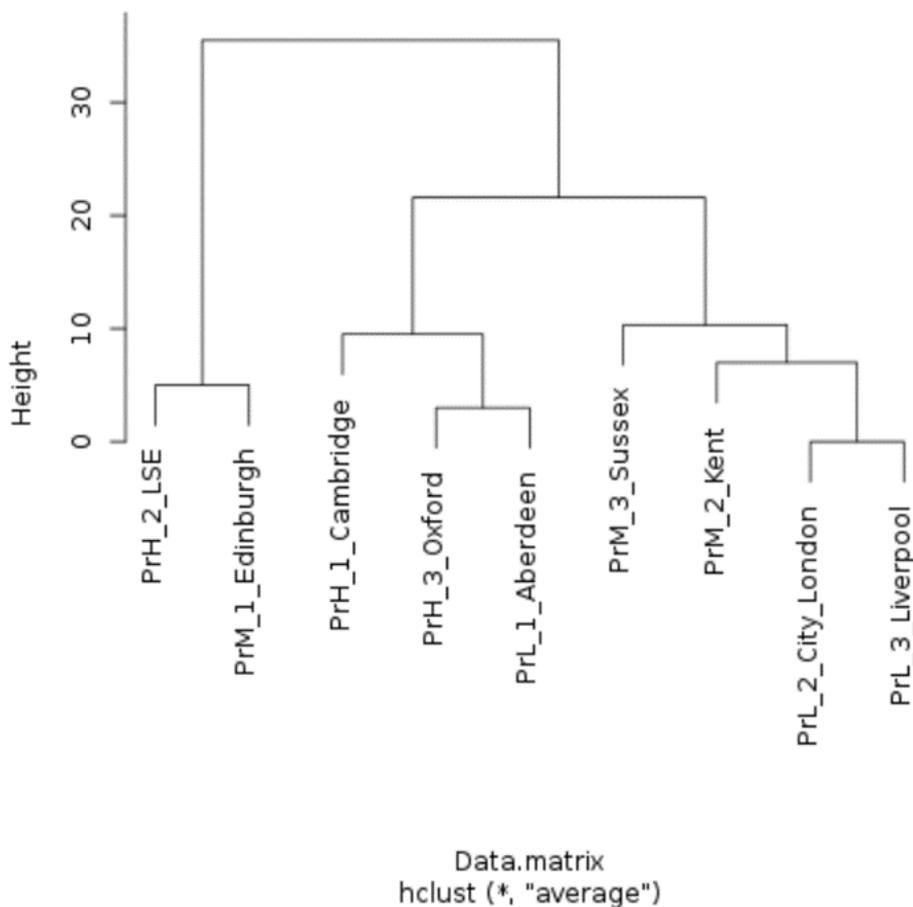
Figure 26 Cluster Dendrogram (Average Linkage Method) of Pr92 Subcorpora: RUGGEDNESS

When it comes to the Po92 universities, Figure 27 shows that the highest frequency is in the *Research*-related texts of PoL_2 (Kingston University). The total frequencies of RUGGEDNESS in Figure 28 also clearly illustrate that the top peak in the bar chart is from PoL_2 (Kingston University), suggesting that the spike associated with the *Research* texts of this university are a major contribution to its total frequency. The isolated position of PoL_2 (Kingston University) in the Dendrogram in Figure 29 also clearly reinforces the distinctiveness of the texts from this institution with respect to the frequency of BP RUGGEDNESS words. The Cophenetic Coefficient is 0.97 ($R_c > 0.75$), indicating the robustness of neighbouring clusters.
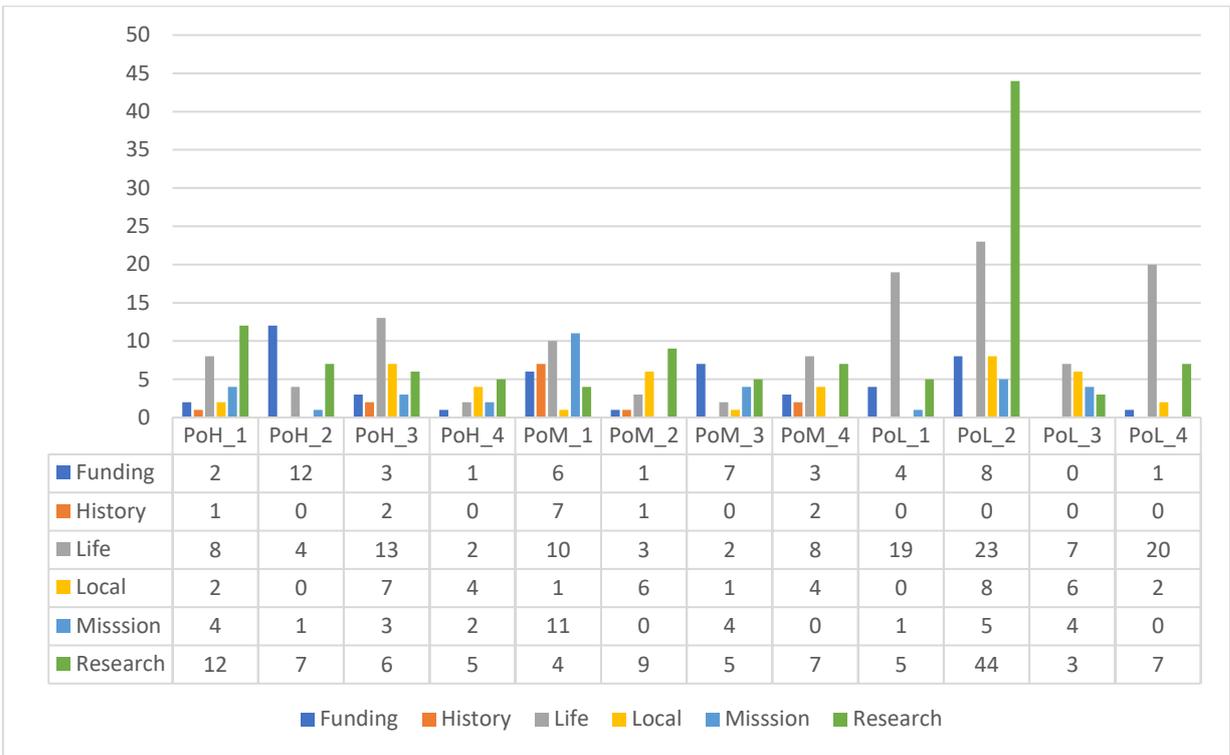
Figure 27 Distribution of Raw Frequencies of Po92 Subcorpora: RUGGEDNESS

	PoH_1	PoH_2	PoH_3	PoH_4	PoM_1	PoM_2	PoM_3	PoM_4	PoL_1	PoL_2	PoL_3	PoL_4
Funding	2	12	3	1	6	1	7	3	4	8	0	1
History	1	0	2	0	7	1	0	2	0	0	0	0
Life	8	4	13	2	10	3	2	8	19	23	7	20
Local	2	0	7	4	1	6	1	4	0	8	6	2
Misssion	4	1	3	2	11	0	4	0	1	5	4	0
Research	12	7	6	5	4	9	5	7	5	44	3	7
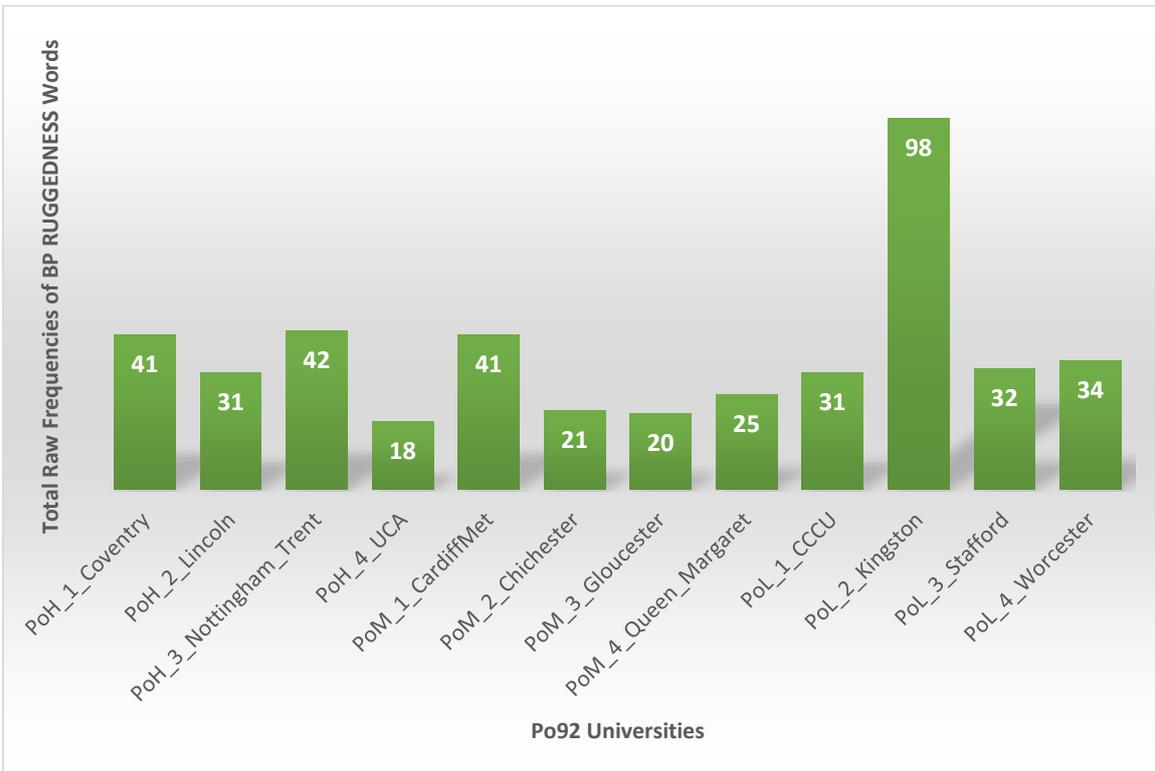
Figure 28 Total Raw Frequencies of RUGGEDNESS words in Po92 Universities
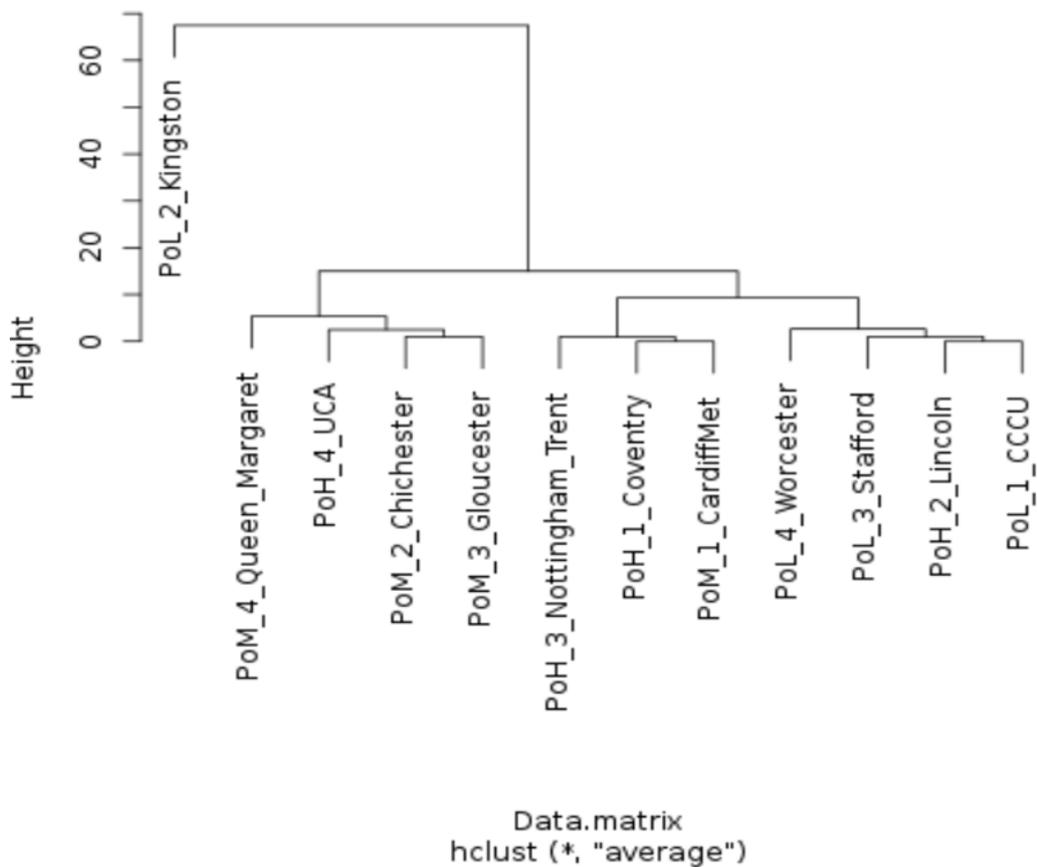
Figure 29 Cluster Dendrogram (Average Linkage Method) of Po92 Subcorpora: RUGGEDNESS

4.2.4 *SINCERITY*

Figure 30 shows the normalised frequencies of words associated with the BP dimension of SINCERITY in the Pr92 and Po92 corpora. Table 10 shows that the subcorpora exhibit frequency differences that are statistically significant. It is clear from Figure 30 that both Pr92 and Po92 have high normalised frequencies in the *Mission* text type (7.2 and 7.9). The difference in frequencies of this text type in Pr92 and Po92 is minor and not statistically different, as reported in the Sig. column in Table 10. The statistically significant differences are observed only in the *Funding* and *Research* texts. In the *Funding* texts, the frequency in Pr92 is statistically higher than in Po92 ($G^2 = 20.46$, > 3.84, p = 0.0006 e^{-3}, <0.05). There is also a statistically significant difference in the frequency of BP SINCERITY words in the *Research* texts ($G^2 = 8.99$, > 3.84, p = 0.002, < 0.05), with the positive number in the Log Ratio column indicating that these words are relatively more common in Pr92. This suggests that there is more of an emphasis on SINCERITY BP words in Pr92 *Funding* texts and *Research* texts. This is also confirmed by the Log Ratio values, which are higher in *Funding*

and *Research* text types (0.59 and 0.32), suggesting that the effect size of the differences is relatively large in comparison with the other text types.
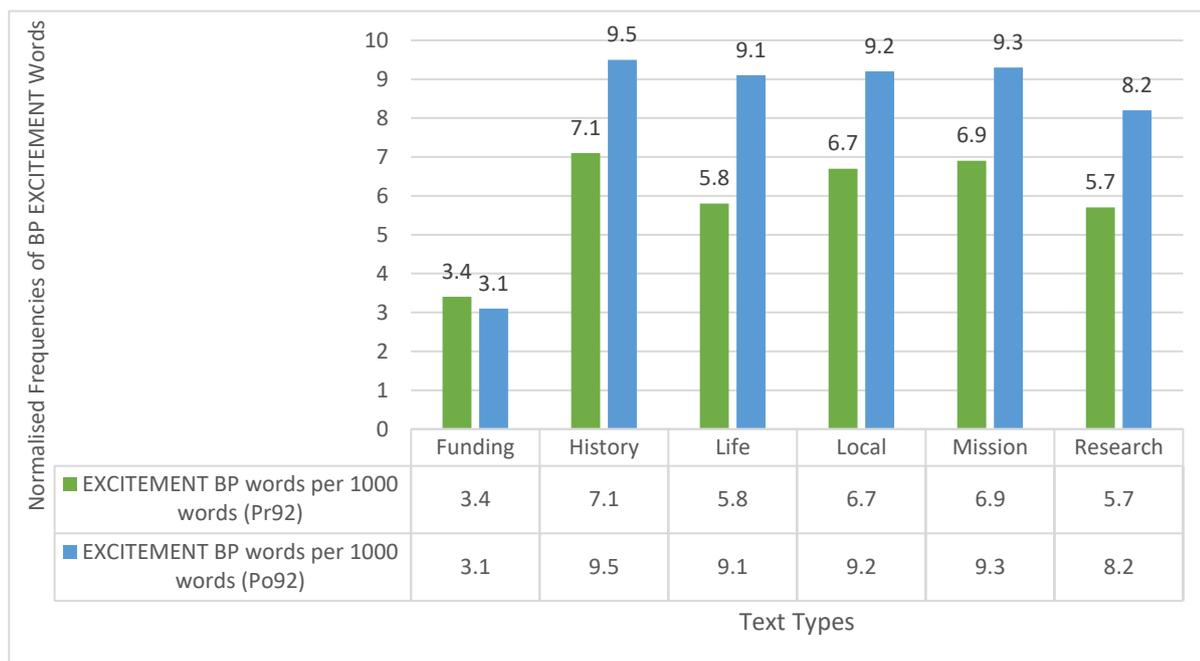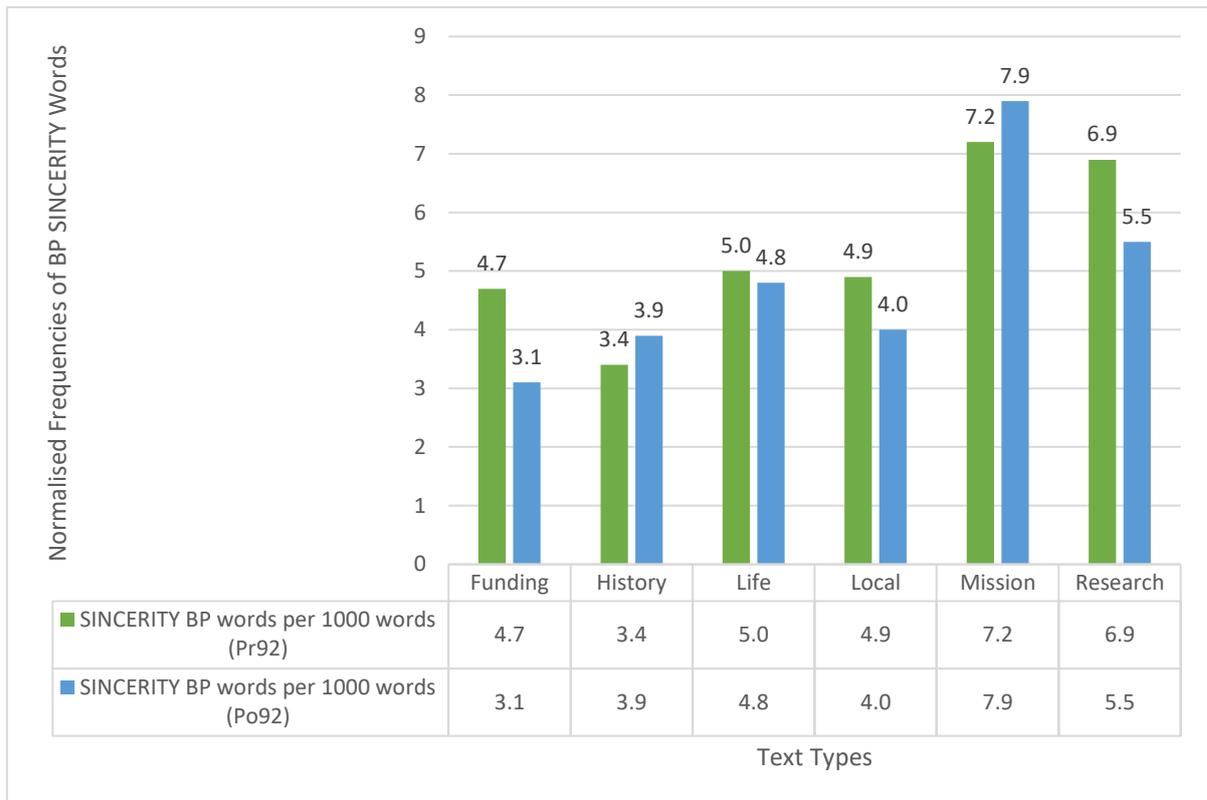

Figure 30 Normalised Frequencies (NF) of SINCERITY words in the Six Text Types of Pr92 and Po92

Text Types	Pr92 BP Raw F.	Po92 BP Raw F.	G^2	p	Sig.	Log Ratio
Funding	374	173	**20.46**	**0.006 e^{-3}**	**Yes**	0.59
History	301	39	0.69	0.404	No	-0.21
Life	239	353	0.28	0.598	No	0.06
Local	96	76	1.72	0.189	No	0.29
Mission	98	106	0.42	0.514	No	-0.13
Research	428	299	**8.99**	**0.002**	**Yes**	0.32

Table 10 Frequency Differences, G^2, p, Significance and Log Ratio of SINCERITY Words

Looking specifically at the Pr92 institutions, Figure 31 illustrates frequency spikes associated with several universities. The frequency spikes are from the *Funding* and *History* webpages of PrM_1 (University of Edinburgh), the *Research* pages of PrL_2 (City University of London), the *Funding* and *Research* pages of PrM_2 (University of Kent). The bar chart in Figure 32 shows that PrM_1 (University of Edinburgh) has the highest frequency. Similarly, the Dendrogram in Figure 33 reinforces the frequency spikes of BP SINCERITY words in that it distinguishes the texts from the University of Edinburgh in particular from those of the other

institutions. The Cophenetic Coefficient is 0.89 ($R_c > 0.75$), showing the robustness of the clusters.

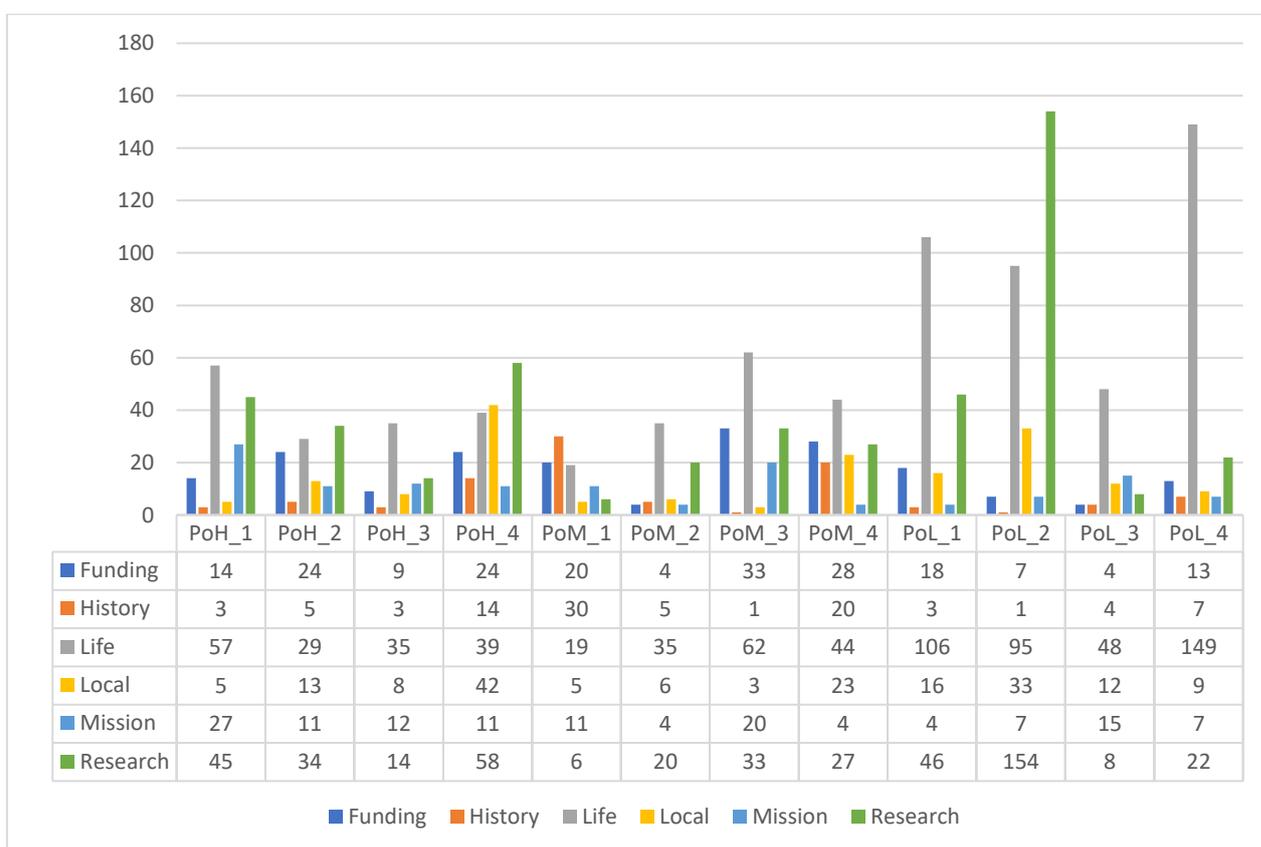|	PrH_1	PrH_2	PrH_3	PrM_1	PrM_2	PrM_3	PrL_1	PrL_2	PrL_3
Funding	12	26	31	126	94	24	18	29	14
History	43	43	3	113	17	71	8	3	0
Life	15	9	26	15	45	25	29	22	53
Local	9	17	15	22	16	0	7	3	7
Mission	4	19	11	8	10	13	3	13	17
Research	47	87	35	15	24	32	33	115	40
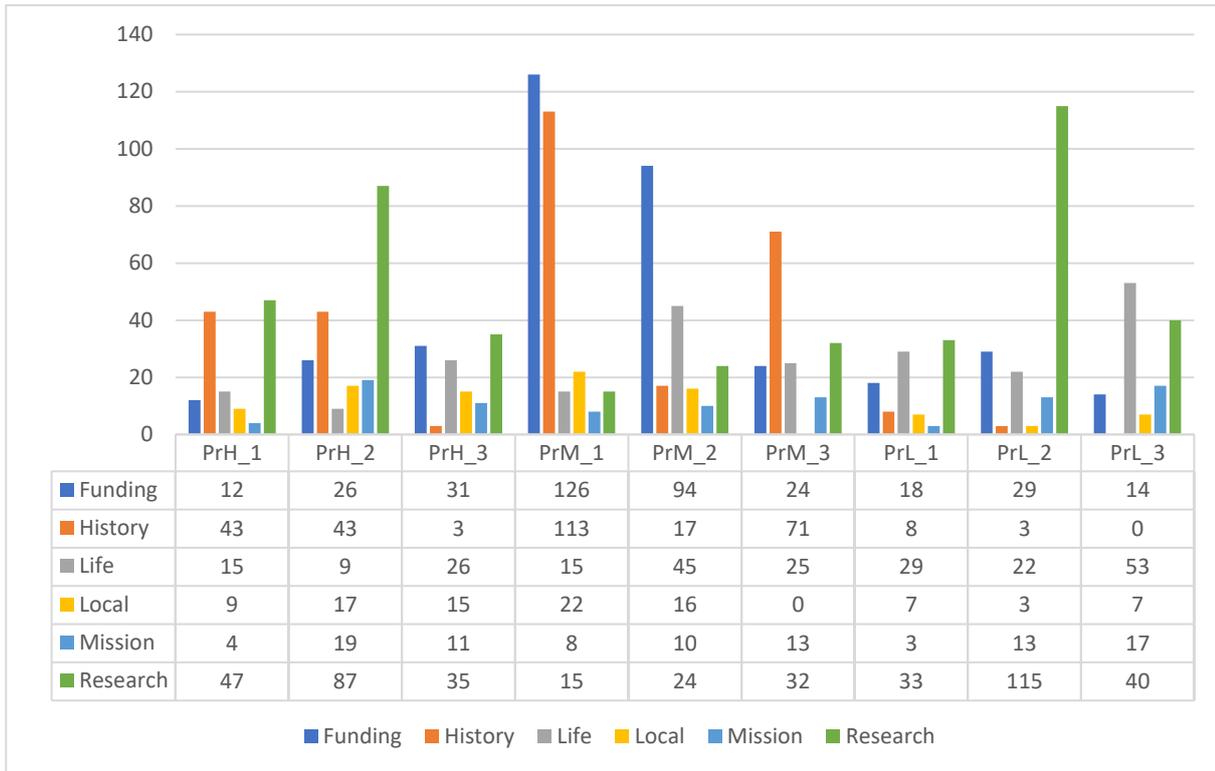
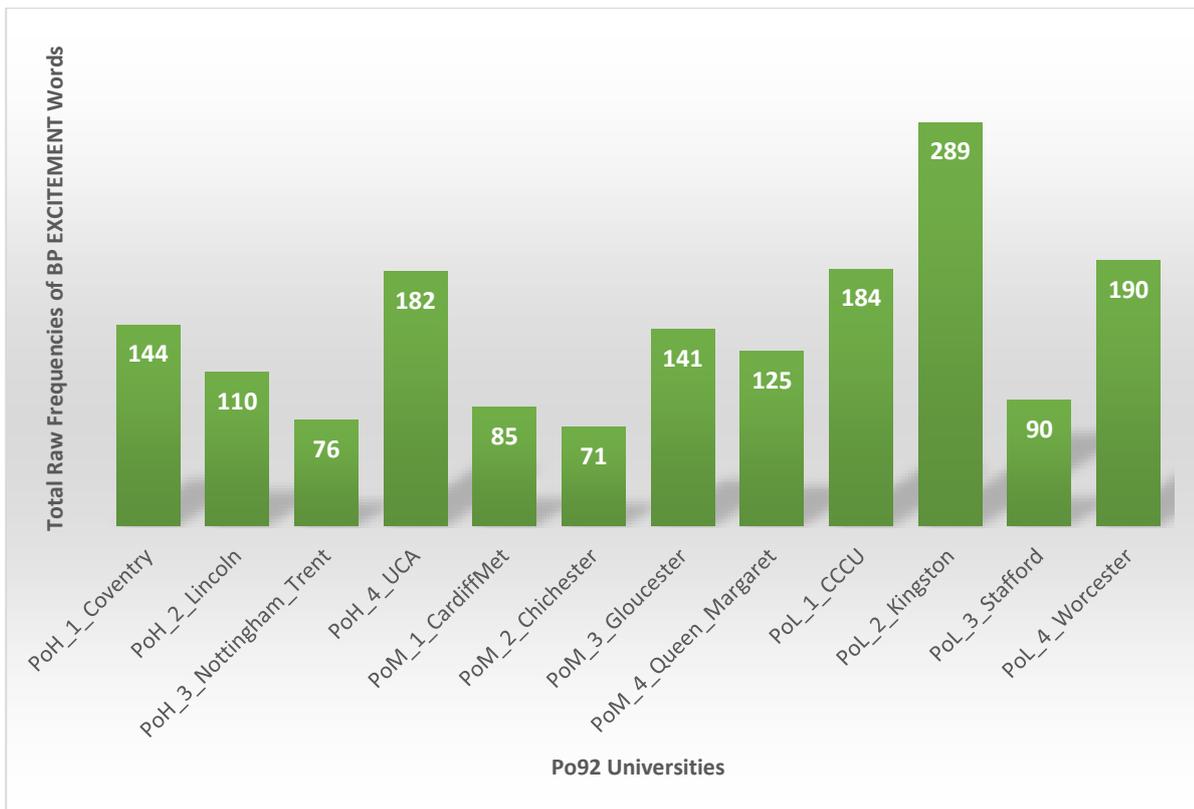*Figure 31 Distribution of Raw Frequencies of Pr92 Subcorpora: SINCERITY*
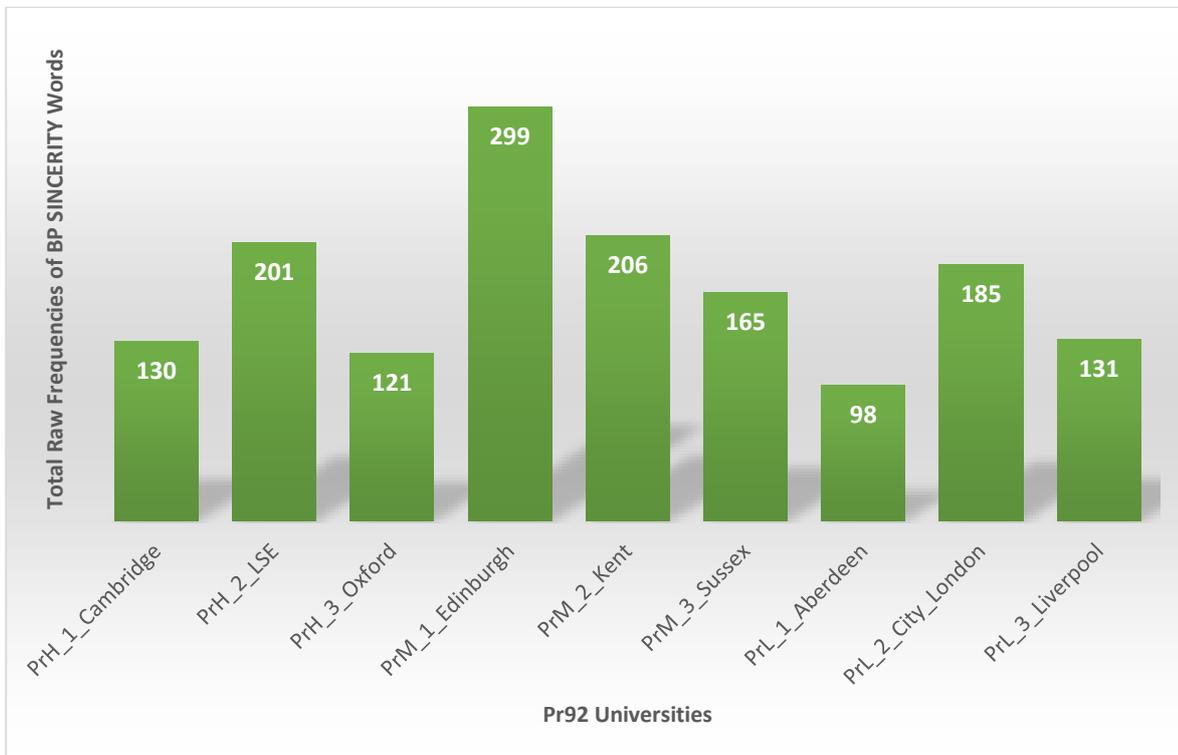
Figure 32 Total Raw Frequencies of SINCERITY words in Pr92 Universities

80
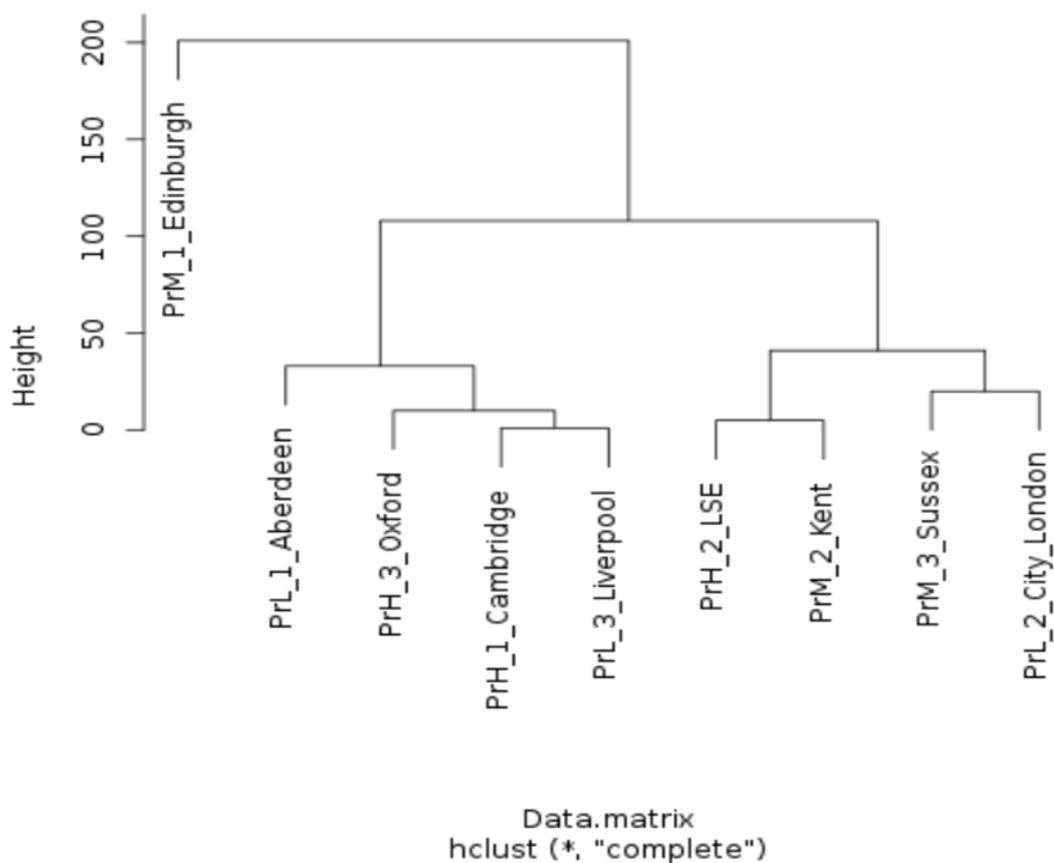
Figure 33 Cluster Dendrogram (Complete Linkage Method) of Pr92 Subcorpora: SINCERITY

Turning to the Po92 texts, Figure 34 clearly shows that PoL_2 (Kingston University) and PoL_4 (University of Worcester) have some of the highest peaks. These peaks are from the *Research* and *Life on Campus* texts in the former and *Life on Campus* in the latter. Likewise, the bar chart in Figure 35 shows that the total frequencies from these universities are also amongst the highest. It is worth noting that the PoL_2 (Kingston University) in particular stands out. It is clear from the Dendrogram in Figure 36 that the branches of these two universities are on top of the clusters of the tree. The Cophenetic Correlation Coefficient is 0.96 ($R_c > 0.75$), indicating the robustness of the clusters.
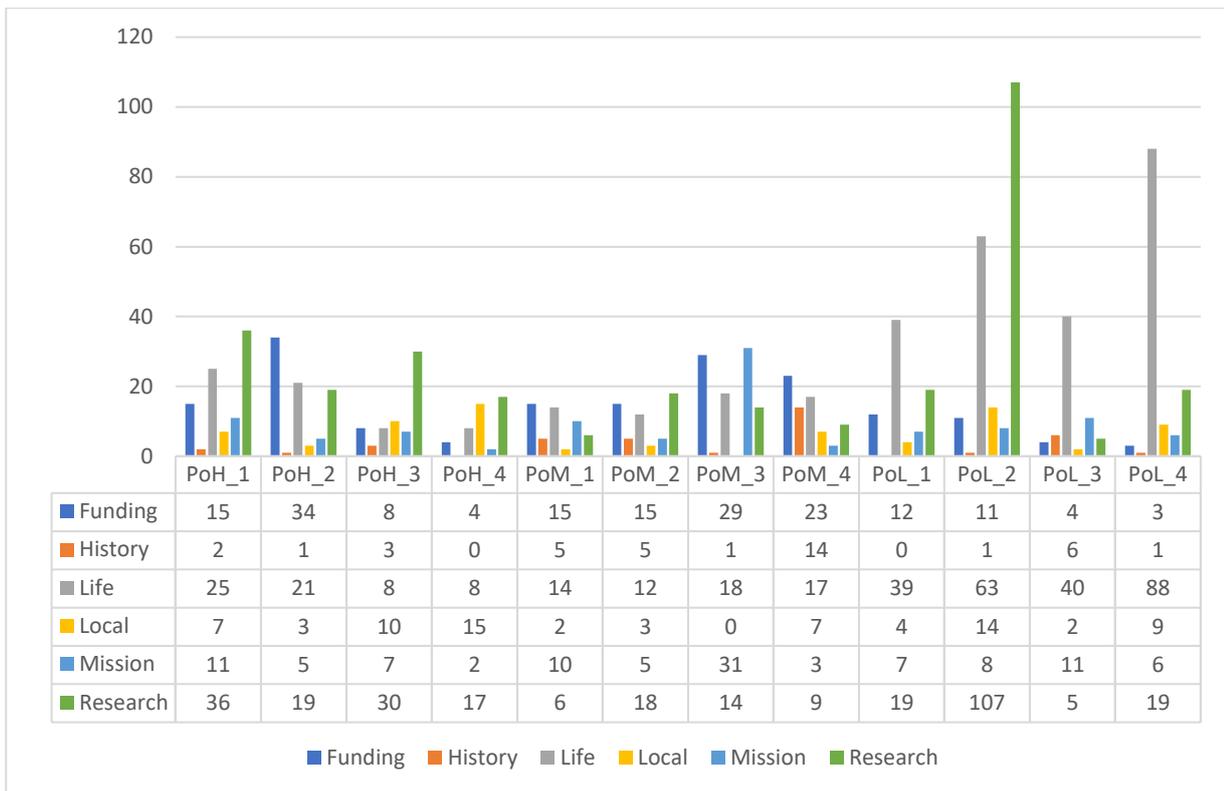
Figure 34 Distribution of Raw Frequencies of Po92 Subcorpora: SINCERITY

