Adopting Measures to Increase Alumni Donations at Prestigious Universities

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Abstract

This research uniquely aims to identify the key factors that current students at prestigious universities indicate have influence upon their likelihood of making donations to their alma mater in the future. Using data and examples from both the UK and the USA we show the importance of voluntary donations to prestigious universities and suggest that UK universities have much to learn from their American counterparts. A novel questionnaire was administered to students studying at a number of prestigious UK universities which resulted in a large number of responses being accepted for inferential statistical analysis. The robust results provide new insight into the significance of student centred pedagogy and students' career and financial aspirations as major determinants of intention to donate and also confirm the importance of overall student satisfaction, acquisition of transferable skills and the social experiences of university as additional determining factors. It is intended that this research should have practical implications and so we emphasise elements of the student and pedagogical experience upon which universities and alumni departments should focus their resources in order to increase the likelihood of obtaining future alumni donations from their current students.

Keywords: alumni, aspirations, donations, graduate income, prestigious universities, student centred pedagogy, transferable skills

1. Introduction

Universities are facing increasing operating costs and have, consequently, become more reliant upon private donations (Weerts & Ronca, 2009; Tsao & Coll, 2005; Cunningham & Cochi-Ficano, 2001). In recent years, universities have had to deal with falling public funding (Stephenson & Yerger, 2014) as well as the increasing competition for globally mobile students. Moreover, they must now learn how to cope with the impact of the COVID-19 pandemic. Some prestigious UK universities have declared that they expect to lose hundreds of millions of pounds in 2021 due to lost accommodation, catering and conference season income, and the decline in international student numbers and falling research grants (Adams & Carrell, 2020). This all places even greater importance on attracting private donations (Francioni et al., 2020) to shore up university finances (Iskhakova, Hilbert, & Joehnk, 2020) and upon establishing what most influences the propensity to donate amongst alumni. Alumni donations are a particularly important source of university revenue, allowing diversification of income (Bastedo, Samuels & Kleinman, 2014; Dennis, Papagiannidis, Alamanos, & Bourlakis, 2016). Whilst this area of research has been receiving increasing attention (Baruch & Sang, 2012; Drezner & Huehls, 2014), additional and more contemporary work is needed to fully understand the reasons why people make gifts to their Higher Education Institution (HEI).

2. Alumni Donations

The widespread introduction of student fees, coupled with a reduction in financial support from public sources, has heightened the urgency for universities to obtain funds from additional sources (Lertputtarak & Supitchayankool, 2014). Earlier research has determined that a very large proportion of alumni do not make donations to their alma mater (Kaplan, 2017) and that not enough is known about alumni opinions, beliefs and preferences. Indeed, there is a lack of contemporary research in the field of alumni funding, particularly outside of the USA. Private colleges and universities in the USA rely more upon donations from alumni to fund capital

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expenditures, create endowments and help towards general operating costs than do public education institutions (Holmes, 2009). Skari (2014) suggests that alumni represent the greatest unexploited potential source of university donors and Kaplan (2012) notes that, of the private donations received by HEIs in the USA (in 2011), only 27% of the total came from alumni. In 2019, HEIs in the USA received their highest ever level of support from voluntary givers (alumni, corporations, foundations, non-alumni individuals and other organisations) and the overall value of donations had been increasing for each of the previous ten years (Council for Advancement and Support of Education). Prestigious universities in the UK are falling far short of their U.S. counterparts in attracting alumni donations and, consequently, enjoy far smaller endowments (see Table 1).

Table 1. Endowments of wealthy HEIs in the USA and the UK

Nation	Higher Education Institute	Endowment
USA	Harvard	\$40.8 billion
USA	Yale	\$30.3 billion
USA	Stanford	\$26.5 billion
USA	Princeton	\$26.1 billion
UK	Cambridge	\$4.15 billion
UK	Oxford	\$3.89 billion
UK	Imperial College London	\$580.34 million

Note. Data collected from the website of each HEI, March 2020.