	PoH_1	PoH_2	PoH_3	PoH_4	PoM_1	PoM_2	PoM_3	PoM_4	PoL_1	PoL_2	PoL_3	PoL_4
■ Funding	15	34	8	4	15	15	29	23	12	11	4	3
■ History	2	1	3	0	5	5	1	14	0	1	6	1
■ Life	25	21	8	8	14	12	18	17	39	63	40	88
■ Local	7	3	10	15	2	3	0	7	4	14	2	9
■ Mission	11	5	7	2	10	5	31	3	7	8	11	6
■ Research	36	19	30	17	6	18	14	9	19	107	5	19
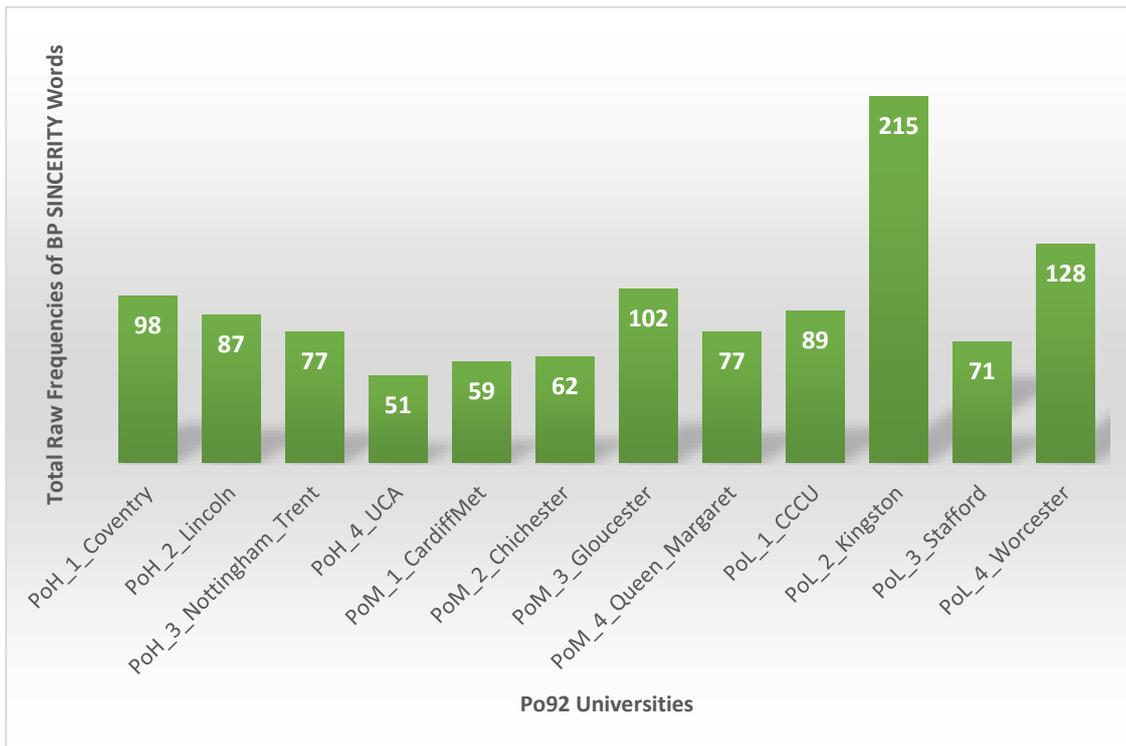
Figure 35 Total Raw Frequencies of SINCERITY words in Po92 Universities

82
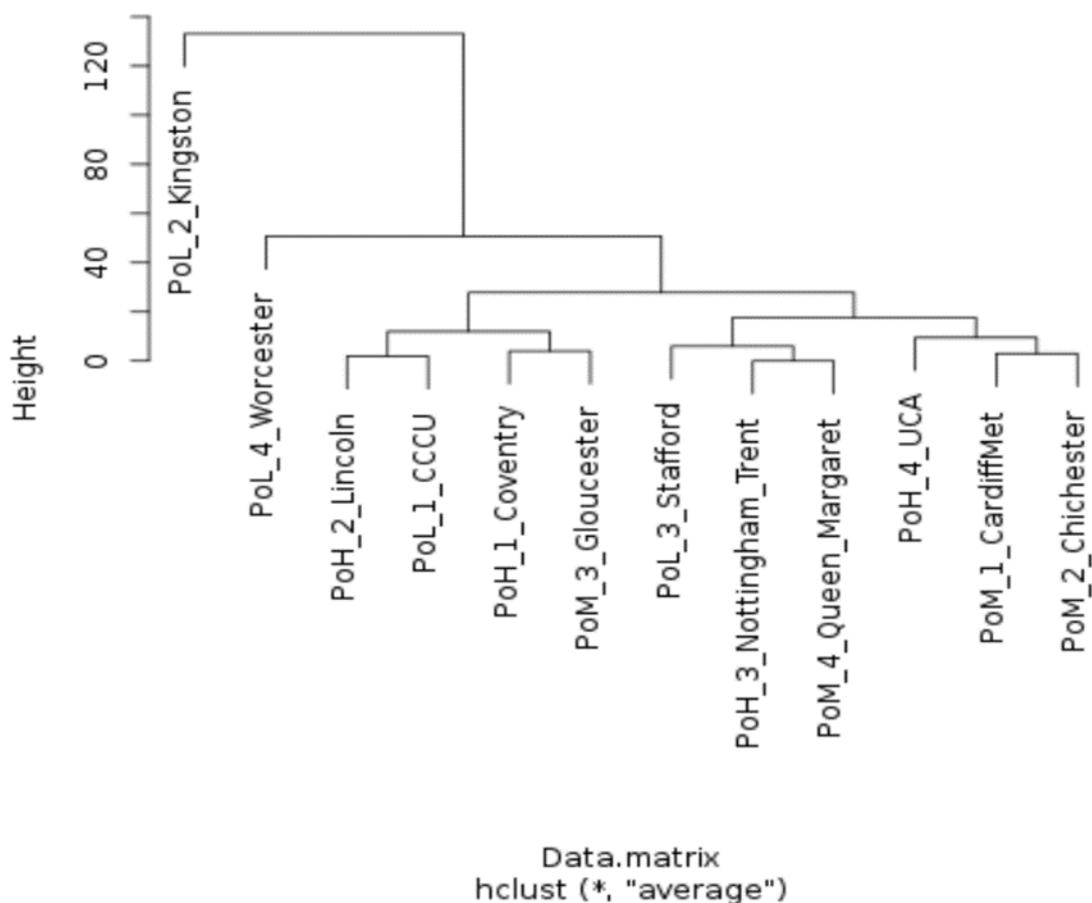
Figure 36 Cluster Dendrogram (Average Linkage Method) of Po92 Subcorpora: SINCERITY

4.2.5 *SOPHISTICATION*

Figure 37 shows that the largest differences between Pr92 and Po92 in the normalised frequencies of BP SOPHISTICATION words are found in the texts that relate to *Funding, Local* and *Research*. Table 11 shows a G^2 value of 30.39 (> 3.84), 0.003 e^{-5} ($p < 0.05$) in relation to the difference in the *Funding* texts, indicating that the difference in frequencies between Pr92 and Po92 is statistically significant. The higher frequency suggests that there is more of an emphasis on the SOPHISTICATION dimension in the *Funding* texts of Pr92. On the other hand, we can see from the bar chart that the frequency of SOPHISTICATION words in the *Research* texts in Po92 is statistically significantly higher than that of Pr92, at $G^2 = 6.07$ (> 3.84), $p = 0.013$ (< 0.05). When looking at the Log Ratio, both *Funding* and *Research* show higher Log Ratio values compared to the other four text types. The Log Ratio value of *Funding* is 1.46, with -0.47 for *Research*, while the remaining four text types are 0.16 and below. The relatively high values for *Funding* and *Research* indicate a substantial difference between Pr92 and Po92. In particular, for the highest Log Ratio value of the *Funding* text

type, the positive number suggests that BP SOPHISTICATION words are more common in the Pr92 universities. Apart from the differences in frequencies, it is notable from Figure 37 that the frequencies of SOPHISTICATION words in the *Local Area* texts are strikingly high in both the Pr92 and Po92 corpora.
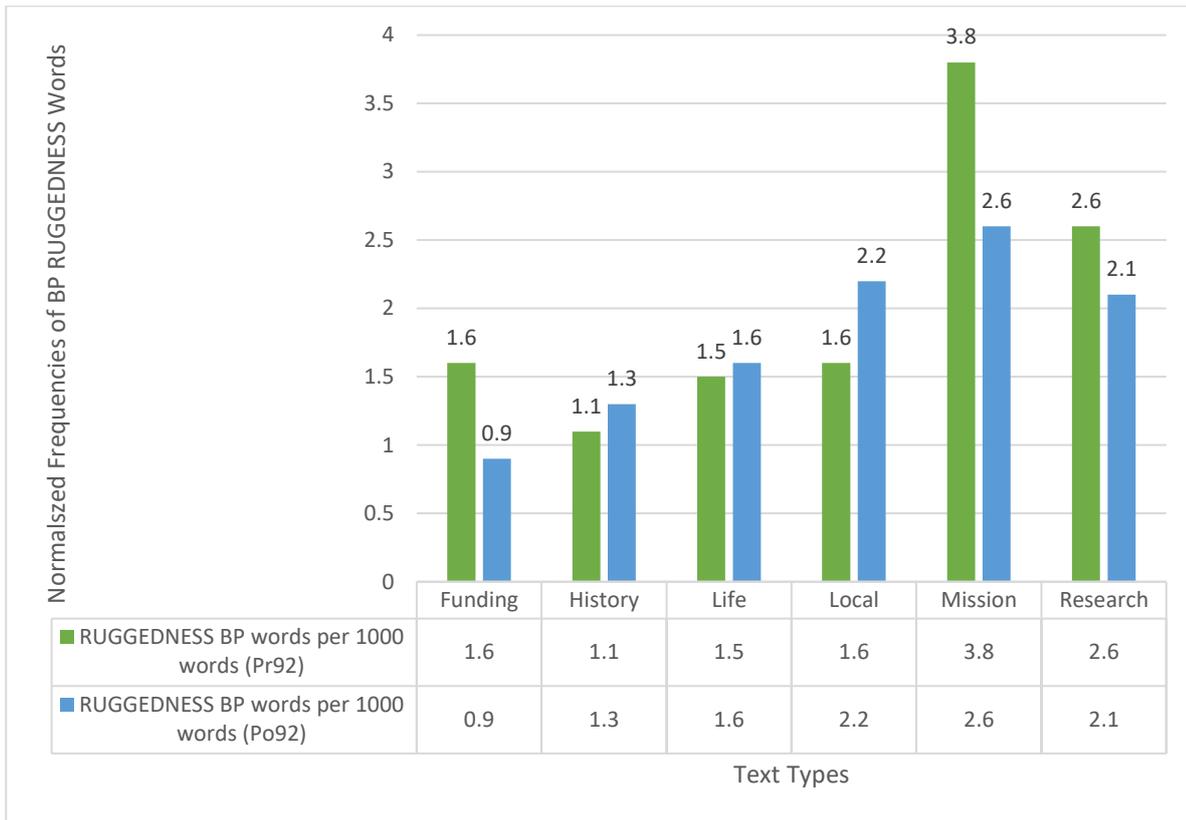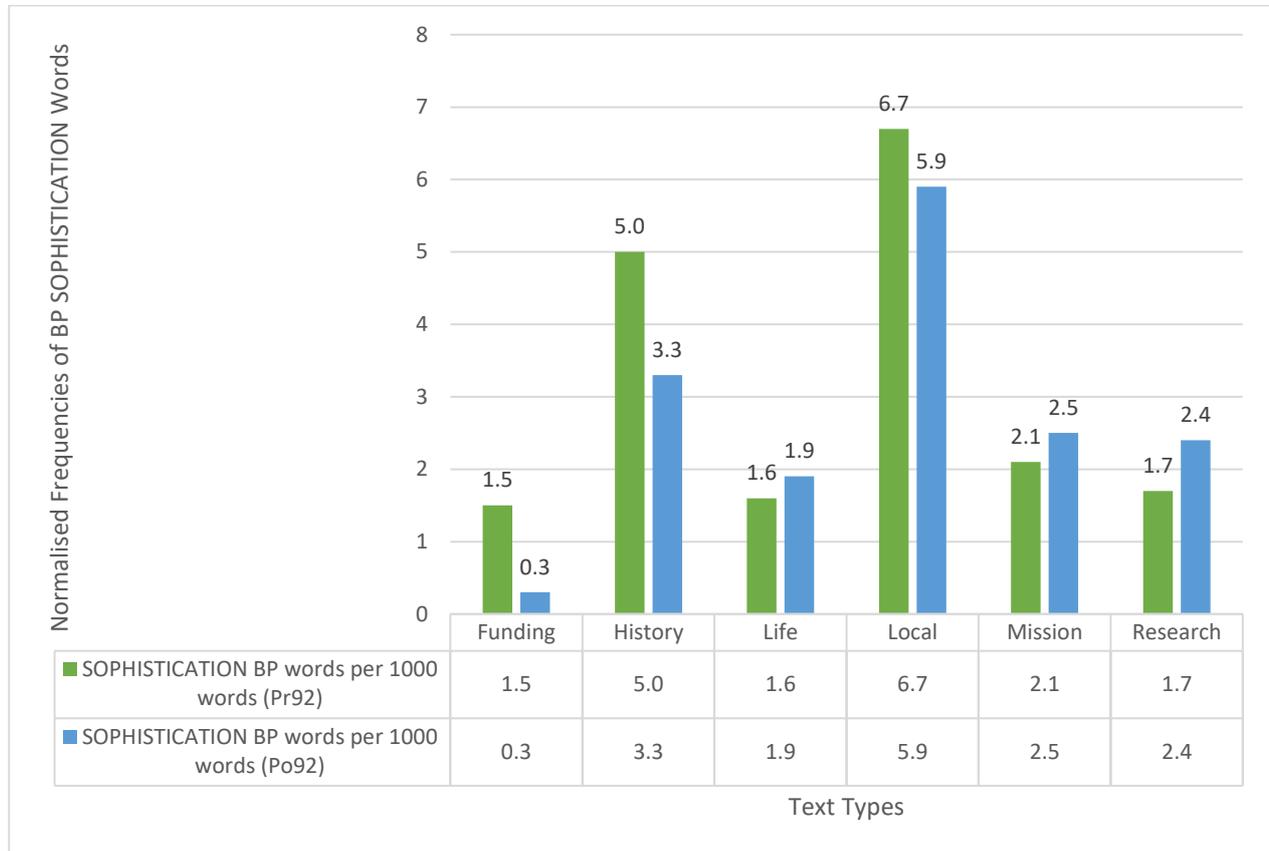

Figure 37 Normalised Frequencies (NF) of SOPHISTICATION Words in the Six Text Types of Pr92 and Po92

Text Types	Pr92 BP Raw F.	Po92 BP Raw F.	G^2	p	Sig.	Log Ratio
Funding	123	31	30.39	**0.003 e^{-5}**	**Yes**	1.46
History	280	33	0.07	0.788	No	-0.07
Life	76	143	1.98	0.159	No	-0.29
Local	130	112	0.82	0.365	No	0.17
Mission	29	33	0.31	0.576	No	-0.2
Research	106	128	6.07	**0.013**	**Yes**	-0.47

Table 11 Frequency Differences, G^2, p, Significance and Log Ratio of BP Words Associated with SOPHISTICATION

Looking at the Pr92 data in Figure 38, the most noticeable spike in the bar chart is associated with the PrM_1 (University of Edinburgh) texts, and specifically the *History* pages of that university's website. Two other text types of PrM_1 that also have relatively high peaks are *Funding* and *Local Area*. Texts from three other universities also have relatively high frequencies of BP SOPHISTICATION words. These are the *Local Area*, *Research* and *History* texts of PrH_2 (LSE), *History* of PrH_1 (University of Cambridge) and PrM_3

(University of Sussex). The bar chart in Figure 39 shows that the University of Edinburgh also has the highest total raw frequency, followed by the LSE. The Cluster Dendrogram in Figure 40 reinforces the picture of some of the frequency peaks in Figure 38, differentiating PrM_1 (University of Edinburgh) in particular, and also PrH_2 (LSE) and PrM_3 (University of Sussex), from the other universities, with the Cophenetic Coefficient at 0.84 ($R_c > 0.75$), indicating that the linkage in the clusters is strong.

	PrH_1	PrH_2	PrH_3	PrM_1	PrM_2	PrM_3	PrL_1	PrL_2	PrL_3
Funding	2	8	5	37	26	22	7	8	8
History	44	29	1	117	5	64	11	7	2
Life	5	1	2	3	20	5	16	4	20
Local	8	50	2	31	14	8	8	2	7
Mission	0	6	3	2	7	5	3	2	1
Research	7	45	7	8	9	8	9	9	4
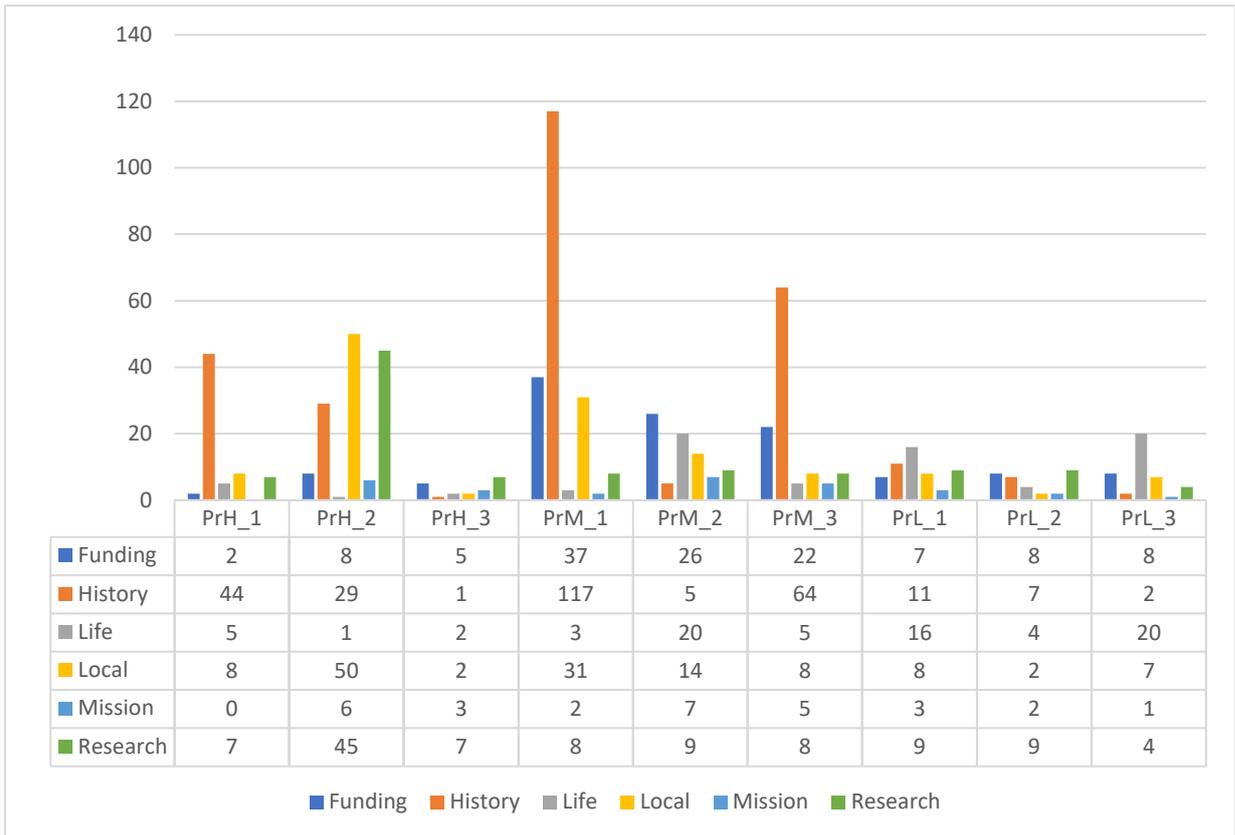
Figure 38 Distribution of Raw Frequencies of Pr92 Subcorpora: SOPHISTICATION
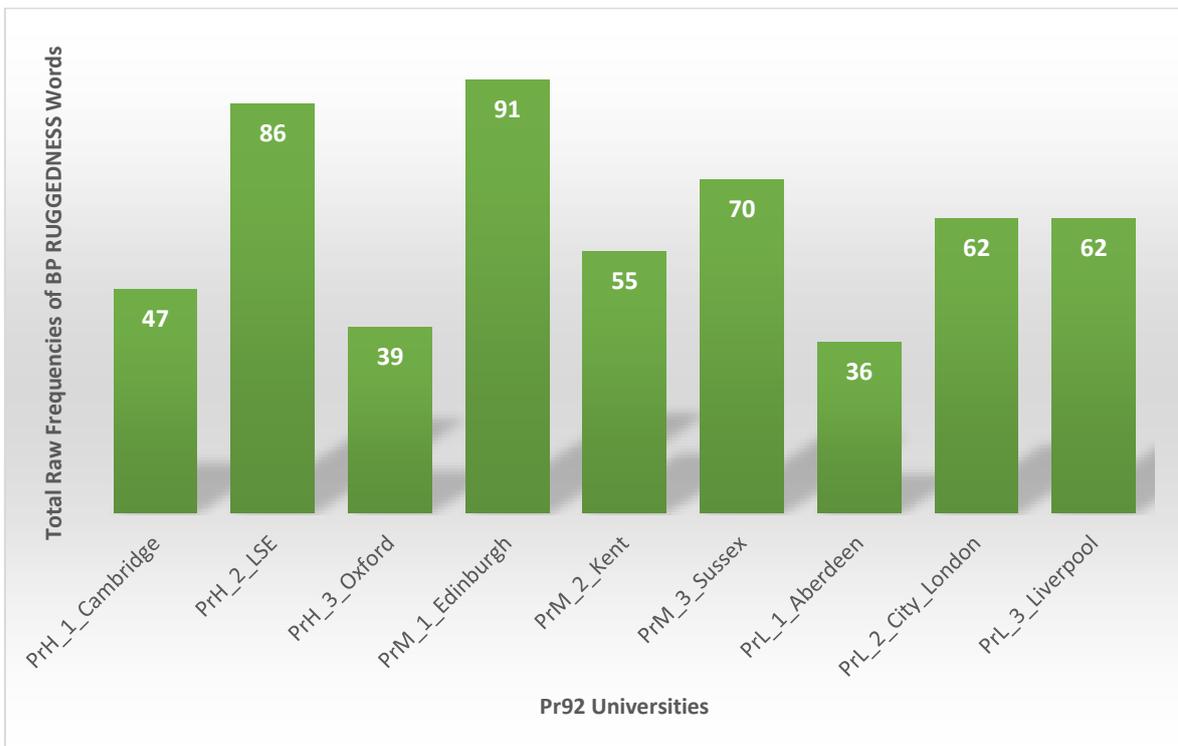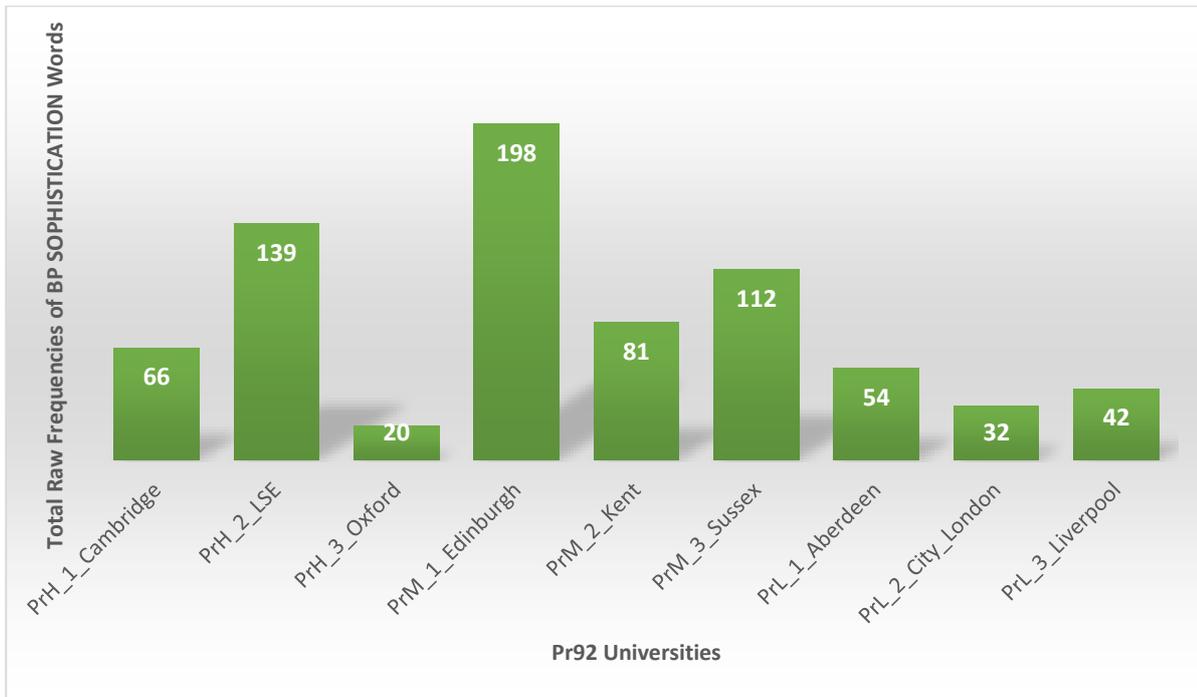
Figure 39 Total Raw Frequencies of SOPHISTICATION words in Pr92 Universities
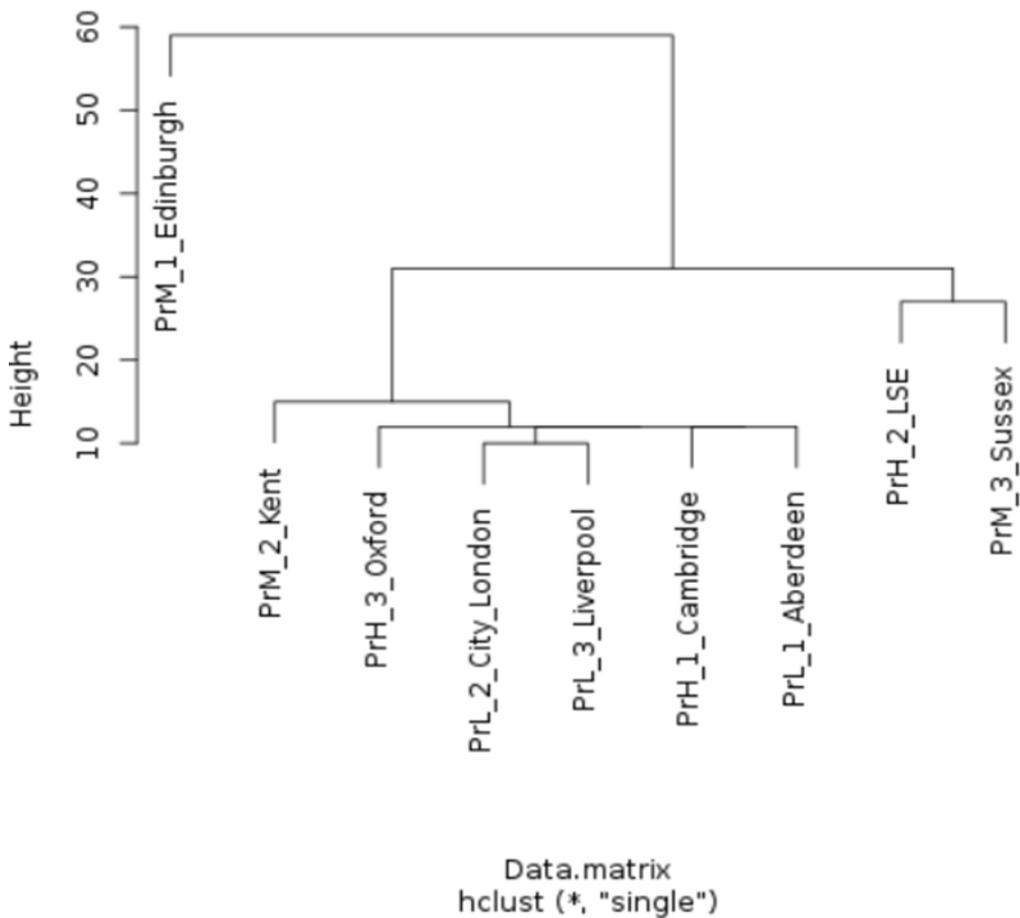
Figure 40 Cluster Dendrogram (Single Linkage Method) of Pr92 Subcorpora: SOPHISTICATION

Turning to the Po92 institutions, Figure 41 shows that texts from several universities contribute to the frequencies of SOPHISTICATION words. The highest spike is from the *Life on Campus* of PoL_4 (University of Worcester). Three other universities with high peaks are *Research* from PoM_2 (University of Chichester), *Local Area* and *Research* from PoM_4 (Queen Margaret University), and *Mission, Local Area* and *Life on Campus* from PoL_2 (Kingston University). Although PoM_2 (University of Chichester) has a peak, it is not reflected in the total frequency. The peaks from PoL_4 (University of Worcester), PoM_4 (Queen Margaret University) and PoL_2 (Kingston University) in frequencies are reflected in the total frequencies as exhibited in the bar chart in Figure 42, where these three universities are the highest.

	PoH_1	PoH_2	PoH_3	PoH_4	PoM_1	PoM_2	PoM_3	PoM_4	PoL_1	PoL_2	PoL_3	PoL_4
■ Funding	0	2	7	1	6	1	5	6	1	0	0	2
■ History	1	2	4	1	3	1	0	6	0	0	14	1
■ Life	8	20	5	11	4	4	6	5	20	17	5	38
■ Local	4	5	5	9	6	3	2	23	7	22	6	20
■ Mission	0	0	5	0	5	1	10	2	3	2	3	2
■ Research	4	4	4	16	7	29	5	16	6	29	1	7

■ Funding ■ History ■ Life ■ Local ■ Mission ■ Research
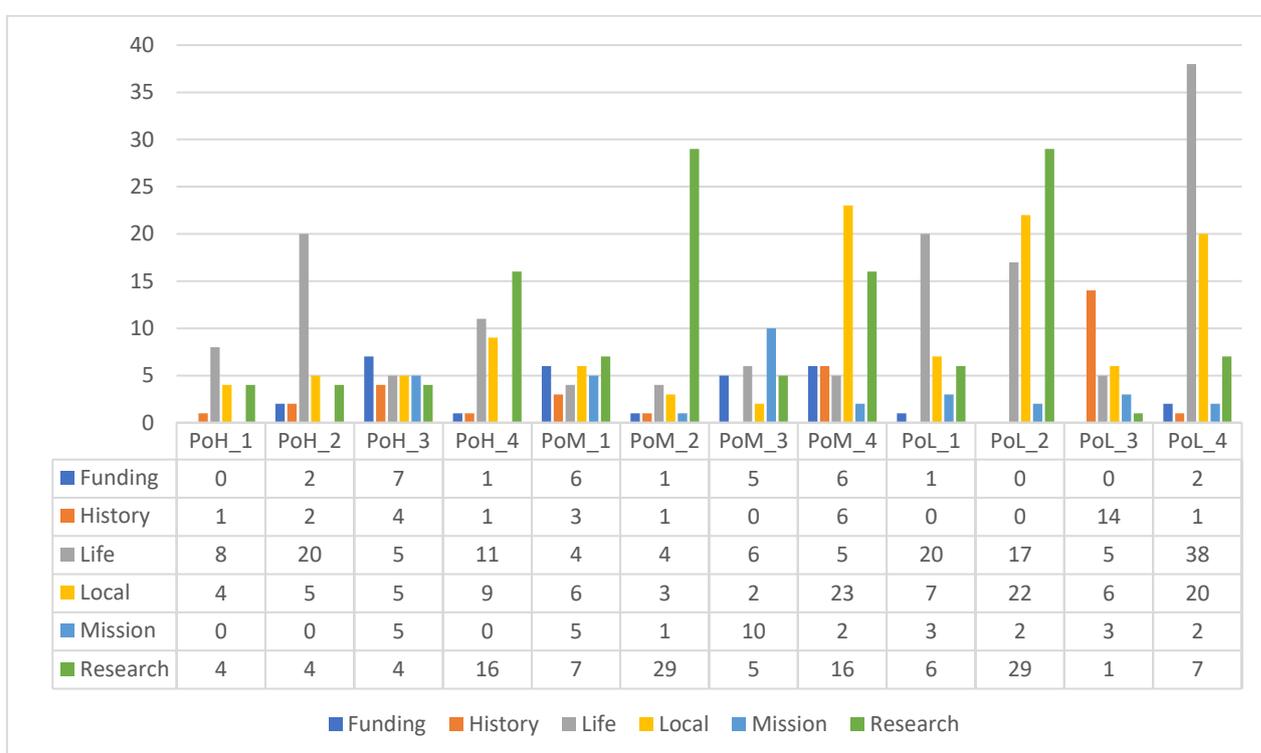
Figure 41 Distribution of Raw Frequencies of Po92 Subcorpora: SOPHISTICATION
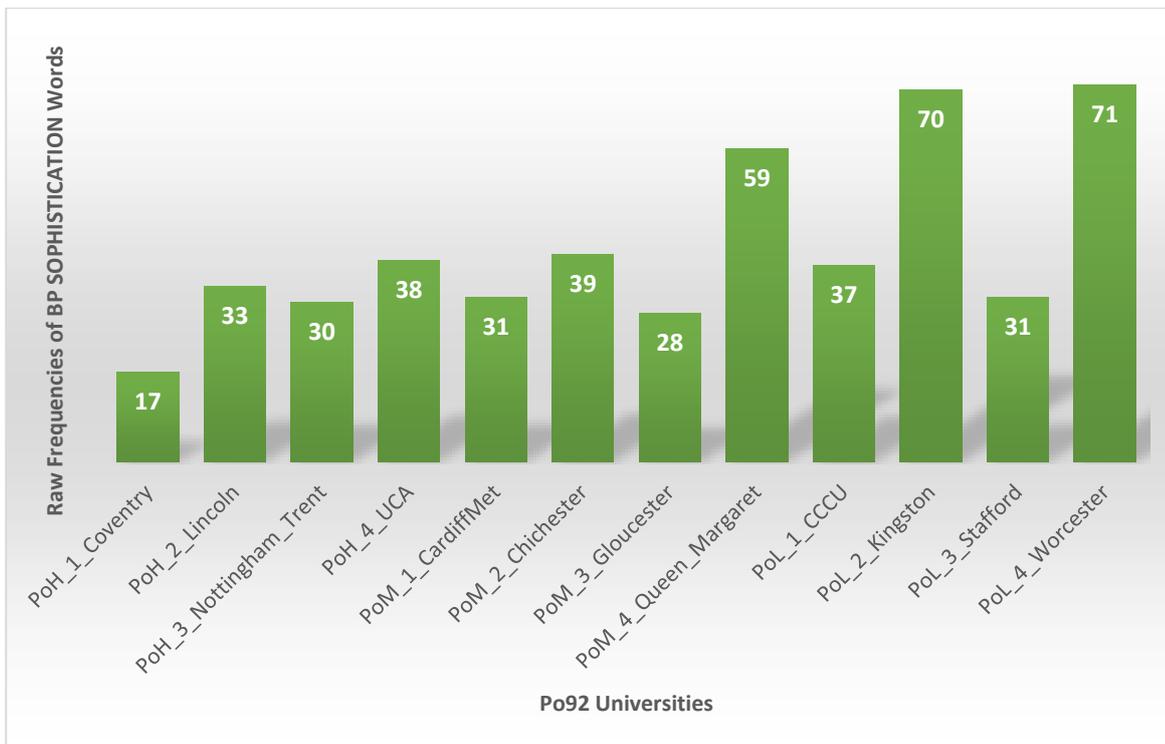
Figure 42 Total Raw Frequencies of SOPHISTICATION words in Po92 Universities

It appears from the Cluster Dendrogram tree in Figure 43 that none of the branches is particularly distinct in terms of height. This suggests that the differences between the clusters are not especially large. Noticeably, three universities with high frequencies of BP SOPHISTICATION words are merged in the same branches. These are shown in the branch on the left, comprising PoM_4 (Queen Margaret University), PoL_2 (Kingston University) and PoL_4 (University of Worcester). All the other universities, which have low frequencies, are merged together under the main branch on the right. The Cophenetic Coefficient is 0.93 ($R_c > 0.75$); the R_c value suggests that the cluster is robust.

Data.matrix
hclust (*, "average")
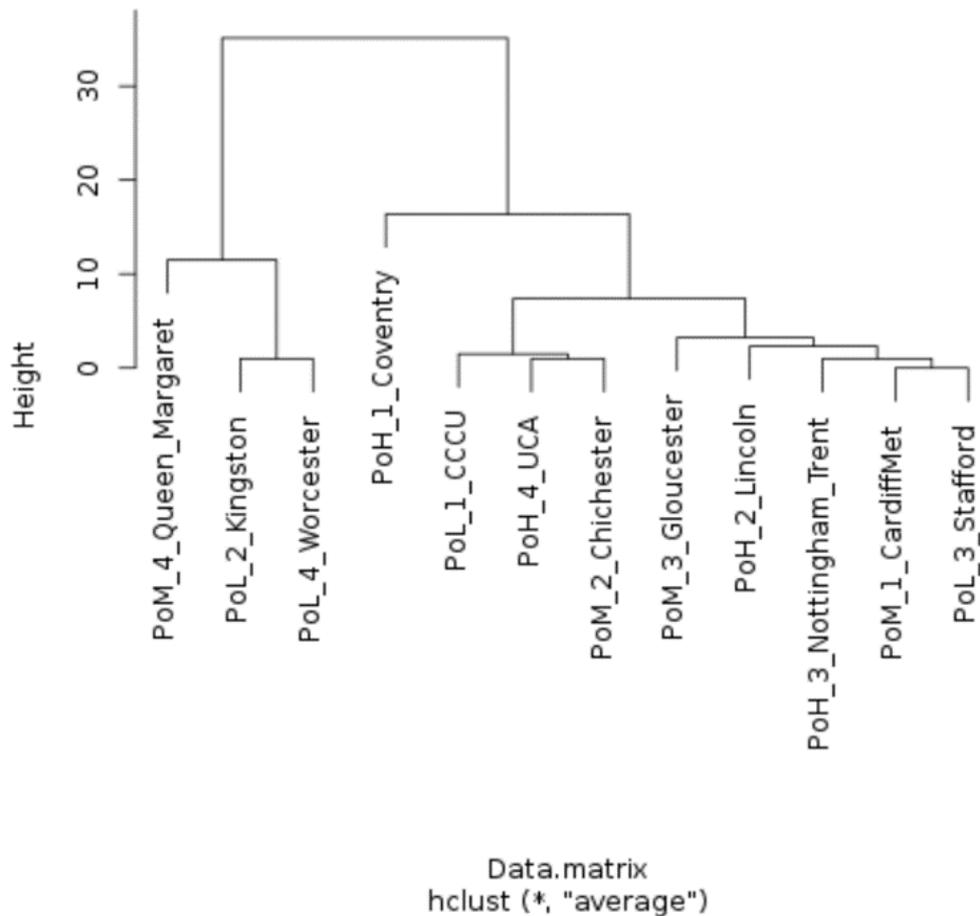
Figure 43 Cluster Dendrogram (Average Linkage Method) of Po92 Subcorpora: SOPHISTICATION

In sum, this section has provided an outline of the frequencies of words associated with each of the five BP dimensions in the six text types from the Pr92 and Po92 universities. To add to this picture, in terms of the frequency information and the density of BP words, type/token ratios are discussed in the next section.

4.3 Type/token Ratio and BP Word Count

This section is concerned with the type/token ratios (TTR) and a comparison between TTR and the frequencies of BP words. The aim of this section is to provide information in relation to the richness of vocabulary in the website texts. Generally, a TTR is an index that suggests vocabulary richness, which can serve as an approximation of the complexity of texts in terms of lexical density. In this respect, TTR, a lower TTR value indicates that there is more repetition of words, and therefore a smaller vocabulary, in the corpus in question relative to the other corpus, as shown in Table 12.

Ratios	Pr92 (%)	Po92 (%)	Pr92 + Po92 (%)
TTR	5.30	5.50	3.96
STANDARDISED TTR	39.05	39.30	39.15
COMPETENCE BP Word Count	0.52	0.52	0.56
EXCITEMENT BP Word Count	0.56	0.63	0.64
RUGGEDNESS BP Word Count	0.18	0.16	0.18
SINCERITY BP Word Count	0.49	0.42	0.49
SOPHISTICATION BP Word Count	0.25	0.18	0.23
Total BP Word Count	2.0	1.9	2.11

Table 12 Type/token Ratio of BP Dimensions

Table 12 shows that the percentage difference of TTR and standardised TTR between Pr92 and Po92 is minor. In addition, the BP word count is also similar between the two corpora. Although the percentage of EXCITEMENT BP words in Po92 is somewhat higher, the difference is minor (0.56 from Pr92 versus 0.63 from Po92). This suggests that, in general, the complexity or difficulty of texts based on the richness in BP words in Pr92 and Po92 is at a similar level.