Harvard is the HEI with the largest known endowment (see Table 1), and it is noteworthy that the first alumni giving in America began at Harvard College (established in 1636) with an in-kind donation of land by four of its alumni in 1648 (Markoff, 1978). However, in spite of having received donations early in their history, it took almost two centuries for America's HEIs to develop strategic initiatives to engage with their alumni to gain their support and philanthropy (Curti & Nash, 1965). In the UK, however, only two universities have come remotely close to emulating the success of their U.S.A. counterparts in this regard. In 2017, Oxford and Cambridge universities combined received 46% of all new university donations in the UK and attracted 34% of donors (Weale, 2017). However, the overall size of their endowments, as Table 1 shows, remains significantly below that of the leading U.S. institutions.

The significance of the prestigious universities attracting the greatest magnitude of donations correlates with work by Terry and Macy (2007) that noted that the entry selectivity of an alma mater, as well as its general prestige, impacted upon graduates' propensity to donate and additionally found that graduates were more likely to donate if they believed their alma mater to already be a successful institution. Numerous studies (Holmes, 2009; Sung & Yang, 2008; Cunningham & Cochi-Ficano, 2001; Baade & Sundberg, 1996) concluded that donations and the intention to be supportive of an alma mater were significantly influenced by its perceived prestige. Liu's (2006) predictive model of anticipated donor contributions for public institutions found that being ranked higher in the US News and World Report university league table is positively associated with alumni giving.

At a time when universities are becoming increasingly reliant upon voluntary donations, it is worrying that the scale of alumni donations might continue, or even accelerate in, its recent decline (see Table 2, highlighted row) as the continuing and long-term effects of COVID-19 hit graduate employment and income levels. There is, therefore, heightened urgency for HEIs to understand the key factors that influence students and graduates, now and in the future, to donate to their alma mater.

Table 2. Estimated Voluntary Support of Higher Education by Source and Purpose, 2018 and 2019, U.S. HEIs.

	2018		2019		Percentage Change		
	Amount Raised	Percentage of Total	Amount Raised	Percentage of Total	2018 to 2019		
					Current	Adj. for Inflation	
Total Voluntary Support	\$46.730	100	\$49.600	100	6.1	3.6	
Source:							
Alumni	\$12.154	26	\$11.200	22.6	-7.9	-10.1	
Non-alumni Individuals	\$8.567	18.3	\$8.300	16.7	-3.1	-5.5	
Corporations	\$6.732	14.4	\$6.800	13.7	1.0	-1.4	
Foundations	\$14.010	30.0	\$17.000	34.3	21.3	18.4	
Other Organizations	\$5.266	11.3	\$6.300	12.7	19.6	16.7	
Purpose:							
Current Operations	\$27.400	58.6	\$28.500	57.5	4.0	1.5	
Capital Purposes	\$19.330	41.4	\$21.000	42.5	9.2	6.5	

Note. U.S. Dollars in Millions. Adapted from Voluntary Support of Education Key Findings, 2018-19 (Council for Advancement and Support of Education, 2019).

Some colleges and universities in the USA have effectively reduced their tuition fees in order to attract those families who have been priced out of the market for education (Ehrenberg, 2012; Hemelt & Marcotte, 2011) by providing increasing numbers of scholarships and other gifts whilst turning to donations to provide the necessary funding for these incentives (Ehrenberg, 2012; Hillman, 2012). Such student scholarships are being funded by individual gift-givers at an increasing rate (Kaplan, 2017). HEIs have an incentive to offer these scholarships, with student debt being determined as the most statistically significant (negative) indicator of likelihood of being an alumni donor (Terry & Macy, 2007). Marr, Mullin, and Siegfried (2005) found that receiving a scholarship increases the likelihood of a student being a future alumni donor. However, later work by Meer and Rosen (2012) suggested that receipt of a scholarship did not affect propensity to be a donor and that, should a scholarship recipient become a future donor, the value of any donation was likely to be comparatively less than from graduates who had not received scholarships.