4.4 Summary and Conclusion

This chapter has examined the frequency information of BP words that occur in the subcorpora of Pr92 and Po92 university website texts. The frequency information includes BP word count, tests of the significant difference and effect size of the difference in frequencies between Pr92 and Po92 subcorpora. The findings answer research question 1, in relation to how frequent the various words associated with the five dimensions of the BP model in the corpora occur in different sections of the university websites. The findings are briefly summarised in Figure 44. As shown in the upper row, the prominent text types are different between Pr92 and Po92 in the *History* for COMPETENCE, *History*, *Life on Campus*, *Local Area*, *Mission* and *Research* for EXCITEMENT, *Funding* for RUGGEDNESS, and *Funding* and *Research* for SINCERITY. Only in the SOPHISTICATION BP dimension is there an additional report of the *Local Area* text type in which the frequencies are strikingly high in both Pr92 and Po92, and the differences go to the *Funding* and *Research* text types. Finally, the two lower columns summarise the list of the universities that have the highest frequency. It is apparent that frequencies from the University of Edinburgh, Kingston University and the University of Worcester are highest in several BP dimensions. The outliers suggest that

certain areas are particularly promoted in the texts of these universities. The *History*-related information is prominent in all BP dimensions of the University of Edinburgh, which is unsurprising because it is one of the oldest universities in the UK and has a very illustrious history. The outliers in all the BP dimensions of Kingston University suggest that it promotes success in *Research* in many areas (as observed in the context of use). The University of Worcester promotes its welcoming atmosphere of *Life on Campus*, and Queen Margaret University promotes its beautiful *Local Area* and excellent *Research*.

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
History - Po92 (prominent)	*History, Life, Local, Mission, Research* - Po92 (prominent)	*Funding* - Pr92 (prominent)	*Funding, Research* - Pr92 (prominent)	*Funding* - Pr92 (prominent), *Research* - Po92 (prominent), *Local* - Pr92 and Po92
Edinburgh, City London (Pr92)	Edinburgh, Sussex (Pr92)	Edinburgh, LSE (Pr92)	Edinburgh (Pr92)	Edinburgh (Pr92)
Kingston (Po92)	Kingston (Po92)	Kingston (Po92)	Kingston, Worcester (Po92)	Queen Margaret, Kingston, Worcester (Po92)

Figure 44 Text Types with Frequency Differences between Pr92 and Po92 and the Universities with the Highest Frequency of BP dimension Words

In conclusion, frequency information suggests that different BP dimensions are reflected prominently in different text types. In terms of the type/token ratio, only minor differences are found between the Pr92 and Po92 corpora, suggesting a similar level of complexity in the vocabulary of the texts from the different kinds of universities. Therefore, Pr92 and Po92 texts are generally similar in terms of vocabulary richness. The findings addressed research question 1, which focused on how frequently the various words associated with each of the five dimensions of the BP model (Aaker, 1997; Opoku et al., 2006) occur in the corpora of texts from the different sections of the university websites. To take the analysis further, the next chapter will evaluate the applicability of BP words in the context of university websites, employing a combination of a quantitative and qualitative corpus approaches.

Chapter 5. Corpus Analysis: Brand Personality Keywords

5.1 Introduction

This chapter identifies and analyses keywords that are associated with brand personality (BP keywords). These keywords are those terms from the full set of Opoku et al.'s (2006) 833 BP dictionary words that are judged to be prominent in the Pr92 and Po92 corpora. The prominence of the words is established by comparing: (1) Pr92 against a reference corpus (the British National Corpus or BNC); (2) Po92 against BNC; and (3) Pr92 and Po92 against BNC. Then the results of the BP keywords from Pr92 are compared with those from Po92 (see section 3.3.2). The aim of identifying these prominent keywords is to refine the full BP dictionary word lists by establishing which words are relevant and significant, specifically in the context of university website texts. The BP keywords identified in this chapter will also be the focus of an in-depth qualitative analysis presented in Chapter 6.[6] In the discussion that follows, section 5.2.1-5.2.5 identifies the BP keywords that occur in the Pr92 and Po92 corpora in relation to each of the five BP dimensions (COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION). Section 5.3.1-5.3.5 then examines the distribution of frequencies of BP keywords across the different text types of both Pr92 and Po92 corpora, illustrated with specific examples of these words in use. Finally, section 5.4 draws some conclusions from the discussion.

5.2 Keywords of Brand Personality

This section identifies the keywords that are associated with each of the five BP dimensions. These keywords are extracted from the Pr92 and Po92 corpora on the basis of Log Ratio statistics. The cut-off point of the Log Ratio values is ≥ 0.5 for positive keywords and ≤ -0.5 for negative keywords, as discussed in detail in section 3.3.2. Each increase of one point in the Log Ratio values indicates that the effect size (i.e. the difference in frequencies) doubles itself, indicating whether the differences of a keyword between the two corpora are major or minor. For example, a Log Ratio value of 2 indicates that word is four times more frequent in the study corpus when compared with a reference corpus (the BNC). The word is 2^x (2 to the power of x) times more frequent, where x is the Log Ratio score. Log Ratio values near zero indicate that differences are so small that the keywords in question are 'locked' between the two corpora, and in this case the keywords can be classified as 'lockwords' (Hardie, 2014).

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[6] In order that the number of BP keywords used for the qualitative corpus analysis was manageable, the BP keywords extracted from both Pr92 and Po92 against BNC stated in the procedure (3) were used for the in-depth qualitative analysis in Chapter 6.

The BP keywords identified in sections 5.2.1-5.2.5 are the keywords extracted from the Pr92 corpus compared to the BNC as the reference corpus, and the same procedure is applied to the Po92 corpus. The BP keywords associated with the five BP dimensions are presented in turn, beginning with COMPETENCE.

5.2.1   *COMPETENCE Keywords*

A comparison of the COMPETENCE keywords identified in the Pr92 and Po92 texts reveals a number of differences in the way in which this BP dimension is represented in the two corpora. The BP keyword lists in Table 13 show that BP COMPETENCE keywords in Pr92 relate to a notion of capacity for achievements (i.e. *forefront*, *comprehensive*, *establishment*). In Po92, on the other hand, the COMPETENCE keywords are related to ideas of the security, trade and industry. Examples of the use of COMPETENCE BP words are listed in Appendix D. All of the use of COMPETENCE keywords in Table 13, with an exception of *concern*, in which use of their meaning is the same or relevant to the meaning they have in Aaker's BP scale, is illustrated in Table 14. *Concern* is used in the sense of a 'matter of interest'; thus, it is not associated with Aaker's BP scale. An example of its use in the university website texts can be seen in the following sentence:

> Cambridge Consultations was a six-term series of events including public debates, lectures and workshops tackling issues of contemporary *concern*. (PrH--Cambridge--History)

It is clear that *concern* here does not correspond to any lexical items in the BP scale in Table 14. Thus, it is excluded from the list of BP keywords found in the university website texts.

Pr92	Log Ratio	Po92	Log Ratio
License	4.38	*manufacture*	3.11
Forefront	2.82	*guaranteed*	2.30
Establishment	1.81	*guarantee*	2.08
Comprehensive	1.55	*safe*	1.47
Scientific	1.42	*technical*	1.41
~~*Concern*~~	1.08	*industry*	1.21
Firm	-1.80	*able*	0.81
		trade	-2.04

Table 13 COMPETENCE Keywords
BP keyword(s) that are crossed out are words whose meaning in context of the Pr92/Po92 university website texts is not associated with Aaker's (1997) BP scale

Aaker's (1997) Scale	Aaker's COMPETENCE facets	COMPETENCE Words
Successful	Successful	*able, establishment, license*
	Leader	*forefront*
	Confident	*guarantee*
Reliable	Reliable	-
	Hard-working	*comprehensive*
	Secure	*firm, guaranteed, safe*
Intelligent	Intelligent	-
	Technical	*scientific, industry*
	Corporate	*manufacture, trade*

Table 14 COMPETENCE Keywords and Aaker's (1997) BP

5.2.2 *EXCITEMENT Keywords*

Table 15 lists BP keywords from the EXCITEMENT dimension. There are no BP EXCITEMENT words that are keywords in Pr92. With the exception of *lone* and *individuals*, all the meanings and uses of all of the EXCITEMENT keywords found in the corpora, as listed in Table 15, are associated with Aaker's (1997) BP. Full details of how these keywords are used in the corpora can be found in Appendix E. It is suggested that *lone* and *individuals* be excluded from the keywords list because they tend not to be associated with the EXCITEMENT dimension, as shown in the following examples:

> We value: the development of the whole person, respecting and nurturing the inherent dignity and potential of each *individual* [*][7] the integration of excellent teaching, research and knowledge exchange [*] the power of higher education to enrich *individuals*, communities and nations. (PoL--CCCU--Mission)

> If you are from Scotland and are a *lone* parent, you must have applied for the Lone Parent Childcare Grant from the Student Awards Agency for Scotland. (PrM--Edinburgh--Funding)

The examples show that both *individuals* and *lone* are used in straightforward references to people, which does not correspond to any facet of Aaker's EXCITEMENT dimension of BP. The facets and other EXCITEMENT keywords that correspond to the EXCITEMENT dimension are summarised in Table 16.

Pr92	Log Ratio	Po92	Log Ratio
~~*Lone*~~	2.82	*creative*	4.35
		enterprising	4.20
		creativity	4.19

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[7] [*] signifies a bullet point in the original sources.

Pr92	Log Ratio	Po92	Log Ratio
		stimulating	2.80
		active	2.05
		latest	1.82
		~~*individuals*~~	1.80
		independent	1.39
		modern	1.54

Table 15 EXCITEMENT Keywords

Aaker's (1997) Scale	excitement facets	EXCITEMENT Words
Daring	Daring	-
	Trendy	-
	Exciting	*active, enterprising, stimulating*
Spirited	Spirited	*active, enterprising, stimulating*
	Cool	-
	Young	-
Imaginative	Imaginative	*creative, creativity*
	Unique	*creative, creativity*
up-to-date	Up-to-date	*latest, modern*
	Independent	*independent (thinking)*
	Contemporary	*modern*

Table 16 EXCITEMENT Keywords and Aaker's (1997) BP

5.2.3   RUGGEDNESS Keywords

Table 17 shows that there are relatively few RUGGEDNESS words from the BP dictionary list that are identified as keywords in the corpora. *Animal* is the only RUGGEDNESS word identified as a keyword in Pr92. Use of *animal* in Pr92 is related to animal welfare and minimising the use of animals for research. As such, the use of this keyword is not associated with Aaker's facets of BP, as seen in the following example:

> With concerns for *animal* welfare and human health and safety paramount, this new production of Ming's cramped living conditions is combined with a commentary by philosopher Jean-Luc Nancy which explores human-animal relations, strange territories and the circumstances of the wild inside. (PoL--Kingston--Research)

Although there is an aspect of this context that relates to 'the circumstances of the wild', which could be linked to the 'outdoorsy' facet of BP, the reference to 'the wild' is used to describe the philosopher Jean-Luc Nancy's interests, while use of the word *animal* is related

specifically to animal welfare, which is not associated with the 'outdoorsy' facet of BP. Thus, *animal* is excluded from the list of in BP RUGGEDNESS keywords. The other RUGGEDNESS keywords in Table 17, all found in Po92, are more clearly associated with facets of the BP RUGGEDNESS dimension, as summarised in Table 18. Further details of the contexts in which the BP RUGGEDNESS keywords are used can be found in Appendix F.

Pr92	Log Ratio	Po92	Log Ratio
~~*Animal*~~	1.79	*resilient*	4.64
		outdoors	3.83
		robust	3.24

Table 17 RUGGEDNESS Keywords

Aaker's (1997) Scale	ruggedness facets	RUGGEDNESS Words
Outdoorsy	Outdoorsy	*outdoors*
	Masculine	-
	Western	-
Tough	Tough	*resilient, robust*
	Rugged	-

Table 18 RUGGEDNESS Keywords and Aaker's (1997) BP

5.2.4 *SINCERITY Keywords*

Table 19 shows that, in Pr92, a number of the BP keywords associated with the SINCERITY dimension can be linked with notions of benevolence, i.e. *charitable* and *generous*. Both of these words tend to be used in contexts related to scholarships and bursaries. When it comes to the BP keywords found in the texts from the Po92 universities, we see that hospitality-related words and contexts show up, for example *friendly* and *welcoming*.

It is noticeable that the keyword *generous* is used in relation to scholarships in contexts that are endeavouring to invite talented prospective students, as shown in the following example:

> Global industry leader Siemens offers a significant number of **generous** Bursaries to all full-time BEng and MEng Engineering applicants who make the University of Lincoln their first choice institution via UCAS. (PoH--Lincoln--Funding)

Another distinctive feature is the use of *friendly*. This BP keyword tends to be used in contexts relating to 'happiness', as shown in the following examples:

> Everywhere you go on campus you can't help but be struck by the *friendly* atmosphere. This doesn't just come from the people you meet but from the academic staff who greet you with a smile when you enter your lecture, or the porter when you pick up your post. (PrM--Sussex--Life)

> Worcester enjoys a national reputation as a very *friendly* place at which people are genuinely happy and feel that they can make a meaningful contribution. (PoL--Worcester--Life)

It is clear that *friendly* is used to convey a sense of a benign atmosphere, positive and inviting.

Further examples of the contexts in which the SINCERITY keywords appear are presented in Appendix G. Table 19 lists the SINCERITY BP keywords, and Table 20 shows the SINCERITY keywords that are associated with Aaker's (1997) facets of BP. In some cases, *relation* is used in a way that is not relevant to any facet of the BP model because it is used as part of the prepositional phrase 'in *relation* to'. However, in general occurrences of *relation* relate to affiliations or partnerships between institutions or countries, for example in the phrase international *relations*, which can be classified under the *friendly* facet of the SINCERITY dimension, as shown in Table 20.

Pr92	Log Ratio	Po92	Log Ratio
Charitable	3.34	*welcoming*	3.51
Generous	2.30	*friendly*	2.76
Distinctive	2.11	*practical*	1.33
Relation	1.18		
Simple	-1.53		

Table 19 SINCERITY BP Keywords

Aaker's (1997) Scale	sincerity facets	SINCERITY Words
down-to-earth	Down-to-earth	*simple* (sensible context)
	Family-oriented	-
	Small-town	-
honest	Honest	-
	Sincere	*generous*
	Real	*practical*
wholesome	Wholesome	*charitable*
	Original	*distinctive*
cheerful	Cheerful	-
	Sentimental	-
	Friendly	*friendly, relation(s), welcoming*

Table 20 SINCERITY Keywords and Aaker's (1997) BP

5.2.5   *SOPHISTICATION Keywords*

Table 21 lists the BP keywords identified in Pr92 and Po92 that are associated with SOPHISTICATION (examples of their use can be found in Appendix H). It is noticeable from many of the contexts in which they occur that BP SOPHISTICATION words are used in relation to sport (e.g. football, golf, cricket), performing arts (e.g. philharmonic, opera, orchestral music) and history (e.g. museums, exhibitions). BP SOPHISTICATION keywords are also used in contexts related to the prestige of awards and scholarships, and additionally to the university surroundings and architecture. Two of the words from the BP dictionary lists that were identified as keywords, *female* and *engaging*, are not associated with any of Aaker's (1997) facets of SOPHISTICATION, as the following examples indicate:

> 'All in all, my Sussex experience has been wonderfully diverse and *engaging*, on a campus tailored to meeting every student's needs. Sussex is not only a great place to study, but also to flourish as an individual, no matter where you come from or what your interests are.' (PrM--Sussex--Life)

> Dismayed at the limited roles for, and representations of, women in contemporary comic books, he shifted his focus from criticism to practice, and created a comic that suggested a different approach to writing, art and production. His starting point was Batgirl, originally a PhD student. Why shouldn't she be portrayed like the *female* PhD students at Kingston University – complex, confident, relatable, and intelligent – wearing a costume adapted from high street fashions, rather than skintight spandex? (PoL--Kingston--Research)

In the first example, *engaging* is used to express a sense of connection or active participation, which is not related to any of the facets of SOPHISTICATION listed in Table 22. Likewise, *female* in the second example is used in a straightforward, if ironic, way to refer to and contrast two very different notions of what it means to be a woman, neither of which are related to the facets of SOPHISTICATION recorded in Table 22. Thus, *engaging* and *female* are excluded from the list of BP SOPHISTICATION keywords.

Pr92	Log Ratio	Pr92	Log Ratio
Prestigious	3.38	*high-profile*	4.76
first-class	3.34	*~~engaging~~*	3.71
Royal	1.47	*stunning*	3.08
Lord	1.32		
~~Female~~	1.13		

Table 21 SOPHISTICATION Keywords

Aaker's (1997) Scale	sophistication facets	SOPHISTICATION Words
upper class	Upper class	*first-class, high-profile, lord, prestigious, royal*
	Glamorous	*stunning*

Aaker's (1997) Scale	sophistication facets	SOPHISTICATION Words
	Good looking	-
Charming	Charming	-
	Feminine	-
	Smooth	-

Table 22 SOPHISTICATION Keywords and Aaker's (1997) BP

To sum up, the BP keywords identified in this section illuminate some of the different themes that are prominent in the Pr92 or Po92 university website texts as far as the five BP dimensions are concerned. In relation to COMPETENCE, the BP keywords in Pr92 occur in contexts that suggest accomplishment, while security and trades are more evident in the contexts in which Po92 COMPETENCE keywords occur. There are many more BP EXCITEMENT keywords in Po92, and they present views relating to liveliness, while there is no EXCITEMENT keyword in Pr92 that is associated with Aaker's BP EXCITEMENT dimension. There are also more RUGGEDNESS keywords in Po92 than in Pr92. RUGGEDNESS keywords in Po92 occur in contexts that reflect a sense of the outdoorsy and toughness facets of Aaker's BP model. In contexts in which SINCERITY keywords are used in Pr92 suggest a sense of benevolence and kindliness, while those in Po92 are related to friendliness and welcoming. With respect to SOPHISTICATION, BP keywords related to prestige found in Pr92, while high-profile and beauty related BP keywords occur in Po92. These BP SOPHISTICATION keywords in both Pr92 and Po92 suggest a notion of recognition of institutions. To add further insights into how the BP keywords behave, the next section examines the keywords that are prominent in both Pr92 and Po92, looking at similarities and differences in their frequency of occurrence and distribution across sub-corpora.

5.3 BP Keywords of Pr92 and Po92 Corpora and Frequency Distribution

The aims of this section are to discuss: (1) BP keywords of both Pr92 and Po92 corpora; (2) frequency distributions across six text types for comparison; and (3) examples of usage that are relevant to the context of university websites. BP keywords in this section were retrieved from the texts of both Pr92 and Po92 added together as one corpus (compared against the BNC as the reference corpus), using Log Ratio with a threshold of ≥0.5 and ≤0.5. The keywords that are also BP words were picked out for use as BP keywords. These BP keywords were then used for an analysis of frequency distribution and qualitative corpus analysis (section 5.3.1-5.3.5). BP keywords in the previous sections (5.2.1-5.2.5), which are

words that are prominent in either the Pr92 or Po92 corpus, are not used for the in-depth qualitative corpus analysis so that the number of words for in-depth qualitative analysis (sections 6.2.1-6.2.10) subsequently are manageable. The total frequencies of the BP keywords are presented in terms of both the raw frequencies (Raw F.) and normalised frequency (NF), with the normalisation base of 100,000, which is the closest round number to the corpus size of Pr92 (312,944) and Po92 (226,363). In the tables that record these frequencies for each BP dimension, the keywords are listed from the highest to the lowest frequencies. The statistics used to identify the keyness of the keywords are Log Likelihood (G^2) and Log Ratio, as in the previous chapter (see section 3.3.2). As a significance measure, G^2 indicates whether the difference in frequencies between the two corpora can be considered statistically significant. A G^2 value of ≥ 3.8 means that the difference is significant at $p < 0.05$, indicating 95% confidence that the difference is not due to chance (95th percentile). Other cut-off points of G^2 that are discussed in this section, and which reflect even greater levels of confidence, include $G^2 \geq 6.63$ at 99th percentile ($p < 0.01$) and $G^2 \geq 10.83$ at 99.9[th] percentile ($p < 0.001$); $G^2 \geq 15.13$ at 99.99[th] percentile ($p < 0.0001$). To complement the Log Likelihood significance test, Log Ratio is used a measure of the effect size of the frequency differences. Where Log Ratio values are given, a plus ('+') sign indicates that the frequency of the keyword is higher in Pr92 relative to Po92, whereas a minus ('-') sign indicates that the frequency is lower in Pr92 relative to Po92. In addition to these statistics, the frequency tables also record the number of universities in which the BP keywords occur (e.g. 20/21 indicates that the BP keyword in question is found in the website texts of 20 out of the 21 universities represented in the corpora).

For each BP dimension, following the table that records the total frequencies of keywords for Pr92 versus Po92, there are two further tables recording the keyword frequencies in each of the six text types (*Funding*, *History*, *Life*, *Local*, *Mission*, *Research*), again comparing Pr92 with Po92. As in the general Pr92/Po92 table, these text type tables record the raw frequencies (Raw F.) and normalised frequencies (NF). In this case, the base of normalisation is 10,000, since this is the closest to the size of the text type subcorpora.

The following sections summarise in turn frequencies of the keywords associated with the five BP dimensions: COMPETENCE, EXCITEMENT, RUGGEDNESS, SINCERITY and SOPHISTICATION.

5.3.1 *COMPETENCE Keywords and Frequency Distribution*

Table 23 shows examples of the contexts in which COMPETENCE BP keywords can be found in the university website texts, noting the source text from which each example is taken. Overall, the examples reveal that the contexts in which COMPETENCE BP keywords occur communicate ideas related to funding, scholarships, research, facilities and students – with a focus on facts or assertions about the university's positive achievements or qualities in relation to its infrastructure, successful research and community, partnerships and initiatives, good governance, safe environment, talented individuals and general reputation. These keywords are related to Aaker's BP facets of successful, leader, reliable, intelligent and corporate, as illustrated in Table 24.

Patterns (Keyword + related issues / ideas found in the context)	**Context** (Keyword highlighted in **bold italic**)	**Source Files** (Subcorpus – Uni – Text type)
partnership(s) + awards / between (or with) institutions / organisation / bursary	The LIH works in *partnership* with health, social care and third sector services in Lincolnshire, regionally and nationally, as well as with academic partners and policy groups in the UK and abroad.	PoH--Lincoln--Research
successful + applicants / candidates / scholarship winners	*Successful* candidates will demonstrate academic excellence and outstanding research potential.	PrM--Kent--Funding
enterprise(s) + innovation / initiatives / activities / partnerships	Building on our success of developing large-scale strategic business partnerships through the *enterprise* and innovation strategy we will develop major initiatives with key partner companies and other organisations, both in the UK and overseas.	PoH--Coventry--Mission
outstanding + reputation / research / staff / students / teaching	Vision [*][8] To recruit and develop the world's most promising students and most *outstanding* staff and be a truly global university benefiting society as a whole.	PrM--Edinburgh--Mission
complete + a degree / an application form / (with) + facilities / attractions	The entertainment district has a large arena, generally used for concerts, a huge night club, a Cineworld as well as many other restaurants and attractions. Over the top of the dome is a fabric skywalk *complete* with viewing platform at the top.	PrH--LSE--Local

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[8] [*] signifies a bullet point in the original texts.

Patterns	Context	Source Files
(Keyword + related issues / ideas found in the context)	(Keyword highlighted in **bold italic**)	(Subcorpus – Uni – Text type)
intellectual + development / innovation / property	Almost every major ***intellectual*** development within Economics over the past fifty years has had input from members of the department, which counts ten Nobel Prize winners among its current and former staff and students.	PrH--LSE--Research
proud + of + achievement / research / education / history / museum	With Institute academics regularly achieving national and international peer recognition for their subject matter contributions, we're ***proud*** to engage in knowledge transfer, sharing their research and academic papers.	PoL--Worcester--Life_on_Campus
secure + environment / resources	Cardiff Metropolitan University aims to provide a safe and ***secure*** environment for students living on campus, with friendly Halls staff available to provide support and help throughout your stay with us.	PoM--Cardiff_Met--Life_on_Campus
governance + policy / strategies / engagement good + ***governance***	In support of our goals, we will ensure strong enabling strategies are in place for good ***governance***, engaged people and culture, sound finance, effective IT and estates, internationalisation, and sustainability.	PoM--Gloucestershire--Mission
talented + people / students / athletes	WE WILL make major improvements in the quality of our educational programmes and the overall student experience at LSE, and develop opportunities for all of our ***talented*** students regardless of their background.	PrH--LSE--Mission
award-winning + place / facilities	Our ***award-winning*** campus comprises stunning waterside accommodation in the Student Village, the Great Central Warehouse Library, academic buildings, sports facilities and Student Support.	PoL--Lincoln--Life_on_Campus
thriving + community / research	At the heart of our ***thriving*** research community is a network of research groups and centres, enabling our experts to work collaboratively, within and across multiple disciplines, to explore novel concepts and take their research into new, groundbreaking directions.	PrL--Liverpool--Research

Table 23 Examples of Use of COMPETENCE Keywords

Aaker's (1997) Scale	competence facets	COMPETENCE Words
Successful	Successful	*award-winning, complete enterprise(s), intellectual, outstanding, proud, thriving*
	Leader	*governance, partnership(s), thriving*
	Confident	*-*
Reliable	Reliable	*secure*
	Hard-working	*-*
	Secure	*-*
Intelligent	Intelligent	*talented*
	Technical	*-*
	Corporate	*partnership(s)*

Table 24 COMPETENCE Words of Pr92 and Po92 and Aaker's (1997) BP

Table 25 below summarises the frequencies of the BP keywords associated with COMPETENCE in Pr92 and Po92. The G^2 values in bold type indicate where there are statistically significant differences in the frequencies of the two corpora. The Log Ratio scores in bold type highlight those keywords where the effect size of the frequency difference is notably larger than the other keywords in the set. Each increase of one point in the Log Ratio values indicates that the effect size (i.e. the difference in frequencies) doubles itself, thus suggesting whether the differences of a keyword between the two corpora are major or minor. As noted above (section 5.2), each one point increase in the Log Ratio score reflects a doubling in the normalised frequency difference between the two corpora (Hardie, 2014). Log Ratio values underlined indicate 'lockwords' (Hardie, 2014), that is, those instances where the effect size is so low (at zero or near zero) that the keywords are 'locked' between the two corpora in the sense that they have very similar or the same normalised frequency in each.

Table 25 shows that *partnership(s)* and *successful* are the most frequent COMPETENCE keywords. Both words also occur across all six text types of Pr92 and Po92. It is notable that the G^2 value of *partnership(s)* is the highest at 31.18 (> 15.13), indicating that the difference in the frequency of *partnership(s)* in Pr92 and Po92 is statistically significant, with 99.99% confidence that the difference is not due to chance (p < 0.0001). The Log Ratio value of -0.99 indicates that *partnership(s)* is 1.99 times more common in Po92 than in Pr92. The fact that the Log Ratio value of *partnership(s)* is the highest of all the COMPETENCE keywords suggests that the difference between Pr92 and Po92 in the normalised frequencies of *partnership(s)* is both highly significant and very prominent. The high frequencies of the

keyword *partnership(s)* can be related to the fact that collaboration is viewed as a good practice in Higher Education, and is therefore something that universities are keen to emphasise. For example, Altbach and Salmi (2011) suggest that elite institutions 'aspire to be the best in teaching, research and participation in the global knowledge network' (p. 16).

BP Keywords	Raw F.	Raw F. Pr	Raw F. Po	NF Pr92	NF Po92	G^2	Log Ratio	No. of Universities where the BP Keywords Occur
partnership(s)	270	111	159	35.47	70.24	**31.18**	**-0.99**	(21/21)
successful	205	115	90	36.75	39.76	0.31	-0.11	(21/21)
enterprise(s)	183	84	99	26.84	43.74	**10.87**	-0.70	(19/21) LSE, Oxford
outstanding	160	99	66	31.63	29.15	0.03	<u>0.04</u>	(20/21) Staffordshire
complete	130	77	53	24.61	23.41	0.08	<u>0.07</u>	(19/21) Liverpool, Creative Art
intellectual(s)	125	90	35	28.76	15.46	**10.50**	**0.90**	(18/21) Cardiff Met, Chichester, Gloucester
proud	65	35	30	11.18	13.25	0.46	-0.24	(19/21) Cambridge, Chichester
secure	61	27	34	8.62	15.02	**4.67**	**-0.80**	(19/21) Lincoln, Kingston
governance	55	28	27	8.94	11.92	1.13	-0.41	(15/21) Cambridge, Oxford, Creative Art, Cardiff Met, Staffordshire, Worcester
talented	50	23	27	7.34	11.92	2.92	-0.70	(17/21) Cambridge, Oxford, Lincoln, Nottingham Trent
award-winning	44	20	24	6.39	10.60	2.81	-0.73	(19/21) Gloucester, Queen Margaret
thriving	35	17	18	5.43	7.9	1.27	-0.55	(13/21) Oxford, Edinburgh, Aberdeen, City London, Lincoln, Nottingham Trent, Chichester, Staffordshire

Table 25 Frequencies of BP Keywords in Pr92 and Po92: COMPETENCE

Other COMPETENCE keywords that occur with statistically significant different frequencies in Pr92 and Po92 are *enterprise(s)*, *intellectual* and *secure*. The G^2 score of *enterprise(s)*, is 10.87 (> 10.83), indicating 99.9% confidence that the frequency difference between Pr92 and Po92 is not due to chance (p < 0.001). The Log Ratio score of *enterprise(s)* is -0.70, indicating that the frequency in Po92 is 1.62 times that of Pr92. The G^2 of *intellectual* is 10.50 (> 6.63), reflecting 99% confidence that the frequency difference is not due to chance (p <0.01). The Log Ratio score of 0.90 for the positive keyword *intellectual* signals that this keyword is 1.87 times more common in Pr92 than Po92. The G^2 score of *secure* is 4.67 (> 3.84; p < 0.05), which shows that there is 95% confidence that the difference between Pr92 and Po92 is not due to chance. The Log Ratio score of *secure* is -0.80. This indicates that the

frequency of *secure* is 1.74 times higher in Po92. It can be concluded that the frequency differences between Pr92 and Po92 of these four COMPETENCE keywords - *partnership(s)*, *enterprise(s)*, *intellectual* and *secure* - are statistically significant, and that the effect size is broadly similar, with Log Ratio values in the range 0.70 to 0.99.

The differences in the frequencies of the other eight COMPETENCE keywords - *successful*, *outstanding*, *complete*, *proud*, *governance*, *talented*, *award-winning* and *thriving* – are not statistically significant. In addition, the Log Ratio values related to these frequency differences are very low, except in the case of *talented* (-0.70) and *award-winning* (-0.73). Log Ratio scores of close to zero, such as -0.04 for *outstanding* and -0.07 for *complete*, indicate that the frequency differences are so low that these are 'lockwords', with similar levels of relative occurrence in Pr92 and Po92.

As seen in Table 25, COMPETENCE keywords with high frequencies (i.e. *partnership(s)*, *successful*, *enterprise(s)*, *outstanding*, *complete*) tend to occur in the website texts of more universities than those with lower frequencies. It is noticeable that several COMPETENCE BP keywords do not occur in several high-ranking universities from both the Pr92 and Po92 sets. For example, *enterprise(s)* does not occur in any of the texts on the LSE and Oxford websites. Similarly, *talented* does not occur in texts from the websites of Cambridge and Oxford, which are high-ranking Pr92 universities; this keyword does also not occur on the websites of Lincoln and Nottingham Trent, which are high-ranking Po92 universities. The non-occurrence of *enterprise(s)* and *talented* in the website texts from some of the high-ranking universities may suggest that the ideas associated with these words are not frequently expressed in the texts from these institutions, or that ideas relating to *enterprise(s)* and *talented* are communicated in other ways.

To further the analysis of the way in which the COMPETENCE keywords are used, tables 26 and 27 show the raw frequencies (Raw F.) and normalised frequencies (NF) of the keywords across the six text types, in order to help identify any specific points of differentiation between the Pr92 and Po92 subcorpora.

BP Keywords	Funding (79,874 / 55,495)				History (89,818 / 10,072)				Life (48,062 / 74,191)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
partnership(s)	29	26	3.63	4.67	15	21	**1.67**	**20.85**	6	22	1.25	2.97
successful	74	45	9.26	8.11	13	4	1.45	3.97	5	19	1.04	2.56
enterprise(s)	2	2	0.25	0.36	6	0	0.67	0	7	14	1.46	2.83

BP Keywords	Funding (79,874 / 55,495)				History (89,818 / 10,072)				Life (48,062 / 74,191)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
outstanding	40	22	5.00	3.96	5	0	0.55	0	6	10	1.24	1.34
complete	32	18	4.01	3.24	16	0	1.78	0	22	21	4.58	2.83
intellectual(s)	8	5	1.00	0.90	17	0	1.78	0	5	2	0.83	0.26
proud	13	4	1.63	0.72	2	3	0.22	2.98	4	12	0.83	1.62
secure	3	2	0.37	0.36	6	1	0.66	0.99	9	12	1.87	1.61
governance	0	0	0	0	7	1	0.78	0.99	0	0	0	0
talented	13	12	1.62	2.16	0	0	0	0	3	12	0.62	1.61
award-winning	3	0	0.37	0	0	4	0	3.97	10	12	2.08	1.61
thriving	3	0	0.37	0	2	1	0.22	0.99	3	7	0.62	0.94

Table 26 Number of COMPETENCE Keywords in Funding, History, Life
(-- / --) = corpus size of Pr92 and Po92 text types

BP Keywords	Local (19,503 / 18,877)				Mission (13,573 / 13,401)				Research (62,114 / 54,327)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
partnership(s)	1	1	5.13	2.30	14	44	**10.31**	**32.83**	46	45	7.41	8.28
successful	1	1	5.13	5.30	2	12	**1.47**	**8.95**	20	9	3.22	1.66
enterprise(s)	1	1	5.13	5.30	9	37	**6.63**	**27.61**	59	45	9.50	8.28
outstanding	1	2	0.51	1.05	18	14	13.26	10.44	24	18	3.86	3.31
complete	2	0	1.03	0	0	3	0	2.24	5	11	0.80	2.02
intellectual(s)	0	0	0	0	23	7	**16.95**	**5.22**	37	21	5.96	3.87
proud	1	2	5.13	1.06	7	3	5.16	2.24	8	6	1.29	1.1
secure	0	1	0	0.52	7	5	5.15	3.73	2	3	0.32	0.55
governance	0	0	0	0	5	1	3.68	0.75	16	25	2.58	4.60
talented	0	0	0	0	1	1	0.73	0.74	6	2	0.96	0.36
award-winning	3	2	1.53	1.05	1	2	0.73	1.49	3	4	0.48	0.73
thriving	4	4	2.05	2.11	0	2	0	1.49	5	4	0.80	0.73

Table 27 Number of COMPETENCE Keywords in Local, Mission, Research

The normalised frequency (NF) in Tables 26 and 27 reveal that the main points of differentiation between Pr92 and Po92 are found in the *History* and *Mission* text types. In particular, the largest differences, as seen in the NF numbers in bold type, relate to the occurrence of *enterprise(s)*, which is approximately four times more frequent in the Po92 as

Mission texts as in those of Pr92 (NF = 27.61 versus 6.63), followed by ***partnership(s)***, which is three times as frequent in the Po92 Mission texts as in those of Pr92 (NF = 32.83 versus 10.31). The NFs of ***secure*** in Pr92 and Po92 do not standout as strikingly different in any of the six text types, even though the total NF recorded in Table 25 shows that the frequency of ***secure*** in Po92 is higher than in Pr92, and that the difference is statistically significant. Despite this, the differences in frequency for the six different text types are subtle. This suggests that although there is a significant difference in the Pr92 and Po92 corpora as a whole, this does not necessarily mean that there is a significant difference at the level of any of the individual text type subcorpora.

It is notable that there are a number of differences where the NF in Po92 is considerably larger than the Pr92 NF, in particular in relation to ***partnership(s)*** (20.85 versus 1.67 for the *History* text type; 32.83 versus 10.31 for the *Mission* text type), ***successful*** (8.95 versus 1.47 for the *Mission* text type) and ***enterprise(s)*** (27.61 versus 6.63 in the *Mission* text types). Although the frequency difference for ***successful*** in the overall table (Table 25) is not statistically significant, it is worth noting that at the level of specific text types, the frequencies of ***successful*** are substantially different in the *Mission* texts, with a NF of 8.95 of Po92 but only 1.47 in Pr92. The keyword ***intellectual***, which Table 25 showed was overall more prominent in Pr92, shows a high degree of difference specifically in the *Mission* related texts, with a NF of 16.20 in Pr92 versus 5.22 in Po92.

To summarise, in the COMPETENCE dimension, the BP keywords that differentiate Po92 from Pr92 are ***partnership(s)***, ***enterprise(s)*** and ***successful***. ***Partnership(s)*** occurs more frequently in Po92 for the *Mission* and *History* text types. ***Enterprise(s)*** and ***successful*** are prominent in Po92 in the *Mission* text type. The BP keyword that differentiates Pr92 from Po92 is ***Intellectual***, which is particularly prominent in the *Mission*-related texts from the Pr92 universities.

5.3.2 *EXCITEMENT Keywords and Frequency Distribution*

As shown in Table 28, overall, contexts containing keywords associated with the EXCITEMENT dimension describe ideas related to the flow of energy in people (e.g. students, researchers, friends) and places (e.g. buildings, community, town, city), as well as engagement in academic and non-academic activities (e.g. generation of new knowledge, promoting freedom of beliefs) and students' future prospects (e.g. opportunities, support for young people, specific scholarships). All of these issues are related to a sense of the liveliness

of communities, research, activities and success. It was noted in in Section 5.2.2 that *individual(s)* tend not to be associated with the EXCITEMENT BP dimension. This is because the contexts related to EXCITEMENT tend to suggest activities that involve people without indicating whether or not they are inviduals doing activities independently. The relationship between the EXCITEMENT keywords and Aaker's (1997) facets of BP is illustrated in Table 29.

Patterns (Keyword + related issues / ideas found in the context)	**Context** (Keyword highlighted in **bold italic**)	**Source Files** (Subcorpus – Uni – Text type)
new + ideas / knowledge / research / practice / technology	We pursue excellence in the generation of *new* knowledge and encourage creativity, wellbeing and the exploration of truth.	PoH--Gloucestershire--Mission
new + building / campus / schools / friends / people / students	Old School site during the nineteenth century, outgrew its original home and moved in 1935 to splendid *new* buildings west of the River Cam with the aid of a very substantial benefaction from the Rockefeller Foundation.	PrH--Cambridge--History
~~*individual(s)*~~ + students / researchers / support / involvement / research / award	Open, friendly and multi-faith, the Coordinating Chaplain, Paul Fitzpatrick, is responsible for all matters of faith and for defending and promoting *individual* students' freedom of belief.	PoM--Cardiff_met--Life_on_Campus
current + students / research / challenges / issues	Reinforce its reputation for high-quality, relevant research. *Current* research initiatives, including the use of a capital markets perspective to explore financial reporting, offer exciting opportunities for greater engagement with the international financial sector.	PrH--LSE--Research
specific + scholarships / expertise / research	We also offer scholarships to eligible students from Partner Schools and Colleges of the University, and have a *specific* scholarship to support students who study abroad.	PrM--Kent--Funding
innovative + practice / centre / idea / thinking / solution / programme / research / teaching	Experts in the Faculty of Science and Engineering are engaged with a wide-range of private, public, and third-sector organisations, transforming ideas into *innovative* solutions to improve performance of technologies, products, and skills.	PoL--Liverpool--Research

Patterns	Context	Source Files
(Keyword + related issues / ideas found in the context)	(Keyword highlighted in **bold italic**)	(Subcorpus – Uni – Text type)
unique + community / town / city / experience / opportunity	A beautiful, cathedral city in the heart of the English countryside, Worcester offers a ***unique*** combination of small-town charm and big-city sophistication.	PoL--Worcester--Local_Area
young + people / students / men / women	We also work with Santander to provide exclusive internship opportunities for City students. Work as a Widening Participation Ambassador, helping ***young*** people to understand the benefits of attending university and their future careers.	PoL--City_London--Life_on_Campus
exciting + city / opportunity / contributions / entertainment	Our world-class interdisciplinary research challenges traditional boundaries, and characterises some of our most ***exciting*** contributions to knowledge, as well as the development of our research centres and groups.	PrM--Sussex--Research
vibrant + (cosmopolitan / creative / colourful / energetic) community / atmosphere / city	Welcome to one of the most prosperous and beautiful regions of the UK. Aberdeen is a ***vibrant***, creative and ambitious city, known for its historic charm and cosmopolitan community.	PrL--Aberdeen--Local_Area
state-of-the-art + facilities / learning resources / equipment	Each campus at Kingston University has its own character. But they all combine ***state-of-the-art*** facilities with a friendly study environment, setting modern architecture against a backdrop of natural beauty.	PoL--Kingston--Life_on_Campus
inspiring + place / setting / environment	The small community of students and staff who arrived in 1965 were our pioneers, shaping the University of Kent into the inclusive, international and ***inspiring*** community that it is today.	PrM--Kent--History
representation + (of) students / committee; student + *representation*	'Student ***representation*** is a really important part of what we do. Each year of each course has Student Reps who provide feedback on their course.	PrM--Sussex--Life_on_Campus
determined + success	The University celebrated its eight hundredth anniversary in 2009, marking the legacy of eight centuries and ***determined*** to remain among the world's greatest universities.	PrH--Cambridge--History

Table 28 Examples of Use of EXCITEMENT Keywords

[The BP keyword(s) that are crossed out are words in which their use in contexts is not associated with Aaker's (1997) BP scale, as far as the contexts in which they occur in the university website texts are concerned.]