The propensity to be an alumni donor is mostly a function of income and the personal/family demographics of the donor (Weerts & Ronca, 2007; Connolly & Blanchette, 1986). Those alumni most likely to donate are the wealthiest (Baade & Sundberg, 1996; Clotfelter, 2001; Holmes, 2009). Studies also suggest that such donors are also likely to make charitable donations to a multitude of institutions or organisations (Okunade, 1993; Weerts & Ronca, 2008; McDearmon & Shirley, 2009). In addition to income levels, the attributes of gender and age are significant factors in alumni giving, with older alumni most likely to be donors (Weerts & Ronca, 2009; Dean, 2007; Caboni & Eiseman, 2003; Bingham, Quigley, & Murray, 2002; Clotfelter, 2001; Belfield & Beney, 2000; Okunade, Wunnava, & Walsh, 1994). This could be attributed to the financial success the alumni have achieved over their career and a desire to contribute back to society (Weerts & Hudson, 2009). Gunsalus (2004) found a positive correlation between the likelihood of being an alumni donor and the institution's rates of graduation and first year retention as well as the level of tuition fees and the number of students based on campus. However, the most recent graduates were found to be less likely to donate than those who had graduated a greater number of years earlier (Caboni & Eiseman, 2003; Dean, 2007) and those alumni who live closest to their old university are more likely to make charitable donations to it (Holmes, 2009; McDearmon & Shirley, 2009).

Drezner (2013) highlights the importance of any positive form of interaction between alumni and their alma mater. There are numerous, non-monetary means through which alumni may support their alma mater, such as donating their time to promote the university to potential applicants, attending reunions and other alumni functions, volunteering or taking part in research activities or acting as mentors (Sung & Yang 2009; Gallo 2018; Francioni et al., 2020; Mael & Ashforth, 1992; McDearmon 2013). Being involved with the alma mater in terms of participation in events and activities is positively correlated with propensity to donate (Dean, 2007; Stephenson & Yerger, 2014). Alumni donors, with their personal connections to their alma mater, may be more able than other donors to influence external parties due to their strong networking potential and those who volunteer their time to the service of their alma mater are more likely than others to make additional gifts (Weerts & Ronca, 2007).

Being involved in extracurricular activities, such as special interest groups and clubs, during time at university has been shown to positively impact upon the likelihood of graduates being donors (Tsao & Coll, 2005; Monks, 2003; Clotfelter, 2001; Okunade et al., 1994). Gaier (2005) found that, if an undergraduate participated in at least one formal extracurricular activity whilst at university, he or she is 87% more likely to be a graduate donor. Additionally, that same student is 154% (1.5 times) more likely to participate in the life of their university after graduation. These findings are commensurate with earlier studies that determined the importance of extracurricular activities and the social system within a university to be very important influencers in creating the overall undergraduate experience (Casebeer & Miller, 1990; Astin, 1984; Astin 1993). Graduates are also more likely to be alumni donors if they engaged with activities in their student residence, such as with governance matters, or were members of religious or performing arts groups (Monks, 2003; Clotfelter, 2003; Gaier, 2005).

Holmes (2009) considered the literature on whether the sporting success of HEIs affected their levels of alumni donations and found the evidence to be inconclusive. However, other studies showed a positive correlation between sports facilities and donations (Marr et al., 2005; Monks, 2003). Skari (2014) argues that extracurricular activities afford opportunities for students to nurture relationships not only with other students but potentially also with staff and faculty, making them more likely to be alumni donors (Clotfelter, 2001; Monks, 2003; Sun, Hoffman, & Grady, 2007).

Clotfelter's (2002) logistic regression model highlighted two main factors in predicting likelihood to donate and they were levels of income (commensurate with other studies as discussed above) and also satisfaction with the institution. Student satisfaction is a key metric applied in many national surveys such as the National Student Survey (NSS) in the UK and the National Survey of Student Engagement (NSSE) in the USA. Monks (2003) found that the most statistically significant indicator of the likelihood to make donations was the feeling of satisfaction related to undergraduate years. Gaier (2005) found that graduates who were satisfied with the faculty that taught them were more likely to be donors as are those who fondly recollect their time spent at university (Stephenson & Yerger, 2014).

Sun et al. (2007) proposed an alumni-giving decision model, with the alumni donation being the outcome of the student experience, alumni experience, alumni motivation, and demographic predictor variables. The study suggests that those with greater satisfaction in their student experience were more likely to report that they would donate. The design of Sun et al.'s model is helpful as a foundation for predicting potential alumni donors, but the variables used in this model are too broad to pinpoint what specifically about a satisfying student experience influences an individual to be a donor. Suggesting a similar approach, Weerts and Ronca (2007) recommend that universities focus on the quality of their educational programmes in order to increase student engagement which will ultimately lead to a greater number of graduates becoming alumni volunteers.