Aaker's (1997) Scale	excitement facets	EXCITEMENT Words
Daring	Daring	*determined*
	Trendy	*new*
	Exciting	*young, new, inspiring*
Spirited	Spirited	*young, vibrant, new, inspiring, current*
	Cool	-
	Young	*young, new*
Imaginative	Imaginative	-
	Unique	*unique, specific, representative, individual(s), innovative*
up-to-date	Up-to-date	*new*
	Independent	-
	Contemporary	*state-of-the-art, new, innovative*

Table 29 EXCITEMENT Keywords of Pr92 and Po92 and Aaker's (1997) BP

Table 30 shows that most EXCITEMENT BP keywords occur with higher frequencies in Po92 than in Pr92, except **new**, **young**, **exciting** and **representation**. The keywords that have frequency differences that are statistically significant are **new**, **innovative**, **unique**, **vibrant**, **state-of-the-art** and **inspiring**. The G^2 of **new** is 4.26 (> 3.84; p < 0.05), while the Log Ratio value of 0.18 indicates that the word is approximately 1.13 times more common in Pr92 than in Po92. This is interesting because, although the frequency difference is statistically different, the effect size is very low. In comparison, while the frequency difference of **young** is not statistically significant ($G^2 = 0.37$, < 3.84), the Log Ratio value is 0.18, the same as that of **new**.

The keywords **innovative** and **unique** have similar G^2 values, 4.86 and 4.41 respectively, indicating a 95 percent level of confidence that the frequency differences of these words in Pr92 and Po92 are not due to chance ($G^2 > 3.84$, p < 0.05). The Log Ratio values of these two keywords are also similar at -0.55 for innovative and -0.57 for unique, suggesting that in both cases the words are about 1.47 times more common in Po92 than in Pr92. The effect size values of **innovative** and **unique** are therefore somewhat higher than the 0.18 value for **new**.

BP Keywords	Raw F.	Raw F. Pr	Raw F. Po	NF Pr	NF Po	G²	Log Ratio	No. of Universities where the BP Keywords Occur
new	1174	716	458	228.79	202.33	**4.26**	**0.18**	(21/21)
current	195	116	89	37.07	39.32	0.17	-0.09	(20/21) Lincoln
specific	167	96	71	30.68	31.37	0.02	<u>-0.03</u>	(20/21) Creative Art
innovative	132	64	68	20.45	30.04	**4.86**	**-0.55**	(19/21) Cardiff Met, Chichester
unique	114	55	59	17.57	26.04	**4.41**	**-0.57**	(20/21) Chichester
young (-)	100	61	39	19.49	17.22	0.37	0.18	(18/21) Coventry, Creative Art, Cardiff Met
exciting	93	39	54	12.46	23.86	2.23	0.36	(21/21)
vibrant	74	29	45	9.27	19.88	**10.60**	**-1.10**	(19/21) Oxford, Liverpool
state-of-the-art	71	30	41	9.58	18.11	**7.13**	**-0.92**	(18/21) Oxford, Gloucester, Staffordshire
inspiring	41	14	27	4.47	11.93	**9.48**	**-1.41**	(15/21) Sussex, Coventry, Lincoln, Nottingham Trent, Cardiff Met, Chichester
representation	38	26	12	8.31	5.30	1.74	0.65	(16/21) LSE, City London, Queen Margaret, Staffordshire, Worcester
determined (-)	14	8	6	2.55	2.60	0.00	-0.05	(7/21) ALL <u>except</u> Lincoln, Cardiff Mett, Gloucestershire, Cambridge, LSE, Edinburgh, Kent

Table 30 Frequencies of BP Keywords in Pr92 and Po92: EXCITEMENT

All the other BP EXCITEMENT keywords in Table 30 have higher frequencies in the Po92 corpus. Those with statistically significant frequency differences between Po92 and Pr92 are as follows. Firstly, the frequency differences of ***vibrant***, ***inspiring*** *and* ***state-of-the-art*** are statistically significant, with G² values of 10.60, 9.48 and 7.13, respectively. These values are above the cut-off point at 6.63, indicating 99.9 percent confidence level ($p < 0.01$). The Log Ratio values for ***vibrant***, ***inspiring*** and ***state-of-the-art*** are -1.10, -1.41 and -0.92 respectively. The Log Ratio values for ***inspiring*** (-1.41) are higher than for the other two keywords, and indeed for the rest of the BP keywords in the table.

Two BP EXCITEMENT keywords – ***innovative, unique*** – have higher frequencies in Po92 than in Pr92, and the differences are statistically significant at 95 percent confident level ($p < 0.05$), indicated from the G² values at 4.86 for ***innovative***, 4.41 for ***unique***. The Log Ratio values of ***innovative*** and ***unique*** are -0.05 and -0.57, indicating that the words are 1.46 and 1.48 more common in Po92 than in Pr92. ***New*** is another keyword in which the frequency

difference is at 95 percent confident level, with its G^2 values at 4.26. The Log Ratio value of 0.18 indicates that the difference is 1.13 times more common in Pr92 than in Po92.

It is noticeable that the Log Ratio value of -0.03 for **specific** is strikingly low, and the normalised frequencies are similar (30.68 for Pr92 and 31.37 for Po92). The Log Ratio of zero or near-zero suggests that **specific** is a lockword in this BP dimension, with a very similar level of usage in both corpora.

BP Keywords	Funding (79,874 / 55,495)				History (89,818 / 10,072)				Life (48,062 / 74,191)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
new	54	61	6.76	10.99	392	42	*43.64*	*41.70*	79	188	**16.44**	**25.34**
current	40	18	5.01	3.24	20	0	2.23	0.00	15	37	3.12	4.99
specific	54	21	6.76	3.78	4	0	0.45	0.00	15	29	3.12	3.91
innovative	8	3	1.00	0.54	9	3	1.00	2.98	4	13	0.83	1.75
unique	7	2	0.88	0.36	15	2	1.67	1.99	7	22	1.46	2.97
young (-)	22	16	2.75	2.88	23	1	2.56	0.99	5	12	1.04	1.62
exciting	7	0	0.88	0.00	1	1	0.11	0.99	9	29	1.87	3.91
vibrant	2	0	0.25	0.00	0	2	0.00	1.99	8	15	1.66	2.02
state-of-the-art	0	2	0.00	0.36	5	4	0.56	3.97	20	29	4.16	3.91
inspiring	2	0	0.25	0.00	2	0	0.22	0.00	2	15	0.42	2.02
representation	0	1	0.00	0.18	6	0	0.11	0	15	2	3.12	0.27
determined (-)	2	5	0.25	0.90	6	0	0.67	0.00	0	0	0.00	0.00

Table 31 Number of EXCITEMENT Keywords in Funding, History, Life

BP Keywords	Local (19,503 / 18,877)				Mission (13,573 / 13,401)				Research (62,114 / 54,327)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
new	24	31	12.31	16.42	26	31	*19.16*	*23.13*	141	105	**22.70**	**29.33**
current	3	0	1.54	0.00	3	4	2.21	2.98	25	30	4.02	5.52
specific	0	0	0.00	0.00	5	1	3.68	0.75	18	20	2.90	3.68
innovative	4	3	2.05	1.59	11	10	8.10	7.46	28	36	4.51	6.63
unique	9	8	4.61	4.24	4	5	2.95	3.73	13	20	2.09	3.68
young (-)	5	0	2.56	0.00	0	0	0.00	0.00	6	10	0.97	1.84
exciting	12	15	6.15	7.95	2	0	1.47	0.00	8	9	1.29	1.66
vibrant	9	14	**4.61**	**7.42**	3	2	2.21	1.49	7	12	1.13	2.21
state-of-the-art	2	0	1.03	0.00	1	3	0.74	2.24	2	3	0.32	0.55
inspiring	4	5	2.05	2.65	1	4	1.47	2.98	4	3	0.32	0.55
representation	0	0	0.00	0.00	0	0	0.00	0.00	0	8	0.00	0.37
determined (-)	0	0	0.00	0.00	0	1	0.00	0.75	0	0	0.00	0.00

Table 32 Number of EXCITEMENT Keywords in Local, Mission, Research

As shown in Tables 31 and 32, in comparison with the other BP EXCITEMENT words, *new* occurs with very high normalised frequencies in the *History*, *Life on Campus*, *Mission* and *Research* text types. The relative frequencies of Pr92 and Po92 are 43.64 and 41.70 for *History*, 16.44 and 25.34 for *Life on Campus*, 19.16 and 23.13 for *Mission*, and 21.70 and 29.33 for *Research*. The numbers in bold type in the tables are the NFs with a relatively large difference between Pr92 and Po92, while the underlined numbers are NFs that are high in both corpora, but with relatively minor differences between the two corpora. The Tables indicate that the differences in NFs are relatively large in the Life on Campus and Research text types, with higher in frequencies in Po92. In contrast, both corpora have high NFs in the *History* and *Mission* texts, but the differences between them are minor (43.64 versus 41.70 for Pr92 and Po92 *History* and 19.16 versus 23.13 for Pr92 and Po92 *Mission*) The high frequencies across many text categories suggest that *new* is a BP keyword that is worth exploring in some detail (see section 6.2).

Another keyword with a relatively large difference in NFs is *vibrant*. The difference in frequency is noticeably large in the *Local Area* text type with NFs of 4.61 and 7.42 from Pr92 and Po92 respectively. Finally, *exciting* is another keyword that is noteworthy, with NFs of 4.62 from Pr92 and 7.42 from Po92, again in the *Local Area* text type.

For all the other keywords across the various text types, the differences in normalised frequencies are not noticeably large. Taking into account the frequency information in Table 30, *new* is the only keyword with frequencies that are statistically significant, which is also prominent in many text types. As with the COMPETENCE keyword *secure* (see section 5.3.1), this shows that although there is a significant difference between the corpora as a whole, at the level of the text type subcorpora the differences can be marginal.

5.3.3   *RUGGEDNESS Keywords and Frequency Distribution*

Table 33 shows examples of keywords and contexts related to the RUGGEDNESS dimension. The contexts make clear that there are a number of BP keywords that do not in fact fit Aaker's (1997) facets of the RUGGEDNESS dimension. These are *external*, *physical*, *difficult*, *hard* and *Western*. First of all, in the university website texts *external* is typically a reference to 'outside' organisations, rather than the notion of being 'outdoorsy' which is reflected in one of Aaker's (1997) facets of RUGGEDNESS. Second, occurrences of *physical* are often related to disciplines (i.e. *physical* sciences) or to *physical* settings; thus, this word is also not associated with 'outdoorsy' in the corpus. Third, the contexts in which difficult is

used relate to circumstances that hinder a positive outcome. For example, *The university sector has generally stopped expanding and in some cases is shrinking, making it **difficult** to recruit junior lecturers* (see Table 33). The keyword **difficult** is therefore excluded from the BP list because its usage refers to an external event or agent, causing a situation in or for the universities, rather than to any aspect of the 'personality' of universities themselves. A similar situation is found with **hard**. For example, **hard** copy, work **hard** and play **hard** are not associated with either the 'outdoorsy' or 'toughness' facets in the BP RUGGEDNESS dimension. The fourth term, *Western*, is another RUGGEDNESS keyword that is not associated with any BP facets in the context of the university websites. The use of **Western** is not associated with the 'outdoorsy' and 'toughness' facets, for example, as illustrated by use in the phrases **Western** *civilisation,* **Western** *Scotland,* **Western** *avenue*. These refer to culture, a region, and a route, which clearly are not associated with RUGGEDNESS. Since the contexts in which these four keywords appear to demonstrate that the way they are used in the website texts does not relate to the BP dimension, they are marked for deletion (crossed out) in Table 33.

Patterns (Keyword + related issues / ideas found in the context)	**Context** (Keyword highlighted in **bold italic**)	**Source Files** (Subcorpus – Uni – Text type)
~~*external*~~ + funding / scholarship / organisation / partner	The Centre is engaged in producing high-impact research based on collaboration with communities and design/construction industries achieved through interdisciplinary, theoretical and practice-based research and consultancy activities. It has been instrumental in forging links with ***external*** organisations, both regional, national and international, to enhance its research reputation and impact.	PoH--Lincoln--Research
future / intellectual / research / societal + ***challenge(s)***; ***challenge(s)*** + practice / ideas / one's view / society	Resources and Network project, funded through a donation from YTL Corporation, explores the ***challenges*** and activities of entrepreneurs engaged in community energy projects in England, and the factors that affect the growth of community renewable energy generation and low carbon communities.	PoL--Kingston--Research
~~***physical***~~ + sciences / education /activity	Fostering interdisciplinary research and exploring the potential of emerging ideas around the nano theme,	PrH--Cambridge--Research

Patterns	Context	Source Files
(Keyword + related issues / ideas found in the context)	(Keyword highlighted in **bold italic**)	(Subcorpus – Uni – Text type)
	across ***physical*** sciences, engineering, biological sciences and medicine.	
outdoor + adventures / activities / sports	The town is also a great starting point to discover unforgettable experiences across Staffordshire, including theme parks, ***outdoor*** adventures, forests and lakes, shopping and leisure centres to name just a few.	PoL--Staffordshire--Life_on_Campus
~~***difficult***~~ + impediment	The university sector has generally stopped expanding and in some cases is shrinking, making it ~~***difficult***~~ to recruit junior lecturers.	PrM--Sussex--History
~~***hard***~~ + entertainment / leisure activities	The Cambridge Advantage: Work ***hard***, play ***hard*** 700+ student clubs and societies to choose from.	PrH--Cambridge--Life_on_Campus
challenging + (social) situation / rival	Bringing together established areas of research excellence across a wide range of disciplines to drive the underpinning research base of data science and address ***challenging*** economic and societal issues.	PrH--Cambridge--Research
~~***Western***~~ + civilization / Europe	Athens, the capital of Greece, one of the world's oldest cities, widely referred to as the centre of ***Western*** civilization and the birthplace of democracy.	PrM--Kent--Local_Area

Table 33 Examples of Use of RUGGEDNESS Keywords

The BP keywords that fit Aaker's (1997) facets are ***challenge(s)***, ***outdoor*** and ***challenging,*** as listed in Table 34. The contexts in which they are found suggest that these words are used with ideas relating to opportunities for resolving social situations. The contexts of RUGGEDNESS BP Keywords also reflect ideas relating to outdoor activities and sports, as seen in Table 33.

Aaker's (1997) Scale	ruggedness facets	RUGGEDNESS Words
Outdoorsy	Outdoorsy	***outdoor***
	Masculine	**-**
	Western	**-**
Tough	Tough	***challenge(s), challenging***
	Rugged	**-**

Table 34 RUGGEDNESS Keywords of Pr92 and Po92 and Aaker's (1997) BP

Table 35 records the frequencies of the keywords associated with the BP dimension of RUGGEDNESS. The BP keyword with the highest raw frequency is *challenge(s)* (153), followed by *outdoor(s)* (57) and *challenging* (23). *Challenge(s)* occurs in texts from all of the Pr92 and Po92 universities (21/21). *Outdoor(s)* is the only keyword that difference in frequency between Pr92 and Po92 that is statistically significant. The G^2 of *outdoor(s)* is 4.62 (> 3.84, p < 0.05), while a Log Ratio value of -0.82 indicates that this BP keyword is 1.77 times more frequent in Po92 than in Pr92.

BP Keywords	Raw F.	Raw F. Pr	Raw F. Po	NF Pr	NF Po	G^2	Log Ratio	No. of Universities where the BP Keywords Occur
challenge(s)	153	84	69	26.84	30.48	0.61	-0.18	(21/21)
outdoor(s)	57	25	32	7.98	14.13	**4.62**	**-0.82**	(20/21) Oxford
challenging (-)	23	12	11	3.83	4.85	0.32	-0.34	(15/21) Oxford, Sussex, Aberdeen, Chichester, Queen Margaret, Staffordshire

Table 35 Frequencies of BP Keywords in Pr92 and Po92: RUGGEDNESS

BP Keywords	Funding (79,874 / 55,495)				History (89,818 / 10,072)				Life (48,062 / 74,191)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
challenge(s)	1	3	0.13	0.54	19	3	2.12	2.98	4	10	0.83	1.35
outdoor(s)	0	0	0.00	0.00	0	1	0.00	0.99	22	16	4.58	2.16
challenging (-)	1	0	0.13	0.00	2	0	0.22	0.00	1	4	0.21	0.54

Table 36 Number of RUGGEDNESS Keywords in Funding, History, Life

BP Keywords	Local (19,503 / 18,877)				Mission (13,573 / 13,401)				Research (62,114 / 54,327)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
challenge(s)	2	0	1.03	0.00	22	16	**16.21**	**11.94**	36	37	<u>5.80</u>	<u>6.81</u>
outdoor(s)	3	15	**1.54**	**7.95**	0	0	0.00	0.00	0	0	0.00	0.00
challenging (-)	0	1	0.00	0.53	2	3	1.47	2.24	6	3	0.97	0.55

Table 37 Number of RUGGEDNESS Keyword in Local, Mission, Research

Tables 36 and 37 show the normalised frequencies (NF) of the keywords in Pr92 and Po92 across the six text types. *Outdoor(s)* has a large frequency difference between Pr92 and Po92 in the *Local Area* text type, being more frequent in texts from Po92 universities (7.95 versus 1.54). Both Pr92 and Po92 have high frequencies in *challenge(s)* in the *Mission* and *Research* text types. While the NFs are relatively large in the *Mission* text type of both corpora, the

frequency in Pr92 is larger than that of Po92 (16.21 versus 11.94; the Pr92 and Po92 frequencies in the *Research* texts are only marginally different.

5.3.4 *SINCERITY Keywords and Frequency Distribution*

Table 38 shows that four SINCERITY Keywords – ***kind***, ***straight*** and ***actual*** – are not used in a way that fits in with Aaker's (1997) facets of BP. The use of ***kind*** is not relevant to SINCERITY because it appears to be used to express meanings regarding a group of things, for example 'the first of its ***kind***'. This is obviously not associated with the notions of being humane, helpful or considerate which could be associated with Aaker's (1997) facet of 'sentimental'. ***Straight*** is another keyword that does not fit any SINCERITY facets because it is used as an adverb (i.e. ***straight*** into the heart of the city). ***Actual*** is also another word whose use is not relevant to SINCERITY. It is used to refer to factual information (i.e. ***actual*** living cost), which does not communicate the sense of 'real' that is associated with factual information. Discussing the keyword ***relation(s)***, it is sporadically related to International Relations as a department. 'In ***relation*** to' occurs with various areas from, for instance 'policy and practice in ***relation*** to research area' and 'in ***relation*** to' mental health. Overall, ***relation(s)*** are related to a specific name (International ***Relations***) and a prepositional phrase (in ***relation*** to) where the contexts reveal that use of this word is often related to establishing a relationship and coordination between institutions or countries, which correspond to Aaker's (1997) 'friendly' facet of the SINCERITY dimension. Although use of ***relation*** is not always associated with the BP facet in some sense, it is relatively common that ***relation*** is associated with the BP facet. Thus, it is included in the BP keyword list that is related to Aaker's BP SINCERITY dimension.

Patterns	Context	Source Files
Keyword + related issues / ideas found in the context	(Keyword highlighted in ***bold italic***)	(Subcorpus – Uni – Text type)
open + ideas / students / scholarship	Whether you already know what you want to do, or are ***open*** to new ideas as you explore the graduate arena, studying at City University London will give you the best possible start in your career.	PrL--City_London--Life_on_Campus
good + practice / governance / research	We will improve our internal mechanisms to promote collaboration and sharing of ***good*** practice.	PrM--Kent--Mission

Patterns Keyword + related issues / ideas found in the context	Context (Keyword highlighted in **bold italic**)	Source Files (Subcorpus – Uni – Text type)
standard(s) + facilities / teaching / partnerships / accommodation	Students at our Medway campus are lucky enough to be studying just a short distance away from Medway Park, which is a sporting venue with Olympic *standard* training facilities. The facility has a swimming pool, fitness suite, studio, sports hall and outdoor track and field provision.	PoL--CCCU--Life_on_Campus
understanding(s) + social aspects / people's thoughts, behaviours, health / countries' and world's situations	Our interdisciplinary research and knowledge exchange provides a critical and intellectual basis for individuals interested in interrogating their own personal and professional *understandings* of inclusion, equality, social justice and the lives of those in disconnected populations.	PoL--CCCU--Research
international + *relation(s)*; *relation(s)* + between / in *relation* to + institutions / countries	Its scale allows it to incorporate a wide range of interests, including foreign and security policy, political economy, international *relations* theory, historical sociology, diplomacy, and environmental politics.	PrH--LSE--Research
kind + of; first of its *kind*	The Diploma in Social Work is launched; the first of its *kind* in the country and first-ever collaboration between Sussex, Brighton Polytechnic and East Sussex Social Services.	PrM--Sussex--History
originality + research / academic activities	To maintain *originality,* significance and rigour in research within a framework of the highest standards of infrastructure, training, and integrity.	PrH--Oxford--Research
straight	Buses every 15-20 minutes throughout the day heading from the campus *straight* into the heart of the city give you the best of both worlds	PoH--Nottingham_Trent--Life_on_Campus
actual	Of course your *actual* living costs will vary according to your lifestyle.	PrL--Liverpool--Life_on_Campus

Table 38 Examples of Use of SINCERITY Keywords

As seen in Table 38, the contexts in which keywords associated with the SINCERITY dimension occur are generally associated with notions such as an openness to ideas, people and institutions, to good practice of governance, research and academic activities, and to

understanding different people and worldviews. The links between the keywords and the facets of SINCERITY are illustrated in Table 39.

Aaker's (1997) Scale	sincerity facets	SINCERITY Words
down-to-earth	Down-to-earth	-
	Family-oriented	-
	Small-town	-
honest	Honest	-
	Sincere	*good, standard(s), originality*
	Real	*understanding(s)*
wholesome	Wholesome	-
	Original	*originality*
cheerful	Cheerful	-
	Sentimental	*understanding(s)*
	Friendly	*open, relation(s)*

Table 39 SINCERITY Keywords of Pr92 and Po92 and Aaker's (1997) BP

Table 40 shows the frequencies of the SINCERITY keywords in Pr92 and Po92. Overall, the differences between Pr92 and Po92 are not large for any of the words, and none of them are statistically significant. Looking at the raw frequencies, **open** is by far the highest. In terms of the frequency distribution, **good**, **open** and **standard(s)** are found in texts from all 21 of the universities, but the total frequencies of **good** and **standard(s)** are only around half that of **open** (210 versus 426). The keyword **understanding(s)** comes closest to having a statistically significant frequency difference, a G^2 value of 3.09, though this is still clearly below the cut-off point of 3.84 or $p < 0.05$. Log Ratio value at -0.43, which indicates that it is 1.35 times more frequent in Po92 than in Pr92.

BP Keywords	Raw F.	Raw F. Pr	Raw F. Po	NF Pr	NF Po	G^2	Log Ratio	No. of Universities where the BP Keywords Occur
open	426	264	162	84.36	71.57	2.75	0.24	(21/21)
good	210	125	85	39.94	37.55	0.19	0.09	(21/21)
standard(s)	210	129	81	41.22	35.78	1.01	0.20	(21/21)
understanding(s)	142	72	70	23.01	30.92	3.09	-0.43	(20/21) Queen Margaret
relation(s)	88	53	35	16.93	15.46	0.18	0.13	(18/21) Creative Art, Staffordshire, Aberdeen
originality	27	14	13	4.47	5.74	0.42	-0.36	(8/21) Cambridge, Kent, Aberdeen, City London,

BP Keywords	Raw F.	Raw F. Pr	Raw F. Po	NF Pr	NF Po	G²	Log Ratio	No. of Universities where the BP Keywords Occur
								Liverpool, Lincoln, Nottingham Trent, Cardiff Met, Gloucester, Queen Margaret, Kingston, Staffordshire, Worcester

Table 40 Frequencies of BP Keywords in Pr92 and Po92: SINCERITY

BP Keywords	Funding (79,874 / 55,495)				History (89,818 / 10,072)				Life (48,062 / 74,191)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
open	103	37	**12.90**	**6.67**	50	6	5.57	5.96	39	78	<u>8.11</u>	<u>10.51</u>
good	17	10	2.13	1.80	12	1	1.34	0.99	19	37	3.95	4.99
standard(s)	21	10	2.63	1.80	20	2	2.23	1.99	17	34	3.54	4.58
understanding(s)	11	7	1.38	1.26	8	0	0.89	0	7	7	1.46	0.94
relation(s)	5	5	0.63	0.90	18	1	2.00	0.99	1	5	0.21	0.67
originality	0	0	0.00	0.00	0	2	0.00	1.99	0	0	0.00	0.00

Table 41 Number of SINCERITY Keywords in Funding, History, Life

BP Keywords	Local (19,503 / 18,877)				Mission (13,573 / 13,401)				Research (62,114 / 54,327)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
open	21	12	**1.08**	**6.36**	4	4	2.95	2.98	47	25	7.57	4.60
good	10	11	5.13	5.83	9	6	6.63	4.48	58	20	**9.34**	**3.68**
standard(s)	2	2	1.03	1.06	18	7	**13.26**	**5.22**	51	26	8.21	4.79
understanding(s)	1	0	5.13	0	4	12	**2.95**	**8.95**	40	44	<u>6.44</u>	<u>8.10</u>
relation(s)	1	0	0.51	0.00	1	2	0.74	1.49	27	22	4.35	4.05
originality	0	0	0.00	0.00	0	1	0.00	0.75	14	10	2.25	1.84

Table 42 Number of SINCERITY Keywords in Local, Mission, Research

Looking at the frequencies across the different text types in tables 41 and 42, we see that four BP SINCERITY keywords – *open*, *good*, *standard(s), understanding(s)* - are different in some of the text types. The frequency of *open* is higher in Pr92 for the *Funding* (9.34 versus 3.68). The same applies to *good* for the *Research* text type (9.34 versus 3.68). The normalised frequencies of *open* is, however, is higher in Po92 for the *Local* text type (6.36 versus 1.08). *Standard(s)* is more frequent in the Pr92 *Mission* texts than in those of Po92 (13.26 versus 5.22). The frequency of *understanding(s)* is higher in Po92 (8.95 versus 2.95) for the *Mission*

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text type. As indicated by the underlined numbers, both Pr92 and Po92 corpora have high frequencies of *open* in *Life on Campus* (8.11 and 10.51) and ***understanding(s)*** in the *Research* texts (6.44 and 8.10), with relatively small differences frequencies between Pr92 and Po92.

5.3.5   *SOPHISTICATION Keywords and Frequency Distribution*

Table 43 illustrates the BP keywords associated with the SOPHISTICATION dimension and the contexts in which they appear in the university website texts. It is apparent from the contexts that one of the words, *expensive*, is used in a way that is not related to the SOPHISTICATION dimension. Its use is linked to the costs associated with university programmes, such as course fees and accommodation, which is not related to any of the BP SOPHISTICATION facets listed in Table 44.

Patterns (Keyword + related issues / ideas found in the context)	Context (Keyword highlighted in **bold italic**)	Source Files (Subcorpus – Uni – Text type)
excellent + facilities / research / teaching; world-leading + internationally ***excellent*** + research	Oxford also made the largest submission of world-leading or internationally ***excellent*** research (4* or 3* rated) in the UK.	PrH--Oxford--Research
renowned + research / impact / historic, historical place / university	Idyllically situated between two areas of outstanding beauty, Worcester is surrounded by the rolling Malvern Hills and the Cotswolds, and offers sensational views of the Severn Valley. ***Renowned*** for its captivating history and colourful culture, the compact city centre is brimming with riverside cafes and bars, stylish shops, museums, theatres, and plenty of live cultural events.	PoL--Worcester--Local_Area
cosmopolitan + culture / atmosphere	Our values acknowledge our history, rich heritage and ***cosmopolitan*** culture and provide the foundation on which our future is built.	PrL--City_London--Mission
~~***expensive***~~ + business / programme	Living away from home can be an ***expensive*** business. Each year, you can expect to pay anywhere between £5,000 and £8,000, depending on your location, personal circumstances and how much you plan on going out.	PoH--UCA--Life_on_Campus

Patterns (Keyword + related issues / ideas found in the context)	Context (Keyword highlighted in **bold italic**)	Source Files (Subcorpus – Uni – Text type)
pretty + area / place	The campus is positioned between Musselburgh Station and the ***pretty*** coastal town and is East Lothian's largest and rapidly expanding town.	PoM-- Queen_Margaret-- Local_Area

Table 43 Examples of Use of SOPHISTICATION Keywords

Overall, the SOPHISTICATION keyword contexts are concerned with the prestige of academic activities (i.e. research and teaching). Use in contexts of the keywords are associated with places and local areas. These are categorised under the 'upper class' and 'charming' facets of Aaker's (1997) SOPHISTICATION dimension, as shown in Table 44.

Aaker's (1997) Scale	sophistication facets	SOPHISTICATION Words
upper class	Upper class	***excellent, renowned, cosmopolitan***
	Glamorous	-
	Good looking	-
Charming	Charming	***pretty***
	Feminine	-
	Smooth	-

Table 44 SOPHISTICATION Keywords of Pr92 and Po92 and Aaker's (1997) BP

Table 45 shows that the normalised frequencies of the keyword ***excellent*** are much higher than those of the other BP SOPHISTICATION words: 52.09 in Pr92 and 61.41 in Po92, with the frequency of ***renowned*** in Po92 (23.41) being the only other NF in double digits. ***Excellent*** is also the only SOPHISTICATION keyword that is distributed across all six text types for each of the universities (21/21). The high frequency and wide distribution of this keyword suggests that promoting and portraying a sense of excellence is considered an important focus for university website texts. This is supported by several studies. For example, Altbach and Salmi (2011) suggest that research universities 'recognize the primacy of merit and their decisions are based on relentless pursuit of excellence' (p. 16). Morrish, et al. (2013) identified 'excellent' as a word that is significant in descriptions of types of university, student experience, learning, teaching and research. It is also notable that 'excellent' is a frequently used word in the corpus of university job advertisements (Kheovichai, 2013, p. 84). The high frequency of ***excellent*** as a BP keyword, coupled with these previous findings, suggests that ***excellent*** is an important feature of university-related

texts. Use of excellent will be discussed further in section 6.2.10. Looking at the details of the frequency of excellent in Pr92 and Po92, we see that the difference is not statistically significant, with a G^2 value of 2.02 (< 3.85; $p > 0.05$), and a small Log Ratio value of -0.24. This suggests that there is only a marginal difference between the Pr92 and Po92 corpora in terms of the frequency of *excellence*.

BP Keywords	Raw F.	Raw F. Pr	Raw F. Po	NF Pr	NF Po	G^2	Log Ratio	No. of Universities where the BP Keywords Occur
excellent	302	163	139	52.09	61.41	2.02	-0.24	(21/21)
renowned	71	18	53	5.75	23.41	**31.22**	**-2.03**	(14/21) Sussex, Aberdeen, City London, Coventry, Gloucester, Staffordshire, Worcester
cosmopolitan	22	12	10	3.83	4.41	0.11	-0.20	(13/21) Oxford, Edinburgh, Liverpool, Coventry, Lincoln, Creative Art, Staffordshire, Worcester
pretty (-)	6	1	5	0.31	1.76	**4.36**	**-2.79**	(5/21) Only occur in Edinburgh, Coventry, Creative Art, Queen Margaret, Staffordshire

Table 45 Frequencies of BP Keywords in Pr92 and Po92: SOPHISTICATION

The only two SOPHISTICATION keyword frequencies that exhibit a statistically significant difference when comparing Pr92 and Po92 are *renowned* and *pretty*. The frequency of *renowned* is much higher in Po92, and the difference between Pr92 and Po92 is statistically significant ($G^2 = 31.22$, > 15.13; $p < 0.001$). The Log Ratio value of -2.03 indicates that this word is 4.08 times more frequent in Po92 than in Pr92. Examining in more detail the various text types, we see that *renowned* is not evenly distributed across them. Tables 46 and 47, which detail the frequencies of the SOPHISTICATION keywords in the six text categories, show that *renowned* is more frequently used in the *Research* texts of Po92 (5.71 versus 0.97). The low frequency of *renowned* in Pr92 is interesting because it does not correspond to previous studies. For example, Kheovichai (2013) found that reputation-related words occur frequently in UK-based university job advertisements to convey public acknowledgement of the university, and additionally renowned is ranked the third most frequently occurring word in the reputation/achievement category in the university job corpus (pp.102-103). This difference in findings suggests that further investigation of words related to reputation could

help us understand whether the notion of being **renowned** is expressed in other terms in the university website texts. This issue will be addressed in section 6.2.10.

BP Keywords	Funding (79,874 / 55,495)				History (89,818 / 10,072)				Life (48,062 / 74,191)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
excellent	28	9	**3.51**	**1.62**	4	1	0.45	0.99	27	42	<u>5.62</u>	<u>5.66</u>
renowned	1	0	0.13	0.00	4	2	0.45	1.99	3	9	0.62	1.21
cosmopolitan	0	0	0.00	0.00	0	0	0.00	0.00	3	4	0.62	0.54
pretty (-)	0	0	0.00	0.00	0	0	0.00	0.00	0	2	0.00	0.27

Table 46 Number of SOPHISTICATION Keywords in Funding, History, Life

BP Keywords	Local (19,503 / 18,877)				Mission (13,573 / 13,401)				Research (62,114 / 54,327)			
	Raw F.		NF		Raw F.		NF		Raw F.		NF	
	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po	Pr	Po
excellent	13	19	6.67	10.07	18	17	13.26	12.69	73	51	11.75	9.39
renowned	2	9	1.03	4.77	0	1	0.00	0.75	8	32	**1.29**	**5.89**
cosmopolitan	6	4	3.08	2.12	2	1	1.47	0.75	1	1	0.16	0.18
pretty (-)	1	3	0.51	1.59	0	0	0.00	0.00	0	0	0.00	0.00

Table 47 Number of SOPHISTICATION Keywords in Local, Mission, Research

According to the research on student mobility discussed in Section 2.3.1, the prospect of a cosmopolitan experience is considered an important Decision Factor for students thinking about studying overseas, but the keyword **cosmopolitan** itself only occurs 12 times in Pr92 and 10 times in Po92, as shown in Table 45. In fact, **cosmopolitan** occurs least frequently in the SOPHISTICATION positive keywords and the normalised frequencies do not stand out in any text types in particular. Because of the significance of **cosmopolitan**, the full concordance lines are presented in Appendix I to help illuminate the use of this word in context. In addition, section 6.2.9-6.2.10 will examine the contexts of other BP keywords to determine whether cosmopolitan-related meanings are being communicated in other ways and/or in relation to other BP dimensions. In terms of the differences in the frequencies of **cosmopolitan** between Pr92 and Po92, the G^2 value of 0.11 (<3.84) indicates that the difference is not statistically significant. The Log Ratio value of -0.20 indicates that the word is 1.15 times more frequent in Po92 than in Pr92.

Tables 46 and 47 show that there are differences in the frequencies of **excellent** and **renowned**. The frequency of **excellent** is higher in the Pr92 *Funding* texts (3.51 versus 1.62 in Po92), but the frequencies of both Pr92 and Po92 are relatively high in the *Life on Campus*

texts (5.62 and 5.66). Finally, **renowned** is another keyword that exhibits a frequency difference in the *Research* text types, where the Po92 frequencies are higher in both cases (5.89 versus 1.29 for *Research*).

5.4 Conclusion

This chapter has examined the use of words associated with the BP model in university website texts by identifying BP keywords, which are those words that are prominent in the Pr92 and Po92 corpora, relative to a reference corpus (the BNC). The contexts in which the BP keywords occur were then considered in order to evaluate whether the meanings that are associated with the words in the university website texts relate to the dimension facet of Aaker's (1997) BP model. It was found that most BP keywords are associated with the BP model although there are others (such as **external** in **external** funding and **physical** in **physical** activity) whose meanings are not relevant to the BP model in the contexts in which they appear on the university websites (they may of course be associated with the BP model in other genres of texts). After the evaluation of the keywords in this chapter, only those with meanings relevant to the corresponding dimensions were then used in the analyses of their frequency distribution. These words are also the focus of the qualitative corpus analysis presented in the next chapter, highlighting the synthesis of these BP keywords and their use in contexts. Reflecting on the analysis in this chapter, the BP model is typically approached and described in a way that a brand is conceived as if they had human qualities in various products and services (i.e. what a product would be like if it were a person). Applying the BP model in analysis helps us to understand a brand by personifying it and viewing its various features in terms of human personality characteristics (Section 2.4.3.1). In the context of university websites, the analysis in this chapter shows that the BP model is generally applicable, in an intellectual or academic sense. The next chapter then focuses on the analysis of use in contexts of the BP keywords.

Chapter 6. Corpus Analysis: Contexts of BP Keywords

6.1 Introduction

This chapter examines the contexts in which the BP keywords discussed in the previous chapter are used. The aim of this chapter is to investigate prominent characteristics of these contexts. These prominent characteristics are identified by mapping the collocate words that share commonalities in their contexts of use. The contexts of use are analysed from the general perspective of what they reveal about how the keywords are used, specifically from the perspective of identifying and discussing important collocation. First, the most common collocates of the BP keywords are identified and grouped into 19 semantic categories. The number and nature of these semantic categories was established on the basis of commonalities of meaning in the collocate words. In grouping the collocates in this way, the aim is to identify those recurring semantic categories that are commonly linked with the BP keywords, and therefore with each of the five dimensions of the BP model. Second, some of the most prominent BP keywords are selected for an in-depth analysis of the contexts in which they are used in the university website texts.

In discussing the collocate words which often appear with BP keywords and the contexts in which the BP keywords are used, the themes identified from Pr92 and Po92 corpora (University Corpus Themes, or UCTs) are labeled. In discussing these UCTs, consideration will be given to the relationship between them and the Decision Factors (DFs) discussed in sections 2.3.1-2.3.3, which related to the potential advantages students gain in terms of their academic experience, life experience and career opportunities.

This chapter is structured as follows. Sections 6.2-6.6 discuss the collocations and other prominent features of the contexts of the BP keywords associated with each of the five BP dimensions in turn, beginning with COMPETENCE. Each of these sections focuses first on identifying the common collocations of the relevant BP keywords, followed by more in-depth analysis of some of the contexts in which they occur. Finally, Section 6.3 summarises the findings in relation to the established BP keywords.

6.2 Collocations and Contexts of BP Keywords

This section analyses the contexts of the BP keywords associated with the five BP dimensions in turn, beginning with the COMPETENCE dimension. In each case, the keywords are those that were identified for each dimension in section 5.2 as being prominent in a combined corpus (Pr92 and Po92) when that was compared with the BNC. The purpose of analysing the collocations and contexts is to identify any patterns that are linked with the use of BP keywords in the different subcorpora of university website texts.

The collocate words are identified on the basis of the Log Ratio statistics, as described in Section 3.3.3.1 A minimum Log Ratio value of five and a raw frequency of 10 occurrences were set as the threshold for recording a collocate word. Once the list of collocates had been compiled, they were grouped together on the basis of similarities in their meanings into 19 semantic categories. The grouping technique for identifying 'Characteristics of Collocations' (i.e. in Table 48) was based on reading and interpreting the contexts of the collocate words (see section 3.3.3.2). The aim of grouping the collocate words into semantic categories is to develop an initial impression of how the BP keywords are used by looking at the kinds of meanings that are active in the contexts in which they are used, as reflected in the collocations. This initial impression is then used as the basis for a more in-depth qualitative analysis of some of the keyword contexts, which is presented in section 6.2.2. The 19 semantic categories into which the collocate words are classified are: **Action**, **Affiliation**, **Association**, **Cosmopolitan**, **Creativity**, **Education**, **Enterprise**, **Evaluation**, **Finance**, **Governance**, **People**, **Place**, **Prospect**, **Security**, **Sport**, **Success**, **Time**, **Tradition** and **Transport**. The characteristics that distinguish the collocates that belong to each category are listed in Table 48. The analysis of collocations of the five BP dimensions is discussed in turn, beginning with the COMPETENCE dimension.

Semantic Categories	Characteristics of Collocations
Action	Non-classroom academic activities and non-academic activities including leisure, recreations and entertainment
Affiliation	Associations, relationships and involvement with organisations or people
Assistance	Support for university members
Cosmopolitan	Dynamics of places with a variety of people, various mindsets and behaviours
Creativity	Artistic works, ideas, objects and innovation created from the use of imagination
Enterprise	Management, business and leaderships
Evaluation	Judgement that could be based on facts, personal experience or beliefs that are evaluative

Semantic Categories	Characteristics of Collocations
Education	Research, training, teaching and learning activities
Finance	(Incoming or outgoing) of financial resources
Governance	Strategic plans
People	Ones involved with universities (whether or not they are in academia)
Place	Environments, atmospheres, facilities and the vicinity around universities
Prospects	Future expectation
Security	Living comfort and safety
Sport	Physical activities and athletic games
Success	Positive results of performances and activities
Time	Duration of events that happen in past, present or future
Tradition	Objects or places of legacy, history or cultural supremacy
Transport	Means and routes for how people commute

Table 48 Generalisation of Semantic Categories and Characteristics of Use

6.2.1   *Collocations of COMPETENCE Keywords*

This section analyses the collocations of the BP COMPETENCE keywords that were identified in section 5.3.1. Table 49 lists the collocates associated with the twelve COMPETENCE keywords identified in section 5.3.1: *partnership(s)*, *successful*, *enterprise(s)*, *outstanding*, *complete*, *intellectual*, *proud*, *secure*, *governance*, *talented*, *award-winning* and *thriving*. As indicated above, the collocates are classified into the 20 semantic categories listed in the left-hand column. The numbers given in parentheses in that column are the total frequencies of all collocate words associated with the category in question. In the right-hand column, collocate words printed in blue are terms that also collocate with keywords associated with one of the other BP dimensions (see sections 6.2.2-6.2.5), while those in green are collocates of keywords associated with two or more of the other dimensions. Some of the collocate words that are potentially polysemous were scanned to identify the patterns of use in order to ensure that the collocates are semantically related to their category. Use of these scanned collocates have a square bracket [--] added. Numbers in parentheses (--) following the individual collocate words are the raw frequencies of those particular words in the COMPETENCE keyword contexts.

Semantic Categories		Collocate Words
Action	(17)	*experience [outstanding learning experience] (17)*
Affiliation	(119)	*partnership (30), team (25), network (16), organisation (14), collaboration (12), engagement (11), institution (11)*
Assistance	(77)	*offer (26), support (21), help (18), provide (12)*
Cosmopolitan	(76)	*international (39), culture (14), national (12), local (11)*
Creativity	(89)	*innovation (56), art (12), innovative (10), launch (11)*
Education	(577)	*research (233), knowledge (74), develop (51), academic (32), practice (30), course (27), learn (27), teaching (25), education (24), doctoral (21), training (21), skill (12)*
Enterprise	(135)	*business (63), [business-related] activity (31), commercialisation (16), leadership (14), management (11)*
Evaluation	(0)	-
Finance	(172)	*scholarship (82), award [scholarship] (68), loan (12), fund (10)*
Governance	(97)	*development (31), scheme (23), strategic (19), ethics (12), policy (12)*
People	(255)	*applicant (109), candidate (51), student (37), athlete (22), committee (20), winner (16)*
Place	(136)	*university (41), community (34), city (21), centre (15), campus (13), environment (12)*
Prospect	(16)	*potential (16)*
Security	(20)	*safe (20)*
Sport	(0)	-
Success	(138)	*graduate (23), performance (19), employability (13), quality (13), achievement (12), career (12), impact (12), merit (12), reputation (12), discovery (10)*
Time	(0)	-
Tradition	(12)	*history [of discovery, invention and innovation] (12)*
Transport	(0)	-

Table 49 Semantic Categories of Collocations of COMPETENCE Keywords
Numbers in parentheses = frequency; Blue = collocate words appearing in 2 BP dimensions; Green = collocate words appearing 3 or more BP dimensions; square bracket = pattern of use

As Table 49 indicates, the semantic categories that are particularly strongly represented in BP COMPETENCE keyword contexts are **Education** (577), **People** (255), **Finance** (172), **Place** (136) **Enterprise** (135), **Success** (138), and **Affiliation** (119). In terms of individual words, those that occur particularly frequently are *applicant* (109), *scholarship* (82), *knowledge* (74), *award* (68), *business* (63), *innovation* (56), *develop* (51), *university* (41), *international* (39), *student* (37), *community* (34), *academic* (32), *development* (31) and *partnership* (30). The contexts in which these collocate words are used often deal with issues such as financial support for education, development of knowledge, and innovation and enterprise. These issues are associated for example with the **Success** semantic category, with collocations such

as *award* (68), *employability* (13), *career* (12), *impact* (12) and *discovery* (10) reflecting a focus on areas such as recognition, career prospects and innovation. Notable collocates in some of the other semantic categories, which may point towards important issues that are mentioned or dealt with in the keyword contexts, include *international* (39), *national* (12) and *local* (11) in the **Cosmopolitan** semantic category, *team* (26) and *network* (16) in the **Affiliation** category, and *history* (12) in the **Tradition** category. The next section examines the COMPETENCE keyword in contexts in more depth to assess the extent to and ways in which the issues suggested by the classification of the collocates in this section play a role.

6.2.2 *Contexts of BP COMPETENCE Keywords*

This section discusses the characteristics of the contexts in which the BP COMPETENCE keywords occur. Overall, the keyword contexts found on both the Pr92 and Po92 university websites reveal that the focus tends to be on world-renowned professionals, national and international collaborations, impact on a large scale, and the student experience in terms of both academic and non-academic environments at the local and international level. The international aspects promote the universities and their surroundings as having a cosmopolitan atmosphere, for example in keyword contexts related to dynamic activities where students with different backgrounds and nationalities share a sense of belonging to the university community. Other characteristics that emerge include collaboration with partners and engagement in charitable activities. These and other characteristics associated with the COMPETENCE keyword contexts are summarised in Table 49. Let us now consider some of the contexts recorded in the table that stand out.

To begin with, contexts in which the word ***partnership(s)*** is used in the Pr92 corpus texts are typically centred around the idea of 'collaboration' with other HE institutions or the notion of 'engagement' with organisations outside HE, at both the national and international level, as suggested in examples (1) and (2) below. In relation to collaboration, there are also references to charitable activities and societal change. The contexts in the Po92 corpus texts are also related to international collaborations, but there are some differences. For example, the Po92 texts tend to have slightly more explicit focus on aspects of network and leadership, as seen in the reference to 'globally responsible leadership' in (4). Finally, the ***partnership(s)*** contexts in Po92 also emphasise a supportive academic atmosphere, as in (3) and (4), while those in Pr92 are more focused on community-related matters, exemplified in (1) and (2).

(1) Innovation and relevance in our education, research and engagement [*][9] Independence and responsibility of thought and action [*] Sustainable *partnerships* with stakeholders - driving a culture of inclusion and accessibility [*] Respect for all within and beyond the University [*] An empowered and ambitious community in which all can thrive (PrL--Aberdeen--Mission)

(2) [The university's relationship with society][10] [*] the place of the University within the broader academic and local community [*] opportunities for innovative *partnerships* with business, charitable, foundations, and healthcare [*] concern for sustainability and the relationship with the environment (PrH--Cambridge--Mission)

(3) We are committed to promoting the highest standards in teaching and research and you will not only benefit from our close collaboration with UK partners, but also from the long-term *partnerships* we have with academic institutions worldwide. [*] Sharing knowledge and discovery [*] By joining our close-knit community of staff, students, and partners, you will access to a large support and knowledge network. (PoL--Worcester--Life)

(4) Our teaching will be informed by scholarship and research into the subjects we teach, and innovation in learning and teaching. We will welcome students from all areas of the UK and overseas, building strong international *partnerships* and promoting globally responsible leadership. We will serve our community through *partnerships* to pursue common goals in supporting progression and achievement. (PoM--Glouscestershire--Mission)

To conclude, the examples above show that the *partnership(s)* contexts are related to collaborations for generating knowledge and supporting communities both within and beyond Higher Education.

Moving on from the *partnership* contexts, an examination of the contexts in which the keywords *successful*, *enterprise* and *thriving* are used illustrates other aspects of how universities seek to represent and promote their achievements. The *successful*, *enterprise* and *thriving* contexts touch on a similar concern with notions of collaboration and engagement. The next keyword for investigation is *successful*. The contexts in which the keyword *successful* occurs tend to be related to achievements in terms of financial support for education, academic excellence and recognition. For instance, the achievements (or COMPETENCE) from the students' perspective are promoted by reporting about awards that students receive. For example, (5) below describes a financial award scheme for students with an interest in music. Similarly, example (6) is related to students' achievements in sports, while example (7) involves success of the university and its staff in terms of research (REF). The example in (7) also reflects the fact that the Po92 COMPETENCE contexts tend to focus more explicitly on international achievement in their use of *successful*. The contexts

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[9] The symbol [*] represents a bullet point in the original sources.

[10] Text enclosed in square brackets, [--], summarises the text of the original contexts.

show that the promotion of **Success** is represented from both the universitys' perspectives (7) and the students' achievements (5) and (6). These contexts show that universities express both corporate identity in the former and corporate image in the latter (as discussed in section 2.4.1) in their use of language on their websites. The student perspective is also promoted by referring to good life experience – i.e. the Po92 contexts also have a stronger focus on positive learning experiences, quality of life (i.e. work-life balance and good living), and career prospects, as shown in (8), (9) and (10). This aspect is related to the emotional approach of communication of the brand (discussed in 2.4.2).

> (5) The Instrumental Awards Scheme enables gifted musicians to reach a high standard of performance in chamber music. *Successful* students are Award-holders for a year, and receive a small financial award (an 'exhibition'), professional coaching of their ensemble, masterclasses, recital opportunities and a subsidy for instrumental lessons. (PrH--Cambridge--Funding)

> (6) Sussex's student sport teams have their most *successful* year ever, with eight teams winning prestigious British Universities Sports Association (BUSA) competitions. (PrM--Sussex--History)

> (7) 94% of outputs submitted to REF 2014 were assessed as World-Leading or Internationally Excellent. Set in a highly *successful* applied research culture, CTEHR works closely with users, service providers, commissioners and industry. (PoH--Coventry--Research)

> (8) London is home to many of the world's leading brands and organisations, especially in the business, creative and science industries. So, it's the perfect place to gain valuable work experience and start a *successful* career after university. [*] Kingston and the local area [*] Outdoors and in, there's no end to student-friendly activities in Kingston. (PoL--Kingston--Local)

> (9) They will be supported to develop critical thinking, originality, decision-making, and the ability to respond to complex situations, by framing decisions through an understanding of concepts and contexts. Our *successful* graduates will have the necessary qualities to lead and to make a significant difference in their chosen field. (PoH--Coventry--Mission)

> (10) Sport Liverpool says Relax! [*] Following on from our *successful* Wellbeing Week, Sport Liverpool are launching Relaxation classes in an attempt to help anyone at University unwind those daily stresses of everyday life. (PrL--Liverpool--Life_on_Campus).

In sum, the examples above clearly show that the *partnership(s)* contexts emphasise collaboration, while the *successful* contexts focus more on national and international recognition of university research, and – with respect to the more immediate aspects of the student experience – financial support and quality of life. We will now look more closely at some of the specific activities that are involved in the universities' business-related collaborations and partnerships, and the resulting achievements, by investigating the use of the keyword *enterprise(s)*. In addition, as the *partnership(s)* and *successful* contexts also

reflected a focus on the student-related issues of learning experiences and quality of life, with internationally-related activities permeating in many contexts, we will examine the contexts of the keyword *thriving*, which also often relates to these notions.

In the Pr92 texts, the keyword *enterprise(s)* occurs in contexts that relate to business activities, management, development, research and innovation, and technology transfer, as exemplified in the list recorded in example (11). The context in (12), which is from a Po92 university, is more explicitly related to the notion of 'internationally recognised' for business practice. The notion of internationally-related achievement reflected in the Po92 *enterprise(s)* contexts was also a feature of the *successful* contexts, as seen in example (7) above. It is noticeable that the terms 'innovation' and 'innovative', as references to creativity, tend to occur with *enterprise* in both Pr92 and Po92: for example, 'innovation' appears in (11) in reference to research-related activities while in (13) *enterprise* occurs with 'innovative' and 'working closely with employers', in a context focusing on employability. These contexts show the focus of the university's engagement in business and involvement with or promotion of new businesses or business ideas. The development of business initiatives are a result of knowledge creation, which is derived from innovative ideas.

> (11) These foundations assist new companies to sustain growth beyond early stages to become well-structured *enterprises*. [*] Edinburgh Research and Innovation [*] Edinburgh Technology Transfer Centre [*] (PrM--Edinburgh--Research)

> (12) The group will: develop excellent and internationally recognised research in the area of family, smaller and social *enterprises*; and use, promote and develop research with businesses, social enterprises and policy makers to create impact within individual businesses, families and communities. (PoM--Queen_Margaret--Research)

> (13) [*] To promote an internationalised culture of *enterprise* and innovation across our communities – locally, regionally and internationally, working closely with employers [*] To develop and promote purposeful knowledge and research and develop innovative practices (PoH--Lincoln--Mission)

The last COMPETENCE keyword to examine is *thriving*. The contexts in which the keyword *thriving* occurs clearly suggest ideas related to prosperity and positivity in terms of national or international activities that are linked to research culture, business, the economy, community, exploration of knowledge. These activities are related to the notion of 'innovation', which, as we have seen, also plays a part in the *enterprise(s)* contexts. The internationally significant activities that are mentioned in (14) and (15) are related to collaborations within or between research communities or research across disciplines that focuses on generating new developments in knowledge and expertise that are relevant to society, business, industry and/or the economy. As well as being presented as internationally

significant, these collaborations are presented as dynamic activities that will result in useful outcomes.

> (14) Our strength lies in bringing together academics from across three faculties to produce research that is globally relevant to society, business, industry, and the economy. Experts across three faculties form part of a ***thriving*** research community that aims to explore novel concepts and push the boundaries of our understanding across a variety of disciplines. (PrL--Liverpool--Research)

> (15) Demonstrated both within industrial subjects and across thematic areas. Sussex has a dynamic and ***thriving*** research culture, offering world-class opportunities for postgraduate study and research. (PrM--Sussex--Research)

> (16) London is only an hour's journey by train and Birmingham, the UK's second largest city, is only 20 minites away. Birmingham is another ***thriving*** centre for the arts, entertainment, sport and culture. [*] By car [*] Coventry lies at the heart of a motorway network. (PoH--Coventry--Local)

> (17) With connections to the likes of the BBC, HSBC, Microsoft and Spotify, it's no wonder that this stunning campus attracts students from all over the globe. [*] Discover the Centre for Art and Photography [*] A ***thriving*** hub of creativity, there is always something exciting going on at the Centre for Art and Photography, from guest lectures with Vogue, to catwalks with Superdry. (PoM--Gloucestershire--Life)

> (18) Access for all to music and arts education is vital to foster intercultural dialogue, to promote the value of cultural diversity and to protect a ***thriving*** cultural legacy. The ways in which music is able to convey meaning and to embody the identity of a particular culture has long been debated. (PoL--Kingston--Research)

Example (16) shows the idea of the prosperity of a city, as in 'Birmingham is another ***thriving*** centre for the arts, entertainment, sport and culture'. In addition, as shown in both (16) and (17), another key theme in the ***thriving*** contexts is the promotion of the arts, cultural and entertainment venues, and other centres of creativity, for instance 'The Centre for Art and Photography' at the University of Glocestershire, which is described as a 'thriving hub of creativity' in (17). Thus, these contexts suggest dynamism and success in the promotion and pursuit of the creative arts. Focusing on the importance of thriving centres of creativity, example (18) asserts that the value of arts-related activities lies in the fact that they support cultural diversity and lay the foundations for a strong cultural legacy.

It can be concluded that the contexts in which the keyword ***thriving*** occurs emphasise activities that involve people's ideas and creativity, often in terms of cross-disciplinary and cross-border collaborations which bring about thought-provoking new research and innovations. In terms of creativity, the contexts also often suggest a liveliness of activities specifically related to the arts. All of these themes can be categorised as cosmopolitan-related aspects (discussed in section 2.3.2), and some of which also factor into the DFs in section

2.3.1-2.3.3. Table 50 summarises the use of the keywords and UCTs (University Corpus Themes) that are related to the contexts.

Table 50 shows each individual COMPETENCE keyword together with a summary of the common characteristics of the contexts in which they are used. The characteristics were determined by reviewing all of the relevant BP keywords and patterns of use in contexts. These characteristics of use were then compared with the DFs that motivate students in their decisions to study overseas. The UCTs refer to the themes derived from the corpus, while the DFs are the themes summarised based on the previous studies that relate to the main motives for students to pursue their education overseas. UCTs with a square bracket *[--]* refer to the corpus themes that are also related to the DFs discussed in section 2.3.1-2.3.3.

Keyword	Characteristics of Use in Contexts	UCTs
partnership(s)	Overall: activities involving local, national and international engagement and collaboration Pr92: knowledge transfer, sharing knowledge Po92: leaderships, local / international enterprise and communities; student experience, students' activities and facilities	*[Cosmopolitan Experience]* *[Knowledge Transfer]* *[Learning Facilities]* *Local Experience* *Support for Enterprise*
successful	Overall: academic and non-academic activities Pr92: academic excellence and prestige; initiatives and activities for sparkling ideas Pr92: 'international' with a focus of learning experiences, welcoming life at the university, career prospects and research excellence	*[Cosmopolitan Experience]* *[Employability]* *[Knowledge Transfer]* *[Recognition]* *Good Living*
enterprise(s)	Overall: locally, regionally, internationally engagement in business-related activities Pr92: business initiatives, management, development, research, education, innovation, consultation and technology transfer Po92: 'internationally recognised' for business practice and business start-up; learning environment that support business initiatives.	*[Cosmopolitan Experience]* *[Knowledge Transfer]* *[Recognition]* *Local Experience* *Support for Enterprise*
outstanding	Overall: academic activities and engagement; regional and international reputation Pr92: research, academic and leisure activities; reginal and global and forefront university; impact Po92: learning experience, facilities, research, engagement of staff and students in academics, high performance, intellectual horizons	*[Intellectual Horizons]* *[Knowledge Transfer]* *[Learning Facilities]* *[Recognition]* *[Impact]* *Engagement*

Keyword	Characteristics of Use in Contexts	UCTs
complete	Overall: accomplishment of degrees or participating in activities; facilities for learning and living well Pr92: accomplishment of a degree, application form, participating in activities Po92: degree completion, application form, well-equipped amenities of learning facilities, accommodations	*[Learning Facilities]* *Good Living*
intellectual(s)	Overall: sharing perspectives from the diversity of people around the world and contributions for better society Pr92: academic activities and sources of knowledge from the diversity of people and professions Po92: embracing collaboration from the diversity of people	*[Diversity]* *[Knowledge Transfer]* *Contribution to Society* *Engagement*
proud	Overall: cosmopolitan, vibrant and popular city, as well as heritage of a city; contribution to society locally and internationally Pr92: heritage of the city, university tradition, contribution to society Po92: heritage of the city, university past, activities or tradition; contribution to society	*[Cosmopolitan Experience]* *[Impact]* *Contribution to Society* *Tradition*
secure	Overall: recognition, accomplishment, impacts and high quality of the universities and activities, broad worldview, living comfort and safety Pr92: global recognition of university, broad worldview, global impact Po92: collaboration of projects, resources, contribution to society, support for students' stay	*[Impact]* *[Intellectual Horizons]* *[Impact]* *[Living Comfort & Safety]* *[Recognition]* *Contribution to Society* *Engagement*
governance	Overall: good practice, good conduct Pr92: good practice of policy, management and research. Po92: good managerial practice of the universities; good academic and international activities	*[Good Practice]*
talented	Overall: scholarships and funding; creating outstanding performance that contributes to society. Pr92: scholarships for students who will potentially make contribution to society. Po92: outstanding staff; scholarships for students and those with specific skills such as artists whose performance is outstanding and that they make substantial contribution to society	*[Diversity]* *[Support for Education]* *Contribution to Society*

Keyword	Characteristics of Use in Contexts	UCTs
award-winning	Overall: academic and non-academic places and activities that potentially interest students and are inviting for students Pr92: activities and centres for activities; environments and places for entertainment Po92: activities, life-style, investment in facilities and infrastructure, environments	*Good Living*
thriving	Overall: 'internationally-related' aspects of dynamic, cosmopolitan community; cultural diversity; knowledge exchange Pr92: dynamic research community and research culture, cosmopolitan environment for entertainment such as music scenes and sport clubs Po92: diversity of cultural and social aspects, such as academics, arts, entertainment; communities without borders; international transport links; improving people's lives	*[Cosmopolitan Experience]* *[Diversity]* *[Knowledge Transfer]* *Contribution to Society*

Table 50 COMPETENCE Keywords and Characteristics of Use in Contexts

The UCTs in the COMPETENCE dimension reflect university-focused activities involve creating **Impact**, facilitating **Knowledge Transfer**, **Recognition** of HEIs and **Support for Enterprise**. **Contribution to Society**, **Diversity**, **Engagement**, **Good Practice** and **Intellectual Horizons** suggest some of the characteristics or values in academic culture (i.e. universities' research conducting for a purpose of societal impact which attributes to **Contribution to Society** UCT). These themes relate to the capability of universities to offer knowledge and prepare students for their future and universities' role in society. In terms of student-focused activities, relevant UCTs are the **Cosmopolitan Experience** and **Employability, Living Comfort & Safety**. These UCTs are related to student life at universities (i.e. **Cosmopolitan Experience**) and students' future (i.e. **Employability**), discussed in section 2.3.2-2.3.3. All of these UCTs suggest that unviersities promote their brand personality from both university-focused and student-focused perspectives, which reflect in the notion of corporate identity for the former and corporate image for the latter, discussed in 2.4.1.

It is notable that the BP COMPETENCE words are commonly associated with internationally-related activities, including student mobility, knowledge transfer, cosmopolitan environments or ways of living. Both Pr92 and Po92 universities convey information relating to contributions that their institution and students make to society at the local, national and international level. While texts related to activities for the public interests

or advantages are found in both corpora (i.e. *[Impact]* and ***Contribution to Society***), the Po92 texts exhibit a stronger focus on the issue of support for enterprise. With regard to student mobility and knowledge transfer, texts in the COMPETENCE dimension commonly focus on promoting messages that convey for a sense of inclusivity in terms of the diversity of students, and emphasize the work that they do to foster the broadening of intellectual horizons through exchanging knowledge, expertise and experience, both nationally and internationally. In doing so, they are also promoting the idea that international students who choose to study at their institution can develop a cosmopolitan mindset (see section 2.3.1) as a result of engaging in the wide range of experiences on offer and interacting with the diversity of people they will encounter, in addition to developing their academic skills and knowledge.

6.2.3   *Collocation of EXCITEMENT Keywords*

The BP keywords that were used for the collocation analysis of the EXCITEMENT dimension are those that were identified in Section 5.3, namely ***new, individual(s), current, specific, innovative, unique, young, exciting, vibrant, state-of-the-art, inspiring, represent*** and ***determined***. Following the same procedure adopted for the COMPETENCE collocates in section 6.2.1, Table 51 lists the collocates and semantic categories they have been assigned to.

Semantic Categories		Collocation of EXCITEMENT keywords
Action	**(151)**	*meet (73) [people, friends], develop [skills, ideas] (30), discover [skills, opportunities, passion] (23), event(s) [activities] (25)*
Affiliation	**(86)**	*group (51), team (25), involve (10)*
Assistance	**(50)**	*encourage (20), support (20), promote (10)*
Cosmopolitan	**(81)**	*city (50), culture (11), international (10), world (10),*
Creativity	**(198)**	*creation (30), idea (28), explore (24), innovative (24), portrait (22), art (16), design (12), initiative (12), exhibition (10), music (10), solution (10)*
Enterprise	**(30)**	*investment (19), invest (11)*
Evaluation	**(53)**	*fun [making friends] (12), insight (11), exciting (10), outstanding [academic practice, student experience] (10), vibrant [city, research culture] (10)*
Education	**(333)**	*research (73), technology (54), medical (30), learn (27), learning (26), digital (24), practice (17), equipment (16), subject (14), curriculum (11), professorship (11), interdisciplinary (10), discipline (10), education (10)*
Finance	**(80)**	*bursary (20), cost (16), income (12), scholarships (12), financial (10), payment (10)*
Governance	**(0)**	-
People	**(196)**	*friend (54), researcher (39), boy (22), chair (16), scholar (16), man (16), child (12), woman (11), individual (10)*

Semantic Categories		Collocation of EXCITEMENT keywords
Place	**(248)**	*facility (54), site (38), community (34), campus (22), building (19), suite (14), centre (13), faculty (12), library (12), district (10), place (10), environment (10)*
Prospect	**(41)**	*opportunity (41)*
Sport	**(0)**	-
Security	**(36)**	*guarantee (14), settle (12), protection (10),*
Success	**(125)**	*create [new knowledge] (45), award (22), discovery (21), growth (17), expertise (10), performance (10)*
Time	**(24)**	*recently (24)*
Tradition	**(30)**	*new [architecture] (16), old [architecture] (14)*
Transport	**(0)**	-

Table 51 Semantic Categories and Collocations of EXCITEMENT Keywords
Numbers in parentheses = frequency; Blue colour = collocate words appearing in 2 BP dimensions; Green colour = collocate words appearing 3 or more BP dimensions

The table shows that the semantic categories that are particularly strongly represented in BP EXCITEMENT keyword contexts are **Education** (333 collocate occurrences), **Place** (248), **Creativity** (198), **People** (196), **Action** (151) and **Success** (125). These semantic categories cover a mix of academic, non-academic and creative activities. Looking at individual collocate words, we see that meanings relating to evaluative outcomes from involvement in activities (i.e. fun) and/or a sense of liveliness (i.e. vibrant) are shown in the EXCITEMENT dimension but not in COMPETENCE. This suggests that engagement in universities is more related to the BP EXCITEMENT. For example, the collocate words that relate to notions of friendship are *meet* (73), *friend* (54), *group* (51). Although some collocate words, *meet* for example, can be used in a variety of ways, having reviewed the use, the large majority of the contexts of *meet* is related to meeting new people or friends. Only several occurrences were the collocate *meet* used in other possibilities (i.e. *meet* the need, *meet* the target). Thus, generally use of *meet* in this dimension tends to relate to social activities.

The research and creativity related collocate words are *research* (73), *technology* (54), *create* (45) and *opportunity* (41). This can also be supported by the number of observed words in **Education** semantic category (14 words) and **Creativity** (11 words), which suggest a variety of use in the contexts of BP EXCITEMENT. Finally, the cosmopolitanism collocate word is *city* (50). These frequently occurring words suggest that key characteristics of contexts associated with the BP EXCITEMENT dimension could involve making friends, being inclusive as part of a group, creating technological innovation through research, opening up opportunities and generating or experiencing the vibrancy of the city. Additionally,

collocations in the **Creativity** and **Success** categories show that the university websites make links between EXCITEMENT and achievements that are associated with discovering new ideas and solutions, and also ideas relating to creative arts such as art, exhibition. music and portraits. For example, the collocates in the **Creativity** semantic category focus on a sense of initiative and new ideas, as reflected in the words *innovative*, *idea*, *explore* and *solution*, as do some of those in the **Success** category, such as *create* [new knowledge]. Overall, therefore, we see that the contexts in which BP EXCITEMENT keywords occur commonly emphasize innovation and the search for new solutions. With this in mind, the next section further examines the ways in which the links between dynamism, vibrancy and innovative ideas are established and reflected in these contexts. In particular, the contexts of the following keywords are analysed: *new*, *specific*, *innovative*, *unique* and *vibrant*. The kinds of gregarious activities and new research ideas that are featured in the keyword contexts are revealed.

6.2.4 *Contexts of EXCITEMENT Keywords*

The activities that are highlighted in the BP EXCITEMENT keyword contexts reflect a sense of innovation and new solutions in relation to collaborations for research, and liveliness of life experience, work experience and environments. Several of these themes are common, for example, in the contexts in which the keyword *new* is used: collaboration for discovering new ideas, partnerships and contribution or commitment to delivering benefits to society (in both the private and public sectors), life experience and local experience. These are exemplified in (19), (20) and (21). The benefits to society include economic growth in (19), intellectual vitality in (20) and growth of region's reputation in (21).

> (19) We continue to explore *new* partnerships and collaborations through which we can develop future innovations and services which will benefit society and contribute to the region's economic growth. (PrM--Sussex--Research)

> (20) Sussex has a dynamic and thriving research culture, offering world-class opportunities for postgraduate study and research. Through actively supporting *new* research ideas and collaborations, we encourage the contribution of our postgraduate and postdoctoral researchers to the University's intellectual vitality. (PrM--Sussex--Research)

> (21) Our research underpins the curriculum, contributes to a positive student experience, makes a difference in society, and grows the reputation of the region. We are committed to discovering *new* knowledge and delivering real benefits to public and private sector industries, the economy and society. (PoL--Staffordshire--Research)

Although references to collaboration are a feature of the texts of both Pr92 and Po92 institutions, there is a slight difference in the detail. References to technology, transformational research and interdisciplinary collaboration are more commonly found in contexts of *new* in Pr92, while university facilities, resources and the campus environment are typical concerns of *new* contexts in the Po92 texts, as exemplified in the contrast between (22) and (23).

> (22) *Synthetic Biology* [*] Delivering sustainable and socially acceptable *new* technologies through transformational research, interdisciplinary exchange and open technologies for innovation. (PrH--Cambridge--Research)

> (23) [A university's building] is a focal point for excellent education, a centre for the arts, a resource for businesses and a dramatic fusion of old and *new* architecture. The Business School reflects a real-world business environment with open-plan, multi-directional learning spaces, […]. The building provides high-tech computer suites, a purpose built entertainment room, social learning spaces […]. (PoL--Worcester--Life)

In terms of research related activities, the common focus is on collaborations between different sectors or academic disciplines, with the aim of generating new ideas. A slight difference between Pr92 and Po92 is that Pr92 contexts are more focused on research, while facilities are a more common concern in Po92. The next theme to be discussed is activity related to students' life experiences, including their involvement in the local community.

Various contexts in the website texts focus on the eclectic range of activities that can be explored locally, from galleries to book shops and from new places to historical or heritage sites. These references are serving to promote the attractiveness of the university's location by highlighting the variety of attractions and amenities that the local area has to offer. In addition, there are contexts that focus on the broader issue of the students' life experience in terms of the ways in which they will be supported in gaining work experience in order to enhance their employability. The first three examples below illustrate the emphasis on students being provided with opportunities to establish new friendships (24), start a new 'adventure' (25), and experience the 'exciting' mix of old and new in the local community (26). Example (27) shows how Staffordshire is promoting itself to prospective 'new' students supported for enhancing their employability skills. Together these four examples reflect a focus on the idea that the university experience is the beginning of a new stage in the students' lives, but also one that is preparing them for the world of work after graduation. To explore further the types of experience, or activities that are commonly highlighted, the next keyword we will consider is *specific*.

(24) Going to university isn't just about studying for a degree; it's about the whole student experience, meeting *new* people, looking after yourself and establishing your *new* life. (PrL--Liverpool--Life)

(25) Having been newcomers themselves, they know exactly what it's like to start a whole *new* adventure! (PoL--Staffordshire--Life)

(26) Independent businesses line its cobbled streets, including art galleries, delicatessens, vintage boutiques and antique book shops. The fusion of old and *new*, ancient and contemporary, makes Lincoln an exciting place to live and study. (PoH--Lincoln--Local)

(27) Who says students have never done a day's work? New for 2016, we guarantee the opportunity of work experience for all *new* students joining us in September. This work experience may be closely linked to your course, or it could be a broader experience designed to develop your employability skills. (PoL--Staffordshire--Life)

The contexts of *specific* often emphasize areas of specialisations in research. In the website texts of the Pr92 universities, contexts in which this keyword occurs are commonly references to academic expertise and specialisation in research, as exemplified in (28) and (29). Additionally, international reputation is another theme that is often reflected in these contexts, as example (28) illustrates.

(28) We aim to be world-leading in *specific* research areas and globally recognised in all our research and impact activities. We will raise the profile nationally and internationally of our established knowledge leadership […]. (PrL--Liverpool--Mission)

(29) You will have the opportunity to interact with professional worlds through our inspiring industry connections, as well as access to your lecturers' *specific* expertise and interests. Through this, we develop your academic achievement, self confidence, and ambition. (PoL--Worcester--Life)

In short, contexts in which *specific* occurs often stress the research specialisations of the university, at times in order to emphasize the university's reputation and at times in order to stress the quality that underpins its teaching. Next, we will consider the types of research and other activities that the universities promote as part of the support they provide for students' development, by investigating the keyword *innovative*.

The contexts in which *innovative* occurs commonly relate to teaching, learning, thinking and new solutions, which are useful for research and students' learning and future career prospects. They can also make reference to research collaborations, sometimes across disciplines, that are focused on tackling societal challenges and promoting the vitality of businesses and communities. These characteristics tend to be for a feature in the texts of both Pr92 and Po92 universities. In the examples below, we firstly see *innovative* being used in a

context relating to creating a positive learning experience for students (30), then in references to coming up with solutions and improved technologies for various organizations outside HE in areas such as healthcare (31-34).

As was also the case in some of the COMPETENCE contexts, use of the keyword *innovative* is also found in references to interdisciplinary academic work and research, as in (32) and (33), where the message is that collaborations of people from different disciplines can lead to new ideas and practices. In addition, excellence in research is also associated with the use of *innovative*, for example through the phrases 'leading-edge' in (33), and 'internationally excellent' and 'world-class' in (34).

> (30) [*] The importance of our educational mission and leading in both high quality and *innovative* teaching and support for outstanding student experience [*] That LSE should build on its distinctive heritage and comparative advantages, and achieve a better integration among different dimensions of our work (PrH--LSE--Mission)

> (31) Experts in the Faculty of Science and Engineering are engaged with a wide-range of private, public and third-sector organisations, transforming ideas into *innovative* solutions to improve performance of technologies, products, and skills. (PrL--Liverpool--Research)

> (32) We will actively pursue opportunities for *innovative* interdisciplinary and interdepartmental academic work, for example, in global health, climate change, migration and in data science. (PrH--LSE--Mission)

> (33) The Centre has an interdisciplinary research and development focus that is leading edge and *innovative*. We have a focus on doing research that 'humanises healthcare' by keeping the person at the centre of care, as well as promoting new methodologies for person-centred research and that influence international developments in the field. (PoM--Queen_Margaret--Research)

> (34) The LIH conducts internationally excellent and world-class studies encompassing the whole research pathway from 'cell-to-community' seeking to develop *innovative* health and social care technologies, treatments and improve health systems. (PoH--Lincoln--Research)

The examples above reflect a broad, wide-ranging perspective, by highlighting links between innovative work in different areas and the interdisciplinary nature of the collaborations that lead to it. This perspective has echoes in issues related to the employability of students, namely the importance placed on transferable skills that graduates can apply to areas beyond their academic discipline. The following excerpts are taken from an article by Cathy Chan which was posted on the website of Bloomberg, the global finance and media company, on 29 March 2018. This article discusses the recruitment policy adopted by JPMorgan, another global finance company, as a result of which they are hiring graduates from a greater variety of academic disciplines than previously.

> JP Morgan Chase & Co. is hiring more engineering, neuroscience and psychology graduates across Asia-Pacific, diversifying away from students with finance backgrounds as it seeks to adapt its workforce to the region's fast-changing economies.
>
> "It's easy to hire finance people because culturally they fit right in, they've been trained," Hall said in an interview in Hong Kong last week. "But it's a short-sighted view if you only hire finance people, at some point, you're lacking some of the diversity that makes for better problem solving." (Chan, 2018)

By emphasising the interdisciplinary nature and wide-ranging 'real world' applications of research, universities are also – by extension – sending the message to students that, by choosing this particular university, they will be developing skills that have a similarly wide-ranging relevance, and they will therefore be improving their employability.

Finally, there is one context in which the keyword *innovative* occurs that takes a very direct and rather different approach to highlighting the issue of employability (35). The focus in texts from this Po92 institution is not on innovations resulting from interdisciplinary research, but on the university's innovative approach to promoting employability and career development.

> (35) We offer a truly *innovative* and effective 'earn as you learn' scheme, which provides our students with invaluable work experience, career development and earning opportunities. Worcester graduates are consistently among the most employable in the country with over 92% in work or continuing to study within six months of graduating. (PoL--Worcester--Life)

To summarise, *innovative* is used in contexts that highlight creativity, for example in relation to collaborative schemes, projects and research that help to tackle societal problems, improve technologies, support students and improve society. To identify further details of the ways in which the university website texts promote the enrichment of the student experience and improvements to society, *vibrant* is the next keyword to be investigated.

The contexts in which *vibrant* occurs focus on the creative, colourful, friendly, energetic and cosmopolitan atmospheres of cities, local communities and university campuses (e.g. shops, restaurants), as seen below in examples (36), (38) and (39). Some of the descriptions of the vibrant locations of the universities combine references to the cosmopolitan nature of the surroundings as in (37), (38) and (39). Some universities add references to their historic significance or charm, such as those in (38) and (39). Contexts from the texts of both Pr92 and Po92 universities also commonly include references to uniqueness of place, for example, from shops and cafés (36) to the university's atmosphere (37) to attractions in the city as in (38) and (39). The idea relating to a variety of a city's attractions corresponds to Ren et al.'s

(2011) suggestions for promoting various identities of a place, while at the same time offering uniqueness of local culture and history.

> (36) The daily market on Market Square sells everything from jewellery and vintage clothes to bread and fruit; and at the weekend there are also farmers', and arts and crafts markets. In addition, in the *vibrant* and eclectic range of shops, cafés and restaurants on Mill Road you can find just about anything from just about anywhere in the world and to suit any budget, all on one street! (PrH--Cambridge--Local)

> (37) [*] all our students offered the opportunity to draw from deep expertise outside their core discipline; a highly satisfied student body with a strong sense of community. Strong and *vibrant* communities within and beyond the University – making the most of our unique offer of world-leading thinking and learning within one of the world's most attractive cities (PrM--Edinburgh--Mission)

> (38) The winning combination of a *vibrant* city centre and its historic quarter, both with a broad range of cultural activities and venues make Lincoln a fantastic environment in which to live and study. (PoH--Lincoln--Local)

> (39) Aberdeen is a *vibrant* creative and ambitious city, known for its historic charm and cosmopolitan community. The City of Aberdeen has something for everyone, from the bustling city centre of Europe's Energy Capital, to the beautiful countryside and coastlines, there's plenty to see and do. (PrL--Aberdeen--Local)

To conclude, the contexts of BP EXCITEMENT keywords capture a wide range of new ideas from creative arts to multidisciplinary research, world-class research and its specialisation. Texts in this dimension also relate to a city's attractions and the uniqueness of the local area from shops and restaurants to nature.

Table 52 summarises the characteristics of the BP EXCITEMENT keyword contexts, identifying the relevant UCTs. The UCTs that are associated with this BP dimension include the following: (1) the creation of **Impact**, **Knowledge Transfer**, **Contribution to Society** and **Recognition** through research and teaching; (2) **Support for Education** and students' quality of life more generally, through scholarships or paid work; (3) enhancing students' **Employability** through work experience and work schemes (which is also closely related to **Support for Education**); (4) facilitating **Engagement** with and between a **Diversity** of people in order to broaden **Intellectual Horizons** and increase creativity; (5) supporting learning opportunities through **Local Experience**; and, (6) promoting a quality of life at the university, as in **Good Living**, **Inclusion in Society** and **Friendships**. These UCTs encourage and support students in the development of their cosmopolitan mindset (see section 2.3.2-2.3.3), which is advantageous for their career opportunities.