3. Methodology

Much of the research on predictors of alumni giving has come from USA studies and has involved quantitative methods, mostly employing regression analysis models. These studies have mostly made use of established data sets from a variety of annual student cohorts such as the College and Beyond data set, Alumni Outcomes survey and the US News and World Report rankings (Clotfelter, 2003; Gallo & Hubschman, 2003; Gunsalus, 2004). Our study gathered its own data set, by deploying a survey instrument to capture responses from a relatively large number of current undergraduate students at a small number of prestigious English universities.

Our student university experience questionnaire was developed based on themes identified in the literature and in both the NSS and the NSSE questionnaires relating to student learning experiences. Additionally, our research instrument included themes related to student career and income aspirations and a broader theme of social experiences. These themes are currently under-researched, and the authors argue that they are critical themes that contribute to the overall student experience. The questionnaire was administered at several Russell Group

universities across England. The Russell Group is a self-appointed group of universities which claims to represent the UK's leading research universities. (In some respects, the Russell Group may be considered to be analogous to the Ivy League in the USA.)

This research study aims to identify which student experiences have a positive impact on expressed intentions to donate to the alma mater in later life.

The key hypotheses to be tested are:

- H1 an enriched pedagogical learning experience will influence student intention to donate
- H2 confidence in achieving career aspirations will influence student intention to donate
- H3 confidence in achieving future income expectations will influence student intention to donate
- H4 overall satisfaction with the university experience will influence student intention to donate
- 3.1 Student University Experience Survey Questionnaire

A draft questionnaire of over 60 questions relating to student university experiences, satisfaction and aspirations was derived from the literature. The questionnaire was scrutinised for its relevance by representatives of two students' unions as well as our focus group of current students. This robust approach resulted in the acceptance of 42 questions being adopted in our data model. The questions were divided into seven themes: Teaching and Learning; Assessment; Course Administration; Skills Acquired (transferable skills to help secure employment after graduation) at university; Learning Resources; Social Experiences; Aspirations; Intention to Donate. As a final check on the wording of the questionnaire it was administered to a small pilot sample (30) of students of various backgrounds and ages.

3.2 General Descriptive Results

The administration of the survey instrument resulted in 518 reliably completed questionnaires from undergraduate, full-time UK students (at English Russell Group universities). The selection criteria revealed a final sample of 427 students that represented a fairly equal distribution by gender, as can be seen in Table 3.

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Sample Characteristics		Percentage
Gender	Male	47.8%
Gender	Female	52.2%
	First	36.8%
Year of Study	Second	33.7%
	Final	29.5%
	Under 20	36.2%
A ~ ~	20	28.9%
Age	21	20.9%
	22+	14.1%

3.3 Statistical Considerations

Before beginning work on inferential data analysis, statistical tests are run to consider whether the data for the 42 questions relating to student experience in higher education is parametric or non-parametric as this determines which statistical analysis tools will be relevant to the data sets under investigation. The results in Table 4 confirm that our data meets the conditions of parametric acceptance and thus inferential analysis can be applied because both the skewness and kurtosis values are in the range of -2 to +2, as advocated by George and Mallery (2010). However, a more conservative approach is advocated by Tabachnick and Fidell (2013) who state that an acceptable range for skewness or kurtosis is below +1.5 and above -1.5. Regardless of which measure is adopted, the data meets the criteria for normality.

Table 4. Means and Skewness and Kurtosis variables identified as contributing to an enhanced student experience in HE

	N	Mean	Median	Std. Deviation	Skewness	Kurtosis
Tutors are friendly and approachable	427	5.36	6.00	1.069	-0.706	0.388
Tutors concerned for student wellbeing	427	4.91	5.00	1.332	-0.456	-0.204
Tutors inspire me to achieve my potential	427	4.76	5.00	1.337	-0.344	-0.296
Lectures and seminars are interesting	427	4.01	4.00	1.375	-0.028	-0.601
Tutors amenable to contact	427	5.47	6.00	1.224	-0.963	0.796
Tutors use real world examples	427	5.06	5.00	1.420	-0.617	-0.180
Sufficient online learning materials	427	5.43	6.00	1.275	-0.777	0.461
Tutors committed to teaching	427	4.60	5.00	1.640	-0.157	-0.836
Variety of assessment methods used	427	4.35	5.00	1.575	-0.169	-0.840
Opportunities to discuss assessment	427	4.80	5.00	1.451	-0.521	-0.367
Assessments are relevant to course	427	5.67	6.00	1.276	-0.996	0.665
Assessment guidance given	427	5.23	5.00	1.262	-0.702	0.722
Assessments disseminated early in the semester	427	5.27	5.00	1.365	-0.618	-0.146
Feedback identifies areas that need improvement	427	4.52	5.00	1.421	-0.285	-0.439
Considerate timetabling	427	4.75	5.00	1.493	-0.428	-0.354
I Know who to approach if there is an admin issue	427	4.95	5.00	1.565	-0.531	-0.410
I am kept informed of course updates	427	4.88	5.00	1.416	-0.532	-0.152
Admin staff are friendly	427	5.30	6.00	1.353	-0.831	0.647
Confident in working with Quantitative data	427	4.59	5.00	1.896	-0.405	-0.907
Confident in applying theory	427	5.11	5.00	1.350	-0.817	0.636
Confident in writing essays / reports	427	5.26	6.00	1.530	-0.843	0.126
Confident in generating creative solutions	426	5.07	5.00	1.327	-0.577	0.087
Confident in delivering presentations	427	4.99	5.00	1.593	-0.636	-0.224
Improved Team working skills	427	5.06	5.00	1.502	-0.764	0.157
Confident in reviewing and critiquing my work	427	5.16	5.00	1.289	-0.707	0.313
Improved leadership skills	427	4.98	5.00	1.462	-0.602	-0.064
Global issues awareness	427	5.03	5.00	1.717	-0.701	-0.318
Ethical issues awareness	427	5.22	5.00	1.569	-0.775	0.040
Sufficient library resources	427	5.32	6.00	1.464	-0.636	-0.464
Sufficient library spaces	427	4.85	5.00	1.621	-0.401	-0.766
SU has sufficient facilities	407	5.04	5 00	1.506	0.727	0.207
(bars, cafes, entertainment)	427	5.04	5.00	1.596	-0.727	-0.207
Confident to try SU clubs / societies	427	4.93	5.00	1.444	-0.507	-0.109
Prices to join clubs are reasonable	427	4.63	5.00	1.417	-0.241	-0.491
Made friends from many backgrounds	427	5.34	6.00	1.565	-0.948	0.271
Forged lifelong friendships	427	6.13	7.00	1.227	-1.722	3.091
Engage in academic discussion with students	427	5.04	5.00	1.636	-0.731	-0.245
Expect career success upon graduating	426	4.69	5.00	1.360	-0.308	-0.178
Expect international career	427	4.49	5.00	1.663	-0.293	-0.693
Intend to pursue career in subject studied	427	5.10	5.00	1.791	-0.748	-0.377
Intend to pursue further HE study	427	4.67	5.00	1.876	-0.382	-0.970
Future income influenced course choice	427	4.05	4.00	1.936	-0.076	-1.119
Future income influenced uni choice	427	4.21	4.00	2.013	-0.193	-1.180

3.4 Statistical Analysis

3.4.1 Factor Analysis

Orthogonal Varimax rotation was applied to the 42 questions in our survey instrument. The factor results revealed a high KMO (Kaiser-Meyer-Olkin) factor of .847 and a Bartlett's test for Sphericity with a significant chi square value of 5151.05, thus confirming the suitability of the data for factor grouping. The factor analysis test was calibrated to reveal only factor loading greater than .49. This yielded 26 questions that met the criteria, segmented into eight factor groups. We labelled these as:

1. Student Centred Pedagogy; 2. Relevant Assessment; 3. Acquiring Transferable Skills; 4. Achieving Career Aspirations; 5. Effective Course Admin; 6. Social Engagement; 7. Ethical Awareness and 8. Future Income Expectations. The overall percentage of variance determined by undertaking factor analysis was 48.55% and this is an acceptable level to permit further statistical analysis on the factor groups.

3.4.2 Testing for Multicollinearity

To ensure that the data analysis does not result in any biased findings, especially under regression analysis, it is prudent to test for multicollinearity between the dependent and among the independent variables. Our dependent variable is the student intention to donate to their alma mater and the independent variables are the eight factor groups, as identified, plus the additional independent variable of student satisfaction. Student satisfaction has long been identified as an indicator of intention to donate (see e.g., Clotfelter, 2002 and Mosser, 1993). Multicollinearity can become a problem in the estimation of linear (or generalised linear) data models (including Cox regression and logistic regression). It can occur for numerous reasons, such as inaccurate dummy variable usage, repetition of similar variable types and the inclusion of one or more variables computed from other variables included in the same data set.