Keyword	Characteristics of Use in Contexts	UCTs
new	Overall: Knowledge generation, technology, environment, facilities, friends, experience Pr92: Technology and research for transformation and innovation; interdisciplinary, issue-oriented research; research for global reach; approach to resolve social issues, research ideas and contribution; partnership and collaboration; learning facilities; friends and experience Po92: learning experience; research impact, knowledge that brings actual benefits to society; technology opportunities; people and friends; environments; work experience for developing employability skills	*[Impact]* *[Knowledge Transfer]* *[Employability]* *Contribution to Society* *Engagement* *Friendship*
individual(s)	Scholarships or financial awards; people with exceptional skills and their collaboration on academic activities and research, based on their unique strength Pr92: scholarships or awards by a funding body; members or groups of people relating to the universities working together (knowledge exchange) for an accomplishment and enterprise Po92: developing one's talents, achievement and creativity; creating impact; promoting opportunities; integration of excellent teaching, knowledge exchange and research	*[Impact]* *[Inclusivity]* *[Knowledge Transfer]* *[Support for Enterprise]* *Contribution to Society* *Engagement*
current	Overall: engagement of people for activities or collaboration amongst institutions Pr92: activities of staff and students which are linked to accomplishments; a place or a period of time when activities are occurring Po92: activities for collaboration amongst institutions (i.e. student exchange), engagement of students	*[Knowledge Transfer]* *Engagement*
specific	Overall: research, community and support for a good performance in academic, businesses or other areas of specialisation such as sports Pr92: research culture, group or community that are linked international collaboration or recognition of research community Po92: area of interest or expertise; criteria for scholarships; support for businesses and / or students' performance (i.e. sporting skills)	*[Recognition]* *[Support for Enterprise]*
innovative	Overall: facilities, research, teaching and diverse academic disciplines	*[Impact]* *[Knowledge Transfer]*

Keyword	Characteristics of Use in Contexts	UCTs
	Pr92: research, curriculum, disciplines that are brought together and put into practice solutions or approaches for societal challenge for creating positive impact. Po92: knowledge, research and interdisciplinary programmes developed to promote novel ideas to resolve challenges in business and community	*Contribution to Society*
unique	Overall: contributions, facilities, activities, dynamic experience from the diversity of people and ideas Pr92: historic architecture, places for entertainment, dynamic environment for research and experience, conceived ideas and contribution; approaches to excel in universities Po92: activities, recreations and sports; engagement creating opportunities	*[Diversity]* *[Impact]* *[Knowledge Transfer]* *[Recognition]* *Engagement*
young	Overall: aspiring people, people with exceptional skills and those who need social care Pr92: support for education for young people, young talents in various academic fields including students embarking on a career in social and medical care Po92: performance from young people or support for students' education including those with talent in arts and sports, as well as those with less opportunities for education	*[Support for Education]* *Contribution to Society*
exciting	Overall: research culture; contribution of knowledge, history, culture, city, opportunities and entertainment Pr92: opportunities to be part of vibrant atmospheres spanning from research and exchange programmes to restaurants, entertainment, social gathering Po92: technology transfer; vibrant atmosphere of cities and local areas	*[Cosmopolitan Experience]* *[Diversity]* *[Knowledge Transfer]* *Good Living*
vibrant	Overall: places for leisure activities, such as shops, restaurants and sport clubs; city; community Pr92: places that represent the 'world'; broad thinking; wisdom within and beyond universities Po92: communities within and beyond universities with diversity of people and mindsets	*[Cosmopolitan]* *[Diversity]* *[Intellectual Horizons]* *Good Living*
state-of-the-art	Overall: Facilities, sport facilities, technological equipment, learning environment Pr92: facilities for academic and non-academic activities Po92: (same as those in Pr92)	*[Learning Facilities]* *[Recreational Facilities]*

Keyword	Characteristics of Use in Contexts	UCTs
inspiring	Overall: cultural experience; lecturers; student community; environment Pr92: an international, supportive and stimulating community / environment / place to study Po92: innovative arts; place to work; learning environments; lecturers; cultural experience; social aspects (i.e. equality, mutual respect)	*[Cosmopolitan Experience]* *[Inclusivity]* **Local Experience**
represent	Overall: universities, student union, views and interests of people Pr92: universities, voice from students, sport clubs Po92: ones' interests or research; support for student life at universities	*[Diversity]* *[Inclusivity]* *[Support for Education]*
determined	Overall: forefront of scholarships, research and institution Pr92: forefront of scholarships, successful university and research Po92: successful university	*[Recognition]* *[Support for Education]*

Table 52 EXCITEMENT Keywords and Characteristics of Use in Contexts
Numbers in parentheses = frequency; Blue colour = collocate words appearing in 2 BP dimensions; Green colour = collocate words appearing 3 or more BP dimensions

6.2.5   *Collocation of RUGGEDNESS Keywords*

This section examines the contexts in which BP RUGGEDNESS keywords occur in the university website texts. The keywords in question, as identified in section 5.3.3, are *challenge(s)*, *outdoor* and *challenging*.

Table 53 shows that a number of the semantic categories and collocates associated with RUGGEDNESS relate to physical activities, athletic games, social activities and challenges in social issues. The semantic category that is most strongly represented in BP RUGGEDNESS keyword contexts is **Education** (68 collocate occurrences). Collocate words in this semantic category reflect ideas associated with research for a better society and opportunities arisen from challenges. Having observed some collocates, the following example illustrates these ideas: 'addressing some of the *key* challenges and opportunities facing contemporary society by bringing expertise from many disciplines' (PrM--Sussex--Research) - i.e. 'see *changes* as a catalyst of opportunity' (PoH--Lincoln--Mission).

There is a similar focus on issues reflected in the **Evaluation** semantic category, but in this instance specifically in terms of highlighting their significance, with the collocates *key* (18),

grand (11) and *major* (10). In addition, the collocate word *global* (21) in the **Cosmopolitan** category and *contemporary* (16) in **Time** suggest a concern with international issues and current events. The collocates extracted from the contexts in this dimension generally focus in some way on solutions for mitigating the adverse effects of contemporary problems facing society.

Semantic Categories		Collocate Words
Action	(0)	-
Affiliation	(15)	*society (15)*
Assistance	(0)	-
Cosmopolitan	(21)	*global (21)*
Creativity	(0)	-
Enterprise	(0)	-
Evaluation	(49)	*key [challenges and opportunities] (18), grand (11), challenge (10), major (10)*
Education	(68)	*address [challenges and opportunities] (25), tackle (17), change (15), intellectual (11)*
Finance	(0)	-
Governance	(0)	-
People	(0)	-
Place	(20)	*centre (10)*, *court (10)*
Prospect	(12)	*opportunity (12)*
Security	(0)	-
Sport	(58)	*sport (22)*, *pitch (16), indoor (10), tennis (10)*
Success	(0)	-
Time	(16)	*contemporary [society] (16)*
Tradition	(0)	-
Transport	(0)	-

Table 53 Semantic Categories and Collocations of RUGGEDNESS Keywords
Numbers in parentheses = frequency; Blue colour = collocate words appearing in 2 BP dimensions; Green colour = collocate words appearing 3 or more BP dimensions

Other notable collocates are found in the **Sport** semantic category. Clearly the collocate words *sport* (22), *pitch* (11) and *tennis* (10) are associated with physical activities. Likewise the 10 occurrences of the word *indoor* all refer to sporting activities, e.g. indoor and outdoor *tenni*s courts. This *Sport* theme is further reinforced by some of the collocates from the **Place** category. For example, *tennis* (10), which is associated with physical activities, is in accord with words from the **Place** category, such as *centre* (10) and *court* (10), as in sport *centre* and tennis *court*, which are sport-related collocates of the keyword **outdoor**. As with other collocates of this semantic category, use of *indoor* (10) is also generally sport-related (with six occurrences), while use in the other four contexts is associated with a place for children

(i.e. 'the purpose-built nursery with mix *indoor* and outdoor play' (PrM--Edinburgh--Life)); other contexts are related to the availability of Internet, i.e. 'Wireless zones are available from various *indoor* and outdoor locations' (PrM--Kent--Life).

To summarise, many collocates of the BP RUGGEDNESS keywords reflect meanings associated with social and global issues, and ways of tackling challenges. The other theme that is associated with this BP dimension is references to sport and outdoor activities. The next section examines some of the RUGGEDNESS contexts in more detail in order to identify exactly what kinds of issues are being discussed in the references to challenges and solutions, and what types of sports and outdoor activities are reflected in the references to that theme.

6.2.6   *Contexts of RUGGEDNESS Keywords*

Taking the contexts of the keyword *challenge(s)* first, we see that in both Pr92 and Po92 they commonly refer to addressing the challenges that society is facing, possibly on a global level, and to approaches or solutions to tackling the issues, as illustrated in examples (40), (41) and (42). As example (42) indicates, research and teaching, and the innovations that arise from them, can be highlighted as a way of tackling these social challenges. This focus on innovation and creativity was also a feature of the BP EXCITEMENT keyword contexts (see section 6.2.4). Other contexts that reflect the idea of research contributing solutions to social issues can also be seen in examples (43) and (44).

> (40) *Strategic objectives* [*] We provide solutions to global ***challenges*** through the delivery of world-class research. We aim to attain the highest standards of research, judged by international comparators, across our range of subjects; to raise Kent's research standing and visibility worldwide and embed a research culture in our academic and innovation activities. (PrM--Kent--Mission)

> (41) With real-world issues at the heart of your research projects, you will have the opportunity to ***challenge*** prevailing concepts and the opportunity to deliver purposeful contributions to the scientific community. (PoL--Worcester--Life)

> (42) We contribute to economic prosperity and to social well-being. Through our research and teaching we contribute to solving some of the most important problems or 'grand ***challenges***' in our society. We seek to foster excellence, innovation, creativity and enterprise among our students, staff and partner organisations. (PoH--Coventry--Mission)

Example (43) suggests specifically that training in 'philosophical discussion' can enable students to make a positive contribution to the community, promoting the idea that analytical skills are useful in supporting society. Similarly, example (44) suggests that the kind of

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analytical skills that students develop benefit them in terms of their employability because 'sought-after' graduates can respond to challenges. Once again, example (44) suggests that creativity is also a quality to be developed alongside others such as resilience, so that graduates have the range of aptitudes and experience that will boost their employability.

> (43) Programmes have been developed to challenge people's own views and the views of others. [Name of a training event], a teaching course designed to show how philosophical discussion can be incorporated in school settings, have been developed to *challenge* people's own views and the views of others as well as enriching the cultural lives of users in the local community. (PrL--Aberdeen--Research)

> (44) The University is committed to nurturing sustainable graduates who, irrespective of background, are fully equipped to respond creatively to the *challenges* which may confront them. Our objective is to develop creative, resilient, and sought-after graduates with aptitudes, skills and experiences that will enable them to impact on their chosen profession or pathway. (PoM--Cardiff_Met--Mission)

In short, the keyword *challenge(s)* occurs in contexts that suggest research can help find solutions to global issues, and additionally that analytical and other skills and experience equip students with qualities for enhancing their employability, enabling them to tackle societal challenges. Importantly, creativity is suggested as an important quality for both research and employability. Next we will consider the contexts in which the keyword *challenging* occurs in order to identify some of the approaches or strategies that universities adopt in finding solutions to social issues.

One key approach is collaboration. The importance of collaborative research for addressing *challenging* issues is shown in particular in the website texts of Pr92 university websites, as exemplified in (45) and (46).

> (45) [We offer] comprehensive professional support and the company of world leading colleagues. With its diverse and *challenging* urban health population, the city of Liverpool provides a valuable setting for research. (PrL--Liverpool--Research)

> (46) Bringing together established areas of research excellence across a wide range of disciplines to drive the underpinning research base of data science and address *challenging* economic and societal issues. [*] Cancer [*] Promoting collaborations at the interface between disciplines [list of academic disciplines]. (PrH--Cambridge--Research)

Highlighting the idea that challenging situations are something that members of a university can rise to overcome, and positive outcomes are expected as a result, is referred to as *Resilience*. This is the case of both Pr92 and Po92 universities, as shown in 'challenging' but 'rewarding' degree programmes for students in (47) and (48). The idea in example (49),

which was taken from a Po92 university, is more specific to a bursary scheme for students to participate in 'a ***challenging*** but supportive environment', which also fits in with the ideas in (47) and (48) of prevailing over challenging activities.

> (47) We will recognise and reward excellence and innovation in teaching and offer opportunities for academic staff to develop themselves as educators and to create an educational offer for students that is ambitious, ***challenging*** and rewarding. (PrH--LSE--Mission)

> (48) Studying for a research degree is a ***challenging*** but ultimately rewarding thing to do and from our experience we understand the need to offer our research students flexibility in how they work. We aim to offer students a vital and engaging environment in which their ideas and practices can be supported, challenged and celebrated. (PoH--UCA--Research)

> (49) The Enterprise Inc. programme operates through the Centre and provides a bursary scheme to allow students to develop their ideas in a ***challenging*** but supportive environment. (PoH--Lincoln--Life)

The last BP RUGGEDNESS keyword that we will look at is ***outdoor***. The contexts that this keyword appears in mainly relate to physical activities, adventures, recreation or socialising, as seen in examples (50) to (54), which are taken from both the Pr92 and Po92 corpora. As well as describing specific activities like sports, the ***outdoor*** contexts can focus on exposure to the beauty of nature or aspects of city life, such as local amenities. Overall, therefore, these contexts are emphasising aspects of the student experience beyond their academic programme.

> (50) London has over 3,000 parks and open spaces, making it one of the greenest capitals in the world. Try the ***outdoor*** sports areas and open air theatre at Regent's Park, row a boat on the Serpentine lake in Hyde Park, or enjoy one of the best views of London from Parliament Hill on Hampstead Heath. (PrL--City_London--Local)

> (51) Now your exams are behind you, make sure you've clocked up a few nights at Teviot, experienced European-style ***outdoor*** socialising at The Pear Tree or in the Grassmarket (weather permitting) and danced the night away at Silent Disco. (PrM--Edinburgh--Life)

> (52) Its compact size makes it easy to get around and wherever you are in the city, you are seldom far from open countryside. [*] ***Outdoor*** *adventures* [*] Edinburgh's location is perfect for adventurers: there are few other places in the world from where you can so easily access opportunities to either snowboard or surf. (PrM--Edinburgh--Life)

> (53) *Enjoying Kingston* ***outdoors*** [*] Enjoy the greenery, stunning riverside views and leisurely activities in Kingston and its surrounding areas. In the town centre get right

on the river: walking along the Queen's Promenade, a lovely stretch along the river Thames or have a drink and a bite to eat on the waterfront. (PoL--Kingston--Local)

(54) *Active Outdoors* [*] We also have an **outdoor** facility based in Westwood Heath, about five miles from the city centre Sport Centre, here you can enjoy a game of football, hockey, cricket, netball or rugby on the astro turf and pitches. (PoH--Coventry--Life)

To summarise, one of the themes that emerges in the BP RUGGEDNESS keyword contexts is support for research that benefits society, with specific references to innovation, creativity, analytical skills, and resilience as qualities that enable staff and students to thrive in their academic studies, research, work and life. Another theme that is reflected in RUGGEDNESS contexts is the way in which universities facilitate access to benefits beyond academic studies, such as recreational activities and the natural environment, thus promoting a welcoming image of student life in the city and region where the institution is located.

Table 54 summarises the characteristics of the BP RUGGEDNESS keyword contexts. Relevant UCTs are linked with the characteristics: **Contribution to Society**, **Cosmopolitan**, **Engagement**, **Knowledge Transfer**, **Recognition** and **Resilient**. It is notable that **Resilience**, which is a UCT associated with the keyword **challenging**, is not a feature of the literature on DFs for student mobility (sections 2.3.1-2.3.3). The rise after overcoming challenging tasks is linked to 'growth mindset', which was discussed as the set of qualities that benefits students in terms of their academic achievement (2.3.1) and employability (2.3.3).

Keyword	Characteristics of Use in Contexts	UCT
challenge(s)	Overall: individual / institutional / social / global situations that need a solution for an improvement Pr92: individuals' views towards culture; world-class research to tackle global situations Po92: infrastructure for research; problems faced by business, local, national and international communities; opportunities to tackle issues	*[Collaboration]* *[Knowledge Transfer]* **Contribution to Society**
outdoor	Overall: cosmopolitan experience of activities and places; sport, socialising or adventures Pr92: sports, adventures and socialising Po92: academic facilities / sport facilities; socialising; activities in the nature	*[Cosmopolitan Experience]* **Engagement**
challenging	Overall: ambition or ability to succeed; abilities to tackle issues; sport competition	*[Recognition]* **Resilience**

Keyword	Characteristics of Use in Contexts	UCT
	Pr92: ambition for excellence; raising social and economic issues Po92: sport competition; thrive after a challenging time; tasks to accomplish in research	

Table 54 RUGGEDNESS Keywords and Characteristics of Use in Contexts

6.2.7 *Collocations of SINCERITY Keywords*

The collocations of the BP SINCERITY keywords identified in section 5.3.4–**open**, **good**, **standard(s)**, **understanding(s)**, **relation(s)** and **originality**–are discussed here. Table 55 groups into their semantic categories the collocate words that occur at least ten times in the keyword contexts.

Semantic Categories		Collocate Words
Action	**(32)**	*promote [friendship and understanding among people] (18) experience [extra-curricular activities, skill development] (14)*
Affiliation	**(91)**	*UK [citizen] (51), EU [citizens] (27), national [non-UK/EU citizens] (13)*
Assistance	**(0)**	-
Cosmopolitan	**(0)**	-
Creativity	**(0)**	-
Enterprise	**(0)**	-
Evaluation	**(547)**	*high (129), rigour (92), good (51), new (46), significance (45), quality (45), excellent (27), professional (24), eligibility (22), integrity (21), excellence (19), great (16), standard (10)*
Education	**(159)**	*research (131), knowledge (18), studies (10)*
Finance	**(0)**	-
Governance	**(16)**	*governance [good research / academic culture] (16)*
People	**(39)**	*applicant (39)*
Place	**(131)**	*library (32), country (30), room (20), place (19), space (18), repository (12)*
Prospects	**(0)**	-
Security	**(76)**	*maintain [high standard] (30), ensure [high standard] (29), committed [high standard] (17)*
Sport	**(17)**	*Olympic (17)*
Success	**(74)**	*award (38), achieve (12), recognise (12), world-leading (12)*
Time	**(209)**	*day (88), term (43), night (20), hour (18), now (17), week (12), autumn (11)*
Tradition	**(0)**	-
Transport	**(0)**	-

Table 55 Semantic Categories and Collocations of SINCERITY Keywords
Numbers in parentheses = frequency; Blue colour = collocate words appearing in 2 BP dimensions; Green colour = collocate words appearing 3 or more BP dimensions

The table shows that the semantic categories that are particularly strongly represented in SINCERITY keyword contexts are **Evaluation** (547 collocate occurrences), **Time** (209), **Place** (131), **Affiliation** (91), **Security** (76) and **Success** (74). Looking at the variety of terms appearing in various categories, we see that the highest number of different collocate words is found in the **Evaluation** (13 words) semantic categories, which are also the categories with the highest frequencies of collocates. The collocate words in **Evaluation** convey meanings of good quality, such as *rigour*, *significance*, *quality*, as well as integrity and excellence. The high number of collocations in these two semantic categories suggest that these ideas are an important feature of the SINCERITY keyword contexts. Like the **Evaluation** category, the collocate words in the **Success** semantic category also relate to expressions of high quality, as seen for instance in *award, achieve, recognise* and *world-leading*, while the collocates in the **Security** category, *maintain* and *ensure*, and *committed*, commonly relate to the sustainability of the university's success. In other words, collocate words associated with the BP SINCERITY dimension help to communicate an impression of high quality and good academic practice. The next section will examine in more detail these contexts of use.

6.2.8 *Contexts of BP SINCERITY Keywords*

The BP SINCERITY keyword contexts are typically concerned with issues of good practice, governance and cross-border activities. The main keywords that will be examined in detail in this section are *good*, *standard*, *open* and *understanding*. Some of the contexts of different keywords, such as *good* and *standard*, convey the same or strongly related meanings and therefore, where appropriate, these keywords and contexts will be discussed together in the analysis that follows.

Looking first at contexts in which *good* and *standard* are used, we see a focus on good academic practice. Specifically, these contexts highlight ideas related to collaboration and sharing of knowledge, as in example (55), and to integrity, honesty and other aspects of good conduct in research, as shown in (56), (57) and (58). Good practice in research is also seen to be a matter of accountability, not only to the university, but also to the funding body, to the profession and to other staff and students involved (59).

> (55) [We will] [*] increase research grant and contracts income to levels that improve our ranking and global recognition [*] improve our internal mechanisms to promote collaboration and sharing of *good* practice [*] ensure the quality of our research is reflected in our knowledge exchange activities (PrM--Kent--Mission)

> (56) The UKRIO Code of Conduct further identifies the key principles in *good* research practice as excellence, honesty, integrity, co-operation, accountability,

providing and obtaining the necessary training and skills, and safety. (PrL--City_London--Research)

(57) [The University aims to] ensure that there are adequate structures to promote and promulgate *good* research practice: It is the responsibility of each individual member of the University involved in research to adhere to the principles of good research practice. (PoL--Kingston--Research)

(58) [In responsibilities for research practice] research users and the wider community require the maintenance of the highest *standards* of integrity. The University of Cambridge is committed to achieving excellence in research and scholarship. (PrH--Cambridge--Research)

(59) Individual researchers (both staff and students) are expected to take direct responsibility for their own *standard* of practice and to recognise that they are accountable for this to the University, to any other funding body concerned, to their profession and to other staff and students involved in the research. (PrL--City_London--Research)

We will now consider some of the other contexts of the keyword *standard*. These also focus on adhering to principles of good practice, but often with an added emphasis on how this is achieved through partnerships or involves gaining recognition from outside bodies that have set or assess the 'standards' in question. For instance, example (60) highlights the idea that high quality standards of learning and teaching are achieved and maintained by working in partnership with students. In terms of the recognition of outside bodies, example (61) shows Coventry University promoting the international quality of its research by noting the ratings it received in the Research Assessment Exercise, which shows that the university adheres to standards set by external bodies or organisations.

(60) The University's approach to Learning, Teaching & Assessment will be underpinned by: high quality academic *standards*; working in partnership with students; the development and embedding of technology enhanced learning, social learning and assessment; and research-informed teaching. (PoM--Cardiff_Met--Mission)

(61) In the 2008 Research Assessment Exercise, almost two-thirds of our submitted research was rated as international, internationally excellent, or world-leading *standard*. We are continuing to build on this success in collaboration with businesses, external funders, students and the wider community. (PoH--Coventry--Research)

The contexts in which the keyword *understanding* occurs add to the picture by illustrating the kinds of activities that exemplify good practice and earn recognition. Examples (62) and (63) emphasise collaborative and interdisciplinary research and knowledge exchange, some of which are related to social inclusion and social justice. Example (63) describes how these

collaborations and successful partnerships can facilitate growth, transforming lives and businesses. Both (62) and (63) promote the idea that the understanding that arises from academic activities has an impact beyond Higher Education, as a benefit to the wider society.

> (62) Our interdisciplinary research and knowledge exchange provides a critical and intellectual basis for individuals interested in interrogating their own personal and professional ***understandings*** of inclusion, equality, social justice and the lives of those in disconnected populations. (PoL--CCCU--Research)

> (63) The benefits that successful partnership can bring must be recognised and embedded. The rewards flowing from partnership are achieved though shared goals and ideals, openness, mutual ***understanding*** and trust and the willingness to learn from each other and grow the relationship. Partnership provision will transform lives and businesses. (PoL--Staffordshire--Mission)

Another feature of the contexts in which ***understanding*** occurs is a focus on the broader, global environment in which students are being educated. For example, (64) a connection is made between the 'well-rounded' education that students at Liverpool receive and their status as 'global citizens' who have the 'inter-cultural understanding' needed to address 'the world's most pressing problems'. Example (65) stresses the broader implications of research in particular areas of the arts as making a 'profound contribution' to our understanding of 'the world around us'. These examples highlight the idea that university research and teaching promote understanding of and intellectual engagement with the world beyond academia. We can examine this notion of broad intellectual horizons further by looking at the contexts in which the keyword ***open*** is used. Examples (66) and (67) show that use of ***open*** is associated with being open to new ideas and open mindedness, which are also related to the notion of students' broad intellectual horizons, as discussed in section 2.3.2.

> (64) We will continue to develop a high-quality environment in which to educate well-rounded, enquiring global citizens who connect and engage – through their learning, research, civic engagement and inter-cultural ***understanding*** – with the world's most pressing problems. We will integrate teaching and research to ensure that we derive the maximum benefit from our rich environment of intellectual enquiry and challenge. (PrL--Liverpool--Mission)

> (65) Research specialists in the College of Arts are making a profound contribution to our ***understanding*** of the world around us, whether by preserving our most cherished architectural treasures, or examining our cultural history. (PoH--Lincoln--Research)

> (66) Whether you already know what you want to do, or are ***open*** to new ideas as you explore the graduate arena, studying at City University London will give you the best possible start in your career. (PrL--City_London--Life)

(67) We don't just push boundaries, we break them. We don't just open books, we *open* minds. (PoL--Staffordshire--History)

To summarise, the contexts of the keywords *understanding* and *open* highlight the ideas of 'well-rounded' education, promoting open-mindedness of the university culture. Table 56 summarises the characteristics of use of BP SINCERITY keywords and the UCTs associated with the SINCERITY dimension.

Keyword	Characteristics of Use in Contexts	UCTs
open	Overall: new ideas; broad mind; scholarships Pr92: new ideas; scholarships for students from any background or country Po92: broad mind; freedom of beliefs; scholarships, especially for sports	*[Good Practice]* *[Intellectual Horizons]* *[Support for Education]*
good	Overall: practice, governance, research, place for leisure activities Pr92: research practice, integrity, place for leisure activities Po92: performance for research and academic practice; place for leisure activities	*[Good Practice]* *Engagement*
standard(s)	Overall: facilities; teaching; partnerships; accommodation Pr92: integrity; good research; good practice; internationally-accepted level of quality of research practice and academic activities Po92: collaboration with students / business / external agents / institutions; approaches for facilitating the development of knowledge and research; sport, art facilities; accommodation	*[Collaboration]* *[Good Practice]* *Engagement* *Good Living*
understanding(s)	Overall: social aspects / people's thoughts, behaviours, health / countries' and world's situations Pr92: situations in the world / continents / countries / novel concepts across disciplines Po92: social situations, sustainability and societal impact, trust and willingness in partnerships and collaboration	*[Collaboration]* *[Impact]*
relation(s)	Overall: collaboration between institutions and countries Pr92: understanding cultural aspects of different countries; policy for world's solution; establishment of interconnection amongst students	*[Diversity]* *Collaboration*

Keyword	Characteristics of Use in Contexts	UCTs
	Po92: understanding social situations; valuing diversity; partnerships for research	
originality	Overall: research, academic activities Pr92: excellence and rigor in research Po92: (as in those of Pr92)	*[Knowledge Transfer]* *[Recognition]*

Table 56 SINCERITY Keywords and Characteristics of Use in Contexts

The UCTs associated with the SINCERITY keywords highlight various characteristics and qualities that the universities are keen to promote: ***Collaboration***, ***Diversity***, ***Engagement***, ***Impact***, ***Support for Education*** and ***Recognition***. The UCTs ***Good Living*** and ***Intellectual Horizons*** reflect the focus on aspects of the student experience beyond their academic studies, while at university and afterwards. All of the UCTs are linked with the universities' concerns with following and promoting good practice and there is also a strong interest across the various areas covered by the UCTs in emphasising the contribution that universities make in encouraging open-mindedness and an understanding of diverse cultures and global situations. Studying and living in an environment that promotes these qualities can therefore be seen as offering opportunities for students to develop a 'cosmopolitan mindset' (see section 2.3.2) and thereby contribute to their success in terms of their employability and future career opportunities.

6.2.9 *Collocations of SOPHISTICATION Keywords*

This section examines the collocates of the SOPHISTICATION keywords that were identified in section 5.3.5, namely ***excellent***, ***renowned***, ***cosmopolitan*** and ***pretty***.

Semantic Categories		Collocate Words
Action	**(106)**	*lead (89), experience (17)*
Affiliation	**(10)**	*relationship [with people or organisations] (10)*
Assistance	**(50)**	*provide (50)*
Cosmopolitan	**(333)**	*internationally (214), world (81), international (28), city (10)*
Creativity	**(0)**	-
Enterprise	**(0)**	-
Evaluation	**(77)**	*star (20), originality (17), significance (16), grade (12), judge (12)*
Education	**(88)**	*research (39), teaching (23), skill (14), training (12)*
Finance	**(0)**	-
Governance	**(0)**	-

Semantic Categories		Collocate Words
People	(10)	*staff (10)*
Place	(102)	*facility (58)*, *environment (18)*, *department (14)*, *campus (12)*
Prospects	(0)	-
Security	(0)	-
Sport	(10)	*sport (10)*
Success	(123)	*world-leading (65)*, *quality (21)*, *recognise (16)*, *impact (11)*, *reputation (10)*
Time	(17)	*term (17)*
Tradition	(12)	*history (12)*
Transport	(34)	*link (21), transport (13)*

Table 57 Semantic Categories and Collocations of SOPHISTICATION Keywords
Numbers in parentheses = frequency; Blue colour = collocate words appearing in 2 BP dimensions; Green colour = collocate words appearing 3 or more BP dimensions

Table 57 shows that the semantic category that is most strongly represented in SOPHISTICATION keyword contexts is **Cosmopolitan** (333 collocate tokens), followed by **Success** (123), **Action** (106) and **Place** (102). The number of different collocate words is highest in the **Success** category (five words), followed by **Evaluation** (five words), **Cosmopolitan** (four words), **Education** (four words) and **Place** (four words). The collocate words with the highest frequencies of occurrence are *internationally* (214), *lead* (89), *world* (81), *world-leading* (65), *facility* (58), *provide* (50) and *research* (39). These words suggest that the focus in this BP dimension is on issues related to the international recognition of university research and facilities. The **Success** semantic category reflects these issues very clearly, with the collocates *world-leading*, *quality*, *recognise*, *impact* and *reputation*. The collocate words in the **Evaluation** category also reflect the theme of recognition, as seen in *star*, *originality*, *significance*, *grade* and *judge* which are research-related in the contexts they occur. In the **Education** category, the collocates *research*, *teaching*, *skill* and *training* clearly suggest that research and teaching are areas of emphasis, which can be linked to the themes reflected in the collocates of the **Success** category. Collocate words in the **Cosmopolitan** category, *internationally, international, city* and *world*, highlight the global environment in which universities operate. It is notable that the adverb *internationally* is by far the most frequent collocate associated with the SOPHISTICATION keywords (214 tokens, with the next most frequent being *lead*, at 89). Finally, collocate words in the **Place** category, *facility*, *environment*, *department* and *campus*, unsurprisingly suggest an emphasis on the university environment and surroundings. These themes are examined in the next section through a more detailed analysis of some of the contexts.

6.2.10 *Context of SOPHISTICATION Keywords*

The SOPHISTICATION keywords that are discussed in this section are *excellent*, *renowned*, *cosmopolitan* and *pretty*. With respect to the contexts of SOPHISTICATION, a combination of the diversity of people, and recognition of research and community are discussed. Firstly, the university atmosphere and the vicinity reiterate the themes identified in the previous section (i.e. university's reputation, international recognition) as common ideas shown in the SOPHISTICATION keyword contexts. Secondly, the collocations are related to the university's facilities and environment. In looking at the keyword contexts in more detail, we will see that those dealing with the university's reputation often convey successful results judged by external bodies or international organizations (i.e. research outputs rated world leading 4*), while those that focus on the facilities and environment often promote a sense of vibrancy' (i.e. campus facilities).

The contexts, in particular, in which *cosmopolitan*, *renowned* and *pretty* occur, share commonalities in terms describing and promoting the vibrancy of local communities or of the surroundings. Common ideas communicated in these contexts are that the location offers a mix of new, dynamic and classic or historical charms as a home for students from various parts of the world. They also highlight recreational facilities and inspirational architecture and venues such as museums, restaurants, cafés, cinemas, theatres. These ideas are found in texts from both Pr92 and Po92 institutions.

Examples (68) to (71) are emphasising what the university city in question offers. It is notable that contexts containing references to *cosmopolitan* communities, cultures and atmospheres also highlight tradition, through references to historic sites and heritage: 'known for its historic charm and *cosmopolitan* community' in (68); 'rich heritage and *cosmopolitan* culture' in (69); and 'blends impressive architecture and a rich history and culture with a vibrant *cosmopolitan* atmosphere' in (70). Example (71) first identifies various types of performing arts, from cultural performances, such as dance and operas, to comedy, for which Nottingham Trent claims it is internationally *renowned*, and then suggests that this cultural recognition is not recent by referring to its 'rich history in theatre and comedy performances'.

> (68) Aberdeen is a vibrant, creative and ambitious city, known for its historic charm and *cosmopolitan* community. The City of Aberdeen has something for everyone, from the bustling city centre of Europe's Energy Capital, to the beautiful countryside and coastlines, there's plenty to see and do. (PrL--Aberdeen--Local)

(69) City's values […] Our values acknowledge our history, rich heritage and *cosmopolitan* culture and provide the foundation on which our future is built. (PrL-- City_London—Mission..)

(70) Edinburgh, Scotland's capital, is amongst one of the most beautiful and exciting cities in the world. It blends impressive architecture and a rich history and culture with a vibrant *cosmopolitan* atmosphere. For students, Edinburgh has lots to offer; libraries, galleries, museums, cinemas, shops, clubs, pubs, restaurants, concert venues, theatres, a wide range of sports facilities and great transport links. (PoM-- Queen_Margaret--Local)

(71) The Royal Centre is a theatre and concert venue that hosts internationally *renowned* plays, dance performances, operas, concerts and comedy. The Nottingham Playhouse has a rich history in theatre and comedy performances. (PoH-- Nottingham_Trent--Local)

Other contexts in which *cosmopolitan* and *renowned* occur, as well as those of the keyword *excellent*, introduce an additional focus to the vibrancy and liveliness of the university campus and its environment through references to the bustling and exciting atmosphere. Example (72), for instance, makes this very clear in its reference to the combination of 'an exciting contemporary buzz with years of tradition and history'. Examples (73), (74) and (75) communicate the bustling feel of the campuses and local areas by listing some of the places and events that students can enjoy, such as eating, shopping and participating in social and leisure activities. To summarise, what we see in the contexts of *cosmopolitan*, *renowned* and *excellent* is the interplay of references to the university's culture and reputation, with its combination of the traditional and diverse, and to the university's environment and reputation tend to highlight its 'vibrancy' in terms of the many and varied attractions the campus and city offers to students.

(72) Canterbury is a World Heritage Site and a historic cathedral city. *Exciting and cosmopolitan Canterbury* [*] *CANTERBURY* [*] **Renowned** for its vibrant and friendly atmosphere, Canterbury combines an exciting contemporary buzz with years of tradition and history. (PoL--CCCU--Local)

(73) Worcester is surrounded by the rolling Malvern Hills and the Cotswolds, and offers sensational views of the Severn Valley. *Renowned* for its captivating history and colourful culture, the compact city centre has a large variety of riverside cafes, bars, stylish shops, museums, theatres, and plenty of live cultural events. (PoL-- Worcester--Local)

(74) Our state-of-the-art facilities and the students' union. With 15,500 students from around the world, the campus has a very *cosmopolitan* feel. [*] Campus facilities [*] Eat, shop, have fun (PrM--Kent--Life)

(75) The village offers great sports, social and leisure facilities, including a bar and restaurant, with *excellent* local amenities close by. (PrL--Liverpool--Life)

Contexts in which the keyword *pretty* occurs also emphasise the beauty and attractions of the local area. For example, the University of the Creative Arts highlights its location in the 'pretty Georgian market town' of Farnham, noting its 'rich arts scene, all nestled in the beautiful Surrey countryside' in (76), while the Queen Margaret website describes its home of Musselburgh near Edinburgh as 'a pretty coastal town' in (77).

(76) Craft Town status Welcoming creative community Excellent public arts venue Close to London 12th century castle. About Farnham […] Farnham is a *pretty* Georgian market town with quaint cobbled streets, a variety of independent shops and a rich arts scene, all nestled in the beautiful Surrey countryside. (PoH--UCA--Local)

(77) The campus is positioned between Musselburgh Station and Newcraighall, home of the Fort Kinnaird shopping complex. Musselburgh is a *pretty* coastal town and is East Lothian's largest and rapidly expanding town. At the last census in 2001, the population was 22,112 and has continued to grow as new housing developments have sprung up in recent years. (PoM--Queen_Margaret--Local)

As well as being used in contexts that relate to the campus and local environment, the keywords *excellent* and *renowned* are also used in contexts that highlight the reputation the university has for high quality research, as shown in the use of *excellent* in examples (78) and (79) and *renowned* in (80). The *renowned* contexts in examples (81) and (82) emphasise specific areas of specialisation that have received recognition.

(78) [We will achieve] [*] The delivery of research of the highest quality, meeting international standards of excellence across the full range of our subjects. [*] The provision of an *excellent* education to our students, delivered by world-class researchers (PrM--Kent--Mission)

(79) In the 2008 Research Assessment Exercise, almost two-thirds of our submitted research was rated as international, internationally *excellent* or world-leading standard. We are continuing to build on this success in collaboration with businesses, external funders, students and the wider community. (PoH--Coventry--Research)

(80) Research is at the heart of City's academic activities, with a *renowned* reputation for fostering interdisciplinary activity, innovation and creativity. Through research, our academic staff seek to advance knowledge in our areas of specialism and to bring value to society. (PrL--City_London--Research)

(81) [*] 11.1% of the 'Outputs' component of the Sport entry was classed as 'world leading' Internationally *renowned* research [*] 97% of the entire Sport entry was international *renowned* [*] 100% of the 'Impact' component of the Sport entry was international *renowned*. (PoM--Chichester--Research)

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(82) School of Physical Sciences Research expertise Kent's research staff are internationally *renowned* in areas of expertise spanning the sciences, technology, medical studies, the social sciences, arts and humanities. (PrM--Kent--Research)

In some cases, *excellent* and *renowned* are used in contexts that promote the quality of teaching and supervision, or of general academic activities, such as conferences and the university's ability to attract prominent scholars, as shown in examples (83) and (84).

(83) We will provide our students with outstanding teaching and supervision, to give them an *excellent* overall experience that develops their understanding and capability through a carefully considered range of formal and informal opportunities for learning. (PoM--Glouscestershire--Mission)

(84) A Conference Celebrating the 800th Anniversary of the University of Cambridge', the conference program included papers given by *renowned* scholars from around the world. (PrH--Cambridge--History)

To summarise, the contexts in which SOPHISTICATION keywords are used commonly focus on promoting the various attractions of the university campus and local area, often highlighting the range of leisure activities available to students. Other contexts focus on academic issues, especially the university's reputation, research specialisations and expertise, and adherence to good practice. Table 58 summarises the characteristics reflected in the contexts of each of the SOPHISTICATION keywords, linking them to the relevant UCTs. Those appearing in square brackets can be related to the DFs that influence students' choices, as reviewed in section 2.3.1-2.3.3.

Keyword	Characteristics of Use in Contexts	UCTs
excellent	Overall: facilities, research, world-leading and international aspects for research and academic success Pr92: facilities for living and leisure activities; education; success in research and education Po92: success in research and education	*[Recognition]* *[Learning Facilities]* *[Recreational Facilities]*
renowned	Overall: research / impact / historic, historical place / university Pr92: recognition in academic activities; value that academics bring to society Po92: vibrant environment; historic and historical places; recognition in academic activities; research; sports; music; theatre	*[Cosmopolitan Experience]* *[Impact]* *[Recognition]* *Tradition*
cosmopolitan	Overall: internationally aspects of atmospheres and communities; areas with historic charm and heritage	*[Cosmopolitan Experience]*

Keyword	Characteristics of Use in Contexts	UCTs
	Pr92: beauty of a city with heritage, dynamic and lively atmospheres Po92: (as in those of Pr92)	*Good Living* *Tradition*
pretty	Overall: nice local areas Pr92: (no relevant occurrence) Po92: nice local areas	*Good Living* *Tradition*

Table 58 SOPHISTICATION Keywords and Characteristics of Use in Contexts

The table shows that UCTs associated with the SOPHISTICATION dimension are *Cosmopolitan*, *Good Living*, *Tradition*, *Impact*, *Learning Facilities*, *Recreational Facilities* and *Recognition*. These UCTs suggest, in relation to the BP SOPHISTICATION dimension, that universities are keen to promote the message that students are provided with a positive and pleasant university experience partly through good living facilities in an area of natural beauty and historic charm, and exposure to a community with a cosmopolitan and lively atmosphere. A sense of SOPHISTICATION is also conveyed through references to the university's academic reputation, but generally in combination with a focus on these broader environmental factors.

6.3 Summary and Discussion of the Findings related to BP Keyword Collocates and Contexts

This section ties together and discusses the findings presented in the preceding sections of this chapter. The findings address research question two (see section 1.2: What patterns of similarity and difference are there in use in contexts of the BP words when comparing the website texts of the pre-1992 universities with those of the post-1992 institutions? The difference between BP reflected in the contexts in Pr92 and Po92 corpora is that Pr92 texts emphasises research and solutions that universities offer to better society. Po92 texts focus on academic and non-academic activities, including sport and international enterprise. The contexts show a number of similar themes commonly occurring in Pr92 and Po92 corpora. To begin, Table 59 summarises the UCTs and provides their definitions. Table 60 summarises the UCTs that were found to be reflected in the keyword contexts of each of the five BP dimensions of various UCTs.

UCT	Characteristics
Collaboration	The action that people work together for academic or non-academic activities
Contribution to Society	Academic or non-academic deeds that have a positive impact to society
Cosmopolitan Experience	Experience of places, people or community with the diversity of people, mindsets, thoughts and ways of living
Diversity	A variety of people, mindsets, thoughts and ways of living
Employability	Quality and abilities that improve career prospects
Engagement	Academic and/or non-academic activities where students / staff are actively involved
Facilities	Academic, recreational or living facilities
Friendship	Establishment of friends
Good Living	Positive, enjoyable experiences in non-academic university life
Good Practice	Practice leading to good outcomes in academics, careers, life
Impact	Academic contributions that provide positive outcomes beyond academia
Inclusivity	Belongingness of a community
Intellectual Horizons	Broaden perspectives of one's world view
Knowledge Transfer	Exchange of knowledge of any form (academic / non-academic) via either physical or non-physical mobility
Living Comfort & Safety	Safe, sound and comfortable life at home and at the university
Local Experience	Experience of place or with people in the local community
Recognition	Prestige judged on the basis of established standards
Resilience	An ability to persevere with tasks or projects until they reach a clearly-defined goal
Support for Education	Financial, educational or emotional support for students to help them gain access to and succeed in Higher Education
Support for Enterprise	Mission or practice aiming at prosperity in commercial initiatives
Tradition	Places or history of places and people in the past of supreme values as a lineage of an identity in the present time

Table 59 Summary of the University Corpus Themes (UCTs) and their Characteristics

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
[Collaboration]		*[Collaboration]*	*[Collaboration]*	
[Cosmopolitan Experience]	*[Cosmopolitan Experience]*	*[Cosmopolitan Experience]*		*[Cosmopolitan Experience]*
[Diversity]	*[Diversity]*		*[Diversity]*	
[Employability]	*[Employability]*			
[Facilities]				*[Facilities]*
[Good Practice]			*[Good Practice]*	
[Impact]	*[Impact]*		*[Impact]*	*[Impact]*
	[Inclusivity]			
[Intellectual Horizons]	*[Intellectual Horizons]*		*[Intellectual Horizons]*	
[Knowledge Transfer]	*[Knowledge Transfer]*	*[Knowledge Transfer]*	*[Knowledge Transfer]*	
[Living Comfort & Safety]				
[Support for Enterprises]	*[Support for Enterprises]*			
[Recognition]	*[Recognition]*	*[Recognition]*	*[Recognition]*	*[Recognition]*
[Support for Education]	*[Support for Education]*		*[Support for Education]*	
Contribution to Society	*Contribution to Society*	*Contribution to Society*		
Engagement	*Engagement*	*Engagement*	*Engagement*	
	Friendship			
Good Living	*Good Living*		*Good Living*	*Good Living*
Local Experience				
		Resilience		
Tradition				*Tradition*

Table 60 Summary of Findings of UCTs from the contexts of the keywords associated with the five BP dimensions

[UCT] = UCTs that can also be related to the DFs discussed in section 2.3.1-2.3.3

Table 60 shows UCTs that emerge in BP dimensions from the analysis of contexts in sections 6.2.1-6.2.10. From Table 60 we see that *Recognition* is the only UCT that is associated with all five BP dimensions. This finding agrees with interpretations put forward by Altbach and Salmi (2011), Brown and Carasso (2013), Olssen and Peters (2007), and Teichler (2004), according to which university prestige is seen as a central concern for university management. The *Recognition* UCT also corresponds closely with Rauschnabel et. al's (2016) University BP Scale Factor 2, Prestige. Another of the UCTs, *Impact*, which is found associated with all of the BP dimensions except RUGGEDNESS, has similar characteristics to *Recognition* (see

Table 60), but with a specific focus on the significance of internationally-recognised research in terms of its wider social benefits. Other UCTs that directly relate to students and the student experience are *Cosmopolitan Experience*, *Knowledge Transfer* and *Employability*. Table 60 shows that the first two of these are each associated with four of the five BP dimensions, and all three are associated with COMPETENCE and EXCITEMENT. These findings fit in with the highlighting by Brooks and Waters (2012) and Hannerz (1996) of the notion that the experience of pursuing Higher Education overseas can increase career prospects and that the cosmopolitan mindset enables graduates to excel in a globally competitive workforce. The correspondence between UCT findings and the ideas highlighted by Brooks and Waters (2012) and Hannerz (1996) indicates that universities are seeking to promote information that they (presumably) know are of interests to perspective students. For instance, *Cosmopolitan Experience*, *Knowledge Transfer* and *Employability* UCTs in Table 60 are also marked as students' DFs as discussed in 2.3.1-2.3.3. These UCTs can be related to some of the effects of neoliberalism on the Higher Education sector, as suggested by Olssen and Peters (2007), where knowledge transfer, knowledge enterprise, recognition, public relations and branding are elements in the management of market-driven Higher Education Institutions (discussed in section 2.2).

Other UCTs are focused on society and the student experience. First, the *Contribution to Society* theme is seen in contexts related to tackling social issues and finding solutions that promote inclusion and potentially lead to creating a better living environment, where the impact of university activities, including those that engage students, is central in developing and applying new approaches and new knowledge. Second, in terms of the student experience, the corpus analysis reveals that there is a focus in the website texts on the *Diversity* of the student body and on broadening *Intellectual Horizons*. These concerns can be related to the students' exposure to *Cosmopolitan* environments, which widen their worldview and thereby improve their *Employability*, in keeping with the ideas highlighted by Brooks and Waters (2012) and Hannerz (1996). The *Cosmopolitan* UCT corresponds to Rauschnabel et al.'s (2016) University BP Scale (UBPS) Factor 6, Cosmopolitan, which they associated with 'study abroad or job opportunities through university networks' (p. 6). It is therefore advantageous for a university to promote this theme in their website material because it ties to a major DF for prospective students.

References to other aspects of the student experience, such as their social lives, the way in which they approach their studies, and the support the university offers them, are also prevalent in the corpora, as encapsulated in the UCTs *Friendship*, *Good Living*, *Good*

Practice, Inclusivity and *Support for Education*. [The *Good Practice* UCT refers to the way universities operate – i.e. in seeking to meet high standards in the teaching and research. This UCT also extends to the idea of developing reflective skills and transferable skills for careers, as discussed in 2.3.3]. The UCT themes of *Good Practice* and *Support for Education* (i.e. support that is offered by universities) correspond to Rauschnabel et al.'s (2016) UBPS Factor 2, Sincerity (i.e. Fair, Friendly, Helpful, Humane, Trustworthy). In addition to the support for students, the *Friendship* UCT relates to Rauschnabel's et al.'s (2016) UBPS Factor 4, Lively, while the *Good Living* and *Inclusivity* UCTs do not correspond to any UBPS. Discussing *Inclusivity*, in particular, Read et al. (2010) highlight that 'non-traditional students', for example mature students and those that are the first-generation in the family pursuing a higher education, consider the issue of inclusion in the academic culture and social life at the university as an important factor when it comes to choosing a university. The latter group of students found that the hierarchical culture in academics can be intimidating (ibid.). Burdett (2013) also found that students from various backgrounds also consider the environments, university members, academic and student culture of the universities when deciding on the university of their choice (see section 2.3.2). In this regard, *Inclusivity* could be considered as an additional part of university culture.

Lastly, the corpus analysis reveals the importance of UCTs related to *Local* communities and *Tradition*, which refer to notions of heritage, history and local attractions. The *Tradition* and *Local* UCTs do not correspond to any of the factors in Rauschnabel et al.'s (2016) UBPS. Yet these themes are related to Ren and Blichfeldt's (2011) findings about place branding, where history and culture are communicated as uniqueness of a destination. In addition, the findings suggest that an international tourist destination presents its differentiation point, in particular, by focusing on local culture (p. 427). In this regard, *Local* and *Tradition* UCTs can be considered as part of branding activities for the local areas where students will live and experience.

These findings show that the common concerns of university website texts are related to both the university's perspective (corporate identity) and the students' perspective (corporate image), as discussed in 2.4.1. This suggests that not only do universities present their brands by communicating about who they are (i.e. their success, good practice), they also project identity in terms of the students' perspective (i.e. students' success, employability, academic support, student life). In sum, UCTs that are linked with corporate identity are *Collaboration*, *Diversity*, *Facilities*, *Knowledge Transfer*, *Good Practice*, *Impact*, *Recognition*, *Support for Enterprise* and *Tradition*. UCTs that are associated with corporate image are *Cosmopolitan*

Experience, *Employability*, *Friendship*, *Good Living*, *Inclusivity*, *Living Comfort & Safety*, *Resilience* and *Support for Education*. UCTs that are related to both corporate identity and corporate image are *Contribution to Society*, *Engagement*, *Intellectual Horizons*, and *Local Experience*.

The next point to consider it how the UCTs identified above relate to the two approaches to promoting a strong brand, namely the Rational and Emotional approaches that were described in section 2.4.3.2. The Rational approach to the communication of a brand concerns functional advantages such as product attribute, while the Emotional approach focuses on the communication of other desirable advantages that enhance emotional connections that establish relationships with the brand so that it occupies the minds of the customers (Keller, 2013; Kotler and Armstrong, 2016). Table 61 summarises links that can be made between the UCTs and these two approaches, indicating which of the themes are part of the Rational approach, which are part of the Emotional approach, and which are associated with both.

Rational Approach (Functional Advantages)	Emotional Approach (Desirable Advantages)
Cosmopolitan Experience	
Contribution to Society	
Diversity	
Engagement	
Facilities	
Intellectual Horizons	
Knowledge Transfer	
Local Experience	
Tradition	
Collaboration	*Friendship*
Employability	*Good Living*
Good Practice	*Inclusivity*
Impact	*Living in Comfort & Safety*
Support for Enterprise	
Resilience	
Recognition	
Support for Education	

Table 61 Links between UCTs and the Rational and Emotional approaches to promoting a strong brand
Non-shaded Area = UCT related to both the Rational and Emotional approaches to brand promotion

Shaded Area = UCT related to either the Rational or the Emotional approach to brand promotion

In sum, the focus of the UCTs associated with the two approaches to branding suggest that, in communicating with prospective students through the text of their websites, universities seek to emphasise that they not only provide students with skills that will help them pursue future career opportunities, but are also a platform that prepares students more generally for life after graduation through a range of experiences above and beyond the academic knowledge they gain from their chosen degree programme.

6.4 Conclusion

The analysis of the university website texts presented in this chapter has focused on exploring four areas: (1) the characteristics of the contexts in which the keywords associated with each of the five BP dimensions occur; (2) the UCTs that can be identified on the basis of these characteristics for each of the five BP dimensions; (3) the relationship between these UCTs and the Rational and Emotional approaches to promoting a brand. Firstly, the qualitative corpus analysis of keyword contexts in this chapter indicates that in the texts of their websites universities seek to emphasise the ways in which their research and teaching help to address issues and problems by supporting innovation and enterprise and by providing students with the knowledge and transferable skills they need in order to improve their own future prospects and help create a better society. Although broadly speaking they promote the same kind of activities and qualities, it is notable that texts in the corpus of pre-1992 universities have more of an emphasis on research activities, while the post-1992 university texts have more explicit focus on enterprise, non-academic activities (e.g. sports) and facilities on campus (see section 6.2.10). Secondly, many of the UCTs that are reflected in the website texts can be related to the DFs that might influence prospective students (see section 2.3.1-2.3.3, 6.3) and to the factors identified in Rauschnabel et al's (2016) University BP Scale, especially those associated with the students' quality of life and cosmopolitan experience, and to qualities of universities in terms of good academic practice and thriving research at the university. However, it is notable that the interweaving or embedding in some of the website texts of the *Cosmopolitan Experience* theme with the themes of *Local Experience* and *Tradition* is not reflected in Rauschnabel et al.'s (2016) UBPS Cosmopolitan Factor. Thirdly, in some cases, UCTs can be associated with either the Rational or the Emotional approaches to promoting a strong brand. Those themes that can be linked to the Rational approach are related to the academic benefits that students can gain from studying at a given university and to the positive impact that their studies will have on their future careers. UCTs associated with the

Emotional approach involve students' quality of life at university in areas outside of their academic studies. Other UCTs can be linked to both the Rational and Emotional approaches. These UCTs are related to transferable skills and career opportunities. Finally, contexts of UCTs in the five BP dimensions are reflected in the communication of both university-focused corporate identity and student-focused corporate image in language use on university websites. Reflecting on how the BP is approached with corpus linguistics methods for the analysis, the BP model is applicable in the contexts of HE, where the use of BP words is specific to university-related activities. Applying the BP model would require researchers to rule out the BP words in which their meanings in contexts are not associated with the BP dimensions. Although most BP words are applicable in the contexts of HE, there is variety in the degree to which the use of BP words corresponds to Aaker's BP dimensions. In this regard, an estimation of the extent to which their use in contexts is generally applicable (e.g. a high percentage of use in contexts of BP words is associated with the BP dimensions) is required in the process of the analysis.

Chapter 7. Conclusion

7.1 Introduction

This concluding chapter begins with a summary of the project's main aims and findings in section 7.2. Some limitations that have been identified in the corpus linguistic methods that were used in the analysis of the Pr92 and Po92 corpora are presented in section 7.3. Section 7.4 offers some final conclusions.

7.2 Summary of the Findings

This project aims to apply corpus linguistic methods to examine Brand Personality (BP) reflected in texts collected from university websites of pre-1992 and post-1992 universities. The texts were analysed in terms of the five dimensions identified in Aaker's (1997) BP model, using the lists of words associated with each dimension in Opoku et al.'s (2006) BP dictionary as a starting point. The process of analyses involves: (1) a quantitative analysis conducted to identify which of the BP dictionary words are keywords in the corpora and to identify collocates of those keywords; (2) a qualitative analysis conducted to identify common themes in the contexts associated with the five BP dimensions and the ways in which these themes are linked to Decision Factors (DFs) for students to study overseas (sections 2.3.1-2.3.3, 6.3). The fundamental stages of the quantitative analysis began with frequency information BP words to obtain a global picture of BP in the corpus (sections 4.2.1-4.2.5). The next stage was identifying keywords and collocations to examine prominent BP words in the corpora. These words revealed the main features of texts (sections 5.3.1-5.3.5), leading the way to the qualitative analysis of use. The qualitative analysis investigated the use in contexts of the BP keywords and identified University Corpus Themes (UCTs) associated with BP keywords (sections 6.2.1-6.2.10). These UCTs were then compared with DFs (6.3). The UCTs were also linked with the 'Rational' and 'Emotional' approaches to communication of a strong brand (sections 6.3). These UCTs also reflect the ways in which universities project their (university-focused) corporate identity and (student-focused) corporate image (sections 2.4.1, 6.3).

Findings from the quantitative analysis of the corpora revealed differences between the pre-1992 and post-1992 university website texts. There were major differences in relation to the representation of the COMPETENCE dimension in the *History* text types, the EXCITEMENT dimension in the *Life on Campus* text types, the RUGGEDNESS dimension in the *Funding*

text types, and the SINCERITY and SOPHISTICATION dimensions in the *Funding* and *Research* text types. The broad impression of these differences was a matter of some of the dimensions not being as strongly represented in the stated text types in one of the corpora. For example, normalised frequencies of BP words in the *History*, *Life*, *Local*, *Mission* and *Research* text types of EXCITEMENT are high in both Pr92 and Po92 corpora, but relatively statistically significant differences were found in those of Pr92 for these text types. In addition to these differences in particular text types, the analysis also showed that there are fewer tokens of EXCITEMENT keywords occurring in the pre-1992 university texts in general. In some cases, keywords associated with a particular BP dimension were found to occur frequently in a particular text type in both the Pr92 and Po92 corpora. For example, SOPHISTICATION keywords are highly frequent in the *Local Area* text type. Despite the insights provided by the analysis of the keyword frequencies, it is important to remember that if we relied on these frequencies alone, we would miss some important features of the texts. For example, it is notable that the SOPHISTICATION keyword ***cosmopolitan*** is underrepresented in both the pre-1992 and post-1992 corpus texts (relative to the BNC as a reference corpus). Despite this apparent underuse of the word, qualitative analysis of the BP keyword contexts showed that the concept of cosmopolitan appears regularly through the use of other words.

A qualitative analysis of the BP keyword contexts identified a number of issues and themes associated with each dimension. For example, COMPETENCE keyword contexts often focus on collaboration, enterprise and dynamic activities, while EXCITEMENT keyword contexts emphasise innovations and engagement in activities. The RUGGEDNESS keyword contexts commonly feature references to outdoor recreational activities and global issues that require a solution. The SINCERITY keyword contexts often deal with academic good practice and quality of university life and finally, and the SOPHISTICATION keyword contexts frequently concentrate on recognition of research and the quality of life in the local areas. Twenty-one University Corpus Themes (UCTs) emerged from the qualitative analysis of the corpora (sections 6.2 and 6.3). Nine of these, including ***Cosmopolitan Experience*** and ***Tradition***, are related to both the 'Rational' and the 'Emotional' approaches to projecting a strong brand. Eight of the UCTs, including ***Employability*** and ***Recognition***, are associated with the Rational approach only, and the remaining four, including ***Friendship*** and ***Inclusivity***, are associated only with the Emotional approach.

7.3 Observations on the Methods Used and Suggestions for Future Research

The method adopted in this study combined quantitative and qualitative approaches to the analysis of the corpora. In the first instance, compared to traditional approaches of corpus-based discourse analysis, in which manual scanning is the main technique for investigating texts, corpus statistical methods were found to be effective tools for identifying and navigating the key contextual information. Several attempts using different statistical measures were carried out before deciding on adopting Log Ratio for extracting the keywords and collocates. The trials of several statistics revealed that employing a suitable statistic was crucial for achieving desirable outcomes. For example, exclusivity was an essential consideration in the extraction of keywords and collocate words, and Log Ratio supported this effectively by limiting the inclusion of grammatical words while allowing prominent lexical collocations.

With respect to the qualitative analysis, the centrality of the contexts was shown to be an important issue to consider. Looking in any detail at corpus contexts, it becomes clear that words that are closely-related in meaning (e.g. *graduate* and *graduation*) can nevertheless typically be used in the description of very different and very specific situations or issues (e.g. *graduate* prospects versus *graduation* ceremony). This accords with Hunston's (2011) suggestions in terms of the centrality and typicality of the use of words in contexts. This reminds us that an analysis that relies solely on searching for word forms through quantitative methods, involving no engagement with the specifics of the contexts, has the potential to conceal interesting features of the texts or to result in misleading conclusions.

The final observation is related to the application of the BP model as a framework for analysing contexts. The contextual analysis of the BP dimension keywords showed that some words — i.e. polysemous words or words with very broad meanings — are used in some contexts with meanings that do not correspond to their BP dimension. The Log Ratio statistic was a useful approach for identifying those BP keywords that are prominent in the university website texts, but this needs to be coupled with an investigation of whether their occurrences in context really are relevant to the BP dimensions they are associated with in Opoku et al.'s (2006) BP dictionary. A manual scanning of all contexts of the BP keywords was carried out in order to rule out unrelated BP words. Future studies that examine use in contexts of a very large number of keywords and collocates can consider an estimation for the patterns in which the keywords are used, if there is a limitation of time for manually investigating every single keyword. Future research can study the extent to which the BP words are prototypical to their

BP dimensions in the context of university websites, as well as investigating words that are also related to Aaker's (1997) BP, but that are not listed in the pre-existing BP dictionary.

Other elements of BP can be further examined in the future, for example, part of speech of contexts in which the BP keywords are commonly used. Future research could consider employing corpus linguistic methods for the analysis of brand personality in texts collected from websites of other industries. For example, investigating job-related corpora would be useful because both university websites and job advertisements share commonality in terms of target audience (e.g. university graduates). In this sense, we can understand to what extent career-related information presented on university websites and requirements of prospective employers correspond to each other.

7.4 Conclusion

To bring this project to a close, it can be concluded that both the Rational and Emotional approaches to the promotion of a brand are apparent in the texts of university websites. The Rational approach is evident in contexts that are related to academic issues that the universities are seeking to promote. On the other hand, messages about the lifestyle of students at the university and in the local area are generally communicated through the Emotional approach. In terms of the BP of university websites, the corpus contexts suggest that collaborations and partnerships, both within HE and between HEIs and outside organisations, are promoted as key elements in the development of new knowledge, discoveries and innovations. The BP of universities is projected in terms of the success of universities from both the universities' and the students' perspectives (i.e. universities' reputation, students' performance and employability and other DF-related themes). As well as emphasising success, both Pr92 and Po92 universities seek to promote student life, the campus and surroundings in their websites in order to encourage a particular view in their 'audience' of perspective students, which are related to both Rational and Emotional approaches to communicating a brand. The distinction for the differences between BP in the texts of the two corpora are that the pre-1992 corpus emphasises research-related activities, while the post-1992 corpus focuses on activities, sports and enterprises. The contexts of use of BP in both pre-1992 and post-1992 corpora highlight the engagement of various sectors and individuals is emphasised as essential elements in supporting achievement. Tackling social situations and devising solutions to meet the needs of social issues are also a focus of these contexts. In line with the social contexts, individuals and businesses are part of the arenas that universities play a key role in, seeking to generate socially useful dynamic flows of

knowledge and transferable skills. An environment that embraces the inclusivity of people and expertise can be promoted as part of university culture. Finally, the corpus methods employed in this study were useful for investigating the language and the BP of universities, in which the use of language reflects values in the sense that universities shape society in a variety of ways, from educating global citizens to creating innovations for developments. Universities can, in turn, use language to reflect the changes that they are determined to create in the future, for a better life and for the better living of all.

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Appendices

Appendix A Criteria for Text Collection

Text Types	Criteria for Text Collection
Funding	- Financial funding of all forms for all degree levels (e.g. undergraduate, graduate and research) - Financial awards for UK, EU and non-EU International students - Bursaries, fund, loan, scholarships, trust, students' employment - Information (brief or detailed) regarding funding that is provided under university (main) webpages **Note:** The details include description of the funds and who could be eligible. The texts do not include application forms and frequently asked questions.
History	- People, place, events and achievement of universities in the past
Life on Campus	- University facilities (such as museum, library, chaplaincy), services (such as advice, students' well-being), accommodation, sports, students' union, activities, food and drink, services and support, overview about academic life
Local Area	- General information about the city/town where the universities/campuses are located. Texts may include any of the following: things to do in the city (in some cases activities of the university that are engaged with the local community), such as attractions, night life, shopping, transportation, history of the city/town, art and culture
Mission	- Introduction, aims, directions of universities, vision
Research	- Overview and information about research conducted by the universities - research achievement, award winners, research environment, innovation, research support, research themes, research practice / integrity, brief details of research impact (but not research news, yet only topics of news may be included if listed in the front pages and pages of research impact of the research in main university websites) **Note:** Details about research news are not included because news discourse has a different genre, which could have been different from the texts appearing in general in terms of how language is expressed. Names or lists of committee members for research were not included because this thesis focuses on the general content of research and names added would have skewed the corpus size. Research in department websites and documents for internal staff were not included because the texts collected were based on general aspects of research.

Exclusion in Text Collection

1. People's directory contact list, non-university homepages, and information that was not specified in the criteria

2. Possible factors affecting a number of words that are different from each sub corpus in under the same category are: the nature of each websites; where websites are navigated (this text collection focuses on university main pages, but not department pages or homepages of non-university websites; some contents are in news which is not included in this study, due to its different genres.

3. Some sub corpora are smaller in size than others due to several factors, such as links to external pages. Given an example of research related texts from Cardiff Metropolitan university are smaller than those in other universities because much of information was provided in links to external websites, and some were related to research news; some were for internal users, which were excluded from text collection.

Appendix B Opoku et al.'s (2006) Dictionary of Brand Personality[11]

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
ABLE	ACTIVE	AL*FRESCO	ABOVE*BOARD	A*LA*MODE
ABLE*BODIED	AGGRESSIVE	ALFRESCO	ACCOMMODATING	ALLURING
ADEPT	ARTISTIC	ANIMAL	ACCURATE	AMIABLE
ADROIT	ARTY	ANIMALS	ACTUAL	ANGELIC
ASSIDUOUS	AUDACIOUS	ARDUOUS	AFFABLE	APPEALING
ASSURED	AUDACITY	BEEFY	APPROACHABLE	ARISTOCRACY
ASTUTE	AUTONOMOUS	BOISTEROUS	APPROACHING	ARISTOCRAT
AWARD*WINNING	AVANT*GARDE	BRUTAL	AUTHENTIC	ARISTOCRATIC
BLOOMING	AWE*INSPIRING	BUMPY	BENEFICIAL	ARISTOCRATICAL
BOOMING	AWESOME	CALLOUS	BENEVOLENT	ATTRACTIVE
BRAINY	BOLD	CHALLENGE	BENIGN	BARONIAL
CELEBRATORY	BOLDNESS	CHALLENGING	BLUNT	BEAUTIFUL
CERTIFIED	BOOST	COARSE	BONAFIDE	BLUE*BLOOD
COMPETENCE	BRACING	CONFRONTATION	BRIGHT	BLUE*BLOODED
COMPETENT	BRANDNEW	COWBOY	BUOYANT	BRUSH*UP
COMPLETE	BRAND*NEW	CRAGGED	CANDID	CAPTIVATE
COMPREHENSIVE	BRAVE	CRAGGY	CHARITABLE	CAPTIVATING
CONCERN	BRAVERY	CRIMSON	CHEERFUL	CELEBRATED
CONCLUSIVE	BREATHTAKING	CRUDENESS	CIVIL	CHARISMATIC
CONFINED	BRISK	CRUDITY	CIVILISED	CHARM
CONGLOMERATE	COLORFUL	CRUEL	CIVILITY	CHARMING
CONQUERING	COLOURFUL	DANGEROUS	CIVILIZED	CHERUBIC
CONSCIENTIOUS	COOL	DAUNTING	CLEAN*CUT	CLASSY

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[11] The * was added as a wildcard for the purpose of frequency word count of multiple word units (with and without a hyphen).

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
CONSISTENT	COURAGE	DAYBREAK	CLEAR*CUT	COSMOPOLITAN
CONSTANT	COURAGEOUS	DAYSPRING	COMMON	COTOURE
CRAFTINESS	COURAGEOUSNESS	DEMANDING	COMMONPLACE	COURTIER
CRAFTY	COURANT	DESERT	COMPANIONABLE	CULTIVATED
CUNNING	CRAZY	DIFFICULT	COMPASSIONATE	CULTURED
DEPENDABLE	CREATIVE	DURABLE	CONGENIAL	CUTE
DEXTEROUS	CREATIVITY	EFFORTFUL	CONTENT	DANDYISH
DILIGENCE	CRISP	ENDEAVOR	CONVENTIONAL	DE*LUXE
DILIGENT	CURRENT	ENDEAVOUR	CONVIVIAL	DELICATE
DOINGWELL	DARING	ENDURE	COOPERATIVE	DIGNIFIED
DOMINANT	DAZZLING	EXTERNAL	CORDIAL	DISTINCTION
ENTERPRISE	DESIGNER	EXTINCT	CORRECT	DISTINGUISHED
ENTERPRISINGNESS	DETERMINED	EXTREME	COURTEOUS	DOWNY
EQUIPOTENT	EARLY	EXTREMUM	CUSTOMARY	DULCET
ESTABLISHMENT	ELECTRIFYING	FEROCIOUS	DECENT	EDIFICATION
EVERLASTING	ELEVATE	FORCIBLE	DEFENSIBLE	ELEGANT
EXHAUSTIVE	EMANCIPATE	FRESCO	DIRECT	ELOQUENT
EXPERIENCED	EMANCIPATED	FRESHAIR	DISTINCTIVE	ENCHANT
EXULTANT	ENERGISE	FRONTIER	DOWN*TO*EARTH	ENCHANTING
FAIL*SAFE	ENERGISING	FURROW	EARNEST	ENDEARING
FIRM	ENERGIZE	GODFORSAKEN	EBULLIENT	ENGAGING
FIRST*PLACE	ENERGIZING	GRANITELIKE	EMOTIONAL	ENNOBLING
FLOURISHING	ENLIVEN	GRANITIC	EVERYDAY	ENRAPTURE
FOOLPROOF	ENLIVENING	GRATING	EXISTENT	ENTHRAL
FOR*CERTAIN	ENTERPRISING	GRAVEL	EXISTING	ENTHRALL
FOREFRONT	EXALT	GRUELING	FACT*BASED	ENTHRALLING
GAINFUL	EXALTING	GRUELLING	FACTUAL	ENTICING
GENIUS	EXCITATION	HARD	FAITHFUL	ENTRANCING
GET*AHEAD	EXCITE	HARD*BOILED	FORTHCOMING	EPICUREAN
GIFTED	EXCITED	HARDENED	FORTHRIGHT	ESTEEMED
GLORIOUS	EXCITEMENT	HARD*HITTING	FRANK	ESTHETIC
GOVERNANCE	EXCITING	HARSH	FRIENDLY	EXCELLENT
GUARANTEE	EXHILARATE	HAZARDOUS	GENEROUS	EXCLUSIVE
GUARANTEED	EXHILARATING	HEAVY*DUTY	GENIAL	EXCLUSIVITY
HARDWORKING	EXUBERANT	HUNT	GENUINE	EXPENSIVE
HARD*WORKING	FEISTY	HUNTING	GLAD	EXQUISITE
HI*TECH	FORCEFUL	HUSKINESS	GOOD	EXQUISITELY
ILLUSTRIOUS	FRESH	INHUMANE	GOOD*HEARTED	EXTRAVAGANT
IMPERISHABLE	FRESHNESS	INSENSITIVE	GOOD*HUMOURED	EYE*CATCHING
IN*FRONT	GUTSY	IRREGULAR	GRACIOUS	FABULOUS
IN*CHARGE	HAPPENING	JAGGED	GREGARIOUS	FANTABULOUS
INDUSTRIAL	HEROIC	JEANS	GUILELESS	FASCINATING
INDUSTRIALISE	HEROISM	JERKING	HALE*AND*HEARTY	FASHIONABLE
INDUSTRIALISED	HIGH*SPIRITED	JERKY	HEALTHFUL	FEMALE
INDUSTRIALIZED	HIP	JOLTING	HEARTFELT	FEMININE
INDUSTRIOUS	IMAGINATIVE	JOLTY	HEARTY	FIRST*CLASS
INDUSTRIOUSNESS	INDEPENDENT	JUNGLE	HELPFUL	FIRST*RATE

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
INDUSTRY	INDIVIDUAL	LABOURIOUS	HONEST	FLOSSY
IN*NO*DOUBT	INNOVATIVE	LEATHERY	HONESTNESS	FLUENT
INTELLECTUAL	INSPIRING	MACHO	HONESTY	FRAGILE
INTELLIGENT	INTREPID	MANFULLY	HONORABLE	FRAGRANT
JUBILANT	INVENTIVE	MANLY	HONORABLENESS	FULGID
KNOWING	INVIGORATING	MANNISH	HONOURABLE	GENTEEL
KNOWLEDGEABLE	IN*VOGUE	MASCULINE	HONOURABLENESS	GENTLE
KNOWLEDGEABLE*ABOUT	JUVENILE	MAVERICK	HUMANE	GENTLEMANLIKE
LASTING	LATEST	MOUNTAINOUS	HUMBLE	GENTLEMANLY
LEADER	LIBERATED	MOUNTAINS	INDISPUTABLE	GENTLEWOMAN
LICENSE	LIFTING	NERVE*RACKING	INIMITABLE	GILDED
LOGICAL	LIVEN*UP	NERVE*WRACKING	INSPIRED	GLAMOROUS
LONG*LASTING	LONE	OPEN*AIR	IRREPLACEABLE	GLAMOUR
LONG*LIVED	MODERN	OUTDOOR	JOVIAL	GLAMOUROUS
LONG*SUFFERING	MODERN*DAY	OUTDOORS	KIN	GLIB
LOYAL	MODERNISTIC	OUTDOORSY	KIND	GLIB*TONGUED
LUCRATIVE	MODERNNESS	OUTER	KINDLY	GLITTERING
MANUFACTURE	MODISH	OUT*OF*DOOR	KINSHIP	GLOSSY
MARKETABLE	MOVING	OUT*OF*DOORS	LEGITIMATE	GOOD*LOOKING
MECHANICAL	NERVE	OUTSIDE	LEGITIMATISE	GOOD*NATURED
MERCANTILE	NEW	PACHYDERMATOUS	LEGITIMATIZE	GORGEOUS
METHODOLOGICAL	NEWLY*ARISEN	PERDURABLE	LEGITIMISE	GRACEFUL
METICULOUS	NIFTY	PERILOUS	LEGITIMIZE	HANDSOME
MONEYMAKING	PLUCKY	PHYSICAL	LUCKY	HAUTE*COTOURE
MONEY*MAKING	PRESENT	POINTY	MATCHLESS	HIGH*BORN
OUTSTANDING	PRESENT*DAY	POTHOLED	MAUDLIN	HIGH*BROW
PAINSTAKING	PREVAILING	PRAIRIE	MERCIFUL	HIGHBROWED
PARTNERSHIP	PRISTINE	PRECARIOUS	MERRY	HIGH*CLASS
PERPETUAL	RECENT	PROHIBITED	MODEST	HIGH*PROFILE
PERSEVERING	REFRESHED	PUNISHING	NATURAL	HIGH*STATUS
PERSISTENT	REFRESHEN	RAMPAGEOUS	NOURISHING	IN*STYLE
POISED	REFRESHFUL	RESILIENT	NOVEL	IN*VOGUE
POTENT	REFRESHING	RIGOROUS	OBLIGING	INDULGENT
PRIZE*WINNING	REPRESENT	ROBUST	OLD*FASHIONED	LADY
PROCEDURAL	RESOLUTE	ROCKLIKE	OPEN	LORD
PRODUCTION	RESOURCEFUL	ROCKY	OPENHEARTED	LUSTROUS
PROFIT	RISKY	ROUGH	ORDINARY	LUXURIOUS
PROFITABLE	ROUSING	ROUGHENED	ORIGINAL	MAGNANIMOUSNESS
PROMISING	SHAKE*UP	ROUGHISH	ORIGINALITY	MAGNIFICENT
PROSPER	SHARP	ROUGH*TEXTURED	PERKY	MELLIFLUOUS
PROSPERING	SMASHING	RUGGED	PLAINSPOKEN	MELLISONANT
PROSPEROUS	SOLE	RUGGEDNESS	PLEASANT	NICE*LOOKING
PROTECTED	SOLITARY	RUTHLESS	PLENTIFUL	NOBILITY
PROUD	SOLO	RUTTED	POLITE	NOBLE
PUNCTILIOUS	SOVEREIGN	SAFARI	POLITENESS	NOBLEMAN
RESPONSIBLE	SPECIFIC	SALOON	POSITIVE	NOBLE*MINDED

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
PROFIT*MAKING	SPINE*TINGLING	SAVANNA	PRACTICAL	NOBLENESS
SAFE	SPIRITED	SAVANNAH	PRAGMATIC	NOBLESSE
SALABLE	STATE*OF*THE*ART	SCRAGGY	PROPER	NOBLEWOMAN
SALEABLE	STIMULATING	SCRATCHY	PROPERNESS	PATRICIAN
SCIENTIFIC	STIRRING	SERRATED	REAL	PHOTOGENIC
SECURE	STOUT	SEVERE	REALISTIC	PICTURESQUE
SELF*ASSURED	STRONG*WILLED	SPARTAN	RELATION	PLEASING
SELF*CONFIDENT	THRILLING	STONY	RELATIONS	POLISHED
SELF*POSSESSED	TONIC	STRAINING	RELATIONSHIP	POSH
SELLABLE	TRENDY	STRAPPING	RELIABLE	PRECIOUS
SHELTERED	TURN*ON	STRENUOUS	REMARKABLE	PREEMINENCE
SMART	UNCONSTRAINED	STRONG*ARM	RESPECTABLE	PRESTIGIOUS
SOLID	UNDEVELOPED	STRUGGLE	RESPONSIVE	PRETTY
STAUNCH	UNFETTERED	STURDY	SCRUPULOUS	PRINCELY
STEADFAST	UNIQUE	SUNRISE	SELF*EFFACING	PROFLIGATE
STEADY	UNMARKED	SUNSET	SENTIMENTAL	PROMINENT
STRONG	UNMATCHED	SURVIVOR	SIMPLE	QUEENLIKE
SUCCESSFUL	UP*TO*DATE	TESTING	SIMPLE*MINDED	QUEENLY
SUPERIOR	UP*TO*THE*MINUTE	THICK*SKINNED	SINCERE	REFINED
SYSTEMATIC	VALIANT	TIMBERLAND	SINGLE	RENOWNED
TALENTED	VENTURESOME	TOOTHED	SMALL*TOWN	RIGHTEOUS
TECHNICAL	VIBRANT	TOUCH*AND*GO	SMILING	ROYAL
THOROUGH	VIBRATE	TOUGH	SOCIABLE	SATIN
THOROUGHGOING	VITAL	TOUGHENED	SPRIGHTLINESS	SATINY
THRIVING	VOUGE	TOUGHNESS	STANDARD	SCINTILLANT
TIRELESS	YOUNG	TREACHEROUS	STRAIGHT	SCINTILLATING
TOPPLACE	YOUTHFUL	TREK	STRAIGHTFORWARD	SEDUCTIVE
TRADE		TREKKING	STRAIGHTNESS	SENSATIONAL
TRANSNATIONAL		TRICKY	SYMPATHETIC	SERAPHIC
TRIUMPHAL		UNCHARITABLE	THE*RIGHT*WAY	SHINING
TRIUMPHANT		UNCIVILISED	TRUE	SHINY
TRUSTY		UNCIVILIZED	TRUE*LIFE	SILK
UNATTACKABLE		UNCOMFORTABLE	TRUSTWORTHY	SILKY
UNBEATABLE		UNCOVERED	TRUTHFUL	SILVER*TONGUED
UNBEATEN		UNDOMESTICATED	TYPICAL	SNOBBISH
UNBENDABLE		UNEVEN	UNADULTERATED	SOPHISTICATE
UNDEVIATING		UNFORGIVING	UNASSUMING	SOPHISTICATED
UNFAILING		UNKIND	UNCHANGING	SOPHISTICATION
UNFALTERING		UNMERCIFUL	UNDERSTANDING	SPECTACULAR
UNFLAGGING		UNPADDED	UNGLAMOROUS	SPLENDID
UNFLUCTUATING		UNPLEASANT	UNGLAMOUROUS	STRIKING
UNSHAKABLE		UNPOLISHED	UNINTERESTED	STUNNING
UNSWERVING		UNREFINED	UNOSTENTATIOUS	STYLISH
UNWAVERING		UNRELENTING	UNPRETENTIOUS	SUAVE
UP*AND*COMING		UNRESTRAINED	UNQUESTIONABLE	SUGARINESS
VENDABLE		UNSMOOTH	UNSPOILT	SUPERFINE

COMPETENCE	EXCITEMENT	RUGGEDNESS	SINCERITY	SOPHISTICATION
VENDIBLE		UNSTEADY	UP*FRONT	TOP*NOTCH
VENTURE		UNTAMED	VALID	UPMARKET
VICTORIOUS		WEATHER*BEATEN	WARM	UPPER*CLASS
WILY		WEATHERED	WELCOMING	UPPERCLASSES
WINNING		WEATHERWORN	WELL*FOUNDED	WELL*BRED
WITTY		VENTUROUS	WELL*MANNERED	VELVET
		WESTERLY	VERITABLE	VELVETY
		WESTERN	VERITY	VOGUISH
		WILD	WHOLESOME	VOLUPTUARY
		WILDLIFE	VIGOROUS	VOLUPTUOUS
		VIOLENT	VIRTUOUS	WOMANLIKE
		WOODLAND	VIVACIOUS	WOMANLY

Appendix C Abbreviation of the Names of the Universities

Corpus	Abbreviation	Names of the Universities
Pr92		
PrH_1	PrH_1_Cambridge	University of Cambridge
PrH_2	PrH_2_LSE	London School of Economics
PrH_3	PrH_3_Oxford	University of Oxford
PrM_1	PrM_1_Edingurgh	University of Edinburgh
PrM_2	PrM_2_Kent	University of Kent
PrM_3	PrM_3_Sussex	University of Sussex
PrL_1	PrL_1_Aberdeen	University of Aberdeen
PrL_2	PrL_2_City_London	City University of London
PrL_3	PrL_3_Liverpool	University of Liverpool
Po92		
PoH_1	PoH_1_Coventry	Coventry University
PoH_2	PoH_2_Lincoln	University of Lincoln
PoH_3	PoH_3_Nottingham_Trent	Nottingham Trent University
PoH_4	PoH_4_Creatve_Arts	University for the Creative Arts
PoM_1	PoM_1_Cardiff_Met	Cardiff Metropolitan University
PoM_2	PoM_2_Chihester	University of Chichester
PoM_3	PoM_3_Gloucester	University of Gloucestershire
PoM_4	PoM_4_Queen_Margaret	Queen Margaret University
PoL_1	PoL_1_CCCU	Canterbury Christ Church University
PoL_2	PoL_2_Kingston	Kingston University
PoL_3	PoL_3_Staffordshire	Staffordshire University
PoL_4	PoL_4_Worcester	University of Worcester

Appendix D Examples of COMPETENCE Keyword Contexts[12]

Examples of COMPETENCE Keyword Contexts	File Names
Being employable means being *able* to manage your own career, making your own decisions, and being able to adapt to new situations. It's about attitudes and skills, confidence and drive. If being 'employed' means relying on others, being 'employable' means taking control of your own destiny.	PrL--Liverpool-- Life_on_Campus
Our objective is to develop creative, resilient, and sought-after graduates with aptitudes, skills and experiences that will enable them to impact on their chosen profession or pathway. We want our students to have developed a self-sustaining mindset so that they are *able* to adapt to a fast-changing world.	PoM-- Cardiff_Met-- Mission
At the University of Edinburgh, Scholarships and Student Funding Services staff are committed to helping you determine the best way to pay for your education and to provide *comprehensive* support and quality service.	PrM--Edinburgh-- Funding
MPC is based at the University's St Johns campus and aims to provide a high quality and *comprehensive* service to the region's sportsmen and women of all ages and abilities, as well as the general public.	PoL--Worcester-- Research
Cambridge Consultations was a six-term series of events including public debates, lectures and workshops tackling issues of contemporary ~~concern~~. They explored what faith has to contribute to some of the most pressing challenges of our day. High profile speakers included the Archbishops of Canterbury and York.	PrH--Cambridge-- History
The Lincoln Institute for Health (LIH) is a university-wide multidisciplinary research collaboration linking schools, colleges and external partners to investigate key issues of ~~concern~~ for health, social care and well-being using a 'cell to community' approach.	PoH--Lincoln-- Research
The *establishment* of the Free Church of Scotland led to the opening of its Normal and Sessional School in 1848, a forerunner of Moray House College of Education.	PrM--Edinburgh-- History
Research is central to the College's mission. The *establishment* of sound infrastructures that both sustain individual excellence and promote a vigorous research culture is an integral aspect of the College's overarching research strategy.	PoH--Lincoln-- Research
True openness means remaining *firm* in ones deepest conviction and therefore understanding others – Pope Fransis We stress to much our differences forgetting the basic level of the oneness of humanity – Dalai Lama, LSE June 2012	PrH--LSE--Life
our international health research is having an impact on refugee integration, the ebola crisis and in countries affected by conflict. Our positive results demonstrate our drive to be a socially relevant university with a *firm* focus on research which ultimately improves quality of life.	PoM-- Queen_Margaret-- Research
Our Vision is to be a connected, global University at the *forefront* of knowledge leadership, recognised by being in the top 100 worldwide Our Strategy places our global activities at the centre of our distinctive vision for the future.	PrL--Liverpool-- Mission

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[12] Words that are crossed out are BP keywords that their use in contexts is not associated with Aaker's (1997) BP scale.