When testing for multicollinearity, it is generally held to be true that the correlation coefficient results should be no greater than 0.9. The results in Table 5 provide evidence that there is no issue of multicollinearity in our data set as all but one of the correlation coefficients between any two variables are less than .5, which Evans (1996) defines as a modest correlation. Thus, regression analysis can confidently be undertaken to identify the key themes that significantly influence student intention to donate to their alma mater in later life.

Table 5: Correlation between Factor Groups and Intention to Donate

	Student Centred Pedagogy	Relevant Assessment	Acquiring Transferable Skills	Achieving Career Aspirations	Effective Course Admin	Social Engagement	Ethical Awareness	Future Income Expectations	Satisfied with University Experience	Intend Donate University	to to						
Student																	
Centred	1																
Pedagogy																	
Relevant	420**	1															
Assessment	.428**	1															
Acquiring																	
Transferable	.372**	.227**	1														
Skills																	
Achieving																	
Career	.271**	.144**	.255**	1													
Aspirations																	
Effective	.471**	.400**	.242**	0.077	1												
Course Admin	.4/1	.400***	.400***	.400***	.400***	.400***	.400***	.400	.242 · ·	0.077	1						
Social	.238**	.227**	.314**	.159**	.286**	1											
Engagement	.236	.221	.514	.139	.200	1											
Ethical	.158**	.206**	.314**	.147**	.169**	0.075	1										
Awareness	.136	.200	.514	.14/	.107	0.073	1										
Future Income	0.037	-0.042	0.037	.264**	0.001	0.031	0.010	1									
Expectations	0.057	0.012	0.037	.201	0.001	0.031	0.010	1									
Satisfied with																	
University	.539**	.413**	.284**	.212**	.406**	.209**	.176**	-0.028	1								
Experience																	
Intend to																	
Donate to University	.363**	.115*	.225**	.271**	.319**	.207**	0.067	.228**	.277**	1							

Note. *significant at the 95% level**significant at the 99% level.

3.4.3 Linear Regression of Identified Factor Groups with Intention to Donate

As noted above, we added to the regression model an additional independent variable, Student Satisfaction with their University Experience. The Regression analysis of the factor groups and this additional independent variable revealed a significant model (F=14.37/0.000) and an R square of .238, supporting the predicted model. The regression estimates for each factor group are highlighted in Table 6.

Table 6. Future alumni donation intention regression model

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	3.113	0.402		7.746	0.000
Student Centred Pedagogy	0.381	0.076	0.239	4.994	0.000
Relevant Assessment	-0.034	0.073	-0.021	-0.468	0.640
Acquiring Transferable Skills	0.178	0.069	0.112	2.591	0.010
Achieving Career Aspirations	0.308	0.070	0.193	4.401	0.000
Effective Course Admin	0.335	0.070	0.210	4.759	0.000
Social Engagement	0.125	0.070	0.078	1.783	0.075
Ethical Awareness	-0.032	0.069	-0.020	-0.460	0.646
Future Income Expectations	0.285	0.069	0.179	4.138	0.000
Satisfied with University Experience	0.146	0.073	0.107	1.983	0.048

The regression analysis of the factor groups revealed two factors with high beta and t values that significantly influenced student intention to donate to their alma mater, namely: Student Centred Pedagogy (in which students perceive the whole learning experience as being centred on activities that engage them), and Effective Course Administration (tuition-paying students have expectations as customers of their HEI). Additionally, there were several other significant factors that influence student intention to donate. These include confidence in Achieving Career Aspirations, achieving Future Income Expectations, Acquiring Transferable Skills and being Satisfied with the University Experience.

Engagement in social activities, such as sports and university clubs, is below the cut-off for significance. However, the mean rating for this theme was high. Thus, while it may not be a critical factor in influencing donations specifically, it is nevertheless an important influence on the overall student higher education experience.

4. Discussion

The first hypothesis was proven and demonstrated that a student centred pedagogy significantly influences intention to donate to the alma mater in the future. This view is echoed in the research by Weerts and Ronca (2007) who recommend that universities focus on the quality of their educational programmes in order to increase student engagement which will ultimately lead to a greater number of graduates becoming alumni volunteers.