Examples of COMPETENCE Keyword Contexts	File Names
We will continue to ensure the highest quality experience for all our students, making sure they are taught by highly motivated, committed and passionate staff who are at the *forefront* of their disciplines.	PoH--Coventry--Mission
The city's rich and diverse exhibitions, collections and programmes are some of the most varied in the UK and can *guarantee* that there's always something new for visitors to see. Aberdeen Art Gallery is one of the city's main tourist attractions, containing some of the finest art collections in Britain with paintings and sculptures which date from the 15th Century to today.	PrL--Aberdeen--Local_Area
The Fitness Suite contains a variety of equipment - including a number of cardiovascular and resistance machines. We offer a free induction to every member of the suite and with the added support of a qualified fitness instructor, you can *guarantee* each visit will be a safe and enjoyable one.	PoH--Coventry--Life
Living outside the City of Edinburgh at the time of application to the University Eligible to receive a *guaranteed* offer of University accommodation In receipt of a Young Students' Bursary or an Independent Students' Bursary	PrM--Edinburgh--Funding
Guaranteed work experience Who says students have never done a day's work? New for 2016, we guarantee the opportunity of work experience for all new students joining us in September.	PoL--Staffordshire--Life
Aberdeen students will grow as active international citizens during their study, and our strong partnerships with business and *industry* will ensure that they are well prepared for working life, with a global outlook and attributes that will be sought-after by employers in every sector.	PrL--Aberdeen--Mission
Our roots go as far back as Coventry College of Design in 1843. It was in 1970 that Coventry College of Art amalgamated with Lanchester College of Technology and Rugby College of Engineering Technology. The resulting institution was called Lanchester Polytechnic: 'Lanchester' after the Midlands automotive *industry* pioneer, Dr Frederick Lanchester, and 'Polytechnic' meaning 'skilled in many sciences and arts'.	PoH--Coventry--History
How can I benefit from Oxford's resources & facilities? Use Equipment & Resources Find Space to grow Host an event *License* technology	PrH--Oxford--Research
Rolls-Royce is a world leader in the design and *manufacture* of gas turbine engines and its ability to design world-leading aerodynamic components in a very competitive market is acknowledged by the company to be strongly linked to its use of the HYDRA computational fluid dynamics code - initiated by Oxford mathematicians and developed in a highly successful collaboration with other universities.	PrH--Oxford--Research
The Sopwith building is a modern teaching and learning centre named after Sir Thomas Sopwith who was knighted for his pioneering work on aircraft design and *manufacture*. Most of the building is used by computing, information systems and maths students. Facilities include a wide range of labs for research and for the development of information systems.	PoL--Kingston--Life_on_Campus

Examples of COMPETENCE Keyword Contexts	File Names
Our city mixes architectural beauty and history with a lively, fun environment. It offers an exciting array of entertainment, history, culture and sport, with the lush Scottish countryside and coastline just a few miles away. It is a *safe* and prosperous city, with an abundance of parks and green spaces for recreation and reflection.	PrM--Edinburgh--Local_Area
Use of the Astroturf and Sports Hall within the times listed below Queen Margaret University's instructors will supervise each visit to ensure their individual programme is carried out correctly. This ensures teens feel *safe*, secure, and happy about their new exercise regime.	PoM—Queen_Margaret--Life_on_Campus
When building work began, it was soon found that the University had underestimated the cost of equipping the laboratories and incorporating the latest *scientific* advances. Further appeals raised another £130,000, but at the time of the official opening in 1884, the building was not completely fitted out.	PrM--Edinburgh--History
Academics from the College of Science are at the vanguard of technological and *scientific* endeavours to find innovative solutions to global challenges, from improving food security to developing new methods of cancer treatment.	PoH--Lincoln--Research
Elite and high performance sport demands exceptional qualities. Exceptional tactical intention, exceptional *technical* execution, and coupled with that the ability to express these qualities with an ever higher physical demand, be it faster, stronger or for longer. At Nottingham Trent University the Sport981 team provide the most cutting edge training delivery tailored to each specific performance sport.	PoH--Nottingham_Trent--Life
City University London provides a comprehensive range of business services from access to academic expertise, continuing professional development and state-of-the-art *technical* facilities to consultancy, technology licensing and contract research.	PrL--City_London--Research
James Meade was awarded the Nobel Prize in Economic Sciences in 1977 with Berthil Ohlin for their groundbreaking contribution to the theory of international *trade* and international capital movements.	PrH--LSE--History
A city of significance Brayford Pool, the site of the University of Lincoln's main campus, has always been an important spot in the city. As far back as the Iron Age, the Celts are thought to have named the town 'Lindon', meaning 'the pool', as it was the source of all water, *trade* and transport in the area.	PoH--Lincoln--History

Appendix E Examples of EXCITEMENT Keyword Contexts

Examples of EXCITEMENT Keyword Contexts	File Names
Just wandering around Kingston is enough to fill your days, with so many sights, shopping areas and markets, places to eat and cultural venues. There's always something going on from brilliant productions, interesting classes and workshops, to *active* sports and big festivals.	PoL--Kingston--Local_Area
Our work is inspiring by a commitment to human equality and dignity, democracy and mutual respect. We promote sustainable development and *active* community	PoL--Worcester--Mission

Examples of EXCITEMENT Keyword Contexts	File Names
engagement. We have an important role in generating and applying knowledge for public benefit.	
Making senior executive reward systems more efficient and effective Supporting the development and success of the *creative* industries Influencing foreign policy and diplomacy around the world Managing digital economy system to drive market success	PrH--LSE--Research
As one of the world's top 20 universities, the breadth and depth of our scholarship, learning and teaching and our entrepreneurial and *creative* culture enables us to make a positive difference to people's lives – both close to home and globally.	PrM--Edinburgh--Mission
we are committed to achieving excellence in research and scholarship, and to ensuring that our research contributes to the well-being of society. We seek to provide a *creative* and supportive environment in which ideas are generated and can flourish.	PrH--Cambridge--Research
We'll be bringing a new range of artists to come and live, work and play with us, with the aim of contributing to our students' and communities' education and well-being, and enhancing the wider *creative* and cultural sector artistically, socially and economically.	PoL--CCCU--Life_on_Campus
There's no doubt you'll be bowled over by the energy and creativity radiating from its vibrant arts and music scene. Through exciting and inspiring events and exhibitions, local *creative* talent is nurtured and residents and visitors can revel in a range of inspiring and innovative arts and cultural experiences.	PoH--UCA--Local
Paris during the first half of the 20th century thrived with *creative* diversity and artistry, making it one of the most exciting places and times in music history with its influences still being felt today.	PoL--Kingston--Research
make the most of their own rich potential we well as to benefit from the practical rewards and prosperity which stern from higher education and learning. These values continue to guide the University's priorities vision and mission, finding expression in a culture of friendliness, *creativity*, imagination, dynamism and effectiveness.	PoL--Worcester--Mission
the picturesque town of Epsom has a friendly, community-focused feel. Living and studying at our Epsom campus, you'll be immersed in a hub of *creativity* - the perfect place to let your talent run wild and create the extraordinary.	PoH--UCA--Life_on_Campus
The Enterprise Education team supports the rapidly-growing culture of enterprise and innovation at City by teaching, training and inspiring the next generation of *enterprising* graduates and global entrepreneurs.	PrL--City_London--Life_on_Campus
Being innovative, *enterprising* and entrepreneurial for us means encouraging creativity and taking balanced risks. It requires a supportive environment for the development of ideas and new business. It requires a commitment to evidence-based work, taking opportunities as they arise, agility, supporting creativity and being effective and efficient.	PoL--Staffordshire--Mission
Cambridge students are ambitious, intelligent, motivated, hard-working, passionate, committed, curious, intellectually creative, *independent* thinkers, and able to manage their time effectively. Employers know this and look for the same attributes in potential new employees, which is why our graduates are so sought after.	PrH--Cambridge--Life

Examples of EXCITEMENT Keyword Contexts	File Names
Enriching Lives 1. We will continue to be a cosmopolitan, London-based university with an international outlook and a diverse student body. 2. We will develop people to be *independent* thinkers with the knowledge, skills and attitudes to contribute to society through constructive challenge and to have fulfilling lives.	PoL--Kingston--Mission
Our university has great connections to the transport network and is surrounded by popular high street shops, a range of *~~independent~~* boutiques, bars, clubs, café bars and restaurants. Students play a big part in shaping the city's nightlife.	PoH--Coventry--Life_on_Campus
The University values diversity; we are an inclusive institution, committed to the provision of opportunity for those with the capacity to benefit as *~~individuals~~* but also as members of a wider community dedicated to a sustainable and just society. We will be guided by strong ethical principles and ensure that our values are embedded in our plans and actions.	PrL--Liverpool--Mission
We value: the development of the whole person, respecting and nurturing the inherent dignity and potential of each *~~individual~~* the integration of excellent teaching, research and knowledge exchange the power of higher education to enrich *~~individuals~~*, communities and nations.	PoL--CCCU--Mission
His Majesty's Theatre and the Music Hall stage over 300 performances every year, from ballet, opera and contemporary dance to comedy and musicals. For film fanatics, there are a number of cinema multiplexes to choose from, showing *latest* releases as well as contemporary cult classics.	PrL--Aberdeen--Local_Area
Visit our international news and events page to keep up to date with the *latest* success stories. Whilst you're here, consider staying in our top standard student accommodation, a great way to get involved and start an exciting student life here	PoL--Worcester--Life_on_Campus
Undergraduate students from Scotland who are *~~lone~~* parents with at least one dependant child can apply to the Students Awards Agency for Scotland (SAAS) for the Lone Parents' Grant.	PrM--Edinburgh--Funding
The Childcare Fund is aimed at students who incur registered childcare costs whilst studying and the *~~Lone~~* Parents Childcare Grant is also paid from this fund.	PoM--Queen_Margaret--Funding
The Tate Modern is the most visited *modern* art gallery in the world with around 4.7 million visitors a year. The collection is based in the former Bankside Power Station, on the southern bank of the river Thames.	PrH—LSE--Local_Area
make the most exciting recent observation in astrophysics by discovering pulsating stars or 'pulsars' using Cambridge's Mullard Radio Astronomy Observatory. Their work alters the course of *modern* cosmology. The new stars provide unique physics laboratories for studying matter in extreme conditions, stimulating research into many new areas of physics.	PrH--Cambridge--History
Staff are passionate about working together to mutual benefit, engaging with *modern* thinking in a digital age, and in turn informing our research culture for both undergraduate and postgraduate students.	PoM--Glouscestershire--Research

Examples of EXCITEMENT Keyword Contexts	File Names
The department's Graduate School provides a *stimulating* and enriching learning and research environment for all the department's graduate students, fostering intellectual and social interaction between graduates of different disciplines and professions from the UK and around the globe.	PrH--Oxford--Funding
To recruit, develop and retain postgraduate research degree students and to provide them with a *stimulating* and supportive research environment and development opportunities.	PoL--Staffordshire--Research

Appendix F Examples of RUGGEDNESS Keyword Contexts

Examples of RUGGEDNESS Keyword Contexts	File Names
The Jeanne Marchig International Centre for *Animal* Welfare Education was officially opened by animal philanthropist Jeanne Marchig (d. 2013) on 19 May 2011. The Centre, for which Marchig had provided significant funding, provides a hub of expertise for animal welfare education across the world.	PrM--Edinburgh--History
With concerns for *animal* welfare and human health and safety paramount, this new production of Ming's cramped living conditions is combined with a commentary by philosopher Jean-Luc Nancy which explores human-animal relations, strange territories and the circumstances of the wild inside.	PoL--Kingston--Research
Active *Outdoors* We also have an outdoor facility based in Westwood Heath, about five miles from the city centre Sport Centre, here you can enjoy a game of football, hockey, cricket, netball or rugby on the astro turf and pitches.	PoH--Coventry--Life_on_Campus
Kingston entertainment, events and *outdoors* Just wandering around Kingston is enough to fill your days, with so many sights, shopping areas and markets, places to eat and cultural venues. There's always something going on from brilliant productions, interesting classes and workshops, to active sports and big festivals.	PoL--Kingston--Local_Area
Through effective planning, judicious resource management and identification of new income streams, we will ensure a *resilient* and efficient institution. Our commitment to environmental and social sustainability will be represented our policies and practices.	PoH--UCA--Mission
Our objective is to develop creative, *resilient*, and sought-after graduates with aptitudes, skills and experiences that will enable them to impact on their chosen profession or pathway. We want our students to have developed a self-sustaining mindset so that they are able to adapt to a fast-changing world.	PoM--Cardiff_Met--Mission
make a real difference to work to tackle major UK and global problems. It has, for example, contributed to efforts to better protect and more sustainably manage global natural resources by developing and sharing new - and more *robust* - methods for natural capital accounting and carbon pricing.	PrH--LSE--Research
The University will ensure that its ICT infrastructure continues to provide *robust*, resilient and high quality services that are fit for purpose for both staff and students.	PoM--Cardiff_Met--Mission

Appendix G Examples of SINCERITY Keyword Contexts

Examples of SINCERITY Keyword Contexts	File Names
Cambridge is a beautiful city, one that combines and embraces the old and the new. You're surrounded by historic architecture as well as ultra-modern buildings. It has the charm and *welcoming* feel of a small town as well as the variety and energy of a larger city. However you like to spend your time, there's always something to keep you entertained – whether that's having coffee with friends, going punting, catching a film, having a night out, or getting involved in clubs and societies.	PrH--Cambridge--Local_Area
A supportive and *welcoming* learning environment Our programmes are designed to give you the practical and theoretical skills needed to succeed in your career, whether it's in early years education or one of the many health and social care professions.	PoL--CCCU--Life_on_Campus
The impact of some research is evident immediately, whereas in other cases it can take years, or even decades, before the true value becomes apparent. There are no *simple* predictors of potential benefit or outcomes, and no single measure of impact. This is where the funding of Research Councils and charities is vital in supporting research which increases our fundamental understanding of the world and allows us to apply that improved knowledge.	PrH--Oxford--Research
Our philosophy is *simple*: "The right diagnosis, first time, every time!" It is our belief that if the diagnosis is correct, then naturally the treatment will be directed at the cause of your symptoms, rather than just treating the symptoms. We aim to provide a service that exudes excellence and we believe in an honest approach	PoH--Coventry--Life_on_Campus
The Department's Media Policy Project, established in 2010 and headed by former government advisor Dr Damian Tambini, promotes interaction between academics, the public and policy makers in ~~*relation*~~ to media and communications policy and research within the UK and EU.	PrH--LSE--Research
The purpose of the site is to provide you with all the information you need if you require help during your time at with us in ~~*relation*~~ to your health, welfare, lifestyle and future career. Our aim is to provide you with all the support you need to ensure your studies are as enjoyable and successful as possible.	PoM--Cardiff_Met--Life_on_Campus
Kent Innovation & Enterprise works at the interface between industry and academia. KIE Enterprise and Impact Training will help you develop the knowledge, confidence and *practical* tools necessary to engage successfully in enterprise activities.	PrM--Kent--Research
Founded in 1875, the institution has always been driven by the highest ideals and purposes, focusing on contributing in *practical* ways to improving the quality of human life and serving the community. Its staff are dedicated to delivering vocational and professional learning and specialising in research which is of value to the community and enhances people's lives.	PoM--Queen_Margaret--History
Clarendon scholarships are competitive, prestigious and highly sought-after. Like all fully-funded Oxford scholarships, they cover all tuition and college fees, and offer a *generous* grant for living costs; however Clarendon's additional appeal lies in its	PrH--Oxford--Funding

Examples of SINCERITY Keyword Contexts	File Names
unique community of scholars. In 2015-16, there are around 370 Clarendon scholars at Oxford representing more than 50 different countries.	
A number of Country based LSE scholarships, made possible by *generous* private donations, are available to overseas applicants. Applicants who are offered a place by the LSE and accept the School as their first choice institution will be given priority over those who select the School as their insurance offer.	PrH--LSE--Funding
Global industry leader Siemens offers a significant number of *generous* Bursaries to all full-time BEng and MEng Engineering applicants who make the University of Lincoln their first choice institution via UCAS. The nature of these financial packages changes each year, but could include a payment each term throughout the course of study to cover living costs, as well as the opportunity to take paid summer work placements with Siemens.	PoH--Lincoln--Funding
Everywhere you go on campus you can't help but be struck by the *friendly* atmosphere. This doesn't just come from the people you meet but from the academic staff who greet you with a smile when you enter your lecture, or the porter when you pick up your post. This atmosphere continues on the short journey by bike, train or bus into Brighton, arguably the most vibrant, energetic and stimulating city in the country.	PrM--Sussex--Life_on_Campus
We are a truly inclusive university where each and every person counts as an individual. As an important member of our dynamic, responsible, high-achieving community, you will have every opportunity to thrive and fully realise your potential. Worcester enjoys a national reputation as a very *friendly* place at which people are genuinely happy and feel that they can make a meaningful contribution.	PoL--Worcester--Life_on_Campus
The University of Oxford's *distinctive* structure, born of its history, is a source of strength. Its colleges offer environments which are both supportive to individual scholars and characterised by a defining and enduring sense of community. The personal sense of academic identity that they provide is life-long.	PrH--Oxford--Mission
In this year, F.R. Leavis, Lecturer in English, also publishes 'New Bearings in English Poetry'. His *distinctive* style of literary and cultural criticism influences generations of students in the 1930s, 40s, and 50s.	PrH--Cambridge--History
Canterbury exudes student appeal with its *distinctive* mix of ancient charm and contemporary culture. Our Canterbury campus is a short walk from the city centre and has a range of purpose-built studios, workshops and lecture theatres.	PoH--UCA--Life_on_Campus
That LSE should build on its *distinctive* heritage and comparative advantages, and achieve a better integration among different dimensions of our work. The need for building a campus to support better student experience and teaching as well as research	PrH--LSE--Mission
There is however a presumption that any intellectual property discovered or developed using public or *charitable* funds should be disseminated in order to have a beneficial effect on society at large, unless there is any express restriction placed on such dissemination.	PrL--City_London--Research

Examples of SINCERITY Keyword Contexts	File Names
Ferguson Trust Scholarships are made available through the generosity of The Allan & Nesta Ferguson *Charitable* Trust. The Trust was set up in memory of two generations of the Ferguson family to promote education, international friendship and understanding, and the promotion of world peace and development. The Trust supports people from low-income and conflict-affected regions who want to improve their knowledge of peace and reconciliation.	PoH--Coventry--Funding

Appendix H Examples of SOPHISTICATION Keyword Contexts

Examples of SOPHISTICATION Keyword Contexts	File Names
'All in all, my Sussex experience has been wonderfully diverse and ***engaging***, on a campus tailored to meeting every student's needs. Sussex is not only a great place to study, but also to flourish as an individual, no matter where you come from or what your interests are.'	PrM--Sussex--Life_on_Campus
The forces of globalisation, technology and scientific advances, and their conflicts with politics, ideology and resources are at the heart of this collaborative research, which draws on the past to inform the future. Staff are passionate about working together to mutual benefit, ***engaging*** with modern thinking in a digital age, and in turn informing our research culture for both undergraduate and postgraduate students.	PoM--Gloucestershire--Research
Undergraduates receive broad training with options to develop specialist knowledge across all disciplines, while postgraduates take advantage of the University's supportive and stimulating research environment. Past research helps us tailor the structure of your course for future years, ensuring that our syllabus is relevant, current, and ***engaging*** to support and inspire future scientists.	PoL--Worcester--Life_on_Campus
The First World War had an enormous impact on ***female*** participation in university life. The number of women students rose from 552 in 1913-1914 to more than a thousand in 1919-20, partly as a result of the decision to admit women into the Faculty of Medicine in 1916.	PrM--Edinburgh--History
turned his attention to the representation of women in the superhero genre of comics and graphic novels. Dismayed at the limited roles for, and representations of, women in contemporary comic books, he shifted his focus from criticism to practice, and created a comic that suggested a different approach to writing, art and production. His starting point was Batgirl, originally a PhD student. Why shouldn't she be portrayed like the ***female*** PhD students at Kingston University – complex, confident, relatable, and intelligent – wearing a costume adapted from high street fashions, rather than skintight spandex?	PoL--Kingston--Research
The new Aquatics Centre opened in May 2014. The centre provides a ***first class*** training and competition venue for elite athletes and offers a community facility that encourages participation in waterbased activities at all ages and abilities. The world-class facility includes a 50-metre, 10 lane Olympic-standard swimming pool, an international-	PrL--Aberdeen--History

Examples of SOPHISTICATION Keyword Contexts	File Names
standard diving pool with moveable floor and a health suite, and is located adjacent to Aberdeen Sports Village.	
The University's *first class* sports and leisure facilities are further boosted by the opening of the newly developed Aberdeen Sports Village, a £28 million Olympic standard sports centre highlighting the University's commitment to sustaining sporting excellence.	PoL--Aberdeen--History
Our historians are not just *first-class* teachers but are also active historical researchers whose work, whether individually or as part of a team, appears in books, articles in academic journals, the press and on the web. View more about our history research	PoL--CCCU--Research
One of the reasons for our popularity is the opportunity to study, live and learn in *first-class* facilities. Our campuses are all within walking distance of each other and are close to the city centre. Take a look at our Find us page to see how easy it is to travel between our facilities.	PoL--Worcester--Life_on_Campus
There are 20 applicants for every arts space and 10 applicants for every science space, with the University experiencing ongoing problems of attracting students to study science. More students are taking A levels but not in the sciences. The tutorial system at Sussex gives it a *high profile* for teaching	PrM--Sussex--History
RSN is known as an international centre for excellence in the art of hand embroidery. Its skills are very much in demand today by couture fashion houses and for individual and public commissions. During your studies you may well be invited to work on *high-profile* embroidered pieces for clients.	PoL--UCA--Life_on_Campus
The Bet365 Stadium hosts Premier League Football in the city. Home to Stoke City Football Club holds 28,000 people. Plenty of room for to join the terraces to roar on 'The Potters'. Stoke-on-Trent is also the European City for Sport. A series of *high-profile* sporting events will occur throughout 2016.	PoL--Staffordshire--Local_Area
Lord Robbins was a key influence in the development of economics at LSE during the 1930s, and his influence and involvement outside LSE was substantial.	PrH--LSE--History
Dr Julia Gale, the head of the School of Nursing at Kingston University's Faculty of Health and Social Care and Education comments that universities will feel bolstered by the strong support provided by *Lord* Willis in his recent report on nursing education.	PoL--Kingston--Research
The Rhodes Scholarship, perhaps the oldest and most *prestigious* international graduate scholarship in the world, is available exclusively at Oxford with 88 scholarships available each year to students from a wide range of countries.	PrH--Oxford--Funding
City of Light: Paris 1900-1950 was nominated for a 2016 Royal Philharmonic Society Music Award in the Concert Series and Festivals category. This *prestigious* award celebrates outstanding achievements in classical music.	PoL--Kingston--Research
In 2013, the Ladies' football club were crowned champions following their success on the pitch at the BUCS Conference Cup, while a member of the American Football team received a *prestigious* male athlete of the year award.	PoL--Worcester--Life_on_Campus

Examples of SOPHISTICATION Keyword Contexts	File Names
Home to the *Royal* Opera, the **Royal** Ballet and the Orchestra of the **Royal** Opera House. The Paul Hamlyn Hall is also known as the 'floral hall', as it once held the exotic flower market of Covent Garden.	PrH--LSE--Local_Area
The scholarship extends to 4 coaching sessions per year with professional musicians from our local partner, the **Royal** Liverpool Philharmonic.	PrL--Liverpool--Funding
Aintree Racecourse is home to the Grand National, there is county cricket at Liverpool Cricket Club, golf on "England's Golf Coast" at Royal Birkdale and the **Royal** Liverpool Golf Club in Hoylake (Wirral), Rugby League at St Helens and Widnes, and ample opportunities for watersports.	PrL--Liverpool--Local_Area
the Scottish National Portrait Gallery and the Scottish National Gallery of Modern Art. Each has its own particular style and all are well worth a visit. The City Art Centre and The Fruitmarket Gallery are more dedicated to the contemporary visual arts. The **Royal** Museum of Scotland offers diverse collections of artefacts from around the world, as well as many excellent temporary exhibitions.	PoM--Queen_Margaret--Local--Area
With its **stunning** Georgian and Victorian architecture, and winding medieval streets, it's easy to see why Edinburgh has been listed as a World Heritage Site. Edinburgh Castle dominates the skyline and is the best known and most visited of our historic buildings.	PrM--Edinburgh--Local_Area
Coventry's glorious 20th century cathedral, with **stunning** 1950s art and architecture, rising above the stark ruins of the medieval cathedral destroyed by German air raids in 1940, provides a unique backdrop to the University campus.	PoH--Coventry--Local_Area
Enjoying Kingston outdoors Enjoy the greenery, **stunning** riverside views and leisurely activities in Kingston and its surrounding areas. In the town centre get right on the river: walking along the Queen's Promenade, a lovely stretch along the river Thames or have a drink and a bite to eat on the waterfront.	PoL--Kingston--Local_Area

Appendix I Contexts of *cosmopolitan*

Contexts	Files
Researchers are helping to lead debates on new *cosmopolitan* approaches to human rights and political conflict, finance and economic change, urbanisation, social stratification and class, and science and technology.	PrH--LSE--Research
Cambridge is a fascinating mix. Small enough to retain its community atmosphere, it is nevertheless host to a *cosmopolitan* range of visitors every summer.	PrH--Cambridge--Local
Close to London, with easy access to its vast cultural resources and *cosmopolitan* life, our University is also key to the fabric and intellectual capital of one of the UK's most enterprising cities, Brighton & Hove, where the University is already recognised as a major asset for economic growth.	PrM--Sussex--Mission
Close enough to visit for the day, London is a fascinating, *cosmopolitan* capital city. If you want to travel further afield, London Gatwick Airport is half an hour by train from Brighton.	PrM--Sussex--Local

Safe and *cosmopolitan* Fairtrade campus surrounded by the South Downs National Park	PrM--Sussex--Life
With over 16,000 students and 140 nationalities represented, the campus has a vibrant *cosmopolitan* atmosphere.	PrM--Kent--Local
With more than a third of its inhabitants from outside of Belgium, Brussels is a vibrant and *cosmopolitan* city with a truly international feel.	PrM--Kent--Local
With 15,500 students from around the world, the campus has a very *cosmopolitan* feel.	PrM--Kent--Life
Campus life in Canterbury revolves around our six colleges, the Templeman library, our state-of-the-art facilities and the students' union. With around 15,500 students from 149 nationalities, the campus has a very *cosmopolitan* feel.	PrM--Kent--Life
Our values acknowledge our history, rich heritage and *cosmopolitan* culture and provide the foundation on which our future is built.	PrL--City_London--Mission
Aberdeen is a vibrant, creative and ambitious city, known for its historic charm and *cosmopolitan* community. The City of Aberdeen has something for everyone, from the bustling city centre of Europe's Energy Capital, to the beautiful countryside and coastlines, there's plenty to see and do.	PrL--Aberdeen--Local
Take a walk along the busy *cosmopolitan* harbour which is always full of safety vessels, fishing boats and sailings to Orkney and Shetland.	PrL--Aberdeen--Local
Access to one of the most *cosmopolitan* student cities in the UK [*] Clifton campus [*] Home to over 7,000 students and just four miles outside the city centre [*] A modern, self-contained, greenfield site with fantastic facilities [*] State-of-the-art Lee Westwood Sports Centre [*] Rosalind Franklin building (a multimillion pound science superlab)	PoH--Nottingham_Trent--Life
Edinburgh, Scotland's capital, is amongst one of the most beautiful and exciting cities in the world. It blends impressive architecture and a rich history and culture with a vibrant *cosmopolitan* atmosphere.	PoM--Queen_Margaret--Local
Home to a *cosmopolitan* range of courses, The Park brings together student-professionals from a variety of specialisms, ranging from subjects like accounting and law right through to music and film production.	PoM--Glouscestershire--Life
This project initiates the preservation of storytelling as a fragile intangible heritage of the Emirates, which has become a bilingual *cosmopolitan* nation with the result that L1 Gulf Arabic alone is practised only by the oldest members of society.	PoM--Chichester--Research
As one of Europe's youngest capitals, it packs all the benefits of a major *cosmopolitan* destination into a friendly, affordable and easy to navigate space and is a great place to live as a student.	PoM--Cardiff_Met--Local
We will continue to be a *cosmopolitan*, London-based university with an international outlook and a diverse student body.	PoL--Kingston--Mission

Cosmopolitan Kingston [*][13] Kingston not only boasts a beautiful riverside location and gorgeous green spaces, but there's always something on to keep you busy throughout the year, from fun get-togethers, festivals and fairs.	PoL--Kingston--Local
Its lively, *cosmopolitan* atmosphere makes an excellent base for your time here. It is also close to the town centre and easily accessible from the other campuses.	PoL--Kingston--Life
CANTERBURY CAMPUS [*] The largest of our campuses, Canterbury is a World Heritage Site and a historic cathedral city. [*] Exciting and *cosmopolitan* Canterbury	PoL--CCCU--Local_Area

Appendix J Collocations of COMPETENCE Keywords

COMPETENCE	Collocate Words
partnership(s)	with (171) work (65) knowledge (57) transfer (51) business (39) between (36) through (34) develop (33) partnership (30) international (29) doctoral (21) training (21) strong (20) community (20) ktp (19) strategic (19) innovation (18) network (16) organisation (14) collaboration (12) national (12) launch (11) continue (11) institution (11) local (11) chevening (10) us (10) foundation (10)
successful	applicant (109) application (55) expect (39) candidate (37) award (27) programme (20) select (19) winner (16) notify (14) scheme (13) project (13) career (12)
enterprise(s)	research (179) our (71) enterprise (44) activity (31) & (30) innovation (28) team (25) business (24) education (24) through (21) support (21) city (21) committee (20) the (20) develop (18) knowledge (17) office (16) development (16) culture (14) employability (13) within (13) consultancy (11) engagement (11) management (11) employer (10) strong (10) social (10)
outstanding	scholarship (36) teaching (25) award (41) performance (19) academic (19) experience (17) potential (16) learn (15) leadership (14) demonstrate (14) candidate (14) potential (13) merit (12) reputation (12) achievement (12) history (12) impact (12) graduate (11) discovery (10) innovative (10) enhance (10)
complete	form (36) application (34) course (27) loan (12) fund (10) international (10)
intellectual	commercialisation (16) development (15) quality (13) academic (13) skill (12) learn (12) graduate (12)
proud	university (41) offer (16) scholarship (16)
secure	safe (20) environment (12) provide (12)
governance	research (54) good (20) practice (18) policy (12) ethics (12) support (12)
talented	student (37) scholarship (30) athlete (22) help (18) attract (12) scheme (10) available (10) offer (10)
award-winning	centre (15) campus (13)
thriving	community (14) art (12) scene (10)

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[13] [*] signifies that it was a bullet point in the original texts.

Appendix K Collocations of EXCITEMENT Keywords

EXCITEMENT	Collocate Words
new	develop (134) building (85) meet (73) people (63) brand (59) open (55) technology (54) friend (54) knowledge (51) create (45) build (43) way (39) site (38) start (33) medical (30) opening (30) creation (30) idea (28) begin (27) video (27) york (27) major (26) approach (26) move (26) new (25) window (25) digital (24) explore (24) innovative (24) recently (24) strategy (23) discover (23) something (22) product (22) introduce (21) discovery (21) encourage (20) try (20) treatment (20) investment (19) whole (18) growth (17) premise (17) chair (16) exciting (16) divinity (16) open (15) announce (15) suite (14) inform (14) old (14) method (14) guarantee (14) generate (14) structure (13) emerge (13) initiative (12) generation (12) fun (12) settle (12) invest (11) call (11) yourself (11) curriculum (11) insight (11) phase (11) events (11) professorship (11) always (10) interdisciplinary (10) cell (10) solution (10) launch (10) light (10) confidence (10) protection (10) official (10) district (10) aquatics (10)
individual(s)	accounts (10) an (55) researcher (39) support (31) each (29) group (25) award (22) may (19) relate (18) need (18) case (16) learning (16) during (15) within (14) team (13) consider (12) where (12) responsibility (10) gain (10) promote (10) payment (10) individual (10) involve (10) both (10) environment (10) only (10) community (33) organisation (26) group (26) support (20) their (20) who (15) continue (14) team (12) need (10) aim (10) education (10) more (10)
current	our (64) prospective (21) scholar (16) sussex (16) rate (12) i (12) part (12) relevant 10 how (10)
specific	or (51) may (36) difficulty (30) include (28) area (22) learn (16) cost (16) subject (14) these (14) they (14) dyslexia (12) duty (12) wish (12) country (12) such (12) out (12) example (11) unexpected (10) certain (10) and/or (10) depend (10) discipline (10) expertise (10) require (10) learning (10) financial (10) within (10)
innovative	research (73) an (44) new (24) practice (17) solution (16) idea (16) develop (16) art (16) programme (15) approach (14) design (12) area (12) through (12) learn (11) opportunity (11) inform (10) outstanding (10) bring (10) together (10)
unique	offer (19) community (16) develop (14) opportunity (13) experience (11) each (11) way (10) own (10)
young (-)[14]	people (49) boy (22) portrait (22) bursary (20) man (16) child (12) income (12) scholarships (12) woman (11) marshall (10) james (10)
exciting	an (43) city (30) most (28) some (19) opportunity (17) this (17) range (16) new (16) event (14) programme (14) offer (14) provide (14) one (12) vibrant (10) exhibition (10) canterbury (10) across (10) get (10) world (10)

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[14] *(-)* is a negative keyword

vibrant	a (92) community (34) city (20) art (14) this (14) scene (12) culture (11) exciting (10) music (10) international (10) its (10) campus (10)
state-of-the-art	facility (54) building (19) equipment (16) centre (13) library (12) performance (10)
inspiring	an (20) our (14) campus (12) place (10)
represent	your (20) university (20) faculty (12) our (12)
determined (-)	the (20) be (12) as (12) to (10)

Appendix L Collocations of RUGGEDNESS Keywords

RUGGEDNESS	**Collocate Words**
challenge(s)	we (40) face (35) address (25) global (21) key (18) tackle (17) contemporary (16) these (16) change (15) society (15) meet (13) opportunity (12) grand (11) intellectual (11) social (11) challenge (10) major (10)
outdoor	sport (22) pitch (16) an (16) indoor (10) tennis (10) court (10) kingston (10) also (10) centre (10)
challenging (-)	(No collocation exceeds 10 occurrences)

Appendix M Collocations of SINCERITY Keywords

SINCERITY	**Collocate Words**
open	access (114) all (96) day (76) uk (51) new (46) applicant (39) award (38) open (34) scheme (32) library (32) these (32) country (30) event (28) eu (27) criterion (25) window (23) video (23) applications (23) eligibility (22) full-time (22) data (20) meet (19) overseas (18) hour (18) space (18) throughout (17) now (17) national (13) from (12) repository (12) computer (12) week (12) autumn (11) prospective (11) equivalent (11) worcester (11) night (10)
good	research (131) practice (130) framework (31) good (30) place (19) standing (17) out (17) governance (16) conduct (16) ensure (16) times (14) principle (14) i (14) experience (14) enrol (13) expect (13) day (12) quality (12) where (12) english (11) night (10) standard (10) management (10)
standard(s)	high (129) maintain (30) professional (24) integrity (21) meet (21) quality (21) room (20) excellence (19) olympic (17) commit (17) international (17) rigour (14) ensure (13) achieve (12) practice (11) international (11) rate (10) possible (10) framework (10) food (10)
understanding(s)	our (48) good (21) promote (18) knowledge (18) through (18) issue (17) social (17) great (16) what (16) how (16) help (16) improve (14) practice (14) between (14) increase (12) aim (12) about (12) encourage (11)

relation(s)	with (94) between (51) international (47) develop (22) international (19) close (17) policy (16) build (15) partner (14) social (14) lse (14) government (14) work (14) social (13) politics (11) history (11) department (11) public (10) change (10) strong (10) explore (10) establish (10) studies (10) excellent (10)
originality	in (49) significance (45) term (43) rigour (39) internationally (26) excellent (17) world-leading (12) recognise (12) quality (12)

Appendix N Collocations of SOPHISTICATION Keywords

SOPHISTICATION	Collocate Words
excellent	internationally (197) or (134) an (93) world (81) lead (77) world-leading (65) 3 (61) facility (58) provide (50) rate (34) 4 (33) result (29) cent (24) per (24) teaching (23) link (21) quality (21) star (20) environment (18) originality (17) term (17) experience (17) significance (16) record (16) recognise (16) access (16) skill (14) department (14) transport (13) grade (12) judge (12) ref (12) training (12) rail (11) relationship (10) reputation (10)
renowned	research (39) international (28) as (28) entry (24) entire (22) its (22) world (20) internationally (17) component (16) internationally (12) class (12) history (12) lead (12) impact (11) sport (10) staff (10)
cosmopolitan	campus (12) kingston (11) city (10) its (10)
pretty (-)	(No collocation exceeds 10 occurrences)