The second hypothesis proposed that students who were confident in achieving their career aspirations were significantly likely to donate to their alma mater. This hypothesis was also proven, and the findings have resonance in the literature which shows that both age and income are significantly related to alumni intention and likelihood to donate (Tsao & Coll, 2005; Weerts & Ronca, 2009).

Hypothesis 3, that confidence in achieving future income expectations will influence student intention to donate, was also proven. It is pertinent to note that prestigious universities tend to attract and recruit students from a

higher socioeconomic background (Cho, Hudley, Lee, Barry, & Kelly, 2008; Macdonald & Stratta, 2001; Reay, Ball & David, 2002). It has been proven that students from higher socioeconomic backgrounds tend to be more successful in achieving their career aspirations and are generally better prepared for the world of work due to better access to resources and career guidance as well as familial experience regarding their higher education choices (Diemer & Ali, 2009).

The UK's Institute of Fiscal Studies has determined that graduates tend to earn more than £100,000 over their working lifetime than non-graduates (see Britton, Deardon, van der Erve, & Waltmann, 2020). However, the increase is not equal among students from the differing socioeconomic backgrounds. Belfield et al. (2018) reveal the significance of a student's socioeconomic background and school leaving grades upon their salary post-graduation. Students from relatively lower socioeconomic backgrounds enjoy a post-graduation salary increase of 3% for every top grade in their high school leaving exams ('A-Levels' in England). For those from the highest socioeconomic backgrounds, the relative increase is 10%. In this study, Russell Group students significantly indicated that they expected to achieve a high income in the future. This expectation is quantified by commercial job search engine Adzune which determined that Russell Group students can expect to earn significantly more per year than graduates from non-Russell Group universities (Turton, 2017).

The fourth and final hypothesis attempted to determine whether satisfaction with the overall student experience would significantly influence student intention to donate to their alma mater in the future; and was proven (though is less impactful than the variables in the first three hypotheses). These findings resonate with earlier research (Monks, 2003; Dean, 2007; Sun et al., 2007) which found overall satisfaction with time spent at university to be a positive influence on likelihood of being an alumni donor.

5. Conclusion

Previous studies have focused upon profiling and targeting alumni to identify their likely intention to donate. This research is the first to consider a range of experiences and aspects of student life, specifically including in-depth analysis of the learning and social experiences as well as career aspirations, to determine their impact on the intentions of current students to donate to their alma mater in the future. We recommend that universities develop a new focus based upon ensuring that their current students will become donors in the future, rather than simply focusing upon existing alumni and hoping that they can successfully profile and target them.

Our results suggest that it is vital that universities invest in a student centred learning experience and that their students acquire the transferable skills required by industry and commerce. At a time when there is a shift towards online learning, universities should be acutely aware of the need to develop an active learning experience which their students feel is centred around them and in which they feel engaged, inspired and empowered.

A particularly unique result of our study is that it demonstrates that current undergraduate students are aware of the need to develop transferable learning skills whilst at university and, moreover, feel able to judge how well their university is equipping them with these skills. Universities should therefore take steps to ensure that their students are fully equipped with the requisite skills to successfully enter the world of work. Additionally, universities should create actionable and inspirational schemes to give their students confidence that they are being guided on the path to achieving their career and future income aspirations and expectations.

Data collected and shown in Table 1 indicate that prestigious universities in the UK are significantly lagging behind their counterparts in the USA in terms of donations received. At a time of increasing pressure on higher education funding, all universities should take note that some of the factors we have identified as being indicators of intention to make future alumni donations also feed into overall satisfaction indicators in the NSSE and the NSS. Universities should therefore elevate the status of their alumni and development offices and ensure that a coordinated approach is taken across all strategic departments such that student centred pedagogy, extra-curricular activities, transferable skills, aspirations and career advancement are at the very heart of each university's mission statement and daily activities.

5.1 Limitations of Research

It is recognised that all research projects have limitations to some extent and this research project was undertaken with every precaution to limit any undue factors that could impinge upon the integrity of its findings. One limitation of this research project is that the data gathered by the questionnaire came from students at only a relatively small number of universities. Thus, it is recommended that this study be replicated among a wider sample base, and internationally, to confirm and enrich the findings.

